european corporate governance institute



Credit, Crises and Infrastructure: The Differing Fates of Large and Small Businesses

Law Working Paper N° 633/2022
March 2022

Todd H. Baker
Columbia Graduate School of Business and Columbia Law School

Kathryn Judge
Columbia University and ECGI

Aaron Klein
Brookings Institution

© Todd H. Baker, Kathryn Judge and Aaron Klein 2022. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source.

This paper can be downloaded without charge from:
https://doi.org/10.67929/ecgi-law-633-2022

european corporate governance institute

ECGI Working Paper Series in Law

Credit, Crises and Infrastructure: The Differing Fates of Large and Small Businesses

Working Paper N° 633/2022
March 2022

Todd H. Baker
Kathryn Judge
Aaron Klein

© Todd H. Baker, Kathryn Judge and Aaron Klein 2022. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source.

Abstract

This essay sheds new light on the importance of credit creation infrastructure in determining who actually receives government support during periods of distress, and who continues to benefit after the acute phase of a crisis and the government's formal support programs come to an end. The pandemic revealed, and the government's response accentuated, meaningful asymmetries in the capacities of small and large businesses to access needed funding. At first glance, it would seem that small businesses benefited more than large ones from the government's pandemic-support programs, as more government funds flowed into small businesses. Yet closer inspection of the range of government programs implemented and their longer term impact reveals a very different picture. By primarily providing grants to small businesses, the government helped address their short-term cash flow challenges but did little to encourage ongoing private credit creation for these businesses. The aid provided was real, but finite in nature. By contrast, the nature of the programs used to facilitate financing for the largest businesses provided major support at the moment and created expectations of future support. These interventions enhanced the viability and attractiveness of inherently fragile intermediation structures and set them up to continue to provide cheap and easy financing for the largest businesses long after the acute phase of the crisis had passed. This essay further reveals how numerous seemingly neutral choices were anything but in practice, creating a disconnect between policy makers stated aims and the actual impact of many of their actions. A key takeaway is that the government should do more during times of peace to understand and shape the credit creation infrastructure in ways that facilitate small-business lending in good times and bad.

Keywords: financial crisis, central banking, emergency lending, corporate debt, small business
JEL Classifications: E58, E61, G23, G28, H32

Todd H. Baker
Senior Fellow
Columbia University
645 West 130th Street
New York, NY 10027, USA
phone: +1 (212) 854-0409
e-mail: thb2121@columbia.edu

Kathryn Judge
Harvey J. Goldschmid Professor of Law
Columbia University, Columbia Law School
435 West 116th Street
New York, NY 10027, United States
phone: +1 212 854 5243
e-mail: kjudge@law.columbia.edu

Aaron Klein
Senior Fellow
Brookings Institution
1775 Massachusetts Ave., NW
Washington, DC 20036, USA
phone: +1 (202) 797-6000
e-mail: communications@brookings.edu

*Corresponding Author

CREDIT, CRISES AND INFRASTRUCTURE: THE DIFFERING FATES OF LARGE AND SMALL BUSINESSES

TODD H. BAKER,* KATHRYN JUDGE & AARON KLEIN*****

ABSTRACT

This essay sheds new light on the importance of credit creation infrastructure in determining who actually receives government support during periods of distress, and who continues to benefit after the acute phase of a crisis and the government's formal support programs come to an end. The pandemic revealed, and the government's response accentuated, meaningful asymmetries in the capacities of small and large businesses to access needed funding.

At first glance, it would seem that small businesses benefited more than large ones from the government's pandemic-support programs, as more government funds flowed into small businesses. Yet closer inspection of the range of government programs implemented and their longer term impact reveals a very different picture. By primarily providing grants to small businesses, the government helped address their short-term cash flow challenges but did little to encourage ongoing private credit creation for these businesses. The aid provided was real, but finite in nature. By contrast, the nature of the programs used to facilitate financing for the largest businesses provided major support at the moment and created expectations of future support. These interventions enhanced the viability and attractiveness of inherently fragile intermediation structures and set them up to

* Senior Fellow, Richard Paul Richman Center for Business, Law and Public Policy, Columbia Graduate School of Business and Columbia Law School.

** Harvey J. Goldschmid Professor of Law, Columbia Law School.

*** Senior Fellow, Brookings Institution.

continue to provide cheap and easy financing for the largest businesses long after the acute phase of the crisis had passed.

This essay further reveals how numerous seemingly neutral choices were anything but in practice, creating a disconnect between policy makers stated aims and the actual impact of many of their actions. A key takeaway is that the government should do more during times of peace to understand and shape the credit creation infrastructure in ways that facilitate small-business lending in good times and bad.

CONTENTS

INTRODUCTION

This essay affirms and adds critical nuance to existing understandings of the way crisis-era programs inevitably shape—and are shaped by—the existing infrastructure for credit creation. The 2008 financial crisis renewed a longstanding debate about the appropriate role of the government generally, and central banks in particular, in providing liquidity and other forms of support during periods of systemic distress. In the wake of that crisis, two dominant schools of thought emerged. Some focused on the moral hazard that comes from any government intervention. They feared that government interventions distort incentives and encourage risk taking, leading to the conclusion that the government should rarely intervene, even in the face of severe shocks.1 A related set of concerns arose around mission creep, as many saw the Federal Reserve's (Fed) actions as moving it far beyond the roles it was originally designed to play.2 Others—including key policy makers—took the position that when things get really bad, the government should provide support almost wherever it could be useful to avoid the macroeconomic costs that can arise from the failure of financial intermediaries and the real economy businesses they help support.3

Strikingly, in contrast to the heated debate triggered by the 2008 interventions, the various programs implemented by the Fed and Treasury Department to help financial intermediaries and businesses survive the pandemic have inspired minimal reflection or debate. An array of valuable efforts to assess empirically who participated in these programs—particularly the novel paycheck protection program

[1] For an overview of this literature, and efforts to address these challenges, see FIN. STABILITY BD., EVALUATION OF THE EFFECTS OF TOO-BIG-TO-FAIL REFORMS (2021), https://www.fsb.org/wp-content/uploads/P010421-1.pdf [https://perma.cc/BR5L-GHTJ] (evaluating effects of too-big-to-fail reforms for systematically important banks); Emmanuel Farhi & Jean Tirole, *Collective Moral Hazard, Maturity Mismatch, and Systemic Bailouts*, 102 AM. ECON. REV. 60 (2012).

[2] E.g., LEV MENAND, THE FED UNBOUND CENTRAL BANKING IN A TIME OF CRISIS (FORTHCOMING, 2022).

[3] See, e.g., TIMOTHY F. GEITHNER, STRESS TEST: REFLECTIONS ON FINANCIAL CRISES (2015).

(PPP)— have yet to inspire a broader debate about the significance of the government's crisis-era interventions.

In seeking to fill that gap, this essay charts a course that falls between the two, more established views of the way crisis-era programs are shaped by, and in turn reshape, financial intermediation infrastructure. We see crisis-era support as sometimes necessary to protect the long-term health of the economy, and something that should be provided broadly when critical to maintaining that health. Yet, we see that as a starting point for discussion, rather than a conclusion that ends the debate. Looking at 2020 through a lens that is informed but not fixed by the events of 2008 reveals new and important lessons.

The first is that seeming neutral choices are often anything but. For example, a primary way that Congress sought to support businesses during the early phase of the pandemic was by having Treasury support credit creation through Federal Reserve facilities created pursuant to the Fed's established authority to make loans to nonbanks under "unusual and exigent circumstances."[4] On its face, this decision did not favor any particular industry or business type. In practice, this decision greatly facilitated the flow of funds to the largest businesses while doing little for mid-sized and smaller businesses. Similarly, in its first effort to implement an innovative new program to provide support for "small businesses," the Treasury favored banks over fintechs as the intermediaries through which these funds should flow.[5] This too was seemingly neutral decision, but resulted in a disproportionate share of the initial funds going to a subset of small businesses that favored larger, older businesses who had existing lending relationships with banks while disfavoring smaller, younger, and importantly businesses owned by women and minorities.

These insights also bring lessons. One ramification is the way crisis-era interventions can and ought to influence the post-crisis regulatory reform agenda. Second, given that crisis-time support is likely, we

[4] Part II, infra.

[5] Part III, infra.

argue that policy makers should use "peace time" to make the infrastructure changes needed to ensure the smooth flow of money and credit to those who most need it when crisis strikes.

These insights and implications flow from our analysis of the key decisions made in early 2020, and the ramifications of those decisions. We begin by providing a brief overview of the major programs adopted in 2020 to provide credit or operating support to various types of businesses, with a focus on who benefitted most and the incentives these programs created with respect to ongoing access to credit once the program ceased.6 Given the exigencies of the pandemic response, our aim here is not to second-guess policy makers who responded remarkably fast in the heat of the moment. The pandemic was a massive, sudden, shock, and broad support was critical to minimizing its economic impact. But, once the acute phases of a crisis wanes, the focus should shift to the lessons both the crisis and the response might hold. These are the questions we tackle here.

Putting the pieces together, the analysis suggests that policy makers should seek to re-balance the scales. Small businesses are a key driver of economic activity. They support the growth and vitality of our neighborhoods, spark innovation, and provide a pathway that can help

[6] Financial assistance came through multiple mechanisms. The two most significant were the Paycheck Protection Program (PPP) and a fund authorizing the Federal Reserve to support the general economy and markets. Both programs utilized the financial system (banks, capital markets, other lenders) as a conduit to provide assistance to businesses with the hopes those businesses would in turn, provide benefits to workers. There are many employers, and hence employees, who work at entities that are not 'businesses' in both the legal and economic sense. Many of the definitions of these indirect programs, and some of the programs themselves were targeted for these type of employers. For example, the PPP provided money to select non-profits, including private schools and non-profit lobbying organizations were eventually eligible for PPP assistance. George E. Constantine, Cynthia M. Lewin & Andrew L. Steinberg, *SBA Clarifies Lobbying and Economic Need Rules for Non-profit PPP* Borrowers, Venable, LLP. (Mar. 5, 2021), https://www.venable.com/insights/publications/2021/03/sba-clarifies-rules-for-nonprofit-ppp-borrowers [https://perma.cc/XEU2-8ZK3]. For purposes of this paper we will use the term business as more synonymous with employer in line with the legal and regulatory implementation of the emergency assistance, whose purpose was to provide economic support to employers and employees.

people achieve financial success and independence.7 Lending to small business often entails greater credit risk, greater informational challenges and disproportionately high lender costs relative to loan size. Complicating these challenges, many of the smallest business loans sit in the blurry zone between corporate cash-flow loans and personal loans. Yet these inherent differences are more reason—not less—to be concerned about the way policy interventions may have inadvertently greased the wheels on large business lending while leaving small business lending more exposed to credit shocks.

The analysis also brings to the fore the value of paying greater heed outside of crisis periods to the ways disparate access to credit shape who can open a small business and which small businesses are likely to have access to the liquidity often needed to weather shocks. People of color make up roughly 40% of the U.S. population, but only 20% of the nation's 5.6 million business owners with employees.8 Women are 51% of the population but only 33% of business owners with employees. Minority- and women-owned businesses also typically have fewer employees, less revenue, and were less likely to survive the recession that followed the 2008 financial crisis. Although there are many reasons for these disparities, access to credit and cost of credit may well be a significant contributor and could well be worse today than it was pre-pandemic because of the government's reliance on private infrastructure it did not fully understand.

Particularly as interest rates start to rise and monetary and lending conditions tighten, differential access to funding between large business and small, and among small business could have far reaching effects. From eating away at the remarkable recent growth in new small business formation to contributing to structural inequities and

---

[7] *See* Sifan Liu & Joseph Parilla, *Businesses Owned by Women and Minorities Have Grown. Will COVID-19 Undo That?*, Brookings Inst. (Apr. 14, 2020), https://www.brookings.edu/research/businesses-owned-by-women-and-minorities-have-grown-will-covid-19-undo-that/ [https://perma.cc/59Y3-QYFU] (discussing how minority- and women-owned business enterprises helped stabilize the economy during the recovery period ensuing the Great Recession).

[8] Id.

accentuating the excessive concentration that already poses a challenge to the long-term health and vibrancy of the economy, credit creation infrastructure is central to the shape of the economy.9 This essay brings to the fore the importance of understanding how the government has shaped that infrastructure, how it has relied on that infrastructure, why it is likely to do so again, and why this reliance and support is often in tension with other policy aims.

I. THE LATEST CRISIS

The acute phase of the COVID-19 crisis in the spring of 2020 served as a powerful reminder that existing infrastructure shapes, and ultimately limits, the government's ability to provide aid for people and businesses. This relationship between existing infrastructure and governmental capacity manifested across most financial and market policy interventions, including direct payments to individuals and families, unemployment insurance, small business assistance, and the Federal Reserve's bond purchase and liquidity facilities.

A return to the early stages of the pandemic response, and a review of the processes through which these programs were adopted, make clear that many of the ramifications of the government's interventions were unintended consequences of the need for the government to move quickly to achieve its goals, with incomplete information and in reliance on imperfect, existing infrastructure. Although both the speed at which the pandemic hit the economy and the speed of the recovery were more rapid than the 2008 financial crisis or other periods of distress, similar dynamics are common during periods of crisis, and all the more reason to reflect on the structure and adequacy of existing crisis response tools outside periods of distress.

Just as in 2007 and 2008, the Federal Reserve was the first responder in the government's effort to contain the economic fallout of the pandemic. To provide accommodative monetary conditions and ease

[9] THOMAS PHILIPPON, THE GREAT REVERSAL: HOW AMERICA GAVE UP ON FREE MARKETS 279-82 (2019) (discussing statistics regarding highly concentrated markets and the negative relation between labor market concentration and wages).

the unexpected and potentially massive dysfunction in the Treasury market, the Fed again adopted a program of quantitative easing ("QE")—buying up Treasury and mortgage-backed securities—on an unprecedented scale.[10] QE, a tool the Fed first used during the 2008 global financial crisis, at the time was considered radical but now has been used in the last two recessions.[11] Yet the Fed's purchases of Treasury securities and agency mortgage-backed securities this time were not only aimed at easing monetary conditions, they were also used to help ease market dysfunction.[12] The Fed bought $1.7 trillion worth of Treasury securities between March and June 2020.[13] To help stem withdrawals from money market mutual funds as COVID-19 began to hit financial markets in March 2020, the Fed created the Money Market Mutual Fund Liquidity Facility to provide liquidity and financial assistance to prevent funds from "breaking the buck" and losing value, building expressly on the same design used in 2008.[14]

[10] Lorie K. Logan, Exec. Vice President, Fed. Rsrv. Bank of N.Y., Remarks at SIFMA Webinar: The Federal Reserve's Market Functioning Purchases: From Supporting to Sustaining (July 15, 2020) (transcript available at https://www.newyorkfed.org/newsevents/speeches/2020/log200715 [https://perma.cc/227W-CYZ7]) ("Another important measure, and the focus of my talk today, is the asset purchases that we have conducted at an unprecedented scale and speed to support the smooth functioning of markets for Treasury and agency mortgage-backed securities (MBS)—both of which play crucial roles in the American financial system and economy.").

[11] Ben Bernanke, *The New Tools of Monetary Policy*, BROOKINGS INST. (Jan. 4, 2020), https://www.brookings.edu/blog/ben-bernanke/2020/01/04/the-new-tools-of-monetary-policy/ [https://perma.cc/J9T8-2Y9L].

[12] Logan, *supra* note 10 (discussing how the Federal Open Market Committee made substantial purchases of Treasury securities and agency mortgaged-backed securities, and directed the Open Market Trading Desk to make purchases "in the amounts needed to support the smooth functioning of markets").

[13] Jane E. Ihrig, Gretchen Weinbach & Scott A. Wolla, *How the Fed Has Responded to the COVID-19 Pandemic*, FED. RSRV. BANKOF ST. LOUIS. (Aug. 12, 2020), https://www.stlouisfed.org/open-vault/2020/august/fed-response-covid19-pandemic [https://perma.cc/J8HC-RY4U] ("The blue shaded region of the graph below shows how quickly the Fed ramped up its purchases of Treasury securities—it bought around $1.7 trillion worth between mid-March and the end of June.").

[14] KENECHUKWU ANADU , MARCO CIPRIANI, RYAN M. CRAVER & GABRIELE LA SPADA, FED. RSRV. BANK OF N.Y., THE MONEY MARKET MUTUAL FUND LIQUIDITY FACILITY (2021),

And the Fed also re-adopted many of the other programs it had used during the 2008 financial crisis to inject additional liquidity into the market for various financial instruments and to provide liquidity to both banks and nonbanks.

Through these programs, the Fed supported market functioning and signaled its continued willingness to prop up key parts of the financial system if needed, just as it had done in 2008. The similarity in the programs the Fed used was also a reminder that once the Fed intervenes in a particular way—even if the aim is to protect market functioning—market participants will often anticipate similar support in the future. This was the case even in the area of money market mutual funds, where Congress, the Fed, the Securities and Exchange Commission, and the Financial Stability Oversight Council had spent substantial time and energy revamping regulations designed to reduce the need for government assistance in the name of financial stability.[15]

The Fed was not the only major government actor to move quickly and aggressively. The United States Congress also responded rapidly with a large fiscal stimulus. The first significant legislative action was the Coronavirus Aid, Relief, and Economic Security Act (CARES Act)—a $2.2 trillion fiscal stimulus bill passed by the end of March 2020.[16] The CARES Act was designed to provide fiscal firepower,

available at https://www.newyorkfed.org/medialibrary/media/research/staff_reports/sr980.pdf [https://perma.cc/CE66-EMJC] ("The Federal Reserve faced the same challenges in 2008, when it set up the AMLF in response to the MMF run triggered by Lehman Brothers' default. Although the type of shock was different, it was natural to design the 2020 facility based on its 2008 predecessor.").

[15] *See also* Press Release, U.S. Dep't of the Treasury, President's Working Group on Financial Markets Releases Report on Money Market Funds (Dec. 22, 2020), available at https://home.treasury.gov/news/press-releases/sm1219 [https://perma.cc/2GC2-JF36] ("The PWG agrees that while many of the reforms implemented after the global financial crisis increased market stability, the events of March 2020 show that more work is needed to reduce the risk that remaining structural vulnerabilities in prime and tax-exempt money market funds will lead to or exacerbate stresses in short-term funding markets.").

[16] CARES Act, H.R. 748, 116th Cong. (2020).

quickly and in large amounts, to try to blunt the economic damage of the pandemic. Direct aid included payments to individuals, state and local governments, health care providers, and others. This was a traditional Keynesian economic stimulus[17] largely delivered through existing methods, such as enhanced unemployment insurance benefits, and through revisions to existing federal/state matching grant programs providing general-purpose aid to state governments.

Alongside direct stimulus payments to individuals, expanded unemployment insurance benefits, specific funds for grants and other types of support for particular industries, the bill included multiple modes of support for businesses and their employees. The two provisions of the CARES Act most relevant to the viability of businesses were the Payroll Protection Program and a separate, innovative effort to have the Fed and Treasury work together to provide credit support to businesses. Considering each program in turn, and in context, brings to light the short- and longer-term effects of the support businesses received during this acute phase of the economic shutdown.

Before doing so, it is worth reflecting briefly on how various government efforts illuminated the central importance of existing financial infrastructure in the government's ability to provide aid quickly to those who needed it. This was true for the provision of direct assistance as well as credit. The federal government authorized expanded unemployment benefits, deeming them critically important to the well-being of qualifying individuals and to the health of the overall economy. But the ability of people who had lost their jobs to actually *receive* the benefits they were owed varied dramatically, largely depending on the existing apparatus for distributing unemployment payments at the state level. The apparatus failed miserably in many states, with particularly well-documented problems

[17] *See* Sarwat Jahan, Ahmed Saber Mahmud & Chris Papageorgiou, *What Is Keynesian Economics?*, INT'L MONETARY FUND 53-54 (Sept. 2014), https://www.imf.org/external/pubs/ft/fandd/2014/09/pdf/basics.pdf [https://perma.cc/3PB4-CVFK] (explaining that "the central tenet of [Keynesian economics] is that government intervention can stabilize the economy").

in New Jersey and Florida.[18] The reasons were manifold: outdated computer systems, application backlogs caused by staffing shortages, and implementation of new federal rules all contributed.[19] This led observers to compare the unemployment payment and processing system to the classic infrastructure example of "replacing aging water pipes."[20] According to one estimate, by the end of May 2020, months into the pandemic, only 57% of the 33 million unemployment claims that had been filed were paid, leaving many unemployed workers and their families in search of other avenues to scrape by.[21] This payment

[18] *See* Sophie Nieto-Munoz & Matthew Stanmyre, *N.J. Failed to Fix Unemployment System for 19 Years, Records Show. Now Murphy Pleads Patience*, NJ ADVANCE MEDIA (May 14, 2020, 6:45 AM), https://www.nj.com/coronavirus/2020/05/nj-failed-to-fix-unemployment-system-for-19-years-records-show-now-murphy-pleads-patience.html [https://perma.cc/6XY8-J3T6] (reporting problems with New Jersey's archaic unemployment website and automated call system which prevent many New Jersey residents from receiving unemployment benefits); Mary Papenfuss, *'S**t Sandwich': Florida's GOP Reportedly Rigged Jobless Site to Block Applicants*, HUFFPOST (Apr. 6, 2020), https://www.huffpost.com/entry/florida-unemployment-website_n_5e87b67ec5b6e7d76c63bcf7.

[19] Lisa Rowan, *Why Is It So Hard To Get Your Pandemic Unemployment Benefits?*, FORBES (Mar. 1, 2021, 8:00 AM), https://www.forbes.com/advisor/personal-finance/why-its-so-hard-to-claim-unemployment/ [https://perma.cc/DEK9-LGMP] (discussing various factors that prevented access to pandemic unemployment benefits: computer reprogramming, application backlogs caused by staffing shortages, and the flood of additional eligible workers under the CARES Act).

[20] Katherine Landergan, *America's Unemployment System Failed When It Was Needed Most. Can It Be Fixed?*, POLITICO (May 19, 2021, 4:30 AM), https://www.politico.com/news/2021/05/19/america-unemployment-system-failed-pandemic-483100 [https://perma.cc/Y9A8-Y7RC] ("The not-so-sexy topic of unemployment insurance system reform — the economic equivalent of replacing aging water pipes — has been quietly dominating policy conversations at every level of government and is about to break into the mainstream.").

[21] *See* Eli Rosenberg, *Workers Are Pushed to theBbrink as They Continue to Wait for Delayed Unemployment Payments*, WASH. POST (July 13, 2020),

https://www.washingtonpost.com/business/2020/07/13/unemployment-payment-delays/ ("By the end of May, about 18.8 million out of 33 million claims—57%—had been paid nationwide."); Manuel Alcalá Kovalski & Louise Sheiner, *How Does Unemployment Insurance Work? And How Is It Changing During the Coronavirus Pandemic?*, BROOKINGS INST. (Nov. 3, 2021), https://www.brookings.edu/blog/up-front/2020/07/20/how-does-unemployment-insurance-work-and-how-is-it-changing-during-the-coronavirus-pandemic/

bottleneck delayed the stimulative effect on the larger economy and increased hardship on families during their time of need.

Similarly, the stimulus "checks" designed to provide aid broadly arrived far more quickly for those who could receive the funds electronically into their bank accounts via direct deposit, using IRS taxpayer and tax return data,[22] than for the 70 to 100 million people for whom the government either lacked correct bank account information or was otherwise unable to figure out how to properly send them their funds. This explains why 25% of American households needed to wait for a physical check or debit card to be delivered to their home despite the fact that only 5% of U.S. households lack a bank account.[23]

While ensuring that ordinary Americans get the direct and timely support their government has promised to them is not the focus of our analysis, these examples help illustrate the fundamental importance of the existing infrastructure—federal and state, public and private—in shaping the government's option set and ability to deliver when crisis strikes.[24] With two major crises already this century, one of the

[https://perma.cc/65V6-LN8G] ("Andrew Stettner, a senior fellow at the Century Foundation, estimates that by the end of May 2020, only about 18.8 million out of 33 million claims (57 percent) had been paid nationwide, an improvement from 47 percent of claims at the end of April 2020 and just 14 percent at the end of March 2020.").

[22] *See Coronavirus Tax Relief*, INTERNAL REVENUE SERVS.,

https://www.irs.gov/coronavirus-tax-relief-and-economic-impact-payments [https://perma.cc/L6LS-V8MR] (last updated Jan. 18, 2022).

[23] Aaron Klein, Opinion, *Want Your Next Stimulus Check Faster? Congress Needs to Change Just One Line of Law*, BROOKINGS INST. (July 27, 2020), https://www.brookings.edu/opinions/want-your-next-stimulus-check-faster-congress-needs-to-change-just-one-line-of-law/ [https://perma.cc/S2WV-DPDC] ("70 million to 100 million people waited one to three months for money that eventually arrived as a paper check or debit card.").

[24] The contrast with other countries that deliver all benefits directly through dedicated electronic interfaces, such as India's e-RUPI, is stark. *See* John Xavier, *Explained| How India'sNew Welfare-Focused Digital Payment System Works?*, HINDU (Aug. 8, 2021, 4:50 PM), https://www.thehindu.com/sci-tech/technology/e-rupi-how-indias-new-welfare-focused-digital-payment-system-works/article35682640.ece [https://perma.cc/89FZ-BBY7]

overarching lessons is the importance of considering in advance the condition of the existing financial infrastructure and acting in advance to correct deficiencies and inequities that merit attention. Addressing these issues can have positive spillover effects and may also help mitigate distributional challenges when times are good. We now turn to the role that the existing infrastructure played in the government's effort to aid businesses, big and small.

II. THE FED-TREASURY FACILITIES

The CARES Act program that sought to provide the most, and widest ranging support, for businesses entailed an effort spearheaded by the Fed using support appropriated by Congress to the Treasury Department. The program authorized the Fed to support the broader economy by allocating $454 billion in seed capital, which allowed the Fed—working with the Treasury Department—to theoretically buy over $4 trillions in assets.[25] This was to be accomplished via lending facilities the Fed created pursuant to its existing authority under Section 13(3) of the Federal Reserve Act to make loans to nonbanks in "unusual and exigent circumstances."[26] The scale of the authorized interventions far exceeded anything done in response to the 2008 crisis, with the Fed itself lauding its potential to provide trillions in new loans.[27] As the context reflects, these funds were designed to

(describing India's e-RUPI system, which "is a digital voucher that can be redeemed by beneficiaries when they make use of any specific government services" and "does not require a card, app or internet access to redeem the vouchers").

[25] Prior to the enactment of the CARES Act, the Department of the Treasury made a $10 billion equity investment from the Exchange Stabilization Fund into the Fed's Term Asset-Backed Securities Loan Facility to support lending of up to $100 billion. Over $4 trillion in asset purchases or lending could be supported by the $454 billion appropriation assuming approximately similar leverage ratios. *SeeTerm Asset-Backed Securities Loan Facility*, FED. RSRV. BD. (Mar. 23, 2020), https://www.federalreserve.gov/newsevents/pressreleases/files/monetary20200323b3.pdf [https://perma.cc/G36K-FBK2].

[26] 12 U.S.C. § 343(3)(A).

[27] Press Release, Fed. Rsrv. Bd., Federal Reserve Takes Additional Actions to Provide up to $2.3 Trillion in Loans to Support the Economy (June 29, 2020, 8:30 AM),

enable the Fed to provide fresh loans to businesses, nonprofits, and municipalities. The gap between the amount appropriated and the hoped-for impact of the related credit facilities reflects the fact that the seed money allocated by Congress was meant to cover only expected losses, enabling the Fed to make loans far in excess of the money allocated without suffering a financial hit itself.

This program positioned the Fed to play a meaningful role in determining who received support.[28] But Congress avoided crossing the Rubicon of having the Fed directly capitalize the facilities with its own funds, by using the Treasury Department to capitalize newly created emergency facilities and by retaining the many limitations on the Fed's authority already embedded in the Federal Reserve Act, particularly section 13(3) thereof.

Section 13(3) was added to the Federal Reserve Act in 1932 to give the Fed the ability to lend directly to the real economy in a crisis.[29] The Fed, however, made only modest use of this power during the

https://www.federalreserve.gov/newsevents/pressreleases/monetary20200409a.htm [https://perma.cc/878E-AECJ].

[28] Kelsey Snell, *What's Inside the Senate's $2 Trilllion Coronavirus Aid Package*, NPR (Mar. 26, 2020, 5:34 PM), https://www.npr.org/2020/03/26/821457551/whats-inside-the-senate-s-2-trillion-coronavirus-aid-package [https://perma.cc/923A-2ECH] (describing how the CARES Act would provide relief to seven main groups of beneficiaries: individuals, small businesses, big corporations, hospitals and public health, federal safety net, state and local governments, and education).

[29] Parinitha Sastry, *The Political Origins of Section 13(3) of the Federal Reserve Act*, 24 FED. RSRV. BANK OF N.Y.: ECON. POL'Y REV. 2 (2018) ("This article concludes that the framers of the section intended to authorize credit extensions to individuals and nonfinancial businesses unable to get private-sector loans. In other words, Section 13(3) sanctioned direct Federal Reserve lending to the real economy, rather than simply to a weakened financial sector, in emergency circumstances."). Between 1932 and1936, the Fed made a total of $1.5 million in section 13(3) loans. *Id.* at 27 ("The Federal Reserve Board renewed the 13(3) authority every six months until July 1936, at which point the Federal Reserve System had made a cumulative total of 123 loans under the authority, aggregating to $1.5 million."). Beyond the limited amount, this fiscal stimulus was also distinct from 2008 and 2020 because the lending was restricted to commercial enterprises and did not include nonmember banks or nonbank financial institutions. *See id.* at 25 ("The Federal Reserve Board took the crucial step of determining that 'the term "corporations" does not include banks,' meaning that 13(3) did not allow discounts for nonmember banks.").

Great Depression and failed to use it at all between 1936 and 2008.[30] When Section 13(3) was invoked by the Fed in response to the 2008 crisis, it used this authority quite broadly to establish new borrowing entities controlled by the Fed that supported many nonbank financial institutions (and indirectly, their counterparties, including banks), that had played an important role in the financial bubble that caused the crisis.[31] Many of the new 13(3) facilities the Fed created were designed to provide fresh liquidity into any array of institutions and sectors of the market that, in various ways, were part of a new system of market-based intermediation, often referred to as the shadow banking system. Far more controversially—and in a move that would be prohibited today—the Fed also used this authority to facilitate JP Morgan's acquisition of Bear Stearns and to help AIG avert bankruptcy.[32]

The Fed's only historical experiment making loans to the real economy was providing working capital pursuant to what was then Section 13(b) of the Federal Reserve Act. This program was initially created during the Great Depression and sputtered along until Congress brought it to an end in 1958, with the full support of then-

[30] David C. Wheelock, *Lessons Learned? Comparing the Federal Reserve's Responses to the Crises of 1929-1933 and 2007-2009*, 92 FED. RSRV. BANK ST. LOUIS REV. 92 (2010) ("The Fed made 123 loans totaling a mere $1.5 million in the four years after the section was added to the Federal Reserve Act in 1932. Section 13(3) was not used again until 2008, when it became an important tool in the Fed's effort to limit the financial crisis.").

[31] *See* Sastry, *supra* note 29, at 29 ("In the spring of 2008, Sections 10B and 13(3) formed the statutory basis for the Federal Reserve's lender-of-last-resort powers for member banks, nonmember banks, broker-dealer firms, commercial paper issuers, and money market mutual funds as the Fed moved to bolster a financial system that had arrived at the brink.").

[32] MARC LABONTE, CONG. RSCH. SERV. R44185, FEDERAL RESERVE: EMERGENCY LENDING 14 (Mar. 27, 2020), available at

https://sgp.fas.org/crs/misc/R44185.pdf [https://perma.cc/5M5F-N9H2] (discussing that the Fed financed JP Morgan Chase's takeover of Bear Stearns with a $29 billion federal loan, while "prevent[ing] AG's failure by intially providing it with a line of credit of $85 million").

Fed Chair William McChesney Martin.[33] In short, although direct Fed lending to the real economy was one of many experiments that tried to help the economy recover from the Great Depression, it is not a tool that has ever been widely used or that was particularly successful, and it is not one that today's far more powerful Fed had ever embraced, until the pandemic response.

In order to understand the impact of the decision to use the Fed to provide fresh liquidity to businesses in particular, it is helpful to have a rudimentary understanding of the lending landscape. Large, established corporations have more options accessing credit than smaller, newer companies. An array of factors makes the debt of large companies—whether in the form of syndicated loans or bonds—easier to fund, originate, and hold than that of smaller companies. Two of the most important challenges are related: smaller businesses generally present risk profiles more expensive to assess, and smaller companies generally pose distinct informational challenges.

Large, public companies, on the other hand, are subject to rigorous, ongoing disclosure requirements, typically have long track records, and benefit from a body of equity holders who are even more motivated than a company's debt holders to monitor the business and prospects of the companies they invest in. These companies often issue debt securities that they pay to have rated by rating agencies, creating free information regarding the credit quality of that debt for investors to rely on.[34] Accentuating the advantage, the past decade has seen a massive growth in the issuance of collateralized loan obligations ("CLOs"), open-end bond funds, and exchange traded funds ("ETFs") backed by bonds. These products have helped create

[33] George Selgin, *When the Fed Tried to Save Main Street*, ALT-M (Mar. 30, 2020), https://www.alt-m.org/2020/03/30/when-the-fed-tried-to-save-main-street/ [https://perma.cc/FH5C-AMB8].

[34] Investors who rely exclusively on rating agency opinions may find themselves investing in assets with greater risk than they realize, as evidenced by the mis-rating of many securities in the 2008 financial crisis. We express no opinion on the wisdom or efficacy of this reliance, simply noting that it exists and in the current "originator pays" model, ratings are provided to investors without cost.

ready buyers for newly issued corporate debt and eased the financing process for large corporations.[35] They also create an intermediation infrastructure that made it easy for the Fed to come up and prop up the functioning of this overall system, and in ways that seem likely to alter expectations of future support.

The credit intermediaiton structure for small businesses is quite different along many fronts. Even for an established small or mid-sized business, the biggest shareholder is often the entrepreneur or family who runs it. The mechanisms for funneling money from the capital markets into smaller company debt are far less established, much more sensitive to overall economic conditions, and far more expensive. Small business lending is often further complicated in a variety of ways, as lenders typically require multiple years of business history, personal guarantees, collateral and other support to reduce risk. This helps explain why small businesses often have challenges obtaining capital from outside sources. Only four in nine small businesses report having obtained credit from a bank in the last five years, according to the Fed's 2020 survey.[36]

That financing is already tilted in favor of large businesses—giving them a meaningful leg up over mid-sized and small businesses—is all the more reason to be concerned about the particular microstructure of

[35] *See* BD. OF GOVERNORS OF THE FED. RSRV. BD., FINANCIAL STABILITY REPORT 22 (Nov. 2019), available at https://www.federalreserve.gov/publications/files/financial-stability-report-20191115.pdf [https://perma.cc/6WUE-BU75] ("In line with the discussion of price terms and risk appetite in section 1, demand for institutional leveraged loans has remained strong and credit standards have remained weak."); Antonio Falato, Itay Goldstein & Ali Hortaçsu, *Financial Fragility in the COVID-19 Crisis: The Case of Investment Funds in Corporate Bond Markets* 47 fig.1 (Becker Friedman Inst., Working Paper No. 2020-98, 2021), available at https://bfi.uchicago.edu/wp-content/uploads/BFI_WP_202098.pdf [https://perma.cc/3KFG-RLGL] (graphing the growing importance of funds in the corporate bond market).

[36] FED. RSRV. BANKS, SMALL BUSINESS CREDIT SURVEY: 2020 REPORT ON EMPLOYER FIRMS 8 (2020), available at https://www.fedsmallbusiness.org/medialibrary/FedSmallBusiness/files/2020/2020-sbcs-employer-firms-report [https://perma.cc/9CPK-3VDE] (summarizing lending sources for small businesses in graph).

the mechanisms through which credit flows to both types of businesses and the impact of the government's interventions.

A. Support for the Largest Businesses

During the COVID-19 response, the primary way the Fed supported the ability of large corporations to access credit was through the creation of two corporate credit facilities.[37] The Primary Market Corporate Credit Facility was created as "a funding backstop for corporate debt," and allowed the NY Fed to purchase both qualifying bonds and portions of syndicated loans at issuance.[38] The Secondary Market Corporate Credit Facility allowed the Fed to buy portfolios of bonds and ETF shares that were already issued and outstanding.[39] Both programs were implemented via the creation of a special purpose vehicle that would hold the bonds and received equity funding from the Treasury Department to reduce the credit risk to which the Fed was exposed.[40]

The mere announcement of the primary and secondary corporate credit facilities dramatically reduced spreads for investment-grade borrowers.[41] The Fed's subsequent announcement that it would also

[37] *See* Press Release, Fed. Rsrv. Bd., Federal Reserve Announces Extensive New Measures to Support the Economy (Mar. 23, 2020), available at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200323b.htm [https://perma.cc/VN53-U3U4] (announcing Fed's measures to support economy during Covid crisis).

[38] *Primary Market Corporate Credit Facility*, FED. RSRV. BD. (July 28, 2020), https://www.federalreserve.gov/newsevents/pressreleases/files/monetary20200728a9.pdf [https://perma.cc/G7PP-EZZ7].

[39] *Secondary Market Corporate Credit Facility Term Sheet*, FED. RSRV. BD. (July 28, 2020),https://www.federalreserve.gov/newsevents/pressreleases/files/monetary20200728a1.pdf [https://perma.cc/EWB9-CAEQ] (describing eligible assets).

[40] *Id.*

[41] *See* Steven Sharpe & Alex Zhou, *The Corporate Bond Market Crises and the Government Response,* BD. OF GOVERNORS OF THE FED. RSRV. SYS. (October 7, 2020),

https://www.federalreserve.gov/econres/notes/feds-notes/the-corporate-bond-market-crises-and-the-government-response-20201007.htm [https://perma.cc/SJ7C-GDKR] (describing

buy "fallen angels" (recently downgraded bonds) and ETFs holding below-investment-grade debt similarly reduced spreads for companies in these categories.[42] The Fed purchased corporate debt primarily through the creation of a new index it created to track qualifying bonds.[43] The Fed's large wallet and assured position as a new entrant into this market drove down the cost of credit for new corporate debt and provided existing holders of corporate debt a willing counterparty to buy, further supporting asset prices.[44] As a result, the Fed ended up holding the bonds of large, robust companies, many of which had not shown need for government support.[45]

Moreover, the biggest beneficiaries of the Fed's bond buying program may not have been any of the companies whose bonds the Fed acquired, or the investors whose asset values were artificially boosted, but the intermediaries through whom these funds flowed. Recall that the growth of open-end bond funds, CLOs and ETFs holding bonds had been critical to the growth of the corporate bond market in recent years and increased leverage in the corporate sector.[46] In the earliest stages of the pandemic, investors were fleeing

how government responded to corporate bond market crises arising from COVID-19); Falato et al., *supra* note 35, at 2 (describing the effects of the Fed's announcement of coverage to some high yield bonds).

[42] Valentin Haddad, Alan Moreira & Tyler Muir, *When Selling Becomes Viral: Disruptions in Debt Markets in the COVID-19 Crisis and the Fed's Response*, 34 REV. FIN. STUD. 5309, 5333-34 (2021) (showing the effects of the Fed's April intervention on some high yield bonds).

[43] *See* Michael D. Bordo & John V. Duca, *How New Fed Corporate Bond Programs Dampened the Financial Accelerator in the Covid-19 Recession* 1 (Fed. Rsrv. Bank of Dall., Working Paper No. 2029, 2020). https://www.dallasfed.org/-/media/documents/research/papers/2020/wp2029.pdf [https://perma.cc/8J2N-ZA95].

[44] *See id.* at 2.

[45] Jeff Cox, *The Fed Is Buying Some of the Biggest Companies' Bonds, Raising Questions Over Why*, CNBC (Jun. 29, 2020, 5:21 PM), https://www.cnbc.com/2020/06/29/the-fed-is-buying-some-of-the-biggest-companies-bonds-raising-questions-over-why.html [https://perma.cc/T2VG-QQLG].

[46] GLENN HUBBARD, DONALD KOHN, LAURIE GOODMAN, KATHRYN JUDGE, ANIL KASHYAP, RALPH KOIJEN, BLYTHE MASTERS, SANDIE O'CONNOR & KARA STEIN, HUTCHINS CTR. ON FISCAL & MONETARY POL'Y AT BROOKINGS, TASK FORCE ON FINANCIAL STABILITY, 31

from these investments.[47] Economists Antonio Falato, Itay Goldstein, and Ali Hortaçsu document massive and potentially debilitating outflows from corporate bond funds and ETFs backed by bonds in March 2020, and further show that these outflows were only slowed and then stanched by the Fed's announcement of the corporate credit facilities and its early modifications in the terms of those facilities.[48] According to the Fed, "[e]ven funds specializing in short-term investment-grade bonds experienced outflows in March totaling eight percent of assets, dwarfing the selling pressure they saw during the global financial crises."[49]

In stanching these outflows, the Fed helped to save these fragile intermediaries—each of which promise daily liquidity despite being backed by very illiquid corporate bonds. This may have prevented investors in these instruments and corporate bonds from fully appreciating the risks embedded in these instruments, in part by increasing expectations of further support if needed. If anything, the Fed's interventions seem to have led investors to be less concerned than ever about the fragility of open-end bond funds and the potential for serious losses if seeking to liquidate bonds, CLOs, or bond ETFs during a period of distress. This helps to explain why these intermediaries have, and likely will continue, to grow. As Blackrock—the pioneer in ETFs—stated, "[i]n their biggest test to date, flagship fixed income ETFs provided deep liquidity, continuous price transparency and lower transaction costs than were available in individual bonds . . . . As a result, asset owners — including pension

(2021), available at https://www.brookings.edu/wp-content/uploads/2021/06/financial-stability_report.pdf [https://perma.cc/M7NS-FAKE] (describing the effects of the rapid growth of bond mutual funds).

[47] *See id.* at 38-39.

[48] Falato et al., *supra* note 35, at 9-10 (describing potential outflow effects from the Fed's policy).

[49] Sharpe & Zhou, *supra* note 41 (summarizing the effects of the government's response).

funds and insurance companies — and asset managers immediately ramped up adoption."[50]

It is useful in this context to observe the evolution of the bond market and corporate debt in the wake of these government interventions. Even though the amount of outstanding nonfinancial corporate debt was at an all-time high going into the COVID-19 crisis, it has since increased subsequently.[51] Data from SIFMA shows that "investment grade issuance was strong in March through May 2020 (+178% to 2019 levels on average)" and even though the issuance of high yield debt fell dramatically in March, it too "had recovered well by May (+60% to 2019 levels)" following the inclusion of many high-yield bonds and ETFs in the Secondary Market Credit Facility in early April.[52] As explained in the November 2021 Financial Stability Report from the Federal Reserve: "Corporate bond issuance remained robust"; "spreads of corporate bond yields over comparable-maturity Treasury yields . . . remained very narrow relative to their historical distributions"; "[t]he excess bond premium, which is a measure that captures the gap between corporate bond spreads and expected credit losses . . . now stands at the bottom decile of its historical distribution, suggesting elevated appetite for risk among investors"; and, "[i]nvestor sentiment in the leveraged loan market has remained optimistic."[53] Moreoever, despite the outflows from bond ETFs

[50] *A Turning Point for Fixed Income ETFs*, BLACKROCK, https://www.blackrock.com/americas-offshore/en/insights/turning-point-in-bond-etf-adoption [https://perma.cc/X6DE-R5VG] (last visited Feb. 20, 2022).**]**

[51]Patricia Buckley, Monali Samaddar & Akrur Barua, *The Pandemic Has Forced Corporate Debt Higher but Is That a Bad Thing?*, DELOITTE INSIGHTS (July 15, 2021), https://www2.deloitte.com/us/en/insights/economy/issues-by-the-numbers/rising-corporate-debt-after-covid.html [https://perma.cc/WZ8R-QEKK].

[52] Sharpe & Zhou, *supra* note 41; *see* KATIE KOLCHIN, SIFMA INSIGHTS: COVID-19 RELATED MARKET TURMOIL RECAP: PART II—FIXED INCOME & STRUCTURED PRODUCTS 5 (2020), available at https://www.sifma.org/wp-content/uploads/2020/07/SIFMA-Insights-Market-Turmoil_FI-FINAL-FOR-WEB.pdf [https://perma.cc/9NZ4-M2PN].

[53] BD. OF GOVERNORS OF THE FED. RSRV. BD., supra note **Error! Bookmark not defined.**, at 11-13.

creating meaningful price dislocations in March 2020, the Fed's prompt interventions resulted in total bond ETFs outstanding crossing the $1 trillion threshold for the first time in the fall of 2020.[54] In short, the largest companies are having little trouble accessing credit on very, very favorable terms.

Shifting momentarily to look at small business access to credit over the same period of time reveals a very different picture. According to the 2021 Small Business Credit Survey conducted by the Fed, 23% of small businesses had trouble accessing the debt they needed in the past year, only 37% of applicants received all the financing they sought (down from 51% in the 2019 survey), and 13% saw credit availability as the single most important challenge they expect to face in the next year.[55]

The implications of these developments are mixed. The good news is that these interventions helped the economy recover at a remarkable clip once the early phases of the pandemic waned, despite ongoing public health uncertainty and related political turmoil.[56] Given the uncertainty and the myriad challenges the pandemic posed, these benefits are hard to overstate. Other implications are more mixed. One obvious drawback is that the potential systemic threat posed by open-end bond funds, CLOs and bond ETFs remains unaddressed while the sector is poised for further growth, while investor expectations of liquidity assistance from the government during future crises are likely

[54] Ben Johnson, *Bond ETF Assets Pass $1 Trillion in October*, MORNINGSTAR (Nov. 3, 2020), https://www.morningstar.com/articles/1008706/bond-etf-assets-pass-1-trillion-in-october.

[55] FED. RSRV. BANKS, SMALL BUSINESS CREDIT SURVEY: 2021 REPORT ON EMPLOYER FIRMS 21 (2021), available at https://www.fedsmallbusiness.org/medialibrary/FedSmallBusiness/files/2021/2021-sbcs-employer-firms-report [https://perma.cc/PS9G-P6T6] (summarizing financing outcomes in 2020).

[56] Gian Maria Milesi-Ferretti, *A Most Unusual Recovery : How the US Rebound from COVID Differs from Rest of G7*, BROOKINGS INST. (Dec. 8, 2021), https://www.brookings.edu/blog/up-front/2021/12/08/a-most-unusual-recovery-how-the-us-rebound-from-covid-differs-from-rest-of-g7/ [https://perma.cc/XA8E-M4NC].

to distort market mechanisms and pricing of risk. Moreover, the sharp rise in corporate debt levels could create debt overhang, potentially impeding investment and growth in the years ahead.[57] And, discussed further below, these interventions could place a heavier thumb placed on the financial scale favoring the largest companies relative to their smaller counterparts in good times and bad.

B. Fed-facilited support for Midsized and Smaller Businesses

We begin to explore this last issue by comparing the easy access and relatively low financing costs the largest companies enjoyed during the crisis with the arguable failure of the Main Street Lending Program and the conspicuous lack of any program using CARES Act funds to

[57] Some economists believe that a debt overhang can weigh on aggregate demand via weaker investment growth. *See* Stewart C. Myers, *Determinants of CorporateBorrowing*, 5 J. FIN. ECON. 147, 147 (1977) (forecasting risks of rising corporate debt levels); Larry Lang, Eli Ofek & René M. Stulz, *Leverage, Investment, and Firm Growth*, 40 J. FIN. ECON. 3, 4 (1996) (discussing potential risk with debt overhang preventing fundraising); Christopher A. Hennessy, *Tobin's Q, Debt Overhang, and Investment*, 59 J. FIN. 1717, 1718 (2005) (explaining debt overhang theory tested in article); Christopher A. Hennessy, Amnon Levy & Toni M. Whited, *Testing Q with Financing Frictions*, 83 J. FIN. ECON. 691, 693 (2007) (explaining the way they tested friction from debt overhang); Murillo Campello, John R. Graham & Campbell R. Harvey, *The Real Effects ofFinancial Constraints: Evidence from a Financial Crisis*, 97 J. FIN. ECON. 470, 486 (2010) (concluding bypassing of NPV projects slow economic growth); Xavier Giroud & Holger M. Mueller, *Firm Leverage, Consumer Demand, and Employment Losses During the Great Recession*, 132 Q.J. ECON. 271, 274 (2017) (describing concern that high leveraged firms more sensitive to demand shifts); Sebnem Kalemli-Özcan, Luc Laeven & David Moreno, *Debt Overhang, Rollover Risk, and Corporate Investment: Evidence from the European Crisis* 4-5 (Eur. Cent. Bank, Working Paper No. 2241, 2019), https://www.ecb.europa.eu/pub/pdf/scpwps/ecb.wp2241~cbea165b30.en.pdf [https://perma.cc/P63C-AF6H] (discussing debt overhang hurts recovery from crises). Others have challenged this view. *See* Atif Mian, Amir Sufi & Emil Verner, *Household Debt and Business Cycles Worldwide*, 132 Q.J. ECON. 1755, 1757-58 (2017) (summarizing results that run contrary to other debt overhang arguments); ÒSCAR JORDÀ, MARTIN KORNEJEW, MORITZ SCHULARICK & ALAN M. TAYLOR, FED. RSRV. BANK OF N.Y., ZOMBIES AT LARGE? CORPORATE DEBT OVERHANG AND THE MACROECONOMY, 1, 1 (2020), available at https://www.newyorkfed.org/medialibrary/media/research/staff_reports/sr951.pdf [https://perma.cc/KRX4-XU2Q] (layout out questioning of debt overhang theory).

increase credit support for truly small companies (apart from efforts to implement short-term operating assistance through the Paycheck Protection Program ("PPP")).

The Main Street Lending Program was the Fed's effort to help companies that are not large enough to readily access public debt markets.[58] Under the Fed's former guidelines (the program terminated in January 2021), companies with up to 15,000 employees or $5 billion in annual revenue (as of 2019) were eligible to participate.[59] These are not small businesses in the 'mom and pop' version but the definition of small business can be quite expansive and these businesses are equally not part of the biggest 'big businesses' under the Fed's definition. To implement the program, the Federal Reserve Bank of Boston set up a special purpose vehicle to purchase participations in loans originated by banks and their affiliates (nonbanks were not made eligible by the time the program ended).[60] The idea behind the structure was not all that different than what the Fed had done with corporate bonds; the Fed did not want to be in the position of directly assessing a company's creditworthiness, so instead it relied on the existing credit creation infrastructure to do that. In this case, that meant relying on banks rather than credit rating agencies or investment fund managers to pick "winners and losers."[61] The Fed further sought to ensure that banks would identify only companies that had at least a decent chance of paying back the moneys borrowed by requiring the banks that originated the loans to retain some credit

[58]BD. OF GOVERNORS OF THE FED. RSRV. BANK OF N.Y, *supra* note 35.

[59]Mark Kolakowski, *What Is the Main Street Lending Program*, INVESTOPEDIA (July 26, 2021), https://www.investopedia.com/main-street-lending-program-4802310 [https://perma.cc/B4TR-LR4S].

[60]*Policy Tools*, *Main Street Lending Program*, BD. OF GOVERNORS OF THE FED. RSRV. SYS., https://www.federalreserve.gov/monetarypolicy/mainstreetlending.htm [https://perma.cc/XD9F-NXGD] (last visited Feb. 20, 2022).

[61]*See* William B. English & J. Nellie Liang, *Designing the Main Street Lending Program: Challenges and Options* 22 (Brookings Inst.: Hutchins Ctr. on Fiscal & Monetary Pol'y, Working Paper No. 64, 2020), https://www.brookings.edu/wp-content/uploads/2020/06/WP64_Liang-English_FINAL.pdf [https://perma.cc/GV5U-KMLM].

exposure and by imposing other substantive conditions, e.g., limits on the total amount of debt a company could have relative to its income.[62] This is a significant structural difference from the corporate credit facilities, as bond ETFs are not required to, and typically do not, hold direct liability to the assets they are creating for their investors.[63] The Fed also set the terms of the loans that would be extended under the Main Street facility, using a structure that allowed repayment flexibility in the early years while still requiring full repayment of principal at a meaningful interest rate.[64]

Importantly, lenders were told to view the eligibility criteria in the term sheets as the minimum requirements and were expected to apply their own underwriting standards in evaluating potential borrowers and conduct an assessment of each potential borrower's financial condition at the time of the potential borrower's application.[65] This was deemed necessary to control risk to the Fed, despite the money allocated to the Treasury by Congress to absorb losses and allow greater lending and risk taking. [66] Along with the risk retention requirement, this criteria and design meant that the Main Street facility did not provide banks meaningful flexibility to make loans that they would not have made otherwise, or to make those loans on terms that were significantly more favorable.

[62] *Id.* at 2.

[63] *See id.* at 14-15.

[64] *Policy Tools*, *supra* note 60.

[65] *Main Street Lending Program: Frequently Asked Questions*, FED. RSRV. BD. (Dec. 28, 2020), https://www.federalreserve.gov/monetarypolicy/files/main-street-lending-faqs.pdf [https://perma.cc/TX7D-VMWS].

[66] Treasury's expression of an aversion to actually bearing losses may be one reason why the Fed designed a program that ultimately received little usage and hence had little potential to actually use the funds allocated.

The Main Street Program was announced in late March 2020 alongside the two corporate credit facilities.[67] In contrast to those facilities, however, there was no immediate favorable impact on the ability of eligible companies to actually access the financing they need to survive.[68] It was not until July, well after the Fed had started buying ETFs and a broad array of other corporate debt, generally issued by companies showing no sign of needing any further financial support, that the Main Street Lending Facility even became fully operational.[69] Moreover, the overall impact of the program was far more muted, to say the least.

At announcement, Main Street was projected for up to $600 billion in total loans with $75 billion set aside for potential losses.[70] It never got close. Mains Street conducted only 1,830 loans with a total lending of $17.5 billion.[71] And roughly half of the entire volume conducted through Main Street occurred in December 2020, just weeks before the facility was ceasing to accept loans.[72] At the end of the day, less than 3% of potential lending credit was advanced and the Treasury set aside money to cover losses in excess of 425% of the total lending that occurred. Putting this in context, 16% of the total CARES Act $454

[67]Brian D. Christiansen, Seth E. Jacobsen, Stephanie L. Teicher & Collin P. Janus, *Updated Guide to the Main Street Lending Program*, SKADDEN, ARPS, SLATE, MEAGHER & FLOM LLP (June 10, 2020), https://www.skadden.com/insights/publications/2020/06/updated-guide-to-the-main-street-lending-program# [https://perma.cc/S8XB-82RN].

[68]Falk Bräuning & Teodora Paligorova, *Uptake of the Main Street Lending Program*, BD. OF GOVERNORS OF THE FED. RSRV. SYS (Apr. 16, 2021), https://www.federalreserve.gov/econ-res/notes/feds-notes/uptake-of-the-main-street-lending-program-20210416.htm# [https://perma.cc/N5MC-25WE].

[69]*See id.*

[70] MARC LABONTE & LIDA R. WEINSTOCK, CONG. RSRCH. SERV. IF11632, THE FEDERAL RESERVE'S MAIN STREET LENDING PROGRAM (2020), https://crsreports.congress.gov/product/pdf/IF/IF11632 [https://perma.cc/RVN4-23B4].

[71]Bräuning & Paligorova, *supra* note 68.

[72] Bräuning & Paligorova, *supra* note 68(describing the timing of the uptake of the lending program).

billion allocated in March was set aside for the Main Street program to cover possible lending of $600 billion to these types of businesses, of which less than $10 billion was actually advanced by Thanksgiving. Even this small amount of support was not well targeted, as according to the Fed's own definitions, approximately 30% of loans were to industries that were not categorized as 'COVID-19 impacted.' An analysis by the non-partisan Congressional Research Service concluded that the Main Street facility may well have been "too small to be effective."[73] As Bharat Ramamurti, a former member of the Congressional Oversight Commission for the CARES Act and currently a senior member of the Biden Administration National Economic Council, put it, "[b]y any measure, the Main Street program has been a failure."[74]

There have been a number of explanations for the relative failure of the Main Street facility. For example, many borrowers generally felt the terms of the facility were too restrictive. As noted in a review of the limited lending: "[f]rom the convoluted eligibility requirements to the prohibition on paying dividends, the benefits provided from the emergency liquidity (namely, deferred principal and interest payments) did not outweigh the costs of the strings attached thereto."[75]Yet, the core challenge grew out of the existing credit creation infrastructure that the Fed relied on, and in the longer term, the lack of implicit commitments that resulted from the Fed's interventions. Ultimately, nothing in the Main Street facility offered banks sufficiently great upsides relative to risk to encourage broad lending using this program. This greatly limited the effectiveness of the program. But, even if the program had been better designed and

[73] LABONTE & WEINSTOCK, *supra* note 70.

[74] Rachel Siegel, *Months into Recession, Fed's Main Street Loan Program Is at a Crossroads*, WASH. POST (Aug. 7, 2020), https://www.washingtonpost.com/business/2020/08/07/federal-reserve-main-street-progral/ (discussing issues with Main Street Loan Program).

[75] Nathan Volz, *How the Main Street Loan Program Failed Main Street*, WIS. L.J. (Mar, 1, 2021 1:25 PM), https://wislawjournal.com/2021/03/01/how-the-main-street-loan-program-failed-main-street/ [https://perma.cc/GMD4-ES7X].

more effective, its long-term impact may well have been limited. Because the program was seen as limited to its terms, and contingent on continuing support from Congress and the Treasury Department, its existence did nothing to incentivize banks to invest further to improve their origination processes and internal infrastructure for making loans to mid-sized businesses. This stands in stark contrast to the corporate bond markets, where the Fed's interventions—intentionally or not—seem to have led to expectations of further support in coming crises.

Shifting to smaller businesses, the Fed created a facility that facilitated implementation of the government's separate PPP initiative, which as discussed below, was designed to provide temporary operating support for small businesses and those they employed. But it made no attempt to create a true emergency lending facility that would have increased access to funding for small enterprises, despite the fact that pandemic-era surveys suggesting that just shy of half such enterprises were concerned about cash flow and the overall health of their businesses.

The Fed could perhaps have promoted more enduring credit creation for small businesses by creating a lifeline for the issuance of asset-backed securities backed by small-business loans. Securitization vehicles allow for the transfer of risk from the loan originator to the holders of securities backed by those loans, and securitization vehicles pool risk between multiple individual loans.[76] The Fed recognizes securitization markets as key to credit creation, and re-deployed a facility in 2020 that it had first used in 2008 to help promote credit creation via the issuance of asset-backed securities ("ABS").[77] When relaunching the program, known as the term auction loan facility ("TALF") in 2020, the Fed explained the program was "intended to help meet the credit needs of consumers and businesses by facilitating the issuance of asset-backed securities."[78] Under the TALF, the Fed agreed to make non-recourse loans secured by ABS backed by a wide

[76] *See Term Asset-Backed Securities Loan Facility*, *supra* note 25 (discussing collateral for recourse loans under Fed loan facility).

[77] *Id.*

[78] *Id.*

variety of different assets, including auto loans, student loans, credit card receivables (both consumer and corporate), equipment loans and leases, and leveraged loans made to large businesses.[79]

Yet, when it came to ABS backed by loans to small businesses, the Fed followed its 2008 precedent to the letter (from a time when Fintech and other nonbank origination of small business loans was negligible) and would accept such loans only if "guaranteed by the Small Business Administration."[80] These terms not only did little to change banks' willingness to extend non-guaranteed small business loans, but they also effectively excluded billions of dollars in nonbank-originated small business ABS and the lenders who originated the underlying loans from market support.[81] The Fed's approach favored some forms of ABS, including CLOs that have become a key mechanism through which funds flow to the largest businesses, but not others such as non-guaranteed small business loans and personal installment loans.[82] This likely reduced the credit risk to which the Fed was exposed, an understandable aim much of the time, but one that requires greater scrutiny in light of the funds allocated by the CARES Act. For, as discussed further below in connection with PPP and the small-business-lending-landscape, these limitations significantly reduced support provided to small businesses during the earliest part of the pandemic and had the effect of denying the intermediaries that facilitate funding for small businesses the support akin to that the Fed provided to open-end bond funds and the other nonbank intermediaries supporting loans to large businesses.[83]

---

[79] *Id.*

[80] *Id.*

[81] Todd H. Baker, *Fed's New TALF Has a Major Gap*, AM. BANKER (Mar. 26, 2020, 12:30 PM), https://www.americanbanker.com/opinion/feds-new-talf-has-a-major-gap (last visited Feb. 20, 2022) ("Unless the TALF is changed to include the investment-grade, ABS based on [consumer] loans, lenders will shut down originations just when they are needed most.").

[82] *See id.*; *see also* Todd H. Baker & Kathryn Judge, *How to Help Small Businesses Survive COVID-19*, at 4 (Columbia L. and Econ., Working Paper No. 620, 2020), https://scholarship.law.columbia.edu/cgi/viewcontent.cgi?article=3643&context=faculty_scholarship [https://perma.cc/PX4Q-VLXW].

[83] Baker, *supra* note 81 (concluding that unless TALF reformed, the Fed "will fail in its goal of ensuring that credit flows to millions of vulnerable consumers").

Relatedly, the Fed also limited the ABS it was willing to accept based on the decisions of credit rating agencies.[84] Specifically, the Fed required ABS to have a credit rating in the highest long-term or, if no long-term rating was available, the highest short-term investment-grade rating category from at least two eligible nationally recognized credit rating agencies, provided that the ABS did not have a credit rating below the highest investment-grade rating category from any such agency.[85] This requirement contrasts with the inclusion of lower rated, non-investment grade corporate loans and ETFs in the secondary corporate credit facility. Holding ABS to a higher credit quality standard than corporate loans or ETFs effectively would have excluded most securitizations of unsecured private small business loans at the time.[86] Again, these types of limitations reduced the credit risk to the Fed, but the fact that Congress had provided the Treasury and Fed, collectively, with substantial loss absorbing capital so that the Fed could extend credit to impacted sectors of the economy in need undermines the sufficiency of this explanation for the decisions made. Given then-current credit market conditions, the Fed's decisions sharply limited the ability of nonbank lenders to support their customers with credit and did little to incent bank lenders—in

[84] Baker & Judge, *supra* note 82(noting "ABS issued by nonbank small business lenders typically don't reach" the credit rating grade required).

[85] *Id.* at 9.

[86] Prior to the pandemic, the highest-rated tranches of small business loan securitizations by Fintechs, such as Kabbage, FundingCircle, Credibly, RapidFinance and National Funding, were rated below the highest rating category. *See* Kroll Bond Rating Agency, *2019 Small Business Lending ABS Year in Review and 2020 Outlook* 6 (Feb. 13, 2019) *see also KBRA Assigns Preliminary Ratings to Kabbage Asset Securitization LLC, Series 2019-1 Additional Notes*, BUS. WIRE (Nov. 12, 2019, 2:49 PM), https://www.businesswire.com/news/home/20191112005999/en/ [https://perma.cc/3BYG-CFAR]. OnDeck, the only Fintech lender whose ABS had a top rating from one rating agency, suspended all non-PPP lending to new and existing customers in April 2020 and was subsequently sold for a small percentage of its historical market capitalization. *See* Sean Murray, *OnDeck Reports Q1 Net Loss of $59M, Suspends Non-PPP Lending Activities*, DEBANKED (Apr. 30, 2020), https://debanked.com/2020/04/ondeck-q1-earnings-to-be-released/ [https://perma.cc/D5X4-QJM3] ("OnDeck has suspended the funding of its Core loans and lines of credit to new or existing customers (unless the loan agreement has already been executed)."); *see also* Press Release, Enova Int'l, Enova to Acquire OnDeck to Create a Leading FinTech Company Serving Consumers and Small Businesses (July 28, 2020), https://www.prnewswire.com/news-releases/enova-to-acquire-ondeck-to-create-a-leading-fintech-company-serving-consumers-and-small-businesses-301101550.html [https://perma.cc/ZGZ7-JM8C].

either the immediate or longer term—to develop or maintain the infrastructure needed to make small business loans that lacked a government guarantee.[87]

The potential economic consequences of the Fed's decision are signficiant. In recent years, more than 61 million individuals—almost one-half of the U.S. workforce—worked in a small business, and small businesses collectively produced 43.5% of U.S. GDP.[88] Even more importantly, small businesses have accounted for 62% of net new job creation since 1995.[89] The failure to do more for these enterprises cannot be readily explained away as lying outside the Fed's employment mandate,[90] nor does it appear that the Fed is unconcerned about these companies. If anything, the opposite seems to be true. Chairman Powell explained: "[t]he pandemic is presenting acute risks to small businesses" and when "a small or medium-sized business becomes insolvent . . . we lose more than just that business."[91] "[t]he heart of our economy and . . . the work of generations" is at stake.[92] The struggles the Fed confronted in its effort to operationalize both the Main Street Facilities show how hard it can be for the Fed to partner

[87] Baker & Judge, *supra* note 82, at 2 (discussing Fed's mechanisms for extending lines of credit to small business as critical but insufficient).

[88] *Frequently Asked Questions About Small Businesses*, U.S. SMALL BUS. ADMIN.: OFF. OF ADVOC. (Dec. 2021), https://cdn.advocacy.sba.gov/wp-content/uploads/2021/12/06095731/Small-Business-FAQ-Revised-December-2021.pdf [https://perma.cc/79HG-U638] (finding small firms also constitute 39.7% of private sector payroll).

[89] *Id.* (stating 12.7 million net new jobs have been added to economy by small businesses).

[90] *See id.*

[91] Jerome H. Powell, Chairman, Bd. of Governors of the Fed. Rsrv. Sys., Semiannual Monetary Policy Report to the Congress, Testimony Before the Committee on Banking, Housing, and Urban Affairs (June 16, 2020) (available at https://www.federalreserve.gov/newsevents/testimony/powell20200616a.htm [https://perma.cc/2PFJ-AHXG]).

[92] *Id.*.

with the lenders who specialize in making these loans, even when big dollars are involved.

C. Why the Fed?

Strikingly, given the effect of delegating so much credit creation to the Fed, there is little sign that Congress had any desire to favor credit creation for large businesses over mid-sized and small ones. Given all that the Fed was already doing to fulfill its core mission of monetary policy while aggressively using emergency authority to stabilize short-term markets, why did Congress lay such a daunting new challenge on the Fed's shoulders? Although there are an array of reasons, one merits particular attention for purposes of our analysis here: perhaps Congress felt it did not have a better alternative.

As Neil Komesar has illuminated in his work on the importance of "deciding who decides," institutional choice is always relative.[93] The alternatives facing Congress in passage of the CARES Act were to: (a) come to a bipartisan, bicameral compromise and decide itself; (b) empower the President to decide directly or through a cabinet agency; or (c) empower an alternative institution such as the Fed. The Fed may be ill suited to address many of the challenges it is now being asked to help solve, but it is still better suited to take them on than administrators closer to the President or Congress through a more detailed set of appropriations, at extremis earmarking funds to specific projects. The Fed may be less susceptible to corruption, more competent, more able to make credible commitments, and more able to act quickly when that is what the situation requires, all factors that matter with these types of decisions. Examining Congress, the Presidency, and the Fed in broad strokes and then looking at specific institutional advantages the Fed may possess helps to explain how the central bank became a key part of the line of first defense for providing fiscal support to businesses in a recession.

[93] NEIL K. KOMESAR, IMPERFECT ALTERNATIVES: CHOOSING INSTITUTIONS IN LAW, ECONOMICS, AND PUBLIC POLICY (Univ. of Chi. Press 1994).

Nevertheless, the Fed or the U.S. system of governance generally is not necessarily well-served by this allocation. As Komesar also emphasizes, because any effort to pursue a substantive aim will be mediated by the processes and people of the institution charged with implementing that aim, institutional choice is of utmost importance.[94] And the use of the Fed as "quarterback" for relief efforts—given its institutional culture and the way it interacts,or does not,with existing "private" mechanisms for credit creation—highlights just how central infrastructure is in determining who gets help when crisis strikes.

III. OTHER SMALL BUSINESS SUPPORT: PPP

Congress also created other programs to try to help businesses survive the unprecedented shock.[95] The most important program for small businesses in the early stages of the pandemic was the PPP. This program was designed to funnel operating assistance to the employees of small businesses and discourage mass layoffs in addition to helping the owners and operators of those businesses weather the storm.[96] Small businesses were particularly hard hit in the early part of the pandemic, as shutdowns were declared and customer traffic imploded in the country's business districts.[97] According to one study, by May 2020, 34% of small businesses were still closed compared to January

[94] *Id.*

[95] Press Release, U.S. Dep't of Treasury, With $349 Billion in Emergency Small Business Capital Cleared, SBA and Treasury Begin Unprecedented Public-Private Mobilization Effort to Distribute Funds (Mar. 31, 2020), https://home.treasury.gov/news/press-releases/sm961 [https://perma.cc/KH7A-S8XL] (describing purpose of Paycheck Protection Program as protecting businesses and their employees).

[96] *Id.*

[97] Iman Ghosh, *34% of America's Small Businesses Are Still Closed Due to COVID-19. Here's Why It Matters*, WORLD ECON. F. (May 5, 2021), https://www.weforum.org/agenda/2021/05/america-united-states-covid-small-businesses-economics/ [https://perma.cc/E5LA-UQF2] (showing large-scale businesses closings across USA in early 2020); John Eric Humphries, Christopher Neilson, and Gabriel Ulyssea, The Evolving Impacts of COVID-19 on Small Businesses Since the CARES Act (NYU Cowles Foundation Discussion Paper No. 2230, April 26, 2020), http://dx.doi.org/10.2139/ssrn.3584745 (survey results showing numerous adverse impacts on small businesses by April 2020).

2020.[98] The impact on business owners was not consistent demographically.[99] For example, Asian and Black business owners were more highly concentrated in places, and in industries, with larger declines.[100]

The PPP was a unique program unprecedented in U.S. history. With the avowed goal to assist small businesses and small business employees impacted by the COVID-19 shutdown, Congress created the PPP and set aside $349 billion of CARES Act appropriations for PPP purposes.[101] Congress placed the Treasury Department in charge of PPP and directed the Small Business Administration to help small businesses qualify for PPP funding.[102] Congress gave the Treasury Department broad discretion to disburse PPP funding.[103] The PPP was designed to funnel operating assistance to small businesses to discourage mass layoffs in addition to helping the owners and operators of those businesses.[104] As one of its main sponsors, Senator Marco Rubio (R-FL) described the program: "PPP had two main

[98] Ghosh, *supra* note [104], (listing San Francisco, Boston, and Washington as cities with sharpest decline in small businesses remaining open).

[99] Daniel Wilmoth, *The Effects of the COVID-19 Pandemic on Small Businesses*, U.S. SMALL BUS. ADMIN.: OFF. OF ADVOC. 5 (Mar. 2021), https://cdn.advocacy.sba.gov/wp-content/uploads/2021/03/02112318/COVID-19-Impact-On-Small-Business.pdf [https://perma.cc/WLX9-CBJ3].

[100] *Id.*

[101] *See A July Update on the Paycheck Protection Program*, COMM. RESPONSIBLE FED. BUDGET (July 10, 2020), https://www.crfb.org/blogs/july-update-paycheck-protection-program [https://perma.cc/2769-VWVD] (stating that PPP's original $349 billion original funding "quickly ran out").

[102] *See* Press Release, *supra* note .

[103] *See A July Update on the Paycheck Protection Program*, COMM. RESPONSIBLE FED. BUDGET (July 10, 2020), https://www.crfb.org/blogs/july-update-paycheck-protection-program [https://perma.cc/2769-VWVD].

[104] *Id.*

goals: help workers keep their jobs, and protect small businesses from being forced to permanently close their doors."[105]

The PPP was ostensibly a "forgivable loan" program run through existing financial intermediaries, primarily banks and, in the later stages, financial technology firms ("Fintechs")[106] and other nonbank lenders. In practice, it functioned as a grant with easily met conditions.[107] Because, it too relied on existing infrastructure, assistance—particularly in the critical early days of the PPP—was principally available to small businesses with existing relationships with participating lenders.

The PPP was structured to reach businesses using lender financial intermediaries as the disbursement arm, accessed through PPP "loan" applications.[108] The Treasury then funded such "loans" through the lender to the applicant. To achieve the dual goals of the program, the "loans" were forgivable as long as borrowers maintained employee

[105] Press Release, Marco Rubio, Chairman, Senate Committee on Small Business and Entrepreneurship, Opening Remarks at Congressional Hearing: Small Business in Crisis: The 2020 Paycheck Protection Program and its Future (Dec. 10, 2020), https://www.rubio.senate.gov/public/index.cfm/2020/12/now-rubio-chairs-hearing-on-the-paycheck-protection-program-and-its-future [https://perma.cc/3AX8-KVRF].

[106] For this paper we will define Fintechs as companies that provide credit primarily through technological platforms (not in-person or store front) and are not chartered banks, credit unions, or community development financial institutions (CDFIs). We define fintechs this way to make the conceptual arguments regarding bank/credit union/CDFI vs. Fintech cleaner. We realize that in the real world many banks/credit unions/CDFIs use financial technology extensively, that there are nonbank lenders that do not operate as FinTechs, and that some Fintechs are or may be considering becoming banks/credit unions/CDFIs. We also recognize that there are a whole host of financial technology companies that are not lenders but are commonly referred to as FinTechs.

[107] Pandemic Oversight, *Paycheck Protection Program*, PANDEMIC OVERSIGHT, https://www.pandemicoversight.gov/data-interactive-tools/interactive-dashboards/paycheck-protection-program (last visited Feb. 20, 2022) (showing hundreds of billions of dollars forgiven). As of November 24, 2021, $629.2 billion of the total of $792.8 billion in PPP loans (79.4%) had been forgiven. *Id.*

[108] *A July Update on the Paycheck Protection Program*, *supra* note 103 ("[T]he forgivable loans were provided through banks and other private financial entities who have collected billions of dollars in fees for their services.").

compensation levels.[109] Originally set at 75% for payroll, that figure was reduced to 60% in later legislation.[110] Thus, up to 40% of funds supposedly designed to protect paychecks could be spent on "other eligible expenses."[111] Reflecting the belief at the time that the economic shutdown would be short, businesses were given eight to twenty-four weeks to use the funds for those purposes.[112] If these criteria were met, the "loan" was forgiven.[113] Thus, the "loan" effectively became a grant.

Economically there is little distinction between a loan that is forgiven if key conditions are met and a grant that must be repaid if certain conditions are not met. Both are contingent gifts that require repayment if certain criteria are not met. Politically there are important distinctions between programs that are marketed as "loans" compared to those marketed as "grants." Short-term grant programs like the PPP are designed to support the status quo without making too many distinctions and "kick the can" down the road until the situation is clearer or possibly in hopes that a short-term lifeline is all that will be needed for long-term business survival. These grants are expenditures not expected to be recouped by the provider.[114] Loans, by contrast, are intended to be repaid over time and availability is dependent upon the lender's assessment of repayment risk. This was the approach that the Main Street Loan program followed, as noted above. The political sensitivity of this distinction is illustrated by the following counterfactual. Had the PPP grants actually been true loans with an

[109] *PPP Loan Forgiveness*, U.S. SMALL BUS. ADMIN. https://www.sba.gov/funding-programs/loans/covid-19-relief-options/paycheck-protection-program/ppp-loan-forgiveness [https://perma.cc/49UN-ZTDA] (last visited Feb. 20, 2022).

[110] *Id.*

[111] *Id.* (requiring also that "loan proceeds are spent on payroll costs and other eligible expenses").

[112] *Id.*

[113] *Id.*

[114] *Id.*

expectation of repayment, then Congress, Treasury, or the Fed would have had to come up with underwriting criteria to control credit risk or delegated underwriting to lenders (as with the MSLP).

Because loan underwriting necessitates some degree of trying to separate expected winners from losers—even when the government is ready to absorb some of the credit risk—using true lending structures to deliver assistance is challenging even in normal cyclical downturns, and is particularly so in a sharp crisis when the future direction of the economy is particularly unclear.[115] During the early phases of COVID-19, for example, there were legitimate questions about whether infections would continue for mere months or many years and thus whether the economic recovery would be V-shaped, a swoosh, a sawtooth, or something else entirely.[116] There were signifcant questions about how it would differentially impact different industries, outside of the obvious areas of travel and leisure.[117] This uncertainty rendered many of traditional tools of credit analysis, temporarily, far less reliable. It can also help explain why neither the Fed nor the Treasury were anxious to try to take more actions that directly supported small businesses via true credit extensions. Given Congress's decision to have the Fed play a central role in aiding the flow of funds to busiensses under the exigencies of the COVID-19 induced recession, there are still lessons to be learned for the next crisis, whatever its cause.

The Treasury, in the first stage of PPP, worked with the SBA and a multitude of banks and credit unions to disburse PPP funds. The government paid fees to entice banks and nonbanks to originate PPP "loans." The fees provided to financial intermediaries facilitated distribution of PPP funds, and banks worked hard to get money out the door to their customers. Low-cost funding ultimately provided by the PPP loan fund set up by the Treasury and the Fed coupled with

[115] Jose Maria Barrero, Nicholas Bloom, and Steven J. Davis, COVID-19 Is Also a Reallocation Shock (University of Chicago Becker Friedman Institute for Economics Working Paper No. 2020-59, June 25, 2020), http://dx.doi.org/10.2139/ssrn.3592953.

[116] *See, e.g.,* Baker & Judge, *supra* note 82, at 2 ("Nor can anyone foresee what the economy will look like when people emerge from their shelters.").

[117] *See id.* ("A severe recession is certain, but questions remain about just how deep it will sear, how long it will last, and how it will reshape the economy that emerges.").

capital relief provided to banks by regulators provided additional incentives for financial intermediaries to engage. [118]

Despite the fact that the initial round of funding was expected to be far shy of demand, the Treasury decided to make funds available in a "first come, first served" basis. The result was a rush to seek funding. The entire $350 billion was given out in fourteen days, beginning April 2, 2020 (barely after the CARES Act was signed and again before any automatic stabilizer tied to the unemployment data would have been able to kick in).

The rollout process was chaotic and exposed significant weaknesses in the SBA's loan application system. It also created frustration for many of the lenders attempting to submit and receive approval for applications and the borrowers seeking funds.[119] Getting so much funding out so quickly was no small feat.[120] And, interestingly, in light of the push for digital lenders to be included in the first round, banks succeeded in getting PPP loans for their customers in most cases by "throwing people" at the problem instead of automating processes.[121]

[118] Regulatory Capital Rule: Paycheck Protection Program Lending Facility and Paycheck Protection Program Loans, 85 Fed. Reg. 20,387-394 (Apr. 13, 2020) (to be codified at 12 C.F.R. pts. 3, 217, 324).The bank regulators allowed banks to exclude PPP loans from regulatory capital calculations. *Id.*

[119] Rebecca Jarvis & Layne Winn, *What Went Wrong with the Paycheck Protection Program,* ABC NEWS (Apr. 25, 2020), https://abcnews.go.com/Business/inside-paycheck-protection-program-race/story?id=70330643 [https://perma.cc/P4CX-FYKL]

[120] *Id.* ("Collecting the right information, auditing thousands of quickly thrown together documents, and doing it all under the extreme conditions of the coronavirus pandemic presented several challenges, but the biggest challenge by far, was submitting the paperwork.").

[121] David Smith, *The Ballad of the Small Banker: An SBA Lender's Experience with PPP Loans*, FICO (May 7, 2020), https://www.fico.com/blogs/ballad-small-banker-sba-lenders-experience-ppp-loans [https://perma.cc/8JMT-KD2M] (explaining big banks' "digital systems are not designed to handle the PPP loan program, and they do not immediately have the regulatory processes in place to detect risk and fraud for these circumstances"); Miriam Cross, *Small Lenders Embrace Automation for Latest PPP Round*, AM. BANKER (Jan. 13, 2021, 3:16 PM), https://www.americanbanker.com/news/small-lenders-embrace-automation-

The Treasury made several decisions in implementing PPP that had the effect of prioritizing larger companies by incentivizing those with preexisting *banking* relationships and those asking for larger PPP amounts. "First come, first served" funding of applications incentivized speed. Speed in application processing is a function of relationships—borrowers knew where to go for help and banks could process the requests of existing customers quickly—but equally the result of bank self-interest. The Treasury also decided to require anti-money laundering rules, such as know your customer, to be part of the PPP underwriting process. This burden increased the fixed cost to process PPP applications and increased the time it took to gather information from customers who had not previously been subject to anti-money laundering review. This very likely had the effect of prioritizing PPP access for businesses that had previously obtained a loan over those that just had a transaction account or some other relationship at the bank.[122] Finally, in more of a structural issue than a decision about implementation, the natural economics of bank/business relationships also tilted the scales toward providing PPP assistance to pre-existing customers who already had outstanding loans from the bank. By improving the liquidity and solvency of a loan customer receiving PPP funds, it became less likely that a bank's outstanding loan would go into default.

These dynamic factors favored large businesses and those who had been in business longer.[123] It also favored wealthier businesses—that

for-latest-ppp-round (noting PPP distribution prior to automation was inefficient and cumbersome).

[122] Aaron Klein & Staci Warden, *Anti-money Laundering Rules: An Emergency Assistance Roadblock*, BROOKINGS INST. (Apr. 8, 2020), https://www.brookings.edu/opinions/anti-money-laundering-rules-an-emergency-assistance-roadblock/ [https://perma.cc/XTG4-Y23E] ("When a new small business comes calling, asking for a small two-month loan at a 1% interest rate, the more prudent course from a bank's risk management perspective, even with a government guarantee, may simply be to not make the loan at all.").

[123] *See* Garrett Borawski & Mark E. Schweitzer, Fed. Rsrv. Bank of Cleveland, *How Well Did PPP Loans Reach Low- and Moderate-Income Communities?* 1-2 (May 28, 2021), https://www.clevelandfed.org/~/media/content/newsroom%20and%20events/publications/economic%20commentary/2021/ec%20202113/ec2021-13.pdf [https://perma.cc/7VTH-D37N].

is, the businesses that were in better financial position to handle the economic disruption even without government aid.[124] These factors help to explain why in the first round of PPP allocations to companies seeking $1 million or more, quite a large sum for what was supposed to cover mainly six to eight weeks of payroll, comprised 44.5% of all PPP funds.[125] By contrast, funds for businesses seeking $150,000 or less made up only 17% of all successfully processed PPP applications.[126]

This approach disfavored the large number of the smaller businesses that relied on Fintechs and other nonbank lenders for credit, and the many very small businesses who were not actively borrowing prior to the crisis. These categories include proportionally more minority and women-owned businesses.[127] Given weaker historical relationships between banks and minority-owned small businesses and microbusinesses (those with ten or fewer employees), this likely contributed to such businesses having more difficulty and less overall access to the first round of PPP funding.[128] Although, to be sure, other

[124] Stacy Cowley & Emily Flitter, *Banks Gave Richest Clients 'Concierge Treatement' for Pandemic Aid*, N.Y. TIMES (Apr. 22, 2020), https://www.nytimes.com/2020/04/22/business/sba-loans-ppp-coronavirus.html (last visited Jan. 3, 2022) (describing "two-tiered system" where wealthier clients had easier loan application process).

[125] Aaron Klein, *The Small Business Relief Program Is Still Broken*, POLITICO (Apr. 27, 2020, 4:30 AM), https://www.politico.com/news/agenda/2020/04/27/small-business-relief-206960 [https://perma.cc/Y9VN-S23N].

[126] *Id.*

[127] Megan Cerullo, *Up to 90% of Minority and Women Owners Shut Out of Paycheck Protection Program, Experts Fear*, CBS NEWS (Apr. 22, 2020, 3:48 PM), https://www.cbsnews.com/news/women-minority-business-owners-paycheck-protection-program-loans/ [https://perma.cc/FTP3-GAYQ].

[128] Sifan Liu & Joseph Parilla, *New Data Shows Small Businesses in Communities of Color Had Unequal Access to Federal COVID-19 Relief*, BROOKINGS INST. (Sept. 17, 2020), https://www.brookings.edu/research/new-data-shows-small-businesses-in-communities-of-color-had-unequal-access-to-federal-COVID-19-relief/ [https://perma.cc/HRC8-N6Y3] (supporting conclusion with empirical data that "small businesses in majority-white

factors also played a role contributing to the disparaties in who actually received funding.[129]

In initially using banks as the primary distribution channel, Treasury seemingly paid little heed how various small businesses access funding, and how the small business credit market has changed since 2008. As two of us noted before those decisions were made: "Banks are no longer the only source of credit for true small businesses, especially the type of very small "Mom & Pop" corner stores, laundromats, beauty salons, and coffee and sandwich shops that line main streets."[130] Over the last decade, the smallest enterprises have increasingly turned to online lenders for their credit needs.[131] The 2019 Federal Reserve Banks' Small Business Credit Survey indicated that, in 2018, nearly one-third of small businesses that applied for credit sought it from an online lender (the type of lender we describe here as a Fintech).[132] For less traditionally credit-worthy businesses, the number was closer to one-half.[133] Despite an average loan size much smaller than that of a typical bank,[134] online lenders extended more

neighborhoods receiv[ed] PPP loans more quickly than small businesses in majority-Black and majority-Latino or Hispanic neighborhoods").

[129] Humphries et al, supra note [104].

[130] Baker & Judge, *supra* note 82, at 7; *See* FED. RESRV. BANKS, SMALL BUSINESS CREDIT SURVEY: 2019 REPORT ON EMPLOYER FIRMS 16 (2019), available at https://www.fedsmallbusiness.org/medialibrary/fedsmallbusiness/files/2019/sbcs-employer-firms-report.pdf [https://perma.cc/Q25K-9HJC] (showing statistical importance of "nonbank" lenders in survey on small business).

[131] FED RSRV. BANKS, *supra* note 130 (showing upward trend in online applications from 2016 through 2018).

[132] *Id.* at iii.

[133] *Id.* ("Medium- and high-credit-risk applicants seeking loan or line of credit financing were as likely to apply to an online lender as to a large bank (54% and 50%, respectively), and more likely to apply to an online lender than to a small bank (41%), CDFI (5%), or credit union (12%).").

[134] Maddie Shepherd, *Average Small Business Loan Amounts, Broken Down and Explained*, FUNDERA (Jan. 27, 2021), https://www.fundera.com/business-

than $20 billion in loans to small businesses in 2019, owing overwhelmingly to very small enterprises.[135] Combined with the approximately $12-15 billion in aggregate merchant cash advances made to small retail businesses in 2019, nonbank lenders provided somewhere between one-quarter and one-third of all credit to the smallest businesses.

Racial disparities also appear larger in bank small business lending than in Fintech lending.[136] While large banks approve at least some credit for about 65% of loan applications from White small business owners, this number drops to 45% for Black small business owners.[137] In contrast, online lenders approved credit for around 85% of White-owned small business borrowers versus 83% for Black-owned borrowers.[138] As a result, regardless of intent, it was foreseeable that

loans/guides/average-small-business-loan-amount [https://perma.cc/EL5Z-54SP] (noting U.S. average small business loan is $633,000.).

[135]Baker & Judge, *supra* note 82, at 7.

[136]Mels de Zeeuw & Brett Barkley, *Mind the Gap: Minority-Owned Small Businesses' Financing Experiences in 2018*, FED. RESERVE (2019) https://www.federalreserve.gov/publications/2019-november-consumer-community-context.htm [https://perma.cc/RCA2-55ET].

[137]*Id.*

[138] Mels de Zeeuw & Brett Barkley, *Mind the Gap: Minority-Owned Small Businesses' Financing Experiences in 2018*, FED. RESERVE (2019), https://www.federalreserve.gov/publications/2019-november-consumer-community-context.htm [https://perma.cc/RCA2-55ET] (concluding that "that minority-owned firms—particularly black-owned firms—experience greater challenges obtaining or accessing financing and have potentially large, unmet financing needs").There is a large disparity in approval rates between White, Black and Hispanic small business loans in general. FED. RESERVE BANK OF ATLANTA, SMALL BUSINESS CREDIT SURVEY: REPORT ON MINORITY OWNED FIRMS, at iii-v (Dec. 2019), https://www.fedsmallbusiness.org/medialibrary/fedsmallbusiness/files/2019/20191211-ced-minority-owned-firms-report.pdf [https://perma.cc/7LQF-9WA7] "On average, Black- and Hispanic-owned firm applicants received approval for smaller shares of the financing they sought compared to White-owned small businesses that applied for financing. Larger shares of Black- and Hispanic-owned firm applicants did not receive any of the financing they applied for—38% and 33%, respectively—compared to 24% of Asian-owned firm applicants and 20% of White-owned business applicants. A larger share of White-owned business applicants received approval for all the financing they applied for: 49%, compared to 39% of Asian-, 35% of Hispanic-, and 31% of Black-owned firm applicants." *Id.* Similar issues exist

in disproportionately relying on banks, the Treasury's particular approach to allocating early PPP funding would also disproportionately go to larger, whiter, small businesses. It was a decision that albeit neutral on its face, was far from neutral in practice.

"First come, first served" also resulted in PPP grants that were often disconnected from the level of COVID-19 infection the business's home area was experiencing or how tight state-based lock-down regimes were—both presumably proxies for negative business impact. For example, Texas companies received the largest share of any state of initial PPP funding despite a relative lack of the virus at the time and having far fewer state based lock-down restrictions.[139] The definition of 'small business' in the legislation was quite lenient, allowing relatively large publicly traded companies and professional sports teams to qualify (among the most famous were Shake Shack and the Los Angeles Lakers).[140] As firms were eventually named, a slew of media stories began, and many firms decided to return the money. The situation was significant enough that a joint statement by Treasury Secretary Mnuchin and SBA Administrator Carranza noted "the large number of companies that have appropriately reevaluated

for women-owned businesses, which are less likely to be approved for business loans than men-owned firms. FED. RRSRV. BANKS OF N.Y. & K.C., 2016 SMALL BUSINESS CREDIT SURVEY: REPORT ON WOMEN-OWNED FIRMS 22 (Nov. 2017), https://www.newyorkfed.org/medialibrary/media/smallbusiness/2016/SBCS-Report-WomenOwnedFirms-2016.pdf [https://perma.cc/9K7T-RXHH].

[139] Stephen Gandel, *Paycheck Protection Program Billions Went to Large Companies and Missed Virus Hot Spots*, CBS NEWS (Apr. 20, 2020, 12:54 PM), https://www.cbsnews.com/news/paycheck-protection-program-small-businesses-large-companies-coroanvirus/ [https://perma.cc/Y6S9-VUKT] (explaining that barebones application set course for disaster).

[140] Sarah Hansen, *Potbelly, Shake Shack, Axios: Here Are All the Companies Returning PPP Money After Public Backlash*, FORBES(Apr. 29, 2020, 11:15 AM), https://www.forbes.com/sites/sarahhansen/2020/04/29/potbelly-shake-shack-axios-here-are-all-the-companies-returning-ppp-money-after-public-backlash/?sh=6b229e497ea0 [https://web.archive.org/web/20200430114300/https://www.forbes.com/sites/sarahhansen/2020/04/29/potbelly-shake-shack-axios-here-are-all-the-companies-returning-ppp-money-after-public-backlash/#6a35ac427ea0] (noting that Shake Shack returned $10 million loan and Los Angeles Lakers returned $4.6 million loan).

their need for PPP loans and promptly repaid loan funds."[141] That same release promised greater scrutiny for firms that took more than $2 million in PPP.

After the initial round of PPP funding provided in the CARES Act was quickly exhausted, Congress appropriated another $321 billion in PPP funding in the Paycheck Protection Program and Health Care Enhance Act of April 2020.[142] In an apparent attempt to rectify the problems in reaching low-income and minority communities, $60 billion of that funding was set aside for small banks, credit unions (defined as assets of under $10 billion) and community development financial institutions ("CDFIs") to allocate. This decision may have reflected Congress's belief that smaller lenders were more likely to be the conduits to reach these communities. At about the same time, the SBA began authorizing PPP lending by nonbank CDFIs, Fintechs, and other nonbank small business lenders, further improving access to PPP by the small businesses that relied on those intermediaries for credit prior to the crisis.

Unfortunately, systems and operational issues persisted, despite efforts to correct known problems.[143] In addition, according to a paper by three economists at the University of Texas, the inclusion of nonbanks as lenders appears to have increased levels of potential fraud

[141] Press Release, Steven T. Mnuchin & Jovita Carranza, Sec'y & Adm'r, U.S. Dep't of Treasury, Joint Statement on Review Procedure for Paycheck Protection Program Loans (Apr. 28, 2020), https://home.treasury.gov/news/press-releases/sm991 [https://perma.cc/885A-UCYB].

[142] Paycheck Protection Program and Health Care Enhance Act of April 2020, Pub. L. No. 116-139, 134 Stat. 620.

[143] Ben Popken & Stephanie Ruhle, *'Extremely Disappointing' and 'Entirely Predictable' – Slowdowns and Lockouts Plague Second Round of PPP*, NBC NEWS (Apr. 27, 2020, 4:31 PM), https://www.nbcnews.com/business/business-news/extremely-disappointing-entirely-predictable-slowdowns-lockouts-plague-second-round-ppp-n1193421 [https://perma.cc/G4R4-HK9Y] ("Lockouts, login issues and sluggish systems marred the Small Business Administration's loan approval process, with each bank unable to submit more than a few hundred applications.").

in the program four-fold in the second round, with some estimates as high as $69 billion total in potentially fraudulent PPP loans.[144]

Initial research suggests that reliance on the existing system of financial intermediaries to distribute PPP support resulted in racial bias in allocation of funding, and focusing on bank size to ameliorate the disparity was not an effective solution. Economist Sabrina Howell and co-authors found that Black-owned businesses were less likely to receive PPP funding through a bank, even after controlling for other variables using standard economic techniques.[145] Their study also found that "smaller banks were much less likely to lend to Black-owned firms, while the Top-4 banks exhibited little to no disparity after including controls," indicating that Congress's solution of prioritizing small banks to rectify racial disparities in the first round of funding was unsuccessful and potentially counterproductive.[146] The study indicated that Fintech firms were more successful in reaching minority owned firms.[147] However, as noted above, other research suggests that Fintechs had their own issues in processing PPP applications, as they approved significantly more potentially fraudulent loans.[148]

---

[144] John M. Griffin, Samuel Kruger & Prateek Mahajan, *Did FinTech Lenders Facilitate PPP Fraud*, (Dec. 6, 2021), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3906395 [https://perma.cc/56AZ-HMNG] ("Overall, we find more than 1.51 million questionable loans representing over $68.9 billion in capital."). It would also seem likely that greater PPP familiarity and preparation time for fraudsters was a contributing factor.

[145] Sabrina T. Howell, Theresa Kuchler, David Snitkof, Johannes Stroebel & Jun Wong, *Racial Disparities in Access to Small Business Credit: Evidence from the Paycheck Protection Program*, (Nat'l Bureau of Econ. Rsrch., Working Paper No. 29364, 2021), https://www.nber.org/system/files/working_papers/w29364/w29364.pdf [https://perma.cc/7AFS-EB55] (noting that less than 9% of all loans went ot Black-owned businesses).

[146] *Id.*

[147] *Id.*

[148] Griffin et al., *supra* note 144 and accompanying text.

Using existing lenders in the financial system to allocate funding inevitably leads to favoritism towards specific subsections of the population, and it often means favoring those who already have a leg up. Just as with the decision to empower the Fed and Treasury, Congress could have made different decisions in how to structure PPP, and it could have provided more guidance to the Treasury Department to minimize some of the disparities on display, particularly in the allocation of the first round of PPP funding.[149] There are inevitable tradeoffs allocating assistance this way, no matter what decisions Congress made, precisely because it was so dependent on existing private infrastructure given the limited public alternatives. In choosing to prioritize speed—an understandable priority under the circumstances—Congress also set the stage for exacerbating existing inequities in access to credit.

Just as with the decision to ask the Fed to play such a central role in facilitating the extension of credit to businesses, the choice was among imperfect alternatives. The scope of the banking system, and the relationships and liquidity it possessed, at least positioned it to serve as a plausible partner in the government's effort to quickly distribute a lot of fresh cash to small businesses and others that happened to qualify.

A. *The Role of Fintechs and Nonbanks*

As discussed above, Fintech small business lenders were the main source of credit for a large and highly vulnerable part of the small business ecosystem that banks were not serving effectively.[150] Unlike banks, Fintech small business lenders were faced with an existential

[149] Press Release, Select Subcomm. on the Coronavirus Crisis, New PPP Report Shows Trump Administration and Big Banks Left Behind Struggling Small Businesses (Oct 16, 2020), https://coronavirus.house.gov/news/press-releases/new-ppp-report-shows-trump-administration-and-big-banks-left-behind-struggling [https://perma.cc/5HHD-R63D] (idenitfying three critical failures in implementing PPP in accordance with Congress's intent).

[150] Fintech lenders include the new breed of standalone nonbank small business lenders like FundingCircle, OnDeck, Fundation, Kabbage, BlueVine, Can Capital, StreetShares, Lendio, and Biz2Credit, as well as more established tech companies like Square, PayPal, Stripe, Intuit, and Amazon, which include lending as part of their service.

crisis when the COVID-19 pandemic began. Due to their capital markets-dependent business models, many Fintech small business lenders were forced out of the loan market just when the liquidity they provide was needed most.[151] Many large Fintech lenders curtailed or ceased lending entirely as their ABS were downgraded and funding costs rose precipitously.[152] In the early stages of the crisis, as a recent

[151] Two of the best known Fintech lenders, OnDeck and Kabbage, suspended all non-PPP lending to new and existing customers in April 2020. OnDeck was subsequently sold to another nonbank lender for a small percentage of its historical market capitalization, while Kabbage was sold to American Express, a bank. *See* Murray, *supra* note 86; Lea Nonninger, *Kabbage Discontinues Lending Operations amid the Coronavirus Pandemic*, BUS. INSIDER (Apr. 6, 2020), https://www.businessinsider.com/kabbage-pauses-lending-suspends-existing-credit-lines-2020-4 [https://perma.cc/C9PF-SYPJ] (noting that Kabbage did not give borrowers notice before cutting off credit).For examples of the instability of capital markets funding for Fintech lenders, see Lawrence Delevingne, *Exclusive: Eyeing Defaults, U.S. Direct Lender Colchis Capital to Shut Funds*, REUTERS (Apr. 7, 2020), https://www.reuters.com/article/us-health-coronavirus-colchiscapital-exc/exclusive-eyeing-defaults-us-direct-lender-colchis-capital-to-shut-funds-idUSKBN21P21X [https://perma.cc/W8KT-CUHN] (explaining decision to shut funds was based on high risk and uncertainty about future economic recovery); Diana Asatryan, *Kabbage Bond Tumbles to Pennies, as the Rest of SMB Is 'On Hold'*, DEBTWIRE (Apr. 2, 2020); Payne Lubbers & Jennifer Surane, *Online Lenders Fizzling in Crisis with On Deck Agreeing to Sale*, BLOOMBERG (July 29, 2020, 10:17 AM), https://www.bloomberg.com/news/articles/2020-07-29/online-lenders-fizzling-in-crisis-with-on-deck-agreeing-to-sale [https://web.archive.org/web/20200730115720/https://www.bloomberg.com/news/articles/2020-07-29/online-lenders-fizzling-in-crisis-with-on-deck-agreeing-to-sale] ("On Deck Capital Inc. said late Tuesday it had agreed to sell itself for $90 million, almost six years after an initial public offering that valued the online small business lender at $1.85 billion.").

See also Todd H. Baker, *Marketplace Lenders Are a Systemic Risk*, AM. BANKER (Aug. 17, 2015, 9:30 AM), https://www.americanbanker.com/opinion/marketplace-lenders-are-a-systemic-risk (noting that MPL "can't slow down lending and slash operating costs to stay afloat while collecting cash from existing loans"); Todd H. Baker, *OK, Marketplace Lenders, I'll Say It: Told You So*, AM. BANKER (May 4, 2016, 2:37 PM), https://www.americanbanker.com/opinion/ok-marketplace-lenders-ill-say-it-told-you-so("[L]iquidity is everything, institutional money can't be relied on, expenses are harder to cut than add, high rates of loan growth aren't sustainable and a business model based on volatile gain on sale margins is inherently unstable.").

[152] Robert Armstrong, *Online Lender Stops Making Loans to Small US Businesses*, FIN. TIMES (Apr. 1, 2020), https://www.ft.com/content/c31a20cf-cb17-4958-9454-73763302b5dc ("We securitise our receivables and we are on the hook for loan performance, which is suffering because of delinquencies, because our customers have no revenue, because they are closed…"); Kroll Bond Rating Agency, *10 U.S. Small Business ABS Deals on Watch Downgrade Due to COVID-19 Concerns*, (Mar. 30, 2020.

paper by Ben-David, Johnson and Stulz showed,[153] the pandemic "led to a sharp contraction in fintech lending to small businesses around the onset of the crisis. Digital lending in the second quarter of 2020 declined by 75% relative to its $16 billion level in the fourth quarter of 2019," and "out of 16 small business fintech lenders originating loans before the COVID-19 shock in 2020, only six were still originating loans in the third quarter of 2020." Strikingly, by contrast, their analysis found "no evidence of an equivalent collapse in bank loans to small businesses during the same period."[154]

This raises important questions about the implications of the decisions by the Fed and Treasury (in the context of TALF and the first round of the PPP, respectively) to take actions that effectively limited their capacity to provide fresh liquidity to Fintechs that specialized in small business lending. There are some practical explanations, but whether those suffice or how informed policy makers were about the myriad consequences that were likely to flow from those decisions, remains unclear. For example, with respect to PPP, assuming that the decision had already been made to require certification of bank-level anti-money laundering compliance for nonbank lenders included in the PPP, those lenders might not have been prepared to participate directly in the first round in any event. Many of the Fintech small business lenders that survived the early stage of the pandemic did so largely by virtue of helping, directly or indirectly, in the distribution of the PPP funds by banks without acting as approved lenders or otherwise taking on the primary anti-money

https://www.krollbondratings.com/documents/report/32339/abs-u-s-small-business-abs-watch-downgrade-surveillance-report.

[153] Itzhak Ben-David, Mark J. Johnson & René M. Stulz, *Why Did Small Business Fintech Lending Dry Up During March 2020?*, (Fisher Coll. of Bus., Working Paper No. 2021-03-014, 2021), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3910549 [https://perma.cc/B4NN-JVZ5]. The authors showed that "the drying up of the loan supply is most consistent with fintech lenders becoming financially constrained and losing their ability to fund new loans."

[154] *Id.*

laundering compliance role.[155] The speed and simplicity of Fintech lenders' processes were, at least theoretically, an advantage relative to the often more bureaucratic loan origination practices of banks, helping to explain why so many Fintechs found ways to work with banks, by generating leads or providing loan origination and tracking software to allow banks that had previously used manual processes to convert to digital origination and tracking in the PPP, rather than going it alone.[156]

Whatever the reasons, the government's initial crisis response did little to support these nonbank lenders, creating a risk not only to them but to the many small businesses that relied on them for funding. This

[155] The CARES Act permits "other lenders" to become licensed to make 100% guaranteed PPP SBA loans. CARES Act, Pub. L. No. 116-136 § 1109(b), 134 Stat. 281, 305. The Interim Final Rule sets out the terms and conditions on which such lenders may participate in the PPP program. Bus. Loan Program Temp. Changes; Paycheck Prot. Program, 85 Fed. Reg. 20811-817 (Apr. 15, 2020) (codified at 12 C.F.R. pt. 120).

[156] In fact, many banks relied on Fintechs for the software used to process PPP loans. Darren Hecht, *How Independent and Community Banks Used Fintech to Tackle PPP*, INDEP. BANKER (July 8, 2021), https://independentbanker.org/2021/07/how-independent-and-community-banks-used-fintech-to-tackle-ppp/ [https://perma.cc/89Z4-FXQY] (describing how this approach strengthened relationships with clients); Loraine Lawson, *Lessons Learned: PPP Spurs New Automations and Fintech Partnerships*, BANK AUTOMATION NEWS (June 7, 2021), https://bankautomationnews.com/allposts/retail/lessons-learned-ppp-spurs-new-automations-and-fintech-partnerships/ (last visited Feb. 20, 2022); Press Release, Fintech Companies, Lendsmart and Griffin Technologies, Partner to Improve SBA PPP Loan Process (May 20, 2020), https://lendsmart.ai/fintech-companies-lendsmart-and-griffin-technologies-partner-to-improve-sba-ppp-loan-process/ [https://perma.cc/CFA2-CRP8] (explaining how technology helps banks process loans). A significant portion of the PPP loans made by small and mid-sized banks were sourced by FinTechs. According to the House Select Committee on the Coronavirus Crisis, a Fintech called Womply worked with seventeen lenders to process 1.4 million or more PPP loans. Press Release, Select Subcomm. on Coronavirus Crisis, Select Subcommittee Expands Investigation into Role of FinTech Industry in PPP Fraud (Nov. 23, 2021), https://coronavirus.house.gov/news/press-releases/select-subcommittee-expands-investigation-role-fintech-industry-ppp-fraud [https://perma.cc/PXA2-3SJJ] (summarizing reasons for expansion of investigation into Fintech's "facilitation of fraud"). While Fintech lenders had the same incentives as banks to facilitate PPP loans to their existing customers as a means of reducing potential defaults, they also had significant financial incentives to make PPP loans to new customers. This is because as monoline lenders become unable to fund traditional loans and lack other revenue sources, they need the revenue from PPP lending to "keep the lights on" in their origination operations until conditions improve.

is a classic quandary when important financial activity moves outside the perimeter of banks and other prudentially regulated institutions. Usually, migration outside this space—whether by Fintechs, money market funds or open-end bond funds—brings lower regulatory costs and other flexibility. This can lead to rapid growth accompanied by reliance on mechanisms that were, by design, not resilient to shocks and not regulated in the way needed to ensure resilience. Providing support can allow the fragility to persist, but can also be key to protect the real economy actors that rely on the fragile intermediaries. Although there are no easy or right answers to these quandries, the numerous places where this type of interplay is at work highlights the need to better understand and address these challenges before crisis strikes.

Ultimately, the Fed and Treasury did provide some short-term assistance to Fintech and other nonbank small business lenders. While they left the TALF unchanged, late in the first round of the PPP, the Treasury, the Fed, and the SBA took action to include Fintechs and other nontraditional lenders like CDFIs with direct access both to the PPP and the related Paycheck Protection Program Liquidity Facility ("PPPLF"). However, Fintech and other nonbank lenders remained subject to various specific application requirements and other conditions (principally related to the Bank Secrecy Act and anti-money laundering compliance)[157] that continued to delay and limit their participation relative to banks.[158]

[157] Binoy Dharia & Graham Silnicki, *Paycheck Protection Program: Participation by Non-Bank Lenders*, WHITE & CASE (Apr. 13, 2020),

https://www.whitecase.com/publications/alert/paycheck-protection-program-participation-non-bank-lenders [https://perma.cc/QP9B-DJMQ] (announcing interim rule expanding group of financial institutions permitted to act as lenders under PPP).

[158] *See, e.g.*, U.S. Small Bus. Admin., *supra* note 89 (explaining how to apply for loan forgiveness); Press Release, Fed. Rsrv. Bd., 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 [https://perma.cc/HE3M-HXJ6]. Under the PPPLF, established April 9, 2020, the Fed will extend credit to eligible financial institutions that originate PPP loans, taking the loans as collateral at face value. While banks are included in the PPPLF at commencement, the Fed's

When Fintechs and other nonbanks were authorized to participate directly in the PPP at the end of the first phase, they began to reap a larger benefit from the program. research conducted by the Federal Reserve Bank of New York shows that Fintechs made less than 2% of PPP loans by dollar amount and less than 4% by number (reflecting lower average loan sizes) in the first phase of the PPP, with large and small banks making almost all the rest. As Fintechs and nonbanks became eligible PPP lenders, their share of PPP lending by both amount and number quintupled.[159] Nonetheless, the fees provided directly under the PPP and in partnerships with banks may well have been played a critical role helping many Fintechs remain viable until conditions improved.

The researchers at the New York Fed also found that fintechs played a critical role getting PPP funds to Black-owned small businesses:

> Applicants who approached Fintech lenders for PPP loans were more likely to lack banking relationships, be minority owned, and have fewer employees. Moreover, a higher share of applications by Black-owned businesses were approved by Fintech lenders as compared to firms with white, Asian, or Hispanic owners. Since Black owners were approved for loans by fintech lenders at a higher rate even before the pandemic, our results suggest that historical factors that prevent Black owners from receiving bank credit continued to operate with the PPP.[160]

release indicates that it is working to include other lenders originating PPP loans "in the near future."

[159] Jessica Battisto, Nathan Godin, Claire Kramer Mills & Asani Sarkar, *Who Received PPP Loans by Fintech Lenders*, FED. RSRV. BANK OF N.Y.: LIBERTY ST. ECON. (May 27, 2021),

https://libertystreeteconomics.newyorkfed.org/2021/05/who-received-ppp-loans-by-fintech-lenders/ [https://perma.cc/HD64-2N7H] (breaking down which demographics received loans from fintech companies).

[160] *Id.*

Finally, fintech loans appeared to be correlated more closely than bank loans with areas of particular pandemic need, as measured by death rates. Other research published by the New York Fed corroborates this.[161] For example, in New York, during the first round of PPP, fintech lenders' shares of small loans were almost twice as large in the counties with the highest death rates as compared to counties with the lowest death rates. By comparison, bank loan shares were statistically uncorrelated with death rates during the first round of PPP funding. In subsequent rounds of PPP, loans of all lenders had a similar correlation with death rates.[162]

IV. SOME IMPLICATIONS FOR POLICY

This is a complex story where stated goals did not align with routes taken. Policy makers in Congress, Fed Chair Powell, and senior Administration officials suggest an acute and distinct interest in the health of smaller enterprises. And much money did flow from the federal government into these businesses. Nonetheless, when the different pieces of government support are put together, the overall picture that emerges is one that tilted the scales in the opposite direction, favoring larger businesses.

The decision to rely on lending facilities established by the Fed under its 13(3) authority, while neutral on its face, had the effect of doing far more to facilitate funding for the largest businesses relative to mid-sized and smaller ones. Similarly, the Treasury Department's decision to favor banks over fintechs in the early stages of PPP implementation resulted in more funds going to larger, more established, and whiter qualifying businesses.

These actions have ramifications both for this recession and when the next shock or severe cyclical recession hits. As a starting point,

[161] Jessica Battisto, Nathan Godin, Claire Kramer Mills, and Asani Sarkar, Who Benefited from PPP Loans by Fintech Lenders?, May 27, 2021,

https://libertystreeteconomics.newyorkfed.org/2021/05/who-benefited-from-ppp-loans-by-fintech-lenders/

[162] *Id.*

this highlights the need for ongoing awareness, engagement and discussion around the nature of the public and private credit intermediation infrastructure in place. Although the perceived lack of better alternatives may help explain Congress's decision to rely so heavily on the Fed in its efforts to support businesses, that decision was far from neutral in its allocational impact. Similar dynamicsm are at play around the decision by Treasury to rely, initially at least, on banks as the primary conduits for PPP funds.

Another key contribution is to highlight the difference between the funds that flow from the government to businesses and the extent of government support provided for a domain. When interventions change the viability of intermediaries or alter expectations of future support, they can have long-term ramifications far in excess of the amount of actual support provided. This was true in 2008, and was a primary defense for interventions that helped stave off the failure of key financial instituitons. This was also a key reason for the many reforms aimed at eliminating too-big-to-fail subsidies. And it was true again—although far less discussed, and in slightly different forms—in 2020.

A lot of money flowed into small businesses, but the nature of the PPP program did little to incent banks or nonbanks to find new and better ways to underwrite loans to small businesses. Nor is there much sign that the Main Street Lending Facility incentivized investments in credit intermediation infrastructure designed to help the mid-sized businesses that qualified for the program.

By contrast, the Fed's purchases of corporate bonds in ways that stabilized open-end bond funds and ETFs holding bonds and its purchases of collateralized assets in ways that may have aided the functioning of the CLO market are precisely the types of interventions that can fundamentally alter market expectations, adding grease to the already well-oiled machine for extending credit to the country's largest companies. That so many large companies issued so much new debt in the wake of these interventions, while so many small business owners report ongoing problems accessing credit, is a testament to this disparaity.

Having created an expectation of support, the Fed may well feel compelled to support bond markets and investors yet again, rolling out the array of facilities created in 2008 and re-deployed in 2020. Whether this happens with specific congressional authority of the kind provided in the CARES Act or without, as was the case for many of the programs in the 2008 financial crisis and even in 2020 prior to the enactment of the CARES Act, the structures the Fed uses and the financial infrastructure the country is operating with will play key roles in shaping who benefits the most from government intervention.

A. The Persistent and Evolving Challenge of Smalll Business Financing

This essay also informs, although by no means seeks to resolve, the current debate regarding the appropriate role and regulation of nonbank fintechs in credit creation. Fintechs burst onto the scene in between these 2008 and 2020, and may well continue to play a growing role in the extension of credit to small business. This raises a host of issues. As this essay reflects, a key challenge to policy formulation in this area is the role that Fintech lenders increasingly play in providing credit to small businesses. There are also signs that the role of Fintech lenders may be especially salient to very small minority and women-owned businesses, whose viability may be of particular importance given persistent structural inequities. Despite this, the extent to which growing Fintech lending volumes can be explained by lower regulatory burdens, different business models, historically low interest rates, or other factors has not been adequately examined by policy makers or academics.

Absent meaningful reform, many of today's Fintechs are poorly situated to weather a severe cyclical downturn. Without the significant and multi-faceted, although inconsistent, government support provided during the pandemic, far more Fintechs may well have failed. As the pandemic revealed, most Fintechs rely on wholesale funding that dries up quickly during periods of distress. This liquidity problem will likely be even more acute in a more traditional, longer lasting

cyclical credit downturn where loan performance and economic activity remained depressed for a lengthy period. This stands in stark contrast to banks that, because of a different business model and far more rigorous regulation, are better (even if far from perfectly) situated to make loans through the business cycle.

Now that the acute phase of the COVID-19 crisis has past, policy makers should seek to understand and address the challenges that arise from allowing fragile, capital-market dependent lenders to play such a significant role in the provision of credit to small businesses.[163] There can be little question that allowing a large portion of lending to a critical area of the economy to be provided by companies (a) beyond direct federal regulation and (b) doing business in an inherently fragile and procyclical manner creates structural risks.

Looking ahead, one implication is the desirability of potentially doing more to facilitate ongoing credit creation for small businesses in peacetime, particularly those that have traditionally had a harder time accessing financing. There are a number of possibilities for dealing with this issue, and the best path forward may well include some mix of these approaches. One possibility would be to encourage banks to make further investments in their ability and willingness to lend to small businesses, including those that traditionally have had a harder time accessing credit. If banks build out the infrastructure and develop the relationships needed to make these loans, this could enhance credit access during good times and reduce the likelihood that economic shocks will overly contract credit creation for these businesses. The role banks, credit unions, and CDFIs can play could be assisted by their information advantages, knowing their customers and their communities.[164] This type of relationship lending model has

[163] This is just one aspect of a larger problem involving the resiliency of capital markets in the face of major crises. Commercial paper, Fed funds, and mortgage and other markets also struggled to function effectively, requiring intervention from the Fed and Treasury.

[164] Congress has already taken some steps in this direction. Legislation signed into law in December 2020 included $12 billion set-aside for CDFIs and Minority Depository Institutions ("MDIs"). Consolidated Approriations Act, 2021, Pub. L. No. 116-260 (2020). Specifically, the law included a $9 billion Emergency Capital Investment Program, administered by the Treasury, to provide low-cost, long-term capital investments to MDIs and CDFIs that are

faced structural challenges given the rise of lending commoditization aided by enhancements in capital markets and computing power, which have driven down costs for certain types of loans that 'fit the standard box,' while making loans to entities that do not fit the box relatively more expensive for lenders, borrowers, and investors.

How best to facilitate deeper engagement by banks with underserved small businesses depends on understanding the frictions currently inhibiting robust extensions of credit by banks to these businesses. Given the risks and costs of such credit creation, and the positive social benefits of such lending, the government may well have a role to play. Regulation can and does incentivize financial institutions' lending patterns, including creating hurdles to non-standard or 'traditional box' loans. The way the government supports housing finance by supporting the securitization of certain home loans may well serve as a model here too, though it may be appropriate for the government to take on even more risk—in a calculated fashion—than it often does with housing.

A related approach would be for the government to do more to expand the nonbank, non-Fintech mechanisms of getting funding to small businesses. A key public institution right now, is the SBA, which proved vital but also deeply flawed and limited during the pandemic. A key set of institutions are CDFIs, many of which are specifically focused on serving under-served populations, and the unfortunately dwindling number of minority-owned depository institutions. By enhancing these mechanisms alongside enhancing the ability of banks to serve small businesses, the government would be better positioned to credibly warn Fintechs that they are unlikely to be utilized in the same way the next time a crisis strikes, increasing their vulnerability.

Given that a lot of money can be made in good times, particularly when differential regulatory schemes make it cheaper to be a Fintech than a bank engaging in similar activities, another question is whether

depository institutions, with special set-asides for the smallest institutions. *Id.* In addition, $3 billion was appropriated to provide grants and other financial and technical assistance to CDFIs, including CDFI loan funds that serve consumers, small businesses and nonprofits in their communities. *Id.*

Fintechs should be regulated in a manner more akin to banks, including some mix of oversight, capital regulation and liquidity regulation.[165] The aim need not be perfect uniformity, but ensuring that any set of lenders that are providing capital to businesses (or households) in sufficient amounts are able to continue to make such loans when conditions soften. As things now stand, even shocks far smaller than March 2020 could lead to meaningful disruptions in credit creation—harming not only the Fintechs who chose to be exposed to such risks but also their clients, who may not be aware of the risks they are indirectly taking in choosing to rely on a nonbank lender. Important but beyond our scope, is the question of whether this is best achieved by compelling Fintechs to become banks, allowing them to do so, or creating an alternative regulatory scheme with some but not all of the features long associated with bank regulation.

Yet another option would be for Congress to institutionalize direct or indirect recession lending (e.g., through SBA/CDFI subsidies) by other lenders like CDFIs focused on the populations heavily served by Fintechs, and leave the Fintechs to their fate. Finally, the government could commit to provide ongoing liquidity support to Fintechs in a recession, to allow them to continue to serve their customers by revising programs like the TALF, to support private small business lending and securitization funding. This would assist credit creation without the concomitant oversight and responsibilities that comprehensive supervision and capital and liquidity rules bring to regulated banking.

Any solution to the Fintech liquidity problem needs to take into account the large populations of small businesses that banks don't serve today, particularly small minority and women-owned businesses. Comprehensive supervision, "Fair lending"-type anti-discrimination legislation, and programs like the Community Reinvestment Act have—so far at least—failed to sufficiently change this dynamic or extend the reach of banks into those populations. Exempting classes of insured deposit lenders from the Community

[165] This same argument could be made about other areas of financial markets, such as money-market mutual funds, that have repeatedly required government assistance in crises.

Reinvestment Act, such as what was done for credit unions, has arguably made the situation worse. Unless structural changes to assure small business lending liquidity in crises also deal with inadequate peace time access to funding for underserved enterprises, any solution will be incomplete.

B. Fragility, Funding and the Largest Businesses

Shifting to large companies, open-end bond funds may be the most vivid example of an inherently vulnerable product propped up by the Fed's pandemic interventions. Corporate bonds are not, and have never been, anywhere near as liquid as equity instruments. Yet, corporate bond funds promise investors daily liquidity. Adding to the challenge, the price that investors in open-end bond funds receive for their shares is also determined by a daily net asset value, a pro rata share of the estimated value of the bonds held by the fund on the day of redemption without taking into account the cost of liquidating those bonds. This structure works fine in normal conditions, as investors are often entering as well as exiting, and bond funds often hold sufficient Treasury instruments to cover short-term demands for liquidity. But as March 2020 illustrated vividly, once liquidity becomes strained, this structure encourages investors to run for the exit—regardless of their need for liquidity—by allowing those who exit to impose the cost of liquidation, and corresponding losses, onto the investors who remain.

The classic problem of promising short-term liquidity in long-term less liquid investments is nothing new. Money market mutual funds, corporate bond funds, and bank deposits are all subject to similar runs. After the Great Depression, the government largely solved bank deposit runs through a combination of federal deposit insurance and substantial regulation. After the financial crisis of 2008, structural changes to money market mutual funds were supposed to have solved this problem. As then SEC Chair Mary Jo White stated in 2014: "Today's reforms . . . will reduce the risk of runs in money market funds and . . . make our markets more resilient and enhance

transparency and fairness of these products for America's investors."[166] These reforms failed their initial test in the Covid-19 crisis. Whether any such reforms are made to corporate bond funds or bond ETFs remains to be seen, despite the importance of the fragilities revealed. As then Brookings scholar and current Treasury Under Secretary for Domestic Finance Nellie Lang remarked in October 2020,

> [T]he success to date of the Fed's corporate bond program to calm the markets does not suggest that reforms are not needed. Instead, the reforms are even more critical, since the Fed's actions likely raised expectations of such interventions in the future. It is important that the Fed, through financial reforms or clarifying its own intent for future emergency actions, reduce any perception by private entities that they would not have to bear the costs of their own risk-taking.[167]

Time will tell whether this wisdom is heeded.

There are an array of tools that could help mitigate these first-mover advantages,[168] and it is beyond our purview to evaluate the right mix. But the analysis here does highlight that such interventions could be helpful for a number of related reasons. In addition to addressing a potential threat to stability, such efforts may be particularly warranted to counteract the impact of the Fed's actions during the pandemic. Even when the Fed should intervene to stop the spread of dysfunction, that it needed to do so is often a flag of a need of further reforms. When these two are decoupled, interventions can perpetuate the expectation

[166] Press Release, Sec.'s & Exch. Comm'n, SEC Adopts Money Market. Fund Reform Rules: Rules Provide Structural and Operational Reform to Address Run Risks in Money Market Funds (July 23, 2014), https://www.sec.gov/news/press-release/2014-143 [https://perma.cc/66YY-B5BF].

[167] Nellie Liang, *Corporate Bond Market Dysfunction During COVID-19 and Lessons from the Fed's Response*, BROOKINGS INST. (Oct 1, 2020), https://www.brookings.edu/research/corporate-bond-market-dysfunction-during-covid-19-and-lessons-from-the-feds-response/ [https://perma.cc/N2KC-JK45].

[168] Hubbard et al., *supra* note 46.

of further support and accentuate the fragility already embedded in a market. Moreover, given the ongoing growth of the bond market, addressing the ways ETFs and open-end bond funds create expectations of liquidity in markets where it may not exist could help slow that growth.

CONCLUSION

The breadth and swiftness of the government's response to the COVID-19 crisis in 2020 is a testament to the capacity of policy makers to act quickly and decisively.The economic recovery from the pandemic has been rapid, particularly when compared with the rest of the world who largely suffered a similar shock. Providing meaningful support to virtually all Americans and increasing the payments made to those who had lost their jobs proved to be not only the right thing to do, but also the wise thing to do. Putting money into the hands of people who needed to spend it promoted economic activity even as people were scared, anxious, and leaving their homes far less frequently. It also played a powerful, even if indirect, role in alleviating strains in the financial system. Putting money in the hands of people and businesses enhanced their ability to pay back existing obligations, reducing the losses that banks and other creditors had to absorb. And the full panoply of government support ensured that the economy was positioned to grow as the acute phase of the pandemic subsided.

Yet alongside reflecting on the many lessons learned from previous periods of systemic distress, the pandemic has its own lessons to teach. Taking a step back to consider not only what worked and how, but also the challenges faced and the collateral consequences of the actions taken, is key to ensuring that policy makers—and the tools available to them—are ready when the next crisis hits. America's financial infrastructure constrained the rapidity and effectiveness of our policy responses. It led to an uneven set of beneficiaries among individuals, families, and businesses big and small. Times of crisis require rapid response, inherently leaning on existing infrastructure. As our economic response increasingly relies on financial institutions and structures, the constraints of the institutions and structures will shape the options available for response as well as the efficacy of

policies chosen. This is why non-crises times are when greater thought and attention are required to improve our financial infrastructure.

european corporate governance institute

about ECGI

The European Corporate Governance Institute has been established to improve *corporate governance through fostering independent scientific research and related activities.*

The ECGI will produce and disseminate high quality research while remaining close to the concerns and interests of corporate, financial and public policy makers. It will draw on the expertise of scholars from numerous countries and bring together a critical mass of expertise and interest to bear on this important subject.

The views expressed in this working paper are those of the authors, not those of the ECGI or its members.

www.ecgi.global

european corporate governance institute

ECGI Working Paper Series in Law

Editorial Board

Editor	Amir Licht, Professor of Law, Radzyner Law School, Interdisciplinary Center Herzliya
Consulting Editors	Hse-Yu Iris Chiu, Professor of Corporate Law and Financial Regulation, University College London
	Horst Eidenmüller, Freshfields Professor of Law, University of Oxford
	Martin Gelter, Professor of Law, Fordham University School of Law
	Geneviève Helleringer, Professor of Law, ESSEC Business School and Oxford Law Faculty
	Kathryn Judge, Professor of Law, Coumbia Law School
Editorial Assistant	Asif Malik, ECGI Working Paper Series Manager

https://ecgi.global/content/working-papers