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Funding Crises: An Empirical Study of the Paycheck Protection Program

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Funding Crises: An Empirical Study of the Paycheck Protection Program

WILLIAM A. BIRDTHISTLE & JOSHUA SILVER†

ABSTRACT

In the early weeks of the COVID-19 pandemic, the United States Congress funded the Paycheck Protection Program (PPP) to address the devastating consequences of business closures and millions of employees losing both their jobs and healthcare coverage during a public health emergency. That program immediately pumped more than a half-trillion dollars of forgivable loans out to five million businesses. But criticism was swift and widespread, if sometimes spurious, with detractors attacking the award of loans to wealthy celebrities such as Kanye West, politically connected donors such as the Kushner family, and large corporations such as Shake Shack and Ruth's Chris Steak House.

In this Article, we conduct an empirical study of the central component of the largest financial bailout in US history. We examine early quantitative data released by the

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Small Business Administration to answer various competing claims about the effects of the PPP. Critics accused the program of being administered as a partisan political tool for President Trump's attempted reelection, as a corrupt slush fund for cronies of the Trump administration, and as an incompetent waste of money on undeserving recipients. We test these hypotheses to evaluate the distribution of funds and whether the disbursement materially suffered from politics, corruption, or waste. We find that the lending process not only suffered from high-profile failures, but it also failed to target the neediest areas, particularly early on. Other studies present mixed findings on whether the PPP successfully protected paychecks. The PPP's greatest weakness was its failure to reach businesses unable to survive long enough to apply for or to receive loans.

Accordingly, we call for a start to the process of theorizing a model for future programs to fund economic crises, one that would avoid the worst mistakes of the PPP. In 2008 and 2020–2021, the US government engaged in massive transfers of money from the federal fisc to corporations and, on both occasions, the task was cobbled together during an emergency, with predictable failures and shortcomings. We consider successful economic responses and how they might guide more effective, fair, and efficient models for providing emergency economic funding in the future. Indeed, we may continue to need to address the financial devastation from COVID-19 itself for years to come.

CONTENTS

ABSTRACT.....	1541
CONTENTS	1543
INTRODUCTION	1544
I. AN EMPIRICAL STUDY OF THE	
PAYCHECK PROTECTION PROGRAM.....	1552
A. <i>Where the PPP Loans Went</i>	1553
1. PPP Funds Were Distributed Differently	
in the Two Funding Rounds	1554
2. Outcome Variable: The Counterintuitive	
Disbursement of PPP Loans	1558
3. Possible Explanatory Variables for Loan	
Disbursements.....	1561
B. <i>Methodology, Model & Results</i>	1566
1. Methodology	1566
2. Models.....	1567
3. Results	1568
C. <i>Critical Questions Surrounding the PPP</i>	1572
1. Was the PPP Administered for Partisan	
Political Advantage?	1572
2. Was the PPP Administered Corruptly?	1573
3. Was the PPP Managed Incompetently?	1575
4. Did the Disbursement of PPP Loans	
Demonstrate a Racial Bias?.....	1577
5. Was the PPP Effective at Supporting	
Payrolls?	1579
6. Did the PPP Alleviate Poverty?.....	1582
7. Did the PPP Prevent Long-Term	
Damage to the US Economy?.....	1583
II. A SOCIOECONOMIC HISTORY OF THE	
PAYCHECK PROTECTION PROGRAM.....	1584
A. <i>The Political History of the PPP</i>	1585
1. Small Businesses and the PPP.....	1586
2. The Design and Scale of the PPP	1588
B. <i>Deployment of the Program</i>	1591
1. Confusion for Business Owners.....	1592
2. Governmental Oversight of the Program....	1599

3. Fees for Intermediaries	1608
III. DESIGNING FUTURE	
EMERGENCY FUNDING PROGRAMS	1611
A. <i>Rationales for Planning Now</i>	1611
B. <i>Comparative Analysis of Foreign Programs</i>	1614
C. <i>Critical Components of Funding Programs</i>	1616
CONCLUSION	1618

INTRODUCTION

So Kanye and Jared Kushner's family got PPP loans. No wonder the Trump White House wanted to keep all this secret. That program may go down as one of the most corrupt and wasteful in American history.

— Ian Sams, former press secretary to Senator Kamala Harris¹

Soon after the COVID-19 virus began to fill hospital wards across the United States with asphyxiating patients, financial sequelae of the pandemic began to suffocate the US stock market and wider national economy. In early 2020, American businesses, pursuant to lockdown orders imposed by local authorities, quickly shut their doors to patrons and employees alike, triggering the sharpest contraction in US GDP and jobs in the post-World War II era.² To triage the consequences of stratospheric unemployment and lost medical coverage during a public health emergency, Congressional legislators reached for some of the instruments they had deployed a dozen years before. The federal government would—as it did in the 2008 financial crisis—flood the economy with money.³ At breakneck pace,

1. Ian Sams (@IanSams), TWITTER (July 6, 2020, 2:31 PM), <https://twitter.com/IanSams/status/1280222971701923843> (with more than 37k retweets and 122k likes as of December 27, 2021).

2. See, e.g., Ben Casselman, *Worst Economy in a Decade. What's Next? 'Worst in our Lifetime,'* N.Y. TIMES (Apr. 29, 2020), <https://www.nytimes.com/2020/04/29/business/economy/us-gdp.html>.

3. See generally HENRY PAULSON ET AL., *FIREFIGHTING: THE FINANCIAL CRISIS AND ITS LESSONS* (2019); ADAM TOOZE, *CRASHED: HOW A DECADE OF FINANCIAL CRISES CHANGED THE WORLD* (2018); David Zaring, *The Government's Economic Response to the COVID Crisis*, 40 REV. BANKING & FIN. L. (forthcoming 2021),

Congress appropriated hundreds of billions of dollars to protect paychecks and, just as quickly, entrepreneurs, large publicly traded companies, and swindlers began to dip their buckets into that river of money.⁴

In this Article, we provide an empirical analysis of America's financial response to COVID-19 to construct a theoretical framework for governmental economic funding in times of crisis.⁵ The outcomes from this pandemic—both

<https://ssrn.com/abstract=3662049>; Michael S. Barr et al., *The Financial Response to the COVID-19 Pandemic*, (Univ. of Mich. Law & Econ., Research Paper No. 20-040, 2020), https://ssrn.com/abstract_id=3666461.

4. See, e.g., Chris Cillizza, *How, Exactly, Did the LA Lakers Get a "Small Business" Loan?*, CNN (Apr. 28, 2020, 10:59 AM), <https://www.cnn.com/2020/04/28/politics/lakers-ppp-small-business/index.html>; Sarah Hansen, *Ruth's Chris Steak House Returns \$20 Million PPP Loan Amid Public Backlash as Treasury Issues New Guidance*, FORBES (Apr. 23, 2020, 4:51 PM), <https://www.forbes.com/sites/sarahhansen/2020/04/23/ruths-chris-steak-house-returns-20-million-ppp-loan-as-treasury-issues-new-guidance/?sh=1d1a29146ef7>; Michelle Toh, *Shake Shack Returns \$10 Million Emergency Loan to the US Government*, CNN, (Apr. 20, 2020, 10:56 AM), <https://www.cnn.com/2020/04/20/business/shake-shack-ppp-loan-sba/index.html>.

5. Early published legal scholarship on the federal legislative response to COVID-19 has discussed constitutional issues. See generally, e.g., Brian Soucek, *Discriminatory Paycheck Protection*, 11 CALIF. L. REV. ONLINE 319 (2020). Two groups of legal scholars have produced working papers on the government's financial response to the pandemic. See Zaring, *supra* note 3; Barr et al., *supra* note 3. Additionally, several groups of economists have examined portions of preliminary data. See, e.g., Haoyang Liu & Desi Volker, *Where Have the Paycheck Protection Loans Gone So Far?*, N.Y. FED. RESRV. BANK (May 6, 2020), <https://libertystreeteconomics.newyorkfed.org/2020/05/where-have-the-paycheck-protection-loans-gone-so-far/>; David Autor et al., *An Evaluation of the Paycheck Protection Program Using Administrative Payroll Microdata* (July 22, 2020) (MIT Working Paper Series), <https://economics.mit.edu/files/20094>; Joao Granja et al., *Did the Paycheck Protection Program Hit the Target?* 1 (Univ. of Chicago, Becker Friedman Inst. for Econ., Working Paper No. 2020-52, 2020), <https://ssrn.com/abstract=3585258>; Alexander Bartik et al., *Measuring the Labor Market at the Onset of the COVID-19 Crisis*, (Univ. of Chicago, Becker Friedman Inst. for Econ., Working Paper No. 2020-83, 2020), <https://ssrn.com/abstract=3633053>; Raj Chetty et al., *How Did Covid-19 and Stabilization Policies Affect Spending and Employment? A New Real-Time Economic Tracker Based on Spending and Private Sector Data* 1 (Nat'l Bureau of Econ. Rsch., Working Paper No. 27431, 2020), <https://ssrn.com/abstract=3637732>; Alexander Bartik, *The Targeting and Impact of Paycheck Protection Program Loans to Small Businesses* 2 (Nat'l Bureau of Econ. Rsch., Working Paper No. 27623, 2020), <https://ssrn.com/abstract=3665894>; Christopher Neilson et al., *Information Frictions and Access*

medical and economic—have been discouraging but, if sifted carefully and analyzed thoroughly, they may yet provide guidance for how best to structure legal and financial responses to future crises. And with “once-in-a-century” recessions having hit twice in the past dozen years, we can reasonably assume those future crises will visit uncomfortably soon.

The federal government’s official economic response to COVID-19 began on March 27, 2020, when the United States Congress enacted the two-trillion-dollar Coronavirus Aid, Relief, and Economic Security Act of 2020 (“CARES Act”).⁶ That federal law and its progeny allocated \$669 billion to the Small Business Administration (SBA) to administer a new initiative entitled the Paycheck Protection Program (PPP).⁷ The PPP was intended to provide forgivable low-interest loans to small- and medium-sized businesses so that employees of those firms could continue to receive paychecks throughout the crisis. In two early rounds of funding—distributing \$342 billion and \$179 billion, respectively—more than a half-trillion dollars quickly coursed out of the SBA through a network of lending institutions into nearly five million businesses across the country by June 2020.⁸

to the Paycheck Protection Program 2 (Nat’l Bureau of Econ. Rsch., Working Paper No. 27624, 2020), <https://ssrn.com/abstract=3665895>; John Eric Humphries et al., *The Evolving Impacts of Covid-19 on Small Businesses Since the Cares Act 2* (Cowles Found. Discussion Paper No. 2230, 2020), <https://ssrn.com/abstract=3584745>; William Beggs & Thuong Harvison, *Fraud and Abuse in the PPP? Evidence from Investment Advisory Firms*, J. BANKING & FIN. (forthcoming 2021) (manuscript at 3), <https://ssrn.com/abstract=3647606>; Dimitris Papanikolaou & Lawrence Schmidt, *Working Remotely and the Supply-Side Impact of Covid-19 1* (Nat’l Bureau of Econ. Rsch., Working Paper No. 27330, 2020), <https://ssrn.com/abstract=3615334>; Anna Cororaton & Samuel Rosen, *Public Firm Borrowers of the U.S. Paycheck Protection Program* (manuscript at 6–13) (Our Article cites to an earlier manuscript version from May 5, 2020 of the now published piece. See 10 REV. CORP. FIN. STUD. 641, 642 (2021).), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3590913.

6. Coronavirus Aid, Relief, and Economic Security Act, Pub. L. No. 116-136, 134 Stat. 281 (2020) (codified as amended in scattered sections of U.S.C.).

7. *Id.* §102, 134 Stat. at 286–294; *id.* § 1107(a), 134 Stat. at 301–02.

8. See U.S. SMALL BUS. ADMIN., PAYCHECK PROTECTION PROGRAM (PPP)

Considerable portions of that money, however, found their way into the hands of both recipients and lenders who were not the proposed targets of economic relief. Some recipients were politically embarrassing beneficiaries of funds intended to support struggling entrepreneurs.

Reality TV personality Maurice Fayne, for example, requested and received more than \$1.5 million from the PPP, which he then used “to purchase \$85,000 in jewelry, including a Rolex Presidential watch, a diamond bracelet, a 5.73 carat diamond ring for himself, and to pay \$40,000 for child support.”⁹ A Florida man, David Hines, similarly obtained \$3.9 million from the PPP, which he then used to “purchase[] a 2020 Lamborghini Huracán sports car for approximately \$318,000.”¹⁰ And Monty Bennett, a luxury hotelier and major political supporter of President Trump, received PPP loans for three of his hotel chains totaling \$59 million.¹¹

When the Trump administration, “under pressure to reveal which companies received [PPP] loans,”¹² disclosed the names of recipients of loans in excess of \$150,000, commentators indulged in a bipartisan carnival of outrage at

REPORT: APPROVALS THROUGH JUNE 30, 2020, at 2 (2020), <https://www.sba.gov/sites/default/files/2020-07/PPP%20Results%20-%20Sunday%20FINAL-508.pdf> (reporting a total loan count of 4,885,388 for aggregate net dollars of \$521,483,817,756 issued by 5,461 lenders).

9. Press Release, U.S. Dep’t of Just., Reality TV Personality Charged with Bank Fraud (May 13, 2020), <https://www.justice.gov/opa/pr/reality-tv-personality-charged-bank-fraud>.

10. Press Release, U.S. Dep’t of Just., Florida Man Who Used COVID-Relief Funds to Purchase Lamborghini Sports Car Charged in Miami Federal Court (July 27, 2020), <https://www.justice.gov/opa/pr/florida-man-who-used-covid-relief-funds-purchase-lamborghini-sports-car-charged-miami-federal>.

11. See David McLaughlin et al., *Luxury Hotel Executive Biggest Winner of Small-Business Relief*, BLOOMBERG (Apr. 22, 2020, 9:11 PM), <https://www.bloomberg.com/news/articles/2020-04-23/luxury-hotel-executive-biggest-winner-of-small-business-relief#:~:text=A%20Dallas%20hotel%20executive%20and,Bennett%2C%20according%20to%20regulatory%20filings>.

12. Jeanna Smialek et al., *Lobbyists, Law Firms and Trade Groups Took Small-Business Loans*, N.Y. TIMES (July 6, 2020), <https://www.nytimes.com/2020/07/06/us/ppp-small-business-loans.html>.

the hypocrisy and opportunism of certain applicants: the Ayn Rand Institute and Americans For Tax Reform, for instance, eschewed their philosophies opposing governmental “handouts” to accept PPP loans; more than one hundred law firms accepted loans of between one and ten million dollars, including Boies Schiller Flexner and Kasowitz Benson Torres, the firm founded by President Trump’s long-time personal attorney, Marc E. Kasowitz; and several businesses connected to the president’s son-in-law, Jared Kushner, received millions of dollars.¹³

These problems attracted a great deal of ridicule, but we conclude that much of that criticism is misguided and, indeed, may detract from more serious problems with the PPP. Opprobrium may better be addressed to the fact that while poorly directed loans were approved, many smaller businesses received nothing after the first round of loans exhausted the PPP’s cupboard or when companies collapsed before they could reach the PPP lifeline.¹⁴ And, in a reprise of the 2008 financial crisis, large banks appeared to do well out of the crisis, pocking \$24 billion in fees from issuing PPP loans.¹⁵

This effusion of public largesse amidst a maelstrom of

13. See *id.* See also Helen Coster, *In Sign of the Times, Ayn Rand Institute Approved for PPP Loan*, REUTERS (July 6, 2020, 8:26 PM), <https://www.reuters.com/article/us-health-coronavirus-ppp-ayn-rand/in-sign-of-the-times-ayn-rand-institute-approved-for-ppp-loan-idUSKBN248026>.

14. See Thomas Franck & Kate Rogers, *Small Business Rescue Loan Program Hits \$349 Billion Limit and Is Now Out of Money*, CNBC (Apr. 16, 2020, 10:38 AM), <https://www.cnbc.com/2020/04/16/small-business-rescue-loan-program-hits-349-billion-limit-and-is-now-out-of-money.html>.

15. See David Benoit & Peter Rudegeair, *Banks Could Get \$24 Billion in Fees from PPP Loans*, WALL ST. J. (July 7, 2020, 11:07 AM), <https://www.wsj.com/articles/banks-could-get-24-billion-in-fees-from-ppp-loans-11594134444>; Robin Saks Frankel, *Banks Made Billions on PPP Loans. Learn What They are Doing with the Cash*, FORBES (July 10, 2020, 8:51 AM), <https://www.forbes.com/sites/advisor/2020/07/10/banks-made-billions-on-ppp-loans-learn-what-theyre-doing-with-the-cash/?sh=1177a5d07f2f> (“Banks earned billions of dollars in fees from processing over 4.5 million [PPP] loans worth more than \$511 billion in the last several months, with the largest haul going to the country’s biggest banks.”).

deep confusion about application procedures among small businesses¹⁶—and the predictable failings of such an endeavor—generated intense media scrutiny, public criticism, and political grandstanding.¹⁷ In Part I of this Article, we attempt to penetrate competing claims that the program was either an enormous failure or a great success. To do so, we conduct a regression analysis of the state-level quantitative data released by the SBA to determine answers to several critical questions about the PPP.

Specifically, we consider and test the hypothesis that PPP funds were deployed as a partisan political tool of the Trump administration. Comparing our quantitative findings regarding the actual disbursement of PPP loans to accusations of partisan bias, we conclude that any political calculation failed, despite continued rhetorical insistence otherwise,¹⁸ either because those who administered the program did so with integrity or incompetence. We also evaluate critiques that the PPP was administered in ways that were, if not partisan, then corrupt or incompetent. Conversely, to evaluate putative successes of the program, we also examine whether the plan might have succeeded on broader terms, notwithstanding specific critiques, such as by keeping millions of Americans employed or by materially alleviating nationwide poverty in the United States during the pandemic.¹⁹

16. See Neilson et al., *supra* note 5.

17. But compare Tim Wu, *The Small-Business Aid Program Has Been a Fiasco*, N.Y. TIMES (Apr. 21, 2020), <https://www.nytimes.com/2020/04/21/opinion/paycheck-protection-program.html?searchResultPosition=10>, with David A. Graham, *The Backlash Against PPP Is Why the U.S. Can't Have Nice Things*, THE ATLANTIC (July 7, 2020), <https://www.theatlantic.com/ideas/archive/2020/07/ppp-naming-and-shaming-is-why-we-cant-have-nice-things/613894/>.

18. See President Donald Trump, Remarks by President Trump on Supporting Our Nation's Small Businesses Through the Paycheck Protection Program (Apr. 28, 2020), <https://trumpwhitehouse.archives.gov/briefings-statements/remarks-president-trump-supporting-nations-small-businesses-paycheck-protection-program/>.

19. See Jonathan O'Connell et al, *Following Messy Start, Enormous Paycheck Protection Program Shows Signs of Buttressing Economy*, WASH. POST (June 10,

In Part II, we apply historical and sociological methodologies to try to explain what went wrong with the PPP.²⁰ We analyze the legislative origins of the PPP and conduct a qualitative empirical survey of entrepreneurs who attempted to navigate loans for their businesses in the earliest days of the program. Their widespread struggles owed a great deal to the lack of clear guidance about how to apply for loans and, most saliently, whether the loans would ultimately be forgiven.²¹ Through multiple interviews with business owners, we examine how they constructed private ordering through group actions—in a process embedded in Granovetterian social ties—in an attempt to compensate for governmental shortcomings in communication about the essential features of the program.²² We apply further socioeconomic theory to inspect lawmakers' oversight in congressional hearings with federal officials and financial intermediaries as they grappled with technical challenges to the disbursement of PPP funds. Finally, we explore the structural incentives contained within the PPP's regulatory apparatus that encouraged banks to generate maximum fees from larger loans—and thus privileged larger borrowers—to the detriment of the small business owners who were the program's putative intended beneficiaries.

In Part III, we begin an attempt to devise a better model for how the government can provide emergency funding during future economic crises. To do so, we invoke the work

2020), <https://www.washingtonpost.com/business/2020/06/09/how-effective-is-ppp-small-business>.

20. See, e.g., Douglas Holtz-Eakin, *CARES Act in Historical Perspective*, AM. ACTION F. (Mar. 27, 2020), <https://www.americanactionforum.org/daily-dish/cares-act-in-historical-perspective>.

21. See OFF. OF THE INSPECTOR GEN., U.S. SMALL BUS. ADMIN., FLASH REPORT ON SMALL BUSINESS ADMINISTRATION'S IMPLEMENTATION OF THE PAYCHECK PROTECTION PROGRAM REQUIREMENTS (May 8, 2020) [hereinafter SBA INSPECTOR GENERAL REPORT], https://www.sba.gov/sites/default/files/2020-05/SBA_OIG_Report_20-14_508.pdf.

22. See Mark Granovetter, *Economic Action and Social Structure: The Problem of Embeddedness*, 91 AM. J. OF SOCIO. 481, 504–07 (1985).

of Raj Chetty and scholars who have explored the financial effects of stimulus plans and other governmental economic interventions.²³ In recent years, economists such as Chetty et al. have increasingly focused upon the social effects of economic change, employing social variables such as race, gender, and socioeconomic status to understand the effects of social welfare policies.²⁴ In engaging with this work, we consider mechanisms deployed during the global pandemic in other countries that more successfully negotiated the financial fallout.²⁵ Ultimately, we argue that the federal government should adopt mechanisms that obviate or diminish the participation of financial intermediaries—and the need to pay those banks billions of dollars—in favor of more direct networks between the national fisc and its individual and corporate citizens.²⁶

In Part IV, we conclude with a call for serious and well-considered plans to be drafted today to create a more efficient and effective mechanism for disbursing future economic stimulus funds to the American public. We now know the steep price of our failure to make such plans following the 2008 financial crisis.²⁷ In the future, such a tool will prove vital whether coming political administrations anticipate retroactively responding to new financial crises or proactively embracing designs to distribute funds, such as universal basic income.

23. See Chetty et al., *supra* note 5, at 2.

24. See *id.* at 4.

25. See, e.g., Jérémie Cohen-Setton & Jean Pisani-Ferry, *When More Delivers Less: Comparing the US and French COVID-19 Crisis Responses*, PETERSON INST. FOR INT'L ECON. (June 2020), <https://www.piie.com/system/files/documents/pb20-9.pdf>.

26. See Isil Erel & Jack Liebersohn, *Does FinTech Substitute for Banks? Evidence from the Paycheck Protection Program* (Nat'l Bureau of Econ. Rsch., Working Paper No. 27659, 2020), <https://www.nber.org/papers/w27659>.

27. See Nathan Stovall, *Coronavirus Bailout Already Towers Over TARP, With More to Come*, S&P GLOBAL (Apr. 8, 2020), <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/coronavirus-bailout-already-towers-over-tarp-with-more-to-come-57964369>.

I. AN EMPIRICAL STUDY OF THE
PAYCHECK PROTECTION PROGRAM

The fundamental inquiry for any quantitative analysis of a massive funding initiative is an assessment of how well the program accomplished its goals. We attempt to answer that question, and its manifold variants, through a statistical approach that focuses on legal and political insights. In so doing, we contribute to a nascent but burgeoning body of economic literature that uses quantitative methods to assess the efficacy of the PPP.²⁸ Although economists may have started to examine the PPP, their studies do not consider the program as a legal policy. Rather, they examine the distribution of the loans, banking infrastructure, business decisions, and the effects of the program. While certainly useful, assessing the performance of the program in this way takes for granted *how* the program was justified, built, and administered. In concentrating on legal issues instead, we consider how the program unfolded in time and the potential mechanisms that caused the distribution to look as it did. We focused our attention on the earliest stage of the program, because we found the data from that period had the strongest effects on subsequent rounds of planning.

In our statistical analysis, we match publicly available data from the SBA with other open sources of data, which

28. Several teams of economists have matched publicly available PPP data with either: (a) proprietary data from large private businesses such as credit card processors or payroll service firms; or (b) proprietary data obtained from the federal government through the Freedom of Information Act. These studies are invaluable, because they obtain micro-level data of not just PPP lending patterns, but also business outcomes during the period in which the PPP was distributing funds. Further, some of these studies use statistical techniques that allow them to make preliminary causal statements about the *effects* of the PPP on key program goals such as reducing unemployment. We discuss the existing state of the economic literature in detail in below. These studies have largely concluded that the PPP's poor geographic targeting, the unclear terms of the loans, and the lack of consumer spending due to the pandemic itself have mitigated the positive effects of the program on employment. *See* sources cited *supra* note 5.

allowed us to run regression analysis on several theories about the design of the program posited by lay commentators and policymakers alike.²⁹ Importantly, these data were also the publicly available data that drove initial reporting on the program and discussions in the Senate hearings that took place in April, May, and June.³⁰ In several instances, our findings confirm those of other researchers, primarily economists. Equipped with these statistical findings, we examine in Part II of this Article the development and oversight of the program to explain how and why the PPP distribution unfolded as it did.

A. *Where the PPP Loans Went*

Our statistical approach answers several important questions. First, at a high level examining the distribution of PPP loans across states, we identify where the money went. In so doing, we are able to answer whether the PPP distribution correlated significantly with variables important to the enactment of the CARES Act, such as unemployment, impact of the pandemic, small business employment, and political voting patterns. Second, we explore how those correlations changed over time, as the PPP rolled out a first and then a second wave of disbursements. We examine whether there was a significant difference in correlations between the first and second rounds of the program. Different outcomes, of course, may communicate essential information about how to structure future programs more effectively.³¹

29. *See infra* Section I.A.

30. *See generally* Hearing on Implementation of Title I of the CARES Act, Senate Committee on Small Business & Entrepreneurship (June 10, 2020), [hereinafter Senate CARES Act Hearing], <https://www.sbc.senate.gov/public/index.cfm/hearings?ID=C0E44E40-CC47-469C-9404-BE3EB4020AA0>.

31. *See, e.g.*, Liu & Volker, *supra* note 5.

1. PPP Funds Were Distributed Differently in the Two Funding Rounds

Visualizing data geographically provides important intuitive insights that can then be tested statistically. We find, in Figure 1A, that lending in the first round of the PPP appeared to favor states less impacted by the pandemic at the time the funds were released. As data became public, between the PPP's first and second rounds, the program was increasingly scrutinized and criticized by legislators, small businesses, and business owners. Perhaps unsurprisingly, then, we find a remarkable reversal in lending patterns between the first and second rounds, which are plainly visible when we map lending per private employee by state in the first two weeks of the second round, as shown in Figure 1B below.

FIGURE 1. PPP Lending per Private Employee by State³²

FIGURE 1B. Round 2—April 27 through May 8, 2020

These results suggest several possible explanations not yet accounted for in the existing quantitative literature, which generally consider the interactions between lenders and borrowers rather than the design and administration of the policy. One benign explanation is simply that many eligible firms from fast-acting, yet less affected states, had already applied in the first round and were therefore no longer eligible to apply in the second round. A different possibility, of course, is that the administrators of the PPP adjusted their approval or targeting strategies between the first and second rounds of the program. That is, the SBA personnel might not simply have been passive actors in a system in which the behavior of borrowers and lenders determined the pattern of disbursed funds, as several papers on the topic seem to assume implicitly.³³

33. See, e.g., Chris Gaetano, *NY Fed Study Finds Most PPP Loans Issued Were in States Least Affected by COVID-19*, THE TRUSTED PRO. (May 7, 2020), <http://www.nysscpa.org/most-popular-content/ny-fed-study-finds-most-ppp-loans-issued-were-in-states-least-affected-by-covid-19-050720>.

We consider four primary hypotheses that might have driven the overall pattern of lending in the first and second rounds:

- (1) loan distributions reflected the overall proportion of small business employment in the states;
- (2) loan distributions reflected the impact of COVID-19 (as measured by infection rates) on the state population;
- (3) loan distributions reflected the political leanings of the state; and
- (4) loan distributions reflected an effort to mitigate unemployment.

In our section on data below, we detail how we developed each of the measures, combining data from the SBA, Bureau of Labor Statistics, 2020 US Census, and the *New York Times* GitHub data portal. In our regression results, we find that in the first round of the program, PPP lending is positively correlated ($p < .001$) with the percentage of small business employment in a state, perhaps suggesting that in states with more robust lending infrastructure for small businesses, those businesses were able to secure loans more quickly in the first come, first serve system of the program.

Most surprisingly, weak—though not statistically significant—negative correlations existed between loan disbursements and both COVID-19 incidence and unemployment claims. That is, states *more* affected by the virus, both economically and epidemiologically, *were less* likely to receive more PPP funding. A weak (but, again, not statistically significant) positive correlation existed between loan disbursements and voting patterns for Donald Trump in the 2016 presidential election.

In the second round of the program,³⁴ many of these

34. See *Senate Approves More Time to Spend Paycheck Protection Loans*, N.Y. TIMES (June 3, 2020), <https://www.nytimes.com/2020/06/03/business/stock-market-today-coronavirus.html>.

trends reversed, as we can see in Figure 2 below. In fact, the relationship between Round 1 and Round 2 lending was negative and statistically significant ($p < .001$). Small businesses in states with lower employment in the small business sector were more likely to receive funding ($p < .01$). States impacted by the COVID-19 pandemic, economically and epidemiologically, were likely to receive a greater portion of funds ($p < .1$). The positive correlation of funds with voting patterns for Donald Trump in 2016 also reversed ($p < .01$). These changes in fortune may have been too little, too late, however, for firms in hardest hit areas with low cash reserves that could not receive funding earlier in the program when funds were misguidedly flowing to states with less urgent need.

FIGURE 2. Round 1 vs. Round 2 Funding

2. Outcome Variable: The Counterintuitive Disbursement of PPP Loans

To arrive at our outcome variable, we divided the total loan amount in each state by the number of private employees from that state in 2019. We used the number of private employees in each state rather than a more general per capita measure to arrive at a value that would be more reflective of the predominant goal of the program: to protect private sector paychecks. In addition to the outcome variable used in our regression, it is helpful to visualize the disbursement of the loans based on the North American Industry Classification System (NAICS), in Figure 3A, and loan size in Figure 3B.

Descriptively, these two bar charts suggest some patterns of concern for the effectiveness of the program. First, by NAICS category, it is clear that funds were not distributed to the industries that were the most impacted by the virus in terms of employment. For example, “Professional, Scientific, and Technical Services,” the category that includes consulting firms, received far more funding than the food and accommodations industry, which faced a disproportionate impact of the virus. The food and accommodations industry accounted for as much as half of employment decline during the early stages of the pandemic, while professional, scientific, and technical service workers accounted for only 5% of employment decline.³⁵ NAICS-level data was not initially released for the second round of the program.

The loan-size data, in Figure 3B, seems to show a disproportionate skew towards higher loan values, despite

35. See Chetty et al., *supra* note 5, at 36 (“For example, firms in the professional, scientific, and technical services industry received a greater share of the PPP loans than accommodation and food services (SBA 2020). Yet accommodation and food services accounted for half of the total decline in employment between February and March (prior to PPP enactment) in BLS statistics, while employment in professional, scientific and technical services accounted for less than 5% of the decline.”).

the disproportionate number of small loan borrowers. That is, loans greater than \$150,000 (just 26% of the total number of loans) accounted for 83% of the total value lent.³⁶ Further, loans of one million dollars or greater accounted for 44.5% of the total loan amount and, as a general matter, larger loans went to larger firms.³⁷ Because the SBA did not release firm-level data until July 2020, we have not presented that data in this study as we are primarily considering the decision environment in the early days of the pandemic.³⁸ Undoubtedly, that data will prove to be an interesting source of evidence for calls of public accountability and must continue to inform future research.

In the first round, the mean loan per employee for the states was \$2,941.86, with a considerable standard deviation of \$577.50 around this figure.³⁹ Surprisingly, the state that initially received the highest amount of loan value per private employee was North Dakota with \$4,462.88, and the state that received the lowest was Nevada with \$1,728.26. The very fact that North Dakota, a state much less affected by COVID-19 at that time, received so much more in loans than Nevada, a state heavily dependent on service sector work, clearly reflects the lack of solution-oriented logic in the allocation of the funds.

Second round statistics from April 27 through May 8, 2020, were used because of the comparable time window and because the majority of second round loans were made in this initial two-week period. Lending in fact remained open through July. The mean loan per employee in this period for

36. U.S. SMALL BUS. ADMIN., *supra* note 8.

37. *Id.*

38. See Jonathan O'Connell et al., *Faulty Data Collection Raises Questions about Trump's Claims on PPP Program*, WASH. POST (July 14, 2020), <https://www.washingtonpost.com/business/2020/07/14/ppp-job-claims-sba/>.

39. U.S. SMALL BUS. ADMIN., *supra* note 8. See also *Effects of COVID-19 Pandemic on Employment and Unemployment Statistics*, BUREAU OF LAB. STATS., <https://www.bls.gov/bls/effects-of-covid-19-pandemic-on-employment-and-unemployment-statistics.htm> (last visited Dec. 27, 2021).

the states was \$1,221.60, less than half of the amount lent in the first round, with a considerable standard deviation of \$482.26 around this figure, almost as high as in the previous round. The state that received the highest amount of loan value per private employee was California with \$2,452.15, and the state that received the lowest was Nebraska with \$580.17. Those distributions might reflect a refinement of the policy based on coronavirus impact in the second round, with higher amounts being channeled to states with greater need, such as New York and New Jersey. In any event, without targeted data on which firms received the loans, the average numbers per private employee still suggest that amounts would not have been large enough to keep employees off state unemployment rolls for more than a few weeks.

FIGURE 3. Round 1 Lending by Sector, Size, and Borrowers

FIGURE 3A. Lending by NAICS subsector for the PPP

FIGURE 3B. Loan Size and Number of Borrowers

3. Possible Explanatory Variables for Loan Disbursements

a. The Incidence of Small Business Employment

The first predictor variable for loan distribution we tested was the proportion of private employees employed in small businesses in each state. Because the program was designed to target employees of small businesses, this variable was included to test the hypothesis that loans went to states with higher rates of small business employment. This variable was the same for both rounds, as the figures are calculated annually, not more frequently.⁴⁰

The mean small business employment rate is 49%, about

40. Note that the definition of a small business varies by industry. For some industries, the definition is set by a company's number of employees and for others by annual revenues. These standards differ widely, with an upper limit of between 1 and 50 million dollars yearly revenues and employment upper limits of up to 1,500 employees for some industries, though an upper limit of 500 employees was the most common.

half of all employment, with a standard deviation around 5%.⁴¹ Montana had the highest small business employment rate, 65%, while Florida had the lowest small business employment rate, 42%.⁴² States with sparse and small populations, such as Maine, North Dakota, South Dakota, Wyoming, Vermont, and Montana, tend to have high employment rates in small businesses. Thus, the high relative allocation of loans to states like Montana in the first round may have been an artifact of economic organization in those states, which could provide richer lending resources for small businesses.

The coefficient of the relationship between small business employment and loan amounts is reported below in the results section, Section I.B.3. In both the first and second round, small business employment is positively and significantly correlated with state loan amounts.

b. The Geographic Impact of the Coronavirus

In order to test whether the relative impact of COVID-19 by state was correlated with loan disbursement amounts, we created a snapshot impact measure using *New York Times* data of how many active cases existed in each state through the last date the loan program was open for both rounds (April 15 and May 8, respectively).⁴³ Because of a sharp right skew, a natural log transformation was necessary to assess the precise relationship of this variable to the outcome variable.

On average, on April 15, 2020, 0.15% of the United States population was considered an active Coronavirus

41. BUREAU OF LAB. STATS., *supra* note 39.

42. Scatterplots in Figure 3A and 3B, *supra*, give an idea of the distribution of small business employment by state.

43. *Coronavirus in the U.S.: Latest Map and Case Count*, NY TIMES, <https://github.com/nytimes/covid-19-data> (last visited Dec. 27, 2021); *see also generally Coronavirus in the U.S.: Latest Map and Case Count*, NY TIMES, <https://www.nytimes.com/interactive/2021/us/covid-cases.html> (last visited Dec. 27, 2021).

case. There was, of course, considerable variation by state, reflected in a standard deviation of 0.2%. The most impacted state was New York with 1.1% of the population considered an active case on April 15, 2020. The least impacted state was Minnesota with 0.03% of the population considered an active case.

Then, in the second round, on May 8, each state had on average 0.35% of the population considered an active coronavirus case, more than double the April rate. There was considerable variation, with a standard deviation of 0.36%. The most impacted state was again New York with 1.73% of the population considered an active case. The least impacted state was Montana with 0.043% of the population considered an active case (less than one thirtieth of the rate in New York).

The coefficient of the relationship between COVID-19 impact and loan amounts are reported below in the results section, Section I.B.3. In the first round, loan amounts are negatively correlated with coronavirus impact, but not statistically significant, meaning states with less COVID-19 impact were more likely to receive loan funds. In the second round, loan amounts are positively correlated with COVID-19 impact (and statistically significant at the $p < .01$ level).

c. 2016 Presidential Election Voting Patterns

In order to assess the extent of partisan political bias in the distribution of funds, we hypothesized that states that voted for Donald Trump in the 2016 election—or that were predicted to do so in 2020—might have been rewarded for that pattern. To test the possibility that presidential politics influenced the disbursements of loans, we created a dummy variable to assess whether a state voting for Donald Trump in the 2016 election was correlated with loan disbursement. Thirty states received the dummy variable of “1” for voting for Donald Trump in 2016, while twenty states and Washington DC received the dummy variable “0” for voting

for Hillary Clinton.

In several of the administration's other COVID-19 policy decisions, there has been considerable evidence that the administration governs in a preferential fashion, rewarding loyal constituents and punishing perceived enemies.⁴⁴ And, indeed, the initial data released following the first round of the PPP,⁴⁵ *prima facie* evidence suggested that this partisan motive could have been at work, at least as demonstrated by the geographical distribution of loans. News reports quickly reflected this supposition.⁴⁶ In that first round, the states that received the highest loan amounts were largely rural or midwestern states with low infection rates. By contrast, states like New York and California, which were disproportionately affected by the pandemic—but traditionally Democratic strongholds with no likelihood of furnishing votes in the Electoral College to the Trump reelection campaign—received far lower loan amounts.

The coefficient of the relationship between voting patterns and loan amounts is reported below in the results section, Section I.B.3. In the first round, having voted in favor of Donald Trump in 2016 is positively correlated with loan amounts. In the second round, voting for Donald Trump is negatively correlated with loan amounts (with neither result being statistically significant).

d. The Incidence of Unemployment Claims

Because the PPP was designed to keep citizens employed, we tested whether the number of people applying

44. See, e.g., Matt Stieb, *Trump's Disregard for Blue States Is at the Heart of His Shoddy Covid Response*, N.Y. MAG. (July 31, 2020), <https://nymag.com/intelligencer/2020/07/trumps-war-on-blue-states-is-worse-than-previously-thought.html>.

45. U.S. SMALL BUS. ADMIN., *supra* note 8.

46. See, e.g., Viktor Reklaitis, *Democratic Congresswoman as Red States Beat Out Blue Ones for Small Business Aid: 'I Smell a Rat,'* MARKETWATCH (Apr. 17, 2020, 11:23 AM), <https://www.marketwatch.com/story/democratic-congresswoman-as-red-states-beat-out-blue-ones-for-small-business-aid-i-smell-a-rat-2020-04-17>.

for unemployment in the two weeks leading up to the opening of the loan application window was correlated with the amounts of loans disbursed. This number was calculated as a rate of new applications per private employee during the two-week period immediately prior to the opening of the program's two rounds, which were the weeks ending April 11 and April 25, 2020.

In the first round of the PPP, each state had on average 8.5% of their private employees filing unemployment claims in the two weeks before the first loan period.⁴⁷ This variable also had considerable variation, with a standard deviation of 2.9%. Georgia had the highest rate of unemployment filings, with 18.7% of private employees. South Dakota had the lowest rate, with 4.1% of private employees.

These data appear to have a roughly normal distribution with a few outlying states having higher unemployment claim rates and the rest tightly clustered. These uneven data could reflect different unemployment insurance policies by state or idiosyncratic labor market structures in different states.

In the second round of the PPP, each state had on average 5.9% of their private employees filing unemployment claims in the two weeks before the second loan period opened.⁴⁸ This number is likely lower than the previous period because many people had already lost their jobs and applied for unemployment,⁴⁹ and this measure includes only new filings.⁵⁰ This variable also had

47. BUREAU OF LAB. STATS., *supra* note 39.

48. *Id.*

49. See Ioana Marinescu et al., *Job Search, Job Posting and Unemployment Insurance During the Covid-19 Crisis* 19 (Aug. 7, 2020), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3664265.

50. See Dana Scott et al., *Employment Effects of Unemployment Insurance Generosity During the Pandemic*, TOBIN CTR. FOR ECON. POL'Y, YALE UNIV., at 5 (July 14, 2020), [https://tobin.yale.edu/sites/default/files/files/C-19%20Articles/CARES-UI_identification_vF\(1\).pdf](https://tobin.yale.edu/sites/default/files/files/C-19%20Articles/CARES-UI_identification_vF(1).pdf). See also BUREAU OF LAB. STATS., *supra* note 39.

considerable variation, with a standard deviation of 2.65%. West Virginia had the highest rate of unemployment filings, with 18.65% of private employees filing claims, while Nebraska had the lowest rate, with 2.3% of private employees filing claims.

The coefficient of the relationship between unemployment claims and loan amounts is reported below in the results section, Section I.B.3. In the first round, new unemployment claims in a state are negatively correlated with loan amounts. In the second round, unemployment claims are positively correlated with loan amounts (with neither being statistically significant).

B. *Methodology, Model & Results*

1. Methodology

To test these hypotheses about how the PPP funds were distributed, we used multiple linear regression in STATA to test for patterns in the allocations of the funds. Again, our four primary hypotheses were: (1) loan distributions reflected the proportion of small business employment in the states; (2) loan distributions reflected the impact of COVID-19 on the state population; (3) loan distributions reflected the political leanings of the state; and (4) loan distributions reflected an effort to mitigate unemployment in the states.

The proportion of small businesses in states was consistently the most statistically significant factor in explaining the allocation. Allocation, however, departed sharply from “need” based on unemployment and coronavirus impact, especially in the first round of the policy, echoing the findings of Granja et al.⁵¹ In the first round of the PPP, “Republican” states were more likely to receive funds, but this trend reversed in the second round. Overall, these statistics might more accurately reflect the chaotic

51. See Granja et al., *supra* note 5, at 3.

nature of the policy and its implementation by the SBA, rather than any more intentional motivations.

2. Models

We estimate the following equations using ordinary least squares:

ROUND 1 MODEL:

$$E(Y_i|X_{i1}, X_{i2}, X_{i3}, X_{i4}) = \beta_0 + \beta_1(X_{i1} * 100) + \beta_2 \ln(X_{i2} * 100) + \beta_3(X_{i3}) + \beta_4(X_{i4} * 100)$$

In the equation for our analysis of the first round of the PPP, β_0 is not meaningful on its own but reflects the y intercept of the regression equation. Technically, the coefficient is the estimated per private employee loan amount for states with no small business employment or coronavirus impact, that voted for Hillary Clinton in the 2016 election, and had zero unemployment claims per private employee filed in the two weeks before the loan allocation. Then β_1 is the estimated difference in state loan allocation per private employee associated with an increase in the small business employment ratio, holding all other variables constant. And β_2 is the estimated difference in state loan allocation per private employee associated with an increase of the natural log of the coronavirus impact percentage (cases per capita times one hundred), holding all other variables constant. The natural log of the coronavirus impact percentage is taken due to a positive skew in the data because of heavily impacted states like New York and New Jersey. Next, β_3 is the estimated difference in loan allocation per private employee associated with voting for Donald Trump in the 2016 presidential election, holding all other variables constant. And β_4 is the estimated difference in loan allocation per private employee associated with an increase in unemployment claims per private employee filed in the two weeks before the loan allocation, holding all other variables constant.

ROUND 2 MODEL:

$$E(Y_i|X_{i1}, X_{i2}, X_{i3}, X_{i4}, X_{i5}) \\ = \beta_0 + \beta_1(X_{i1} * 100) + \beta_2(X_{i2} * 100) + \beta_3(X_{i3}) + \beta_4(X_{i4} * 100) + \beta_5(X_{i5})$$

The Round 2 Model is identical to the Round 1 Model with the exception of one additional coefficient, β_5 , reflecting the estimated difference in loan allocation per private employee associated with an increase in loan allocation in the previous round, holding all other variables constant. This variable was added to test the hypothesis that administrators of the program redirected the allocation of the program following a review of the first round.

3. Results

We set forth our results in Table 1 below.

TABLE 1. Factors Associated with PPP Loans by State

	PPP Loan Amounts per Private Sector Employee	
	Coefficient	SE
Round 1		
Small Business Employment	76.25*	11.28
COVID-19 Impact	-80.59	74.04
2016 Election Voting	130.39	125.60
Unemployment	-4.51	20.18
Round 2		
Small Business Employment	37.04**	12.97
COVID-19 Impact	115.08*	61.83
2016 Election Voting	-314.99**	103.23
Unemployment	6.15	19.03
Round 1 Allocation	-0.63***	0.12

* $p < 0.1$

** $p < 0.01$

*** $p < 0.001$

For the first round of program, the coefficient of 76.25 for the Small Business Employment variable is the estimated difference in state loan allocation dollars per private employee associated with an increase of 1% in the small business employment ratio, holding all other variables constant (statistically significant relationship, $p < .001$). To illustrate, a state with 10% higher employment in small businesses than another state would be expected to receive about \$760 more per private employee in that state. The small business employment percentages ranged from 42% in Florida to 65% in Montana, indicating a large possible influence of changes in this ratio on loan outcomes. The coefficient for COVID-19 Impact variable of -80.59 is the estimated difference in loan allocation per private employee associated with a 1% relative increase in the coronavirus impact percentage (cases per capita * 100), holding all other variables constant. For a 1% relative increase in the COVID-19 impact percentage, we would expect to see a decline of \$80.60 in loan amount. The coefficient of 130.39 for the 2016 Election Voting is the estimated difference in loan allocation per private employee associated with voting for Donald Trump in the 2016 election, holding all other variables constant. The coefficient of -4.51 for the Unemployment variable is the estimated difference in loan allocation per private employee associated with a 1% increase in unemployment claims per private employee filed in the two weeks before the loan allocation, holding all other variables constant.

Only one variable correlation was statistically significant in the first round—the private employment share of small businesses—which suggests relatively little coherence or effectiveness in possible rationales for the program. Still, the overall trends do show some striking relationships. The correlation of loan amount with small business employment was positive and statistically significant. States with a larger percentage of small businesses, as defined by the SBA, received more loans.

Paradoxically, however, having a higher coronavirus impact in a state tended to *reduce* the amount of loans disbursed per private employee, reflecting a general misallocation of the funds and assuming a main goal of the program was to relieve the economic impact of the pandemic. These two results suggest that businesses in states with many small businesses, but without the chaos of an eruption of the pandemic, were the first ones to get PPP loans. Further, states with more unemployment claims tended to receive fewer loans per private employee, suggesting, again, a mismatch between the program's distribution and the goal of mitigating unemployment. Republican states tended to receive about \$130 more per private employee than non-Republican states. This result is not statistically significant, however, and the relationship may reflect underlying differences in economic organization in these states, rather than political bias.

In the second round of funding, many of these trends appeared to reverse. In that round, the reversal of loan patterns is so striking that they alone do not seem to reflect the additional clarity provided in rules, which were released in a series of FAQs and links of "Interim Final Rules" on the SBA website,⁵² or the exhaustion of eligible firms in high-performing states early on. Instead, the reversal was perhaps a deliberate effort on behalf of the administration to reallocate the distribution of loans. In the course of the first few weeks of the program, thousands of loan processors were hired at the SBA to handle increasing loan volume, perhaps signaling a shift in the processing approach of at least some of the loans.⁵³

52. See generally *Paycheck Protection Program Loans, Frequently Asked Questions (FAQs)*, TREASURY DEP'T, <https://home.treasury.gov/system/files/136/Paycheck-Protection-Program-Frequently-Asked-Questions.pdf> (last visited Dec. 27, 2021).

53. See Kenneth Terrell, *SBA Seeks to Fill Work-from-Home Jobs to Process Stimulus Loans*, AARP (May 5, 2020), <https://www.aarp.org/work/job-search/info-2020/sba-hiring-coronavirus-stimulus-loans.html> ("To meet the [coronavirus] demand, the SBA already has hired nearly 7,000 employees since

In the second round, the coefficient of 37.04 for the Small Business Employment variable is the estimated difference in state loan allocation per private employee associated with an increase of 1% in the small business employment ratio, holding all other variables constant (statistically significant, $p < .01$). The coefficient of 115.08 for the COVID-19 Impact variable is the estimated difference in loan allocation per private employee associated with a 1% relative increase in the coronavirus impact percentage (cases per capita * 100), holding all other variables constant. For a 1% relative increase in the COVID-19 impact percentage, we would expect to see an increase of \$115.08 in loan amount. The coefficient of -314.99 for the 2016 Election Voting variable is the estimated difference in loan allocation per private employee associated with voting for Donald Trump in the 2016 election, holding all other variables constant ($p < .01$). The coefficient of 6.15 for the Unemployment variable is the estimated difference in loan allocation per private employee associated with a 1% increase in unemployment claims per private employee filed in the two weeks before the loan allocation, holding all other variables constant. The coefficient of -0.63 for the Round 1 Allocation variable is the estimated difference in loan allocation per private employee associated with a one dollar increase in allocation in the previous round, holding all other variables constant (statistically significant, $p < .001$). Thus, the higher the loan values received in the first round, the more likely firms in the state were to receive lower amounts overall in the second round.

For the second round of the PPP, which we calculate through May 8, 2020, statistically significant results showed striking differences from the previous round. These changes may have been due to a redirection of the program to better meet the needs of small businesses or simply as a response to criticism. Loan allocation in the first round was negatively

March, and the hiring continues.”).

associated with allocations in the second round, meaning several of the trends in allocation must have reversed entirely. The loan amount correlation with small business employment in the states, however, remained positive and statistically significant. That is, states with more small businesses still tended to receive more PPP loans. Most notably, in the second round, states suffering a higher coronavirus impact, based on a measure of new infections per capita, tended to enjoy an increase in the amount of loans disbursed. Little evidence exists, however, to show that unemployment claims predicted loan amounts. Finally, the trend of allocation due to political leanings also reversed in the second round, such that Republican states received fewer funds per employee on the whole. Overall, we can conclude that, at the limited resolution the SBA published their data at the time, loans started to flow to heavily impacted states only in the second round.

C. Critical Questions Surrounding the PPP

Having conducted our analysis of the publicly available data surrounding PPP loans, we can now consider several of the most critical questions surrounding a program of this magnitude and exigency. To do so, we draw upon our own findings, of course, but also conduct a wider examination of other economic analyses that have been conducted to date, in an effort to survey the state of the field.

1. Was the PPP Administered for Partisan Political Advantage?

We considered and tested the hypothesis—entertained widely by the chattering classes on Twitter and other social media—that the PPP was deployed as a political tool by the Trump administration to buttress his presidential reelection campaign. Drawing upon our quantitative findings from the actual disbursement of PPP loans, we conclude that any political designs underlying the program likely failed. That failure might have been due either to the integrity of its

administrators or to their incompetence in advancing a partisan agenda. In the first round of the PPP, states that voted for Donald Trump in the 2016 election did receive, on average, about \$130 more per private employee than states that voted for Hillary Clinton. But statistics will not prove to be the source of any evidence of political or punitive motivations behind the PPP disbursements.

Although the hypothesis of a politically motivated PPP in the first round is plausible, as Republican states tended to receive more loans per private employee, the relationship was not statistically significant. Further, that relationship reversed in the second round of PPP funding. Within the nascent economic literature on the PPP, scholars have tended not to question the motivation of the PPP program, but instead its efficacy according to its stated objectives. Documentary accounts of the policymaking process will have to be investigated when they are ultimately released, in order to evaluate the extent to which political pressure from the executive branch shaped the design of the loans. The SBA is, unlike the Federal Reserve, a cabinet-level agency of the executive branch and thus far from an independent political organ. Whether explicit political choices created distortions *within* the policy itself is something future correspondence or communiques will be needed to prove.

2. Was the PPP Administered Corruptly?

Another line of questioning related to the PPP funds is whether the program was administered corruptly, not at the level of government officials in the executive branch, but rather at the level of bank lenders and borrowers free riding on a program meant to prop up the economy during one of the worst economic crises in American history. Although our statistical evidence does not provide answers to this question at its state-level resolution, the fact that the small number of firms taking on the largest loans—those greater than one million dollars—accounted for more than half of the total lending does suggest problems with a program designed to

benefit “small businesses.”⁵⁴ Further, recent examinations of firm-level data have observed seemingly “unworthy” borrowers, some of whom have begun to return their loans.

In the economics literature, for instance, Anna Cororaton and Samuel Rosen have investigated the characteristics of public firm borrowers in the PPP in an attempt to answer some of these questions.⁵⁵ Although certain public firm borrowers were made eligible for the PPP, these firms have drawn considerable scrutiny in the press: Shake Shack and Potbelly, among many others.⁵⁶

Cororaton and Rosen ran regression analyses on the 273 public firms that received \$929 million in loans between April 7 and 27, 2020. The scholars are careful to point out that these firms received only 0.3% of the total PPP funds, a fact that can be obscured when these public firms are featured prominently in the news. Data on these firms were gathered from Compustat, where Cororaton and Rosen found that 47.3% of public firms were eligible to receive PPP funds. Ultimately, according to their regression results, the firms that did receive the funds—which constituted 13% of the eligible public firms—did tend to possess characteristics targeted by the SBA: though they were smaller in terms of total assets, they tended to have larger numbers of

54. See Yan Wu & Vivien Ngo, *Where Did the Biggest PPP Loans Go?*, WALL ST. J. (July 23, 2020, 12:00 PM), <https://www.wsj.com/graphics/where-did-the-biggest-ppp-loans-go/>.

55. See Cororaton & Rosen, *supra* note 5, at 2.

56. See Jen Wieczner, *PPP: Dozens of Public Companies Kept Millions of Dollars in Small-Business Loans*, FORTUNE (July 7, 2020, 8:00 AM), <https://fortune.com/2020/07/07/ppp-loans-public-companies-small-businesses-sba-paycheck-protection-program/>; Inti Pacheco & Theo Francis, *Public Companies Got \$500 Million in Small Business Loans*, WALL ST. J. (Apr. 22, 2020, 6:27 PM), <https://www.wsj.com/articles/these-are-the-public-companies-that-got-small-business-loans-11587493742>; Cororaton & Rosen, *supra* note 5, at 673 (In an earlier version of their published paper, app. A tbl. A1 contained a detailed list of 273 public firms and loans amounts.); Jonathan O’Connell et al., *Public Companies Received \$1 Billion in Stimulus Funds Meant for Small Businesses*, WASH. POST (May 1, 2020), <https://www.washingtonpost.com/business/2020/05/01/sba-ppp-public-companies/>.

employees. The PPP-receiving public firms also had less growth opportunities and less cash on hand. These firms also tended to have outstanding debt, which may reflect more robust banking relationships.⁵⁷

Little to no concrete evidence suggests that firms such as these or firms connected to political associates of the current administration received a *disproportionately* high share of PPP funds. Thus, accusations that the PPP suffered from explicit corruption are not substantiated at this time. It is more likely that these larger and more well-connected firms obtained access through their high general levels of social capital (such as through privileged relationships with lenders) and information access (through attorneys and accountants) rather than through explicitly corrupt channels.

3. Was the PPP Managed Incompetently?

In terms of the existing quantitative evidence, our results and those of other scholars support a conclusion that the PPP was mismanaged and poorly targeted in several respects. Beyond unverifiable political influence, the distribution of the loans on the ground reflected contingencies that can largely be explained with theories other than Trump's political designs. For instance, they might owe much to the social structure of loan making on the ground. In interviews we conducted and news reports, several patterns emerged regarding the award of loans. Especially in the first round, factors such as the local embeddedness of banks, borrowers' experience with the financial system, and borrowers' existing social ties with banks appear to have resulted in the privileging of certain applicants over others in receiving PPP loans. Similar patterns appear in the statistical data we collected.

Consider our finding that funds initially flowed—in round one—to the rural or midwestern states depicted in

57. Cororaton & Rosen, *supra* note 5, at 2–3.

Figure 1. Granja et al., tie this pattern to the non-participation of large banks in lending to small businesses.⁵⁸ According to Granja's data, the largest four banks were responsible for lending 36% of small business loans prior to the PPP, but only 3% afterwards.⁵⁹ This massive shift in lending prompted by the PPP may have been a boon for the small banks, but it also likely put loans out of reach for many borrowers that did not have existing relationships with smaller lenders, such as borrowers in urban centers less likely to encounter small community banks. Indeed, Granja et al. argues that "exposure"—geographical proximity—to low PPP banks (such as Wells Fargo, JP Morgan Chase, Bank of America, and Citibank) correlated tightly with low PPP lending for borrowers.

That pattern, which corresponds to the geographic pattern we present in Figure 1A and the correlation we found between lending and state small business employment percentage, suggests that further investigation is needed to determine why large banks were not able to meet the needs of small businesses. Based on anecdotal evidence, it seems that larger banks prioritized larger clients that had privileged access to lenders. Further, we must question why certain geographical areas were favored based on a more robust small banking infrastructure in the first place, a question outside the scope of this Article but one that has been asked by rural sociologists.⁶⁰ It is likely that the intermediation of the program by the banking system writ large led to distortions in which loans did not make their way to the businesses most impacted by the pandemic, at least in the program's early stages. Whether this flaw was a result of incompetence or deliberate design will need to be investigated if documentation of the policy design process is

58. See Granja et al., *supra* note 5.

59. See *id.* at 1.

60. See generally Charles M. Tolbert et al., *Restructuring of the Financial Industry: The Disappearance of Locally Owned Traditional Financial Services in Rural America*, 79 RURAL SOCIO. 355 (2014).

ever released. Ultimately, Granja et al. present preliminary evidence from Homebase, a payroll and scheduling software for the retail and foodservice sector, that shows that even among successful PPP borrowers, PPP funds have *not* been used to prop up local economic activity but rather to build up firm savings and meet other loan commitments.

According to Neilson et al., who draw on a social media-based survey of 14,000 small business owners in the United States, information frictions and the “first-come, first-served” design of the program resulted in larger firms receiving disproportionate resources which may have “permanently reduced its effectiveness.”⁶¹ Our interview data presented in Part II help shed light on the particular character of these information frictions that may have biased against lending to the smallest businesses.

Their questionnaire results showed that the smallest businesses, those with fewer than ten full-time employees, were both less aware of the PPP and about 20% less likely to apply than businesses with between ten and fifty employees. Further, “the smallest businesses applied later, faced longer processing times, and were less likely to have their application approved.”⁶² Compounding these effects, the businesses that did receive PPP loans in the survey sample did achieve better outcomes: they were more likely to report fewer layoffs, have higher employment and report improved expectations about the future.

4. Did the Disbursement of PPP Loans Demonstrate a Racial Bias?

Media outlets widely reported findings that minority owned businesses were disproportionately affected by the COVID-19 pandemic and faced barriers to accessing the PPP.⁶³ These reports had particular resonance in Senate

61. See Neilson et al., *supra* note 5, at 2.

62. *Id.*

63. See Imani Moise, *Predominately Black Congressional Districts Got Fewer*

committee meetings, where racial disparities in the economic effects of the pandemic were discussed.⁶⁴ UCSB economist Robert Fairlie has largely corroborated these concerns using data from the US Current Population Survey. For instance, he reports the following conclusions:

The number of active business owners in the United States plummeted by 3.3 million or 22 percent over the crucial two-month window from February to April 2020. The drop in business owners was the largest on record, and losses were felt across nearly all industries and even for incorporated businesses. African-American businesses were hit especially hard, experiencing a 41 percent drop. Latinx business owners fell by 32 percent, and Asian business owners dropped by 26 percent. Simulations indicate that industry compositions partly placed these groups at a higher risk of losses. Female-owned businesses were also disproportionately hit by 25 percent.⁶⁵

On the question of racial bias, several plausible reasons might explain why minority owned businesses faced particular challenges in the early days of the COVID-19 pandemic, including reduced access to the PPP because of historic lending patterns that disfavor minority-owned businesses.⁶⁶ Fairlie, however, chose to focus his study on the industry composition of businesses owned by minority entrepreneurs,⁶⁷ using simulations to quantify the fact that female, black, Latinx,⁶⁸ and Asian businesses were

PPP Loans: Study, REUTERS (July 30, 2020, 8:06 AM), <https://www.reuters.com/article/us-health-coronavirus-ppp/predominately-black-congressional-districts-got-fewer-ppp-loans-study-idUSKCN24V24B>.

64. Senate CARES Act Hearing, *supra* note 30.

65. See Robert W. Fairlie, *The Impact of Covid-19 on Small Business Owners: Evidence of Early-State Losses from the April 2020 Current Population Survey* (Nat'l Bureau of Econ. Rsch., Working Paper No. 27309, 2020), https://www.nber.org/system/files/working_papers/w27309/w27309.pdf.

66. See Amara Omeokwe, *Black-Owned Businesses Hit Especially Hard by Coronavirus Pandemic, Study Finds*, WALL ST. J. (Aug. 4, 2020, 12:32 PM), <https://www.wsj.com/articles/black-owned-businesses-hit-especially-hard-by-coronavirus-pandemic-study-finds-11596558754>.

67. Fairlie, *supra* note 65, at 7–8.

68. See Inti Pacheco, *Latino Business Owners Hit Hard During Pandemic*, WALL ST. J. (Aug. 3, 2020, 7:22 PM), <https://www.wsj.com/articles/latino->

disproportionately concentrated in industries hit hard by the pandemic. For example, 66% of businesses owned by black business owners are considered “essential” while 76% of businesses nationally are considered essential. This discrepancy meant that nonessential business shutdowns adversely affected black business owners. Similarly, only 61% of female-owned businesses are considered essential.⁶⁹

5. Was the PPP Effective at Supporting Payrolls?

Not all questions surrounding the PPP are inherently critical. Indeed, some observers posited that the program had been quite successful.⁷⁰ On that front, we primarily conclude that there is mixed evidence that the first round program was “successful” according to its own stated objectives of alleviating pandemic-related unemployment among small businesses. The program issued on average about five weeks’ worth of payroll to firms, as measured per employee in the private sector by state. The money did not go to the states that “needed” it most based on coronavirus impact at the time, but it did go to states with higher relative levels of small business employment. We did not find statistically significant evidence that the program favored Republican states, though those states did appear to receive slightly more funds on average, likely due to the structure of the economy in those states. Overall, the picture we found was of a program designed to get funds “out the door” but without a clear goal or logic.

According to our reading of other early quantitative literature, the results are mixed. PPP loans may have helped small business that received them with liquidity, but it is not clear these funds were channeled into payroll at a level visible in statistical findings. Studies by Granja et al.,⁷¹

business-owners-hit-hard-during-pandemic-11596493322.

69. Fairlie, *supra* note 65, at 8.

70. O’Connell et al., *supra* note 19.

71. See Granja et al., *supra* note 5, at 3–4.

Autor et al.,⁷² and Chetty et al.⁷³ are particularly useful in answering this question, because they each draw on similar research designs to make causal statements about micro-level data.

First, studies such as one by Granja et al. have begun to lay the groundwork for assessing whether the PPP loans “paid off” by matching PPP disbursement with employment micro-data. Their results about the distribution of PPP loans largely confirm our initial quantitative findings. Granja et al. found that there was not a significant effect on unemployment claims in the initial weeks of the program. While confidence intervals cannot rule out moderate effects of the program, they find that the PPP did not have a large effect on unemployment.

Granja et al.’s findings, which use proprietary data from the SBA at the congressional district level and sophisticated variable controls to isolate effects of the PPP loans, also show that the PPP did not alleviate unemployment claims.⁷⁴ These findings corroborate our state-level observation that showed a general lack of relationship between lending and unemployment figures.

Finally, Granja et al. uses US Census Small Business Pulse Survey data to argue that many firms did not use PPP funds on payroll, as intended, but instead on building up liquidity.⁷⁵ While such a result could have medium-run effects on the survival of the firms, this behavior does not support short-run employment and, for firms that would have been fine without the loans, provides further evidence that the loans did not hit their intended target.

Granja et al.’s Freedom of Information Act confidential data from the SBA, however, contained only information

72. See Autor et al., *supra* note 5, at 25.

73. See Chetty et al., *supra* note 5, at 34–35.

74. See Granja et al., *supra* note 5, at 24, 39, 94, 98.

75. See *id.* at 39–41.

through April 15, 2020. So, Granja et al. are unable to show the drastic change in lending that we argue took place in the second round of the program, which began on April 27.

Chetty et al. use aggregated data from many private sources—such as credit card and payroll processing—and a difference-in-difference research design which allows them to make causal statements about firms on the threshold of eligibility of 500 employees. Although this design limits insights to the largest firms that participated in the PPP, it does allow the study to draw causal interpretation. Nevertheless, Chetty et al. finds that payroll declines during the pandemic may be stable across firm size, from 5 to 30,000 employees, at -36% to -39%, suggesting results from firms around the 500-employee threshold have some level of generalizability for both larger and smaller firms. Their results show no significant impact on employment rates due to PPP lending.⁷⁶

In contrast to Chetty et al., Autor et al. found a modest effect of PPP on employment using very similar difference-in-difference methods. According to their analysis, the PPP increased employment at eligible firms by 2 to 4.5%.⁷⁷ This modest increase may have been an inefficient outcome considering their calculation of the dear price of the program—between \$162,000 and \$381,000 per job supported.⁷⁸ Autor et al., however, also point out that slight differences in data sources and standard errors could entirely explain the differences between their findings and Chetty et al.'s.⁷⁹

76. See Chetty et al., *supra* note 5, at 32–33.

77. See Autor et al., *supra* note 5, at 3, 24.

78. See *id.* at 24–25.

79. See *id.* at 5–6.

6. Did the PPP Alleviate Poverty?

While the PPP generally had a very limited effect on employment, it is still too early to say definitively whether the program alleviated poverty or had other long-term effects on the economy, though early indications suggest a positive impact.⁸⁰ Certainly, the additional liquidity in the American economy may have provided lasting benefits for the firms that received it.

According to the findings of Granja et al., benefits from the PPP to firms outside of supporting payroll might have occurred through three possible channels. First, firms that received PPP benefits could have continued to operate as they did prior to receiving funds, accruing benefits to the owners and substituting forgivable loans for traditional lending. Second, firms might simply have strengthened balance sheets during shelter in place, suggesting potential medium-term benefits due to a stronger financial position. Finally, some firms may have actually tried to call back workers, but this result may not have been observed due to employees preferring unemployment insurance.⁸¹

When considering poverty writ large, outside of the PPP, Chetty et al. found an important result related to consumer spending.⁸² High-income individuals reduced spending much more than low-income individuals during the pandemic, resulting in a disproportionate impact on income and employment for low-income employees working in affluent areas. In that case, payments to households through unemployment insurance would have been a more effective stimulus tool, inasmuch as health concerns were the real limitation in attempting to stimulate demand and get people back to work.

80. See Jason DeParle, *Pandemic Aid Programs Spur a Record Drop in Poverty*, N.Y. TIMES (July 28, 2021), <https://www.nytimes.com/2021/07/28/us/politics/covid-poverty-aid-programs.html>.

81. See Granja et al., *supra* note 5, at 33.

82. See Chetty et al., *supra* note 5, at 2–6.

7. Did the PPP Prevent Long-Term Damage to the US Economy?

This question is, of course, still too early to answer and lies beyond the strict scope of the data available for our analysis. The study by Chetty et al., however, led them to conclude that “the only effective approach to mitigating economic hardship in the short run may be to provide benefits to those who have lost their incomes to mitigate consumption losses while public health measures restore consumer confidence and ultimately increase spending.”⁸³ Longer-term benefits from the PPP are possible, though the limited scale of the program in the face of continued economic slowdown may limit the magnitude of those long-term benefits. Cororaton and Rosen found that PPP borrowers could potentially allocate up to \$20,319 per employee with the program.⁸⁴ Similarly, in studying more subjective evidence, Humphries et al. found that business owners who received PPP loans reported more optimistic expectations about the future, about a 10% higher stated probability of recovery in the next two years and 10% decrease in stated probability of bankruptcy in the next six months.⁸⁵

Bartik et al. found that states receiving higher rates of PPP loans showed milder unemployment troughs, suggesting some prophylactic effect of PPP loans.⁸⁶ As we pointed out earlier, however, it is not clear whether the distribution of loans to less-affected states could be confounding this relationship. Finally, Bartik et al. do report a “cleansing effect” of the PPP due to banks preferring healthier firms in lending and cash-poor firms not surviving long enough to receive funds at all.⁸⁷ This more cynical

83. *See id.* at 34.

84. *See Cororaton & Rosen, supra* note 5, at 3.

85. Humphries et al., *supra* note 5, at 6.

86. Bartik et al., *Measuring the Labor Market at the Onset of the COVID-19 Crisis, supra* note 5, at 16.

87. *See id.* at 19.

conclusion by Bartik et al. is unclear, however: it suggests that surviving the pandemic economically might have been a matter of evolutionary “success,” whereas the objective of the program was to support employment and not to facilitate a competition in which only the strong firms survive.

II. A SOCIOECONOMIC HISTORY OF THE PAYCHECK PROTECTION PROGRAM

Like so much else in the time of COVID-19, the PPP spread from nascent idea to ubiquitous phenomenon in dramatically little time.⁸⁸ This explosive transmission of lending activity was the federal government’s primary attempt to respond legislatively to a medically induced financial emergency. In the absence of a carefully tested plan for such an intervention, however, Congress and the SBA cobbled together several components of the PPP from scratch under extreme time pressure.⁸⁹ Predictably, many intended beneficiaries struggled mightily to navigate the ad hoc loan process to avail themselves of proffered funds, and even governmental officials toiled to administer the program effectively in its first few weeks. Perhaps the only entities to thrive in those confused early days were the financial intermediaries—national and regional banks primarily—that originated loans from the SBA to PPP lenders and earned tens of billions of dollars doing so.⁹⁰

88. Holtz-Eakin, *supra* note 20.

89. David T. Zaring, *The Government’s Economic Response to the COVID Crisis* 2 (July 28, 2020), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3662049; Michael S. Barr et al., *The Financial Response to the COVID-19 Pandemic* 9 (Univ. of Mich. L. & Econ., Research Paper No. 20-040, Aug. 1, 2020), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3666461.

90. See sources cited *supra* note 15; see also Press Release, Bd. of Governors of the Fed. Rsrv. Sys., Federal Reserve Takes Additional Actions to Provide up to \$2.3 Trillion in Loans to Support the Economy (Apr. 9, 2020), <https://www.federalreserve.gov/newsevents/pressreleases/monetary20200409a.htm>.

A. The Political History of the PPP

The most striking characteristic of the financial fall-out from COVID-19 was its astonishing debut. A Trump administration that had resolutely denied the initial presence and impact of the virus performed an abrupt volte-face to enact one of America's largest financial responses in history, a two-trillion-dollar stimulus package.⁹¹ On March 9, 2020, when the United States reported 605 confirmed cases of the coronavirus and twenty-two deaths,⁹² President Trump attempted to reassure Republican senators: "We're prepared, and we're doing a great job with it [the virus]. And it will go away. Just stay calm. It will go away."⁹³ Just a fortnight later, on March 27, 2020, Trump was signing the CARES Act into law.⁹⁴ One week after that, loans began emanating from the SBA.⁹⁵

Democrats in the House had introduced and, indeed, voted for the origins of this bill nine months earlier.⁹⁶ How did Republican legislators, who had ignored that earlier bill, then so quickly change from repudiating governmental

91. Jack Brewster, *Trump Signs \$2 Trillion Coronavirus Relief Bill into Law, Largest Aid Package in U.S. History*, FORBES (Mar. 27, 2020, 4:36 PM), <https://www.forbes.com/sites/jackbrewster/2020/03/27/trump-signs-2-trillion-stimulus-bill-into-law-largest-aid-package-in-us-history/>.

92. Harry Stevens & Shelly Tan, *From "It's Going to Disappear" to 'WE WILL WIN THIS WAR,'* WASH. POST (March 31, 2020), <https://www.washingtonpost.com/graphics/2020/politics/trump-coronavirus-statements/>.

93. President Donald Trump, Remarks by President Trump After Meeting with Republican Senators (March 10, 2020), <https://trumpwhitehouse.archives.gov/briefings-statements/remarks-president-trump-meeting-republican-senators-2/>.

94. Coronavirus Aid, Relief, and Economic Security Act, Pub. L. No. 116-136, 134 Stat. 281 (2020) (codified as amended in scattered sections of U.S.C.).

95. Press Release, U.S. Small Bus. Admin., SBA's Paycheck Protection Program for Small Businesses Affected by the Coronavirus Pandemic Launches (Apr. 3, 2020), <https://www.sba.gov/article/2020/apr/03/sbas-paycheck-protection-program-small-businesses-affected-coronavirus-pandemic-launches>.

96. See Middle Class Health Benefits Tax Repeal Act of 2019, H.R. 748, 116th Cong. (2019) (originally passed in the House, July 17, 2019).

bailouts to embrace government largesse on an unprecedented scale? March 2020 was filled with several grim milestones that made the severity of the virus impossible to ignore, including the widespread cancellation of schooling, a plummeting stock market, and in the week ending March 21 unemployment filings of 3.3 million, a figure “nearly five times” the previous record set almost forty years before.⁹⁷

1. Small Businesses and the PPP

Just a dozen years before, government officials had triaged another great financial crisis born of the subprime mortgage collapse in 2008.⁹⁸ Yet legislators were unable or unwilling to adopt many of the lessons of that Great Recession. First, the crisis in 2008 was deemed a systemic financial problem, while the 2020 crisis was borne of a public health emergency.⁹⁹ In the 2008 recession, the Obama administration considered the possibility of bailing out home mortgage holders directly—which might have more closely resembled the current governmental interventions—but chose instead to provide direct financial support to mortgage lenders and systemically important financial institutions deemed too big to fail. Commentators on both the left and the right criticized the 2008 response¹⁰⁰ and, with the exception of a variety of liquidity facilities,¹⁰¹ the 2020 response via the PPP owes little to that precedent.

97. Jim Zarroli, *3.3 Million File Unemployment Claims, Shattering Records*, NPR (Mar. 26, 2020, 12:02 AM), <https://www.npr.org/2020/03/26/821580191/unemployment-claims-expected-to-shatter-records>.

98. Stovall, *supra* note 27.

99. See PAULSON ET AL., *supra* note 3, at 23–24; TOOZE, *supra* note 3, at 6; ALAN BLINDER, *AFTER THE MUSIC STOPPED* 5–6 (2013); AARON ROSS SORKIN, *TOO BIG TO FAIL* 3–4 (2009).

100. PAULSON ET AL., *supra* note 3, at 80; see BLINDER, *supra* note 99, at 181.

101. See BD. OF GOVERNORS OF THE FED. RESRV. SYS., *REPORT ON OUTSTANDING LENDING FACILITIES AUTHORIZED BY THE BOARD UNDER SECTION 13(3) OF THE FEDERAL RESERVE ACT* 3–4 (July 31, 2020), <https://www.federalreserve.gov/publications/files/pdcf-mmlf-pmccf-smccf-talf-ppplf-mslp-20200803.pdf>.

Instead, politicians and media outlets quickly defined this economic crisis in their narratives as primarily a problem of the nation's *small* businesses.¹⁰² Rather than an issue of perturbations throughout the macroeconomy, millions of the nation's "mom and pop" businesses—not its banks nor its largest industrial concerns—were the ones deemed, collectively, "too big to fail."¹⁰³ But though the social imaginary of the small business was critical to the overarching policy of the PPP, details of the program belied the centrality of small businesses, as many of the PPP's critical mechanisms deferred instead to the centrality of orthodox financial intermediaries.¹⁰⁴

So, for instance, small businesses would not receive PPP loans directly from the SBA; rather, they were obliged to apply to conventional banks and similar financial institutions for the loans, which would then be underwritten by the SBA.¹⁰⁵ The Small Business Administration, in sum, declined to deal directly with small businesses. As we shall see, that intermediation caused extreme difficulties for some entrepreneurs who struggled to navigate the PPP and to correct errors committed on their loans by the lenders acting as their intermediaries.

Once the PPP became operational in early April 2020, the program resembled a wind tunnel "money machine,"

102. Jim Zarroli, *Even the Los Angeles Lakers Got a PPP Small Business Loan*, NPR (Apr. 27, 2020), <https://www.npr.org/sections/coronavirus-live-updates/2020/04/27/846024717/even-the-la-lakers-gota-ppp-small-business-loan>.

103. See President Donald Trump, Remarks by President Trump on Supporting Our Nation's Small Businesses Through the Paycheck Protection Program (Apr. 28, 2020), <https://trumpwhitehouse.archives.gov/briefings-statements/remarks-president-trump-supporting-nations-small-businesses-paycheck-protection-program/>; Senate CARES Act Hearing, *supra* note 30.

104. See CHARLES TAYLOR, MODERN SOCIAL IMAGINARIES 23–24 (2004); BENEDICT ANDERSON, IMAGINED COMMUNITIES: REFLECTIONS ON THE ORIGIN AND SPREAD OF NATIONALISM 15 (1983).

105. TREASURY DEP'T, *supra* note 52; AnnaMaria Andriotis et. al, *What's in the \$2 Trillion Senate Coronavirus Bill*, WALL ST. J. (Mar. 26, 2020), <https://www.wsj.com/articles/whats-in-the-2-trillion-senate-coronavirus-bill-11585185450>.

with swirling piles of cash available to anyone canny enough to grab it amidst the maelstrom.¹⁰⁶ In just two weeks, a massive amount of governmental financial intervention squeezed through a narrow temporal window.¹⁰⁷ In contrast to the virus's nanoscale and America's dilatory appreciation of its risk, the scale of the economic response to the pandemic exceeded—by many orders of magnitude—the institutional capacity of the federal government.

2. The Design and Scale of the PPP

To appreciate the scale of the PPP, consider a more typical year for the operations of the SBA. In 2019, as the most recent comparator, the SBA allocated around \$30 billion worth of loans.¹⁰⁸ By contrast, the SBA allocated \$342 billion in PPP loans just between April 3 and April 15, 2020.¹⁰⁹ When this first round of PPP loan applications closed on April 15, the Administrator of the SBA Jovita Carranza and Secretary of the Treasury Steve Mnuchin issued a joint statement crafted for media headlines: “The SBA processed more than 14 years’ worth of loans in less than 14 days.”¹¹⁰

Cramming such an enormous volume of lending into such a tight window was always going to strain the successful execution of this massive, impromptu program. Indeed, the PPP began experiencing challenges even earlier,

106. Jeanna Smialek, *How the Fed's Magic Money Machine Will Turn \$454 Billion into \$4 Trillion*, N.Y. TIMES (Mar. 26, 2020), <https://www.nytimes.com/2020/03/26/business/economy/fed-coronavirus-stimulus.html>.

107. See U.S. SMALL BUS. ADMIN., PAYCHECK PROTECTION PROGRAM (PPP) REPORT: APPROVALS THROUGH 12 PM EST 4/16/2020, at 2 (2020), <https://home.treasury.gov/system/files/136/SBA%20PPP%20Loan%20Report%20Deck.pdf>.

108. See SMALL BUS. ADMIN. AGENCY FIN. REP. 1 (2019), https://www.sba.gov/sites/default/files/2019-12/SBA_FY_2019_AFR-508.pdf.

109. See U.S. SMALL BUS. ADMIN., *supra* note 107.

110. Press Release, U.S. Small Bus. Admin., Statement from Sec'y Steven T. Mnuchin and Adm'r Jovita Carranza on the Success of the Paycheck Protection Program (Apr. 17, 2020), <https://home.treasury.gov/news/press-releases/sm983>.

at its conceptual stage. Despite a seeming consensus in anecdotes relayed by congressional representatives, the definition of what constituted “small” and “large” in an economy like that of the United States is far from clear.¹¹¹ In fact, even a suitable metric is unclear: Is the size of a business best measured in terms of revenues, profits, assets, or some other number on a balance sheet? Or perhaps its overall market valuation? None of the above, as it turned out.

In its ordinary operations, the SBA uses a definition of “small business” that turns on the number of employees and the status of its securities: respectively, fewer than 500 and private (not publicly traded).¹¹² The SBA’s definition of a small business can then be relaxed to include larger businesses depending on the industry. These standards differ widely, with an upper limit of up to fifty million dollars in yearly revenues and employment limits up to 1,500 employees.¹¹³

Perhaps unsurprisingly, given the time constraints for providing relief quickly, the SBA’s pre-existing, employment-based definition was adopted for the PPP.¹¹⁴ That definition suffered from dramatic over-inclusiveness: many extraordinarily wealthy and powerful firms, for example, operate with few employees and equity shares that trade privately. Further, lockdown mandates early on were unlikely to affect employment at firms whose employees were able to work from home. Private equity funds and hedge

111. See Emily Stewart, *The PPP Worked How it was Supposed to. That’s the Problem.*, Vox (Jul. 13, 2020, 8:00 AM), <https://www.vox.com/recode/2020/7/13/21320179/ppp-loans-sba-paycheck-protection-program-polling-kanye-west>.

112. See 13 C.F.R. § 121 (2020).

113. See Coronavirus Aid, Relief, and Economic Security Act, Pub. L. No. 116-136, § 1102, 134 Stat. 281, (2020) (codified as amended in scattered sections of U.S.C.); 15 U.S.C. § 636(a)(36)(D).

114. See *PPP Borrower Application Form*, U.S. SMALL BUS. ADMIN., <https://www.sba.gov/sites/default/files/2020-04/PPP%20Borrower%20Application%20Form.pdf> [https://web.archive.org/web/20211227195043/https://www.sba.gov/sites/default/files/2020-04/PPP%20Borrower%20Application%20Form.pdf] (last visited Dec. 27, 2021).

funds, as just two examples, typically employ fewer than a few dozen professionals and scrupulously avoid public status through a number of regulatory exceptions to US securities regulations such as the Securities Act of 1933, the Securities Exchange Act of 1934, and the Investment Company Act of 1940.¹¹⁵ But these high-finance investment funds were hardly the mom-and-pop outfits desperate for governmental assistance. Hedge and private equity funds were not specifically excluded from the PPP until April 28, more than a week after the close of the first round, when the Treasury Department issued an Interim Final Rule expressly disqualifying them.¹¹⁶

To evaluate the actual size and scope of the PPP and the loans it issued, we have analyzed data released by the SBA in a previous section, Section I.B.3. As many Senators complained bitterly in oversight hearings,¹¹⁷ the earliest data released publicly by the SBA had extremely poor resolution: data on individual firms and their loans were not disclosed for several months and then only for the biggest loan values.¹¹⁸ Accordingly, our statistics are similarly constrained. Nevertheless, they do produce interesting findings on the state level that reveal the contours of the PPP's general structure and the political decision environment of the initial months of the pandemic.

115. These funds are typically structured to avoid registration under the Securities Exchange Act of 1933 by refraining from issuing their shares through an initial public offering and limiting the shares to fewer than 2,000 shareholders; and under the Investment Company Act of 1940 by offering their shares to fewer than 100 investors or only to "accredited investors." See JAMES COX ET AL., *SECURITIES REGULATION, CASES AND MATERIALS* (Wolters Kluwer 9th ed. 2020).

116. See Business Loan Program Temporary Changes; Paycheck Protection Program—Requirements—Promissory Notes, Authorizations, Affiliation, and Eligibility, 85 Fed. Reg. 23,450, 23,451 (Apr. 28, 2020) (to be codified at 13 C.F.R. pts. 120 and 121).

117. See generally Senate CARES Act Hearing, *supra* note 30.

118. See Courtney Weaver, *Treasury Agrees to Release Names of Most Paycheck Protection Program Borrowers*, FIN. TIMES (June 19, 2020), <https://www.ft.com/content/23ad5fa2-0d7e-4f82-b8ab-4ed1da6b7659>.

In the first round, the average loan amount per private employee for the states was \$2,941.86, with considerable variation around this number.¹¹⁹ If indeed the goal of the program was to keep employees off unemployment insurance, which itself has been supplemented during the pandemic with a bonus of \$600 per week, these PPP amounts were hardly adequate. The program, intended to be drawn on just once by firms, provided just about one month's worth of payroll funds, bearing in mind that firms were initially obligated to spend 75% of their loan on payroll costs, which was later dropped to 60%.¹²⁰ As we now know, many small businesses had to operate at diminished capacity, and with diminished revenues due to lockdowns, for far more than four weeks.¹²¹

Yet statistics, alone, do not explain *how* this difference materialized. Furthermore, the state-level averages obscure considerable variation among the entire eligible pool of applications. The reality is that many eligible firms likely did not apply, and many firms that received loans likely received much higher amounts per employee than the per capita average. To understand the actual impact of the program, we expanded our investigation beyond SBA statistics to those businesspeople who attempted to navigate the PPP.

B. *Deployment of the Program*

A gulf always exists, of course, between the intention of a law's makers and the experience of a law's subjects. Because of the urgency with which the PPP was

119. See *supra* Section I.A.2.

120. Peter Whoriskey, *PPP Was Intended to Keep Employees on the Payroll. Workers at Some Big Companies Have Yet to Be Rehired.*, WASH. POST (July 27, 2020), <https://www.washingtonpost.com/business/2020/07/27/ppp-was-intended-keep-employees-payroll-workers-some-big-companies-have-yet-be-rehired/>.

121. See, e.g., Danielle Kurtzleben et al., *Here's How The Small Business Loan Program Went Wrong in Just 4 Weeks*, NPR (Mar 4, 2020, 11:14 AM), <https://www.npr.org/2020/05/04/848389343/how-did-the-small-business-loan-program-have-so-many-problems-in-just-4-weeks>.

promulgated, the gap in this case turned out to be extraordinary. To understand the initial impact of the program, we consider three constituencies comprising the key players in the rollout of the PPP: businesspeople who applied for the loans, governmental officials who administered the program's funds, and financial intermediaries who brokered loans between businesses and the government for a fee. Our study of these groups suggests that small business owners and governmental officials struggled to deal with the early chaos of the program, but the banks navigated the situation to their considerable profit. Those differing outcomes have much to do with both the relative experience of the participants with America's legal and financial infrastructure as well as the specific design of the PPP's lending program, which created conflicting incentives.

1. Confusion for Business Owners

We begin with participants who attempted to navigate the PPP on the ground. Our interviews with multiple business owners—restaurateurs, primarily, and a certified public accountant¹²²—reveal that they struggled to process complex medical and financial regulations, much of which came at them quickly and without adequate explanation or coordination.¹²³ We found that, to cope with that burden, they relied upon private ordering constructed through Granovetterian embeddedness in social ties to compensate for the government's absence.¹²⁴

Mark Granovetter, of course, pioneered the concept of “embeddedness” in economic sociology in an attempt to enrich an under socialized concept of economic action

122. Interviews transcripts, notes, and summaries on file with the authors.

123. See Mark Niquette & Jason Grotto, *Small Firms Join Rush to Return Bailouts After Rules Revision*, FIN. ADVISOR (May 11, 2020), <https://www.fa-mag.com/news/small-firms-join-rush-to-return-bailoutsafter-rules-revisions-55656.html?section=3>.

124. See Granovetter, *supra* note 22, at 481.

longstanding in neoclassical economic models.¹²⁵ That is, Granovetter argued against an atomistic view of humans and frictionless markets in rational actor theories by emphasizing the position of economic actors in social structures.¹²⁶ Specifically, Granovetter was interested in network analysis—the study of social ties¹²⁷—and how economic information circulates within patterns of strong and weak ties. In the economic context, Granovetter emphasized the importance of enduring networks of often reciprocal information sharing that exhibited properties uncharacterizable as either markets or hierarchies.¹²⁸ Indeed, many seemingly open markets are highly ordered series of interpersonal relations. Since Granovetter published his theory in 1973, it has become one of the most-cited works in the social sciences.¹²⁹ In the case of the PPP, information about successfully navigating the program initially circulated only in networks of privileged borrowers embedded via personal ties in relations with either lenders or other legal or financial professionals.

The lack of clarity surrounding the precise terms of the loans was the PPP's original sin. Without knowing whether or under what circumstances these loans would be forgiven, borrowers faced an excruciating decision: take on large amounts of debt that might cripple their firms over the long run or forgo a financial lifeline and risk losing their business immediately. Information, of course, was only one critical variable to be juggled by business owners. One of our subjects, a Texan restaurateur deciding whether to apply for a two-million-dollar loan, found himself in a position in

125. *See id.* at 481–82.

126. *See id.* at 482–83.

127. Mark S. Granovetter, *The Strength of Weak Ties*, 78 AM. J. SOCIO. 1360, 1360 (1973).

128. *See id.* at 1361.

129. *See Stanford Scholars Among the Most Cited*, STANFORD NEWS (Oct. 13, 2014, 5:00 PM), <https://news.stanford.edu/thedish/2014/10/13/stanford-scholars-among-the-most-cited/>.

which obtaining the loan was less a matter of making the “correct” or “rational” business decision as it was of being in the right social position at the right time.¹³⁰ In this section, we explore the perspective of business owners during the first few weeks of the PPP.

To summarize the findings of our interviews with the restaurateurs, we observed a number of common challenges as well as a few idiosyncratic variations. All of the restaurateurs, for instance, did receive PPP loans, though none was successful in the first round. In those early days, they all struggled to educate themselves and to submit loan applications in a morass of urgent confusion, and they each worried about being able to satisfy the requirement that 75% of the loan be allocated to payroll: a huge challenge at a time when many employees were already furloughed or terminated and when unemployment benefits, enhanced by other governmental payments to remediate COVID-19, were more generous than typical paychecks.¹³¹ All the restaurateurs also worried greatly about whether the loans would actually be forgiven, an issue that was unclear at the program’s outset. The loans themselves were also a point of divergence: one owner successfully applied for more than two million dollars, while another received just \$23,000, a fraction of the amount for which she applied but enough to disqualify her from successive applications.¹³²

As these individuals attempted to organize a coherent orientation toward the program and a plan of action, they generally acted embedded within social ties in four ways. Their first reaction was often to reach for ties with banks, which had been deputized by the SBA to process PPP loan applications. Yet, as was widely reported in the news and

130. See interviews transcripts, notes, and summaries on file with the authors.

131. See Dimitris Papanikolaou & Lawrence D. W. Schmidt, *Working Remotely and the Supply-Side Impact of Covid-19* 4 (July 27, 2020), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3615334.

132. Interviews transcripts, notes, and summaries on file with the authors.

strongly reflected in our interviews, many small business owners lack personal social ties with the largest banks.¹³³ The banks, for their part, were either reluctant to participate in such an uncertain program or chose to prioritize their wealthiest clients. At small banks, ties were more productive: several local and regional banks embraced the entrepreneurial opportunity created by the PPP to navigate the program's rules and paperwork and then to service small businesses directly.¹³⁴

Second, business owners actively engaged their professional networks of horizontal ties to other firms in similar commercial fields. As institutional actors, they attempted to orient themselves to other actors in similar circumstances. Locally, businesses communicated with and observed one another, and then modified their own approaches based on what they were learning about the positive and negative experiences of their peers.¹³⁵ In this

133. See Emma Coleman Jordan & Jamillah Bowman Williams, Opinion, *Surprise, Surprise. Big Bank Racism is Corrupting PPP Loans*, L.A. TIMES (July 17, 2020, 3:00 AM), <https://www.latimes.com/opinion/story/2020-07-17/banks-pandemic-small-business-racism> ("Countless small businesses, which didn't have this advantage [prior relationships with banks], were shut out of the first round of PPP."); see Stewart, *supra* note 111 ("Many banks approving PPP loans accepted applications only from existing customers as a default. That left out many minority-owned businesses, which often have weak relationships with banks as a result of years of systemic exclusion.").

134. See, e.g., Stacy Cowley, *The Tiny Bank That Got Pandemic Aid to 100,000 Small Businesses*, N.Y. TIMES (June 23, 2020), <https://www.nytimes.com/2020/06/23/business/paycheck-protection-program-cross-river-bank.html> ("Cross River [Bank of Fort Lee, NJ] has churned out loans to more than 106,000 businesses through the Paycheck Protection Program, a centerpiece of the government's \$2 trillion CARES Act. That puts it just behind three of the country's most prolific lenders: Bank of America, JPMorgan Chase and Wells Fargo.").

135. See, e.g., Interviews transcripts, notes, and summaries on file with the authors; see also Geri Stengel, *Black Women Entrepreneurs Need Support to Keep Their Communities Strong*, FORBES (Aug. 10, 2020, 7:00 AM), <https://www.forbes.com/sites/geristengel/2020/08/10/black-women-entrepreneurs-need-support-to-keep-black-communities-strong/#7256cbe539c7> ("Data from the application for Hello Alice's Covid-19 Business for All Emergency Grant program finds that 36% of Black entrepreneurs report having difficulty securing funding. Alice provides guides, resources, and collaborative communities of fellow entrepreneurs.").

endeavor, industry communications—such as listservs, email chains, and local websites¹³⁶—were particularly important. Restaurateurs in Chicago, for instance, communicated extensively with one another to describe how they were navigating the PPP loan applications, employment and furlough decisions for their waitstaffs, as well as the new health and safety regulations.¹³⁷ Nationally, online resources like Covidloantracker.com¹³⁸ sprang up as a form of “mutual aid” to distribute information for small business owners by small business owners.

Third, only in later stages of the program’s development did service professionals such as attorneys and certified public accountants begin to create a “market” for PPP expertise.¹³⁹ Gaining information from their own professional networks and exposure to many different clients, these professionals began to offer webinars, electronic tools, and other incentives to attract clients to use their services to help navigate the program. Although none of our interviewees engaged this “open market” for PPP services, evidence of its existence and operations is widely available online and in news reports.¹⁴⁰ The fact that small business owners, as best as available evidence can demonstrate, did not rush to enter this new market for services supports Granovetter’s embeddedness model, which

136. See interviews transcripts, notes, and summaries on file with the authors.

137. Interviews transcripts, notes, and summaries on file with the authors.

138. COVID LOAN TRACKER, <https://web.archive.org/web/20200625085228/https://www.covidloantracker.com/> (last visited Dec. 27, 2021) (“COVID Loan Tracker is a community of 31,000+ small business owners reporting across all 50 states. Launched by two small business owners, we started with the mission to help inform other entrepreneurs about when and where PPP and EIDL money is flowing. In the short-time we have existed, our position has evolved into not only a data source but a champion of small business in the face of government ineptitude and the COVID-19 lockdown.”).

139. Interviews transcripts, notes, and summaries on file with the authors.

140. See, e.g., Bruce Willey, *PPP Tips: 6 Things to Discuss with Your Accountant Now*, KIPLINGER (July 20, 2020), <https://www.kiplinger.com/business/small-business/small-business-loans/601079/ppp-tips-6-things-to-discuss-with-your>.

posits that business decisions predominantly occur within established networks rather than in an open market for services.¹⁴¹ Only in the late stages of the program did FinTech firms begin to aggressively use digital advertising to target small businesses that had not yet applied for the loans.¹⁴²

Indeed, our qualitative observations about business owners attempting to navigate the PPP evokes a number of elements of Granovetter's work. Sociological and economic models of human action have, respectively, emphasized under- and over-socialized conceptions of action.¹⁴³ Humans neither make atomistic rational decisions (the Beckerian view¹⁴⁴) nor do they fully internalize the norms held by their society (the Parsonian view¹⁴⁵). Instead, in Granovetter's argument, they always act within specific social structures that provide reliable information and expectations about those around them.¹⁴⁶

Economic action is exemplary of this behavior as business decisions and information-seeking are most often conducted within existing social networks that do not neatly correspond with the idealized versions of frictionless markets or formal hierarchies. Granovetter makes the case that trust and the discouragement of malfeasance take place within

141. See Granovetter, *supra* note 22, at 495–96.

142. See interview transcripts, notes, and summaries on file with the authors. See also Erel & Liebersohn, *supra* note 26, at 54.

143. See Granovetter, *supra* note 22, at 483–84.

144. Economist Gary Becker is well known for using formal rational decision analysis to model human decision-making outside of the economic realm. See, e.g., GARY S. BECKER, *THE ECONOMIC APPROACH TO HUMAN BEHAVIOR* (1976). Mark Granovetter uses Becker's work to typify an approach to social science that de-emphasizes historical and social situatedness and emphasizes stylized "typical" actors. See Granovetter, *supra* note 22, at 486.

145. Sociologist Talcott Parson's AGIL schema, characterized by Granovetter as "oversocialized," emphasizes the complete internalization of social norms and value structures by actors and, similar to Becker, thus underappreciates the role of social structure in shaping human action. See *id.* at 486–487.

146. See Granovetter, *supra* note 22, at 495–96.

social structure, where expectations must be set and economic action tends to become overlaid with social content, not because of a generalized morality.¹⁴⁷ Most PPP loans, both legitimate and illegitimate, took place between lenders and borrowers who knew one another.

In the case of the PPP, we observed evidence that both supports and contradicts Granovetter's fundamental principles.¹⁴⁸ In seeking information and originating loans, actors did in fact work within their social networks to make decisions. But new technological tools for organizing many similar positioned individuals, such as Covidloantracker.com and the SBA portal itself, provided contexts in which the embeddedness of economic action may have been less relevant than the individual and collective characteristics of the actors.

To conclude, we must note that although borrower-lender interaction was embedded in social structure, lender-SBA interaction was not embedded in social structure in the strict sense. Rather, it was automatic, blind to abuse yet capable of threatening retroactive audits.¹⁴⁹ And the greatest failing of the PPP had less to do with undeserving or dissatisfied borrowers and more to do with those businesses that failed before being able to partake of the program's support.¹⁵⁰

147. *See id.* at 489–90.

148. *See id.* at 490–91.

149. *See, e.g.,* Micah Solomon, *Your Audit Risk on PPP Loans Explained, Plus the Latest on Forgiveness*, FORBES (June 4, 2020, 7:04 PM), <https://www.forbes.com/sites/micahsolomon/2020/06/04/your-audit-risk-on-ppp-loans-explained-plus-the-latest-on-forgiveness/> (“Business owners tell us they are worried about the risk of their PPP loan being audited (or reviewed) and the loan not being forgiven. They are as scared of one of these audits as they are an IRS audit.”); Business Loan Program Temporary Changes; Paycheck Protection Program—SBA Loan Review Procedures and Related Borrower and Lender Responsibilities, Interim Final Rules, 85 Fed. Reg. 33,010, 33,012 (June 1, 2020) (“*For a PPP loan of any size, SBA may undertake a review at any time, at SBA’s discretion.*” (emphasis added)).

150. *See* Michael S. Barr, *Paycheck Protection Program Failed to Reach the Smallest Businesses: How Congress Can Do Better*, CRAIN’S DETROIT BUS. (Apr.

2. Governmental Oversight of the Program

a. Governmental Narratives

While business owners attempted to navigate the PPP on the ground, governmental administrators faced a dual challenge of overseeing and correcting its myriad teething pains. Unsurprisingly, federal officials scrambling to launch the PPP developed narratives to make sense of both the scale of their activity and the time constraints they faced. To study how those officials grappled with technical problems and possible solutions for the PPP, we reviewed congressional hearings held by federal legislators.¹⁵¹ We invoke the theoretical work of another preeminent economic sociologist, Karin Knorr Cetina,¹⁵² to evaluate the extent to which the SBA as a sociotechnical system precluded forms of sociality and decision-making that would have permitted greater transparency, reciprocity, and certainty in the use of the program.

First, though, we consider the narratives that governmental officials generated for the program. Scale manifests itself significantly in the narrativization of the program as something intimate, taking place almost directly between legislators and constituents or the Small Business Administration and small businesses. In a Senate Hearing on June 10, for instance, SBA head Jovita Carranza reported—improbably or merely anecdotally—that she was personally answering emails from small business owners.¹⁵³

22, 2020, 6:00 AM), <https://www.crainsdetroit.com/other-voices/paycheck-protection-program-failed-reach-smallest-businesses-how-congress-can-do>. But see Ruth Simon, *Covid-19 Shuttered More Than 1 Million Small Businesses. Here is How Five Survived.*, WALL ST. J. (Aug. 1, 2020, 12:00 AM), <https://www.wsj.com/articles/covid-19-shuttered-more-than-1-million-small-businesses-here-is-how-five-survived-11596254424?mod=searchresults&page=1&pos=5>.

151. See Senate CARES Act Hearing, *supra* note 30.

152. See generally Karin Knorr Cetina & Urs Bruegger, *Global Microstructures: The Virtual Societies of Financial Markets*, 107 AM. J. SOCIO. 905 (2002).

153. See Senate CARES Act Hearing, *supra* note 30.

In fact, these relationships were extremely mediated, by an automated system known as E-Tran and by banking institutions actually originating the loans. As of June 30, 2020, 4,885,388 small businesses had received loans from the PPP aggregating to \$521.5 billion.¹⁵⁴ Administrator Carranza was not “personally answering emails” from any meaningful portion of that population.

In addition to size as a critical narrative element in the PPP, its administrators also attempted to make sense of the explosive program in temporal terms. The structure of the loan program itself shaped temporality in unexpected ways. At times automated and at times conducted painstakingly by hand, steps in the process resembled an hourglass with grains flowing through multiple bulbs and narrow necks as millions of borrowers engaged thousands of lenders, in only distant privity with the single SBA agency. In the first days of lending, media outlets widely reported the surprising news that smaller banks were able to access loans more quickly than the largest banks, which either did not engage with the program at all initially or favored their private clients to the exclusion of many other potential applicants.¹⁵⁵ Many of the smaller banks reported that their employees were working around the clock to fill out applications for hundreds of borrowers. In these early moments, social ties—including weak ones, as Granovetter might predict¹⁵⁶—played an outsized role in the success of entrepreneurs finding loans or banks willing to lend to them.

Bank employees at smaller banks were not the only ones working flat out. In the Senate’s June 10, 2020, hearing, Administrator Carranza claimed that she too was “working

154. U.S. SMALL BUS. ADMIN., *supra* note 8.

155. *See, e.g.,* Cowley, *supra* note 134 (“Cross River has churned out loans to more than 106,000 businesses through the Paycheck Protection Program, a centerpiece of the government’s \$2 trillion CARES Act. That puts it just behind three of the country’s most prolific lenders: Bank of America, JPMorgan Chase and Wells Fargo.”).

156. *See* Granovetter, *supra* note 22, at 490–91.

around the clock.”¹⁵⁷ Indeed, this sort of testimony is evidence of the confused temporal scales reported by participants at the heart of the program in these frantic early days. Of course, Administrator Carranza’s narrative is not only temporal, it is also heroic, perhaps as a vaccination against claims of ineffectiveness or incompetence.

b. Legislative Hearings on the PPP

In addition to these narratives, we consider the oversight by lawmakers of the federal administrators as they grappled with technical problems and possible solutions in congressional hearings. Here, our analysis most closely relies upon the theoretical work of Mitchel Abolafia¹⁵⁸ who has studied policy decision-making in terms of the processes by which policymakers arrive at narrative consensus around economic ideas. The current administration’s narrative consensus for the PPP is captured in two quotes from Senate testimony on the program. First, Senator Marco Rubio, Chairman of the US Senate Committee on Small Business and Entrepreneurship, offered the following characterization of the situation:

As the CAREs act was being negotiated, businesses remember at that time were faced with the prospect of laying off workers not because of the weakness in their business model, or a cyclical downturn in the economy, [but] because the government told them you can’t operate. You can’t open your doors. You can’t take customers. You can’t do business. It is in some respects the equivalent of a taking, in which [the] government and the public interest intervened and denied people the right to do something. And we viewed the PPP as what [the] government does when it uses its power to do that. And that is to help and compensate those who were damaged by it. With no work available to be done, pure economic logic told these people in small businesses that the most efficient thing for them to do was to lay off their workers until more normal conditions were restored. But we knew that the most efficient economic outcome was not the best outcome for the

157. See Senate CARES Act Hearing, *supra* note 30.

158. See *generally* MITCHEL Y. ABOLAFIA, STEWARDS OF THE MARKET: HOW THE FEDERAL RESERVE MADE SENSE OF THE FINANCIAL CRISIS (2020).

common good. [It] would have been catastrophic for our country.¹⁵⁹

Second, Steven Mnuchin, United States Secretary of the Treasury, proffered this version of the narrative: “This was a unique situation. This was not due to economic issues. This was due to government action in shutting down the economy as a result of COVID-19. So, as I’ve said before, the traditional economic models are not good at predicting things.”¹⁶⁰

This narrative from Senator Rubio and Secretary Mnuchin, invoking biological and “governmental” origins of the financial crisis,¹⁶¹ makes it difficult to clearly grasp the economic model and ideological position of the Trump administration: was this crisis the fault of a virus or the government? The implementation of the program was grounded in a loosely defined “savior” narrative that emphasized saving small businesses and employment. Once this consensus was established, at least among the Republican-controlled Senate and executive branch, struggles over the program itself were as much technical as ideological. Because the PPP was financialized, meaning the stimulus was distributed through loans in an automated portal between banks and the SBA (known as the E-Tran system), the design of the sociotechnical system, the available information about the loans, and the technical capacity of E-Tran were central in these discussions.¹⁶² Here, then, is where we see the most helpful purchase of the intellectual approach of Knorr Cetina and Bruegger¹⁶³ for

159. See Senate CARES Act Hearing, *supra* note 30.

160. See *id.*

161. See Alan Rappeport & David McCabe, *Small-Business Loan Deadline Poses Test for Mnuchin*, N.Y. TIMES (May 13, 2020), <https://www.nytimes.com/2020/05/13/us/politics/ppp-loan-companies-mnuchin.html>.

162. See U.S. SMALL BUS. ADMIN., E-TRAN ELECTRONIC LOAN PROCESSING (2014), https://www.sba.gov/sites/default/files/articles/ETran_Origination_01_2014.pdf.

163. See generally Knorr Cetina & Bruegger, *supra* note 152.

framing the possibilities provided by such sociotechnical systems.

c. Socioeconomic Theory on Governmental Oversight

In her work, Knorr Cetina found the possibility of a global “we” relation in the digitally mediated interactions of financial actors.¹⁶⁴ With the PPP, that relationship was absent, as the actors navigated E-Tran fundamentally “alone,” with the exception of limited communication between borrowers and lenders or between borrowers and other borrowers. The only respite from this situation were periodic, though somewhat anemic, updates to the “Frequently Asked Questions” section of the SBA website.¹⁶⁵

Unlike the currency trading that Knorr Cetina and Bruegger studied, the most striking feature of the SBA system was its seeming asociality. That is, although social ties were important for business owners in their initial search for a bank through which to submit their SBA loan, the actual issuance of the SBA payment involved minimal, if any, human interaction. Instead, as SBA Administrator Jovita Carranza testified in the June 10, 2020, Senate Hearing, the system was automated through the SBA’s E-Tran software,¹⁶⁶ the infrastructure that processed nearly five million loan applications submitted in the first two rounds of the PPP.¹⁶⁷

Note, importantly, that E-Tran is not a communicative

164. *See id.* at 920.

165. *See, e.g.,* TREASURY DEP’T, *supra* note 52.

166. Note that one of the private sector responses to the PPP was technological tools to help users navigate the SBA system. For example, interfaces for E-Tran allowed lenders to file hundreds of applications at a time. *See* U.S. SMALL BUS. ADMIN., *supra* note 162.

Some of these solutions, such as Robotic Process Automation systems, were banned after the first round, while others, such as Application Programming Interfaces, were not. *See* Jeff Drew, *SBA, Treasury Ban Use of RPA to Submit PPP Loans*, J. ACCT. (Apr 28, 2020), <https://www.journalofaccountancy.com/news/2020/apr/sba-treasury-ban-use-of-rpa-to-submit-ppp-loans.html>.

167. *See* U.S. SMALL BUS. ADMIN., *supra* note 8.

interface between the SBA and the lenders; it possesses the capacity only for “submission” and automatic response based on algorithmic criteria.¹⁶⁸ Any “social” or interactive component of the system is merely retroactive (through possible subsequent audits for problematic or fraudulent applications) or has been issued as general broadcasts from the SBA.¹⁶⁹ Thus, the architecture of this electronic system placed the government in a distinctly powerful role of benefactor rather than guarantor. Though the loan application process obviously involved interaction between the lenders and the borrowers, the program was vulnerable to unforeseeable structural and social distortions. While an automated system was not per se responsible for malfeasance or poor distribution of the funds, the fact that the system was automated, did not provide clear rules, and was structured as a first-come first-served competition independent of any possible microsocial interaction proved nearly disastrous in the first days of the program.¹⁷⁰ Indeed, one of the restaurateurs whom we interviewed specifically blamed this clunky system—devoid of human common sense—for being unable to substitute an erroneous \$23,000 loan for the more than \$123,000 she sought.¹⁷¹

In considering the insights of Knorr Cetina, we note that the massive PPP program did not, within itself, contain clear microstructures to coordinate the vast national implementation of the program. That is, despite the folksy claim that people like Administrator Carranza were personally answering emails in the SBA office,¹⁷² the SBA’s processing of loans through the E-Tran software was entirely

168. See U.S. SMALL BUS. ADMIN., *supra* note 162.

169. TREASURY DEP’T, *supra* note 52.

170. See Aaron Gregg, *Scathing SBA Watchdog Report Details ‘Pervasive’ Fraud in Coronavirus Disaster-Loan Program*, WASH. POST (July 28, 2020), <https://www.washingtonpost.com/business/2020/07/28/scathing-sba-watchdog-report-details-pervasive-fraud-coronavirus-disaster-loan-program/>.

171. Interviews transcripts, notes, and summaries on file with the authors.

172. Senate CARES Act Hearing, *supra* note 30.

automated.¹⁷³ As we have seen in the most exaggerated cases of inequitable issuances of loans, the lending “moment” was not subject to the transparency, reciprocity, or intersubjectivity that keeps actors from behaving unfairly.¹⁷⁴ This fact, that the epistemic asociality of the program kept information from flowing to the SBA until well after the funds were disbursed, confounded the ability of the administration to properly handle the funds. Further, the panic and subsequent fear of auditing and sanction by deserving firms discouraged optimal deployment of the funds.

The few public hearings and oversight reports on the CARES Act and PPP reveal institutional logics underpinning the program. Because these forums allowed for internal debate amongst government actors on the nature of the program, the contested narratives of sensemaking and criteria for evaluating the program were made temporarily visible, even if in a limited and platitudinous fashion. Regardless of the rhetorical nature of such events, conflicts in meaning help us draw provisional ideological lines around the purpose of the program. Unlike Abolafia’s example, in which a group of policymakers—on the Federal Open Market Committee—had to reach a consensus in order to act on policy,¹⁷⁵ the congressional actors in the PPP did not need to reach a consistent narrative or consensus, because there was not a clear single “decision” to be made.

We witnessed the oversight process in the early stages of the PPP through three primary sets of actors and forums. First, on May 19, 2020, Federal Reserve Chair Jerome Powell and Treasury Secretary Steve Mnuchin testified before the US Senate.¹⁷⁶ Second, on June 10, 2020, Mnuchin and SBA

173. See U.S. SMALL BUS. ADMIN., *supra* note 162.

174. See Knorr Cetina & Bruegger, *supra* note 152, at 920.

175. See ABOLAFIA, *supra* note 158.

176. The Quarterly CARES Act Report to Congress: Hearing on the CARES Act, Before the S. Committee on Banking, Hous., and Urb. Affs. (May 19, 2020),

Administrator Jovita Carranza met with a bipartisan committee, the US Senate Committee on Small Business and Entrepreneurship, led by Republican Chairman Senator Marco Rubio and Democratic Ranking Member Senator Ben Cardin.¹⁷⁷ Third and perhaps most strikingly, on May 8, 2020, the Inspector General of the SBA, Hannibal “Mike” Ware released a sharply critical report on the implementation of the program.¹⁷⁸

As we noted above, Senator Rubio, justifying the expansive size of the program, pointed to the fact that the government “caused” the financial crisis by taking the right to operate businesses away from people.¹⁷⁹ If the problem were caused by the government, according to Rubio’s narrative, there would need to be a government response. In this way, Rubio legitimized a program that he directly linked to previous large governmental programs, disfavored by the Republican party generally, pointing out that it was the largest since the New Deal.¹⁸⁰ He praised the program for addressing the Community Development Financial Institutions and minority deposit institutions, a narrative contested sharply by the Left.¹⁸¹ He also praised the swift implementation of the program and the ability of government to revise the program according to small business needs by, among other examples, extending the program window from eight to twenty-four weeks.¹⁸²

<https://www.banking.senate.gov/hearings/the-quarterly-cares-act-report-to-congress>.

177. See Senate CARES Act Hearing, *supra* note 30.

178. See SBA INSPECTOR GENERAL REPORT, *supra* note 21, at 4–6.

179. See Senate CARES Act Hearing, *supra* note 30.

180. See *id.*

181. See *id.*

182. See Hearing on Small Business in Crisis: The 2020 Paycheck Protection Program and Its Future, Senate Committee on Small Business & Entrepreneurship (Dec. 10, 2020), <https://www.sbc.senate.gov/public/index.cfm/hearings?ID=FC8E242C-B966-4C5A-AD3C-83E17DDE6704>. See also Marco Rubio, *Now: Rubio Chairs Hearing on the Implementation of Title I of the CARES Act* (June 10, 2020), <https://www.rubio.senate.gov/public/index.cfm/2020/6/now->

Senator Cardin, on the other hand, directly linked the PPP to the broader political protests taking place following the death of George Floyd.¹⁸³ He pointed out how the fiscal response to the 2008 financial crisis failed to address the needs of minorities and that minority lending fell after the 2008 financial crisis.¹⁸⁴ Specifically, he cited a *Wall Street Journal* article¹⁸⁵ reporting that the virus eliminated the rising black job market, together with other media narratives highlighting racial inequality.¹⁸⁶

Administrator Carranza attempted to address Cardin's concerns, pointing out how the funds did reach underserved communities.¹⁸⁷ Oddly, she also addressed the importance of the SBA hiring in their office of "faith-based initiatives," something that was also featured prominently on the SBA website.¹⁸⁸ She also cited the hiring of thousands of new employees at the SBA to process the loans for the second round of the program.¹⁸⁹

Finally, and perhaps most damning, the report issued by the SBA's Inspector General¹⁹⁰ concluded that the PPP failed to accomplish several central goals, as we have noted with our foregoing quantitative analysis. First, the PPP failed to prioritize underserved and rural markets. Lenders were not

rubio-chairs-hearing-on-the-implementation-of-title-i-of-the-cares-act.

183. See Senate CARES Act Hearing, *supra* note 30.

184. *Id.*

185. Eric Morath & Amara Omeokwe, *Coronavirus Obliterated Best African-American Job Market on Record*, WALL ST. J. (June 16, 2020, 8:30 AM), <https://www.wsj.com/articles/coronavirus-obliterated-best-african-american-job-market-on-record-11591714755>.

186. See Senate CARES Act Hearing, *supra* note 30.

187. See *id.*

188. See *id.*; see also U.S. SMALL BUS. ADMIN., FREQUENTLY ASKED QUESTIONS REGARDING PARTICIPATION OF FAITH BASED ORGANIZATIONS IN THE PAYCHECK PROTECTION PROGRAM (PPP) AND THE ECONOMIC INJURY DISASTER LOAN PROGRAM (EIDL) (2020).

189. See Senate CARES Act Hearing, *supra* note 30.

190. See SBA INSPECTOR GENERAL REPORT, *supra* note 21.

given guidance on these priorities by the SBA and were not required to collect demographic data.¹⁹¹ Second, the SBA's rules on which loan proceeds were eligible for forgiveness were unclear, a point the report supported by publishing inconsistent language from the CARES Act itself,¹⁹² the Interim Final Rules,¹⁹³ and the SBA's own FAQs.¹⁹⁴ The SBA also did not offer guidance on loan deferments for borrowers.¹⁹⁵

To conclude with a reprise of Abolafia,¹⁹⁶ these reports and hearings reveal the governing party's narrative attempt to make sense of a complicated situation. The economic situation was, for them, not a standard project of determining acceptable risk within a standard market ideology, but rather a function of extrinsic biology or—as Rubio emphasized¹⁹⁷—deleterious government intervention.

3. Fees for Intermediaries

The third group that proved critical to the PPP is typically the most overlooked, notwithstanding having most successfully navigated the novel program.¹⁹⁸ Unlike in 2008, when banks were the chief protagonists in the financial crisis, in 2020 their role has been ancillary. Indeed, but for the PPP, they might not have had any role in the COVID-19 crisis whatsoever. But because the PPP situated banks as critical pieces of the lending infrastructure connecting

191. *See id.* at 4.

192. *Compare* SBA INSPECTOR GENERAL REPORT, *supra* note 21, with Coronavirus Aid, Relief, and Economic Security Act, Pub. L. No. 116-136, 134 Stat. 281 (2020) (codified as amended in scattered sections of U.S.C.).

193. *See generally* Business Loan Program Temporary Changes; Paycheck Protection Program—SBA Loan Review Procedures and Related Borrower and Lender Responsibilities, Interim Final Rules, 85 Fed. Reg. 33,010 (June 1, 2020).

194. *See* TREASURY DEP'T, *supra* note 52.

195. *See* SBA INSPECTOR GENERAL REPORT, *supra* note 21, at 29.

196. ABOLAFIA, *supra* note 158.

197. *See* Senate CARES Act Hearing, *supra* note 30.

198. *See, e.g.,* Cowley, *supra* note 134.

businesses applying for loans with the vast treasury of the SBA, these banks were featured in every one of the five million PPP loans. They also profited handsomely from the program, earning tens of billions of dollars in compensation for their efforts.¹⁹⁹ But the structure of that compensation, like so much compensation, may have affected the banks' incentives in ways that materially affected the program's overall outcomes.²⁰⁰ For that reason and others, their inclusion in the PPP might have been a mistake.

A general critique of the role of banks and other lenders in the PPP is simply one of efficiency: interposing financial intermediaries between lenders and borrowers might have, as simply a function of increasing the parties to each transaction, slowed the lending process by requiring more parties to evaluate each loan while also introducing further complexity and opportunities for error. The government has—and could presumably augment—many more direct connections to citizens and businesses, such as through the existing payroll system for withholding tax receipts. Indeed, some called for the issuance of PPP loans via payroll service firms, such as ADP, rather than via banks.²⁰¹

199. See, e.g., Kevin LaCroix, *Wells Fargo Hit with First PPP-Related Securities Class Action*, D&O DIARY (June 4, 2020), <https://www.dandodiary.com/2020/06/articles/securities-litigation/wells-fargo-hit-with-first-ppp-related-securities-class-action>.

200. The intersection of small business lending and government, despite the outsize influence of small businesses on employment, has not been a central concern for economists, who often focus on the perspective of banks rather than firm borrowers when they do study small business lending. Balla et al. ask whether the Small Business Lending Fund (SBLF) of the TARP response to the 2008–2010 Great Recession, as one key example, actually increased lending to small business. They found that banks were divided in their use of the funds: many banks experiencing stronger growth did in fact use SBLF funds to expand small business lending while already distressed banks tended to use funds to repay their own TARP obligations. Eliana Balla et al., *The Other Capital Infusion Program: The Case of the Small Business Lending Fund*, 34 REV. FIN. ECON. 99, 99–108 (2017).

201. See, e.g., Jim Cramer (@JimCramer), TWITTER (Apr. 13, 2020, 9:39 AM), <https://twitter.com/jimcramer/status/1249693777066893312> (“Let ADP or Paychex help.”); Stephanie Ruhle (@SRuhle), TWITTER (Apr. 8, 2020, 6:33 AM),

A more pointed criticism is that the rule governing the compensation of banks—which awarded higher fees for larger loans, instead of a per-loan compensation—created incentives for lenders that could and did distort policy goals. The lending institutions that processed PPP loans earned fees on a sliding scale: On loans of \$350,000 or less in total dollars approved, the lenders received 5%; On loans between \$350,000 and \$2,000,000, they received 3%; And on loans of \$2,000,000 or more, they earned 1%.²⁰² A program targeting small businesses would presumably have preferred that the funds flowed to one hundred small businesses rather than to a single large one.²⁰³ A single, flat fee would have eliminated any bias towards larger applicants; indeed, assuming their paperwork was more complicated, it might have actually skewed lending activity towards smaller firms with simpler balance sheets, payrolls, and applications.

Finally, the fact that more than twenty-four billion dollars went to financial firms rather than to the small businesses that were the program's intended beneficiaries is less than optimal,²⁰⁴ particularly if the distribution process could have been done without the cost of their intermediation.

<https://twitter.com/SRuhle/status/1247834935471353862> (“What if govt paid everyone directly through existing payroll (ADP & other large payroll outfits) not SBA or a million banks.”).

202. *Paycheck Protection Program (PPP) Information Sheet Lenders*, TREASURY DEPT, <https://home.treasury.gov/system/files/136/PPP%20Lender%20Information%20Fact%20Sheet.pdf>.

203. See, e.g., Courtney Weaver, *Luxury Fashion and Law Firms Among US Bailout Recipients*, FIN. TIMES (July 7, 2020), <https://www.ft.com/content/67aec12a-e744-4bcb-ba91-7e7887e5363e>.

204. See Benoit & Rudegeair, *supra* note 15.

III. DESIGNING FUTURE EMERGENCY FUNDING PROGRAMS

Whatever one concludes about the efficacy of the PPP, there is very little doubt that the program might have been more effective had it been more thoroughly planned and prepared in advance. The ad hoc, emergency nature of the program certainly contributed to several of its earliest missteps and lasting problems—rampant confusion amongst the program’s participants was a critical failing, widely reported in the media and in our own interviews during this study.²⁰⁵ Our quantitative and qualitative findings lead us to urge scholars and policymakers to begin planning now for similar programs that might be needed in the future.

A. *Rationales for Planning Now*

Perhaps the chief obstacle to planning for unprecedented challenges is that the costs involved today might never be redeemed by eventual benefits. By their very nature, extraordinarily rare occurrences do not tend to recur with sufficient frequency or certainty to guarantee a return on the preparation of their countermeasures. But the fact that we have, in such quick succession, experienced massive, systemically disastrous crises in both 2008 and 2020 suggests that we can no longer afford to be complacent. If once-in-a-century floods occur twice in a dozen years, it is time to raise the levees or at least to plan for how to do so.²⁰⁶

Indeed, as our economy becomes increasingly

205. See interviews transcripts, notes, and summaries on file with the authors.

206. In broader academic literature, particularly sociology, the link between social and economic structures, health crises, and community well-being has been an extremely active field of study for both quantitative and qualitative researchers. Among qualitative researchers, Eric Klinenberg’s *Heat Wave* (2002) is exemplary. Klinenberg studied how welfare retrenchment, social isolation, and institutional abandonment led to higher mortality rates in poor and minority communities during the 1995 Chicago heat wave. Although Klinenberg was not focused on economic impacts, his events-based analysis of uneven access to care mirrors the uneven distribution of small business loans in divested communities. See ERIC KLINENBERG, *HEAT WAVE* 11, 18–24, 164 (2002).

financialized—through, in some measure, a more ubiquitous reliance upon 401(k) plans for retirement funding²⁰⁷—then economic crises will tend to have greater national fallout. The devastation of one portion of the US economy may have an increasing tendency to inflict deleterious effects throughout the country, rather than simply remaining local.²⁰⁸

Perhaps the most pointed reason to plan for the future is because the crisis of 2020 has not yet ended.²⁰⁹ So the first new version of a crisis funding program might be yet another wave in the ongoing response to COVID-19 and its variants. Consider the dimming prospects for a vibrant economy recovery at that time: broad economic indicators were weakening,²¹⁰ job figures were declining with fewer workers than prior to the pandemic,²¹¹ and travel data from the TSA suggested a once-improving market in flights had subsequently softened²¹² and was not projected to recover

207. See, e.g., WILLIAM A. BIRDTHISTLE, *EMPIRE OF THE FUND: THE WAY WE SAVE NOW* 1–2 (2016).

208. See Joyce M. Rosenberg, *Loan Program Ends, Hard-Hit Businesses Hope for 2nd Chance*, AP NEWS (Aug. 7, 2020), <https://apnews.com/article/virus-outbreak-business-small-business-9746737060a0a1d5745cb72cd0025500>.

209. See Lauren Fedor et al., *Dispute Over Aid for Cities and States Slows US Stimulus Talks*, FIN. TIMES (Aug. 3, 2020), <https://www.ft.com/content/312e6aa2-be03-4963-a951-1b820dea671e>; Annie Lowrey, *Don't Bet on a Quick Recovery*, THE ATLANTIC (June 25, 2020), <https://www.theatlantic.com/ideas/archive/2020/06/no-quick-recovery/613462/>.

210. See Dion Rabouin, *The Economic Recovery Is Reversing*, AXIOS (July 22, 2020), <https://www.axios.com/economic-recovery-stall-coronavirus-stimulus-19cfb417-c428-4f22-80c5-5e6d5afbd7ef.html> (“The New York Fed’s Weekly Economic Index (WEI) is reversing course, showing real-time, high-frequency economic data is again turning negative after climbing back from April and May’s coronavirus-driven swoon.”); Annie Lowrey, *The Second Great Depression*, THE ATLANTIC (June 23, 2020), <https://www.theatlantic.com/ideas/archive/2020/06/second-great-depression/613360/>.

211. See Greg Iacurci, *6 Reasons Why Americas Aren’t Returning to Work*, CNBC (Oct. 20, 2021, 1:47 PM), <https://www.cnbc.com/2021/10/20/6-reasons-why-americans-arent-returning-to-work.html>.

212. See *TSA Checkpoint Travel Numbers (Current Year Versus Prior Year(s)/Same Weekday)*, TRANSP. SAFETY ADMIN., <https://www.tsa.gov/coronavirus/passenger-throughput> (last visited Dec. 27, 2020).

until as late as 2024.²¹³

The US GDP numbers from the second quarter of 2020 revealed a devastating drop of 10%.²¹⁴ The *Wall Street Journal* reported that the US economy contracted at a record 32.9% annual rate in the second quarter of 2020 and weekly jobless claims rose to 1.43 million amid signs of a slowing recovery.²¹⁵ Indeed, some projections at the time suggested that as many as one-third of all US restaurants would go out of business by the end of 2020.²¹⁶ We are also facing an eviction crisis. “Every year in America, 3.7 million evictions are filed,” which has greater salience amidst a pandemic because “[t]hat’s going to mean that our homeless shelter system is flooded and stressed. Shelter systems are really important but they’re horrible for social distancing.”²¹⁷

Another reason for planning now is the availability of better data and data analytics on how best to devise a program such as this. Compared to the kinds of analyses that economists like Chetty et al., Autor et al., and others are running, the government’s targeting systems for funding relief are quite crude. As global experts have improved their

213. See David McHugh, *Air Travel Not Expected to Recover Until 2024*, AP NEWS (July 28, 2020), <https://apnews.com/article/air-travel-travel-changing-economy-airlines-business-73b55c3da0a07012f20bd6913743e806>; see also Alison Sider, *American Airlines Plans to Furlough up to 25,000 Workers this Fall*, WALL ST. J. (July 15, 2020, 6:17 PM), <https://www.wsj.com/articles/american-airlines-plans-to-furlough-up-to-25-000-workers-this-fall-11594849477>.

214. *Gross Domestic Product (GDP)*, U.S. BUREAU OF ECON. ANALYSIS (Nov. 24, 2021), <https://fred.stlouisfed.org/series/GDP>.

215. Harriet Torry, *U.S. Economy Contracted at Record Rate Last Quarter; Jobless Claims Rise to 1.43 Million*, WALL ST. J. (July 30, 2020, 3:21 PM), <https://www.wsj.com/articles/us-economy-gdp-report-second-quarter-coronavirus-11596061406>.

216. See Rachel King, *More Than 110,000 Eating and Drinking Establishments Closed in 2020*, FORTUNE (Jan. 26, 2021, 8:00 AM), <https://fortune.com/2021/01/26/restaurants-bars-closed-2020-jobs-lost-how-many-have-closed-us-covid-pandemic-stimulus-unemployment/>.

217. See Noel King, *It ‘Looks Very Scary for Renters’ as Federal Eviction Relief Expiration Nears*, NPR (July 21, 2020, 5:04 PM), <https://www.npr.org/sections/coronavirus-live-updates/2020/07/21/893406577/as-protections-expire-millions-of-americans-face-threats-of-eviction>.

skills with two major rounds of PPP funding, they are well situated to plan for the future. A nimble economic response team using machine learning and statistical tools could more quickly identify ways of automatically targeting firms or individuals that are most at risk in the next financial crisis.

A final rationale for planning today is more optimistic and less directly related to COVID-19. Spurred on by the candidacy of Andrew Yang, the idea of a Universal Basic Income (UBI) has been gaining widespread public interest. UBI has enjoyed a significant amount of coverage in the press,²¹⁸ preceded by several years of more serious academic scholarship.²¹⁹

Thus, rationales certainly exist for both the motivation to plan now and its possible efficacy for ameliorating future economic crises.

B. *Comparative Analysis of Foreign Programs*

The United States has, unfortunately, endured a particularly poor response, both economically and medically, to the pandemic. Thus, one simple possibility for developing a superior plan would be to consult programs that have succeeded in other nations. France, for example, maintained lower unemployment levels at a far lower cost than the US plan. Other countries do not, of course, feature the variety of cultures, communities, and other variables that might confound the ability of the United States to adopt foreign plans wholesale in this country. Yet comparative analyses

218. See Brooks Rainwater & Clay Dillow, *Is the Pandemic Finally the Moment for a Universal Basic Income?*, FAST CO. (July 20, 2020), <https://www.fastcompany.com/90529479/is-the-pandemic-finally-ubis-moment>.

219. See ESTHER DUFLO & ABHIJIT V. BANERJEE, GOOD ECONOMICS FOR HARD TIMES (2019); ANNIE LOWREY, GIVE PEOPLE MONEY: HOW A UNIVERSAL BASIC INCOME WOULD END POVERTY, REVOLUTIONIZE WORK, AND REMAKE THE WORLD 4–11 (2018); ANDREW YANG, THE WAR ON NORMAL PEOPLE: THE TRUTH ABOUT AMERICA'S DISAPPEARING JOBS AND WHY UNIVERSAL BASIC INCOME IS OUR FUTURE (2018).

may nevertheless yield illuminating insights.²²⁰

Studying Japan in a non-crisis setting, Wilcox and Yasuda found that access to government guaranteed loans for small- and medium-sized enterprises led banks to make riskier lending decisions to small businesses across their portfolios, in both their guaranteed and non-guaranteed loans, indicating measured success in expanding lending but also greater potential for default.²²¹ One conclusion from this setting is that non-intermediated grants, rather financialized loans, may actually protect the financial sector from the volatility associated with lending in crisis times. Further reflecting volatility in the sector, Kiser et al. have modeled that changes in bank ratings by rating agencies during the Great Recession had a disproportionate effect on the number of loans made to small businesses.²²² Because small businesses employ higher numbers of people, this study underscored the precarity of the sector: volatile financial markets can lead to banks suddenly pulling out of lending to small businesses.²²³ These studies are relevant to our endeavor as they directly challenge the sociologists' usual path of assessing economic interventions based on structural inequalities, instead considering economic indicators as opposed to ground level data and observations. Although these studies may directly avoid the political aspects of political economy (i.e., they question the outcomes of processes rather than the social basis for decision-making), they nevertheless speak to the possibility that intervening in the small business sector of the economy could alleviate, or exacerbate, financial distress.

220. See, e.g., Cohen-Setton & Pisani-Ferry, *supra* note 25, at 1–3, 16.

221. See James A. Wilcox & Yukihiro Yasuda, *Government Guarantees of Loans to Small Businesses: Effects on Banks' Risk-Taking and Non-Guaranteed Lending*, 37 J. FIN. INTERMEDIATION 45, 46–48 (2019).

222. See Elizabeth K. Kiser et al., *Supervisory Ratings and Bank Lending to Small Businesses During the Financial Crisis and Great Recession*, 50 J. FIN. SERV. RSCH. 163, 184–85 (2016).

223. *Id.* at 164.

The example of France in the present economic crisis is telling. In their comparative work, Cohen-Setton and Pisani-Ferry have emphasized the greater robustness of automatic income stabilization mechanisms in France that have kept unemployment at one-fifth of the level of the US for half of the cost.²²⁴ Indeed, rather than a heroic or savior narrative, as we have seen in the US case, the French case provides a model for a flexible social safety net planned well in advance of crises. More comparative studies such as this one, by experts in both comparative law and economics, will prove vital tools as we move forward.

C. Critical Components of Funding Programs

Based on our own findings and lessons from other nations, we believe a number of critical components—as an initial list to consider in future scholarship—would be useful elements to include in any future program to fund an economic crisis.

But perhaps the single most important goal for a future program should be to connect lenders or beneficiaries more directly with the ultimate source of government funding. That is, financial intermediaries such as banks and other lending institutions should be removed from the funding pipeline. Those players add complexity and cost at times of exigency when speed and simplicity are paramount.

Spatial disparities in financial access, such as between rural and urban dwellers, have also been of concern to sociologists. Tolbert et al. have made an important contribution studying the decline of small banks in rural areas over the past decades.²²⁵ Our analyses show that loans per capita in the first round of the PPP were actually concentrated in rural and midwestern areas, suggesting an interesting puzzle for future research about how those loans

224. See, e.g., Cohen-Setton & Pisani-Ferry, *supra* note 25, at 1–3, 16.

225. See Tolbert et al., *supra* note 60, at 375–77.

got to those communities. Crowley and Stainback have recently written on the negative effects of retail concentration and declining small business presence on community wellbeing.²²⁶ If the SBA program fails to sustain many small businesses, we can expect that these trends will only increase. In future research, the SBA program could be assessed from this perspective, with analyses of its long-term impacts on economic and social well-being.²²⁷

To receive a loan from a bank during this crisis, one had to have—or had to form—a relationship with a bank or other financial lender. A growing body of literature grapples with the various social dimensions and implications of the “unbanked.” Historically, barriers impeded access to fair lending. Other researchers have focused on the role of culture in attitudes about incurring debt. In *How the Other Half Banks*, Mehrsa Baradaran historicizes the phenomenon of poorer consumers tending to pay more for their banking services. Baradaran proposes a return to banking through post offices as one possible solution.²²⁸ Important for our study and its future iterations, we must consider which small businesses failed to receive PPP loans and why that might be the case. Our qualitative findings point largely to informational mismatches between the administration of the SBA and the states most impacted by the pandemic, between economic actors and financial institutions, and between the US government and its constituency.

Cutting out financial intermediaries from future funding programs could, in addition, reduce perverse distortions that cause money to flow away from the beneficiaries that need it most.

226. See Martha Crowley & Kevin Stainback, *Retail Sector Concentration, Local Economic Structure, and Community Well-Being*, 45 ANN. REV. SOCIO. 321, 337–38 (2019).

227. See, e.g., Benjamin A. Austin et al., *Jobs for the Heartland: Place-Based Policies in 21st-Century America*, BROOKINGS PAPERS ON ECON. ACTIVITY, Spring 2018, at 151, 223–24.

228. See generally MEHRSA BARADARAN, *HOW THE OTHER HALF BANKS* (2015).

CONCLUSION

The apocryphal curse, “may you live in interesting times,” certainly hexed the year 2020. Much of what we in the United States and throughout the world endured—the virus, strict lockdowns, and economic collapse—certainly was interesting and, collectively, unprecedented. But the mere fact that things are unprecedented does not necessarily make them unforeseeable. With foresight ought to have come preparation and competent governance. Yet, exacerbating much of our recent travails has been the persistent blight of incompetent government. In this Article, we have attempted to provide an early, but comprehensive, analysis of the most important component of the largest bailout of a financial crisis in US history: the PPP.²²⁹ We have conducted both a quantitative empirical analysis of data surrounding the program and a socioeconomic examination of the experiences of business owners trying to navigate the program.

Major, unprecedented events tend, of course, to generate cascades of historical contingencies and unforeseen consequences. Much of what has occurred with the financial response to COVID-19, however, has been *precedented* and thus potentially foreseeable. That the program to support an economy reeling from historically disastrous losses in employment and productivity would be expensive and complicated was readily foreseeable, as so much of the global economy endured a trial run of massive government bailouts just a dozen years before. That such a program would be confusing to its beneficiaries was also predictable, as our tax system continues to confound millions of Americans each year more than a century after the advent of a federal personal income tax in 1913.²³⁰ So what might have been done—might still be done—to produce better governance in future?

229. See Brewster, *supra* note 91.

230. See Joseph A. Hill, *The Income Tax of 1913*, 28 Q.J. ECONOMICS 46, 46–47 (1913).

We must look both backward and forward. Even though the financial crisis of 2008 involved primarily governmental support of large financial institutions, many commentators urged the Obama administration to make payments directly to homeowners who were struggling to make their mortgage payments.²³¹ Had they done so, or had a plan simply been prepared, then 2008 could have served as a sound model to borrow for the PPP in 2020.

Rather than intervening successfully at an early stage, the failure to do so has led to greater problems and even more dire levels of economic distress for states and citizens. Similarly, poor public health decisions throughout the country have allowed waves of the virus to spread aggressively, squandering the sacrifices of millions of Americans and, quite possibly, much of the money spent under the CARES Act.

So, we conclude with a call for lawmakers to master unlearned lessons and to prepare now for the future, specifically with more efficient ways to connect the government's treasure to its citizenry. Other countries flooded their business communities with support far more efficiently than the United States did,²³² even though this country has effectively built a pipeline in the other direction for taxpayers to remit their payments to the governmental treasuries. We endured both 2008 and 2020, and it would be folly not to expect further economic dislocations in future.

231. See, e.g., Rob Johnson & George Soros, *A Better Bailout Was Possible During the Financial Crisis*, THE GUARDIAN (Sept. 18, 2018, 3:24 PM), <https://www.theguardian.com/business/2018/sep/18/bailout-financial-crisis-donald-trump-barack-obama-george-soros>.

232. Internationally, in response to the crisis, Germany guaranteed loans to all businesses that needed one through its \$100 billion economic stabilization fund. See Julia Anderson et al., *The Fiscal Response to the Economic Fallout from the Coronavirus*, BRUEGEL, <https://www.bruegel.org/publications/datasets/covid-national-dataset> (Nov. 24, 2020). Other governments, like Japan, instead have supported workers through a mix of direct payments to individuals and firms. See *Policy Responses to COVID-19*, INT'L MONETARY FUND, <https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19> (last visited Dec. 27, 2021).

To consider this prospect through a slightly more optimistic lens, one cheerful piece of news from the pandemic has been that the massive government payments might have alleviated measures of poverty across America.²³³ So, even if we do not endure a third great financial collapse in the years ahead, the CARES Act might furnish empirical support and inspiration for serious consideration of universal basic income. Again, unprecedented times do generate unforeseen outcomes, and UBI could be the next occasion on which the government disburses financial support across the United States. Happily, those payments, if successful, would not be yet another haphazard reaction to a crisis, but rather the proactive alleviation of social blights such as poverty and all that they threaten to the social fabric of the world.

233. See DeParle, *supra* note 80; Jason DeParle, *Vast Federal Aid Has Capped Rise in Poverty, Studies Find*, N.Y. TIMES (June 21, 2020), <https://www.nytimes.com/2020/06/21/us/politics/coronavirus-poverty.html>.