

# Journal of Financial Crises

---

Volume 4 | Issue 4

---

2022

## The Financialization of Recession Response

Aaron Klein

*Economic Studies, the Brookings Institution*

Follow this and additional works at: <https://elischolar.library.yale.edu/journal-of-financial-crises>



Part of the [Economic Policy Commons](#), [Policy Design, Analysis, and Evaluation Commons](#), [Public Administration Commons](#), and the [Public Policy Commons](#)

---

### Recommended Citation

Klein, Aaron (2022) "The Financialization of Recession Response," *Journal of Financial Crises*: Vol. 4 : Iss. 4, 47-76.

Available at: <https://elischolar.library.yale.edu/journal-of-financial-crises/vol4/iss4/2>

This Article is brought to you for free and open access by the Journal of Financial Crises and EliScholar – A Digital Platform for Scholarly Publishing at Yale. For more information, please contact [journalfinancialcrises@yale.edu](mailto:journalfinancialcrises@yale.edu).

---

## The Financialization of Recession Response

### Cover Page Footnote

Thanks to James Kunhardt, Rayan Sud, and Kira Hobson for their research assistance; Greg Feldberg, Peter Conti-Brown, and Sarah Binder for their comments; and especially Kate Judge and Todd Baker for their collaboration on work that grew from this.

# The Financialization of Recession Response<sup>1</sup>

*Aaron Klein*<sup>2</sup>

## Abstract

This paper analyzes economic policy responses to the COVID-19-induced recession, focusing on the American policy response. Despite widespread political distrust between the two parties sharing control of the government and the timing of the upcoming presidential election, America's political system was able to enact a massive policy response that reduced the severity of the recession. This political response happened faster than any automatic policy response would have, based on the delays in data reporting. The economic policies enacted continued America's trend toward financialization of fiscal policy. The Federal Reserve and America's private banking and financial systems were heavily relied upon to deliver general macroeconomic assistance to households and businesses, particularly small businesses. The immediate result was that households and businesses that have stronger ties to the financial system received greater economic support. Those with less strong ties to the financial system received aid more slowly and, in some instances, not at all. The long-term consequences of relying on the Federal Reserve to distribute recession assistance through the financial system blurs the lines between engaging in monetary and fiscal policy. This response is a continuation of the trend that began in America from the prior recession and appears likely to continue, potentially impacting the central bank's independence and raising concerns regarding the role of the Federal Reserve in society.

**Keywords:** COVID-19, finance, US economy

**JEL Classifications:** Macroeconomic Policy, Comparative Analysis of Fiscal and Monetary Policy, Studies of Particular Policy Episodes

**JEL Codes:** E61, E63, E65

---

<sup>1</sup> The author would like to thank the Nomura Foundation for its support for this paper, which was first presented at the Nomura Foundation Macro Economy Research Conference 2021. Thanks to James Kunhardt, Rayan Sud, and Kira Hobson for their research assistance; Greg Feldberg, Peter Conti-Brown, and Sarah Binder for their comments; and especially Kate Judge and Todd Baker for their collaboration on work that grew from this.

<sup>2</sup> Aaron Klein, Miriam K. Carliner Chair and senior fellow in Economic Studies, the Brookings Institution, [aklein@brookings.edu](mailto:aklein@brookings.edu), [@AaronDKlein](https://twitter.com/AaronDKlein).

## **I. Introduction**

The depth and nature of the recession that began as a result of COVID-19 were unprecedented in modern economic history. The speed at which the pandemic traveled, both physically and economically, highlights the modern world's interconnectedness. While COVID-19 was felt globally, the economic implications and responses varied significantly nationally. This disparity provides an opportunity to compare and contrast responses. This paper primarily examines the United States' economic response, which can be summarized as swift, substantial, and heavily financial. The United States leveraged the financial system, particularly its central and commercial banks, to deliver economic assistance to households and businesses of all sizes. The result was highly positive for the American banking system and a select set of businesses and produced a faster economic recovery than in many other nations. Households and businesses with weaker ties to the banking system were less likely to receive benefits, received them more slowly, and were less positively impacted by the policy response. America's COVID-19 response leaned heavily on the Federal Reserve, blurring the line between monetary and fiscal policy. This response is a continuation of the trend from the prior recession, which is somewhat surprising given the distinction in the causes between the two recessions: financial and biological.

## **II. US Economy Pre-COVID-19**

Before COVID-19 struck, the American economy was enjoying its longest period of economic expansion ever (Li 2019). The unemployment rate reached 3.5% and real GDP grew by 2.3% in 2019 (BEA 2020; Cox 2019). Policy makers were considering whether the economy had exceeded "full employment" (Hartman 2021). Sustained periods of long-run economic growth and tight labor markets reached historically difficult sectors of the American economy, particularly the unemployment rate for Black workers, which hit a historical low of 5.5% (Isidore 2019).

America did not use this period to get its fiscal house in order, exacerbating structural budget deficits through a series of tax cuts and increases in federal governmental spending, particularly in the defense sector (Long and Stein 2019). As a result, the fiscal deficit was at a nominal record, nearly \$1 trillion, equal to 4.6% of real GDP (CBO 2020). Asset markets appreciated substantially, with both the equity and real estate markets surpassing previous record levels before the Global Financial Crisis of 2007–2009 (GFC).

## **III. The COVID-19 Recession**

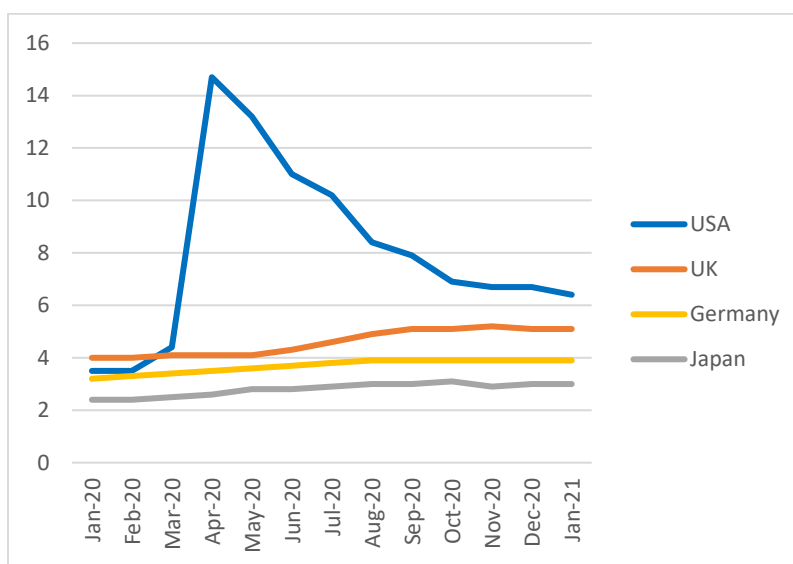
COVID-19, originating in China, began causing severe illness and death at rates substantially higher than those of existing diseases such as influenza (Johns Hopkins Medicine 2021). As the disease spread, activities shut down, eventually leading to full-scale closures of basic

forms of economic activity and public gatherings. The pace and severity of shutdowns varied across and sometimes within nations. In the US, there was substantial variance in the depth of shutdowns (and illness rates) within and between states (Messner and Payson 2020).

Economic activity dependent on the movement of people and goods was more vulnerable to the COVID-19 shock than activity dependent on the movement of information (Klein and Smith 2021). Some forms of economic activity benefited from the shutdowns—for example, companies that charged for videoconferencing (Zoom) or were based on limiting physical contact or exposure in the purchase of goods and services (Amazon). Overall economic activity was particularly harmed in parts of the economy dealing with the movement of people such as travel and tourism (Klein and Smith 2021).

COVID-19 and the policies required to curb its spread plummeted America's economy into recession. The National Bureau of Economic Research (NBER) dates the economic peak in the fourth quarter of 2019 (NBER 2021). Real GDP began to shrink in March 2020, with the second quarter of 2020 posting the largest quarterly decrease in economic activity in American history (Cox 2020). Employment fell off a cliff, with 20.7 million jobs shed in April 2020 and a total of 22.4 million jobs lost before employment began to rebound in May (BLS 2021). Other nations suffered smaller declines in official employment, despite facing similar government-mandated shutdowns because of COVID-19 (see Figure 1).

**Figure 1: Unemployment Rate**



Source: OECD 2022.

Facing a sharp, unforeseen recession, policy makers responded forcefully with fiscal and monetary policy (Bullard 2020). The Federal Reserve cut interest rates by 150 basis points (bps) in March, reaching the so-called zero lower bound of nominal interest rates that the Fed has been unwilling to go below (Bernanke 2017; Ihrig, Weinbach, and Wolla 2020). Central banks around the world facing similar drops in economic activity cut rates, if they were not already at their lower bound, as expected (IMF 2021).

The Fed employed quantitative easing (QE), a tool that when first used during the GFC in 2008 was considered nonstandard/unprecedented but now has been used in the last two recessions (Bernanke 2020). The Fed's large QE program followed its previous pattern with an announcement and a period of active purchases, followed by a period of stable purchases, and then the announcement of phased-down activity (Tepper and Curry 2021). The Fed's decision to rely on QE to continue to ease monetary conditions to stimulate the economy shows where it has come out in the debate on the effectiveness of QE in achieving its dual mandate of full employment and price stability (Fabo et al. 2021).

The Federal Reserve responded to a series of disruptions in financial markets when markets began to appreciate the impact of the pandemic. In early and mid-March 2020, the Fed responded to volatility across the financial system with purchases of Treasury securities and agency mortgage-backed securities (Logan 2020). It bought \$1.7 trillion worth of Treasury securities between March and June 2020 (Ihrig, Weinbach, and Wolla 2020). Through these purchases, the Fed supported markets when assets were hard to sell, signaling that it would prop up key parts of the financial system if needed.

Congress responded with large fiscal stimulus. The first significant legislative response was the Coronavirus Aid, Relief, and Economic Security Act of 2020 (CARES Act), a \$2.2 trillion fiscal stimulus bill. CARES quickly provided large fiscal firepower. Alongside direct stimulus payments to individuals, expanded unemployment insurance benefits, specific funds for grants and other types of support for small businesses and particular industries, the bill included \$454 billion to support lending facilities that the Fed may create pursuant to its authority under Section 13(3) of the Federal Reserve Act of 1913 to make loans to nonbanks in "unusual and exigent circumstances." As the context reflects, these moneys are designed to enable the Fed to provide meaningful, direct financial support to businesses, nonprofits, and municipalities. At the time the CARES Act was passed, this ability seemed to position the Fed to take on a largely unprecedented role (Snell 2020).

Section 13(3) was added to the Federal Reserve Act in 1932, giving the Fed the ability to lend directly to the real economy in a crisis (Sastry 2018). The Fed made only modest use of the power and failed to use it at all between 1936 and 2008. When the Fed invoked Section 13(3) in 2008 in response to the Global Financial Crisis, it used this authority primarily to support nonbank financial institutions, which had grown to play an important role in providing credit and other financial services. It did not provide loans directly to nonfinancial companies. Although Fed lending directly to the real economy was one of many experiments tried in the array of efforts to help the economy recover from the Great Depression, that facility is not a tool that has ever been widely used or was particularly successful, and it is not one that today's far more powerful Fed had ever embraced, until now. The scale of the potential interventions also far exceeds anything done in response to the GFC, with the Fed itself lauding its potential to provide trillions in new loans (Federal Reserve Board 2020b).

This paper focuses heavily on the decisions made in the beginning of the COVID-19 recession. These choices largely set the precedent for future programs that generally authorized additional money for programs or policies created in the first set of COVID-19 responses. The paper situates the ongoing ascendance of the Fed alongside the relative decline of Congress

and the administration, which helps explain how America's economic policy response manages to be resilient despite the growing dysfunction in American politics. An aim of this paper is to illuminate how the functional and dysfunctional features of the current moment collectively have contributed to giving the Fed this role and to consider what lies ahead. What this means for the economy, democracy, and the role of the central bank of the future is just starting to come into focus. Looking ahead, how the Fed opts to use its new authority and how successful it is in doing so could further enhance its importance and diminish the relative role of Congress, a dynamic that has been at play and has had the effect of substantially empowering the central bank over much of the past century. How the Fed manages to weave the implementation of anti-recessionary investment of public resources alongside its established roles, particularly as conductor of independent monetary policy, could also profoundly alter the role and contours of America's central bank. And, given the institutional and legal constraints on Fed action, expanding its role could have long-term ramifications on the structure of markets, the focus of fiscal policy on addressing concerns of households or businesses, and the economy more generally.

### **CARES Act: COVID-19's First Responder**

Congress's response to the economic crisis resulting from COVID-19 follows a different track than historical fiscal policy of directed spending and tax cuts. The CARES Act spent \$1.9 trillion through a series of programs that can be divided broadly between direct aid and financial assistance. Direct aid includes payments sent straight to individuals, state and local governments, health care providers, and so forth. This is traditional Keynesian economic stimulus (Jahan, Mahmud, and Papageorgiou 2014) generally sent through existing methods, such as enhanced unemployment insurance benefits and changes to existing federal/state matching-grant programs to provide general purpose funds in aid to state governments. Some \$54 billion was directly targeted to the airline industry to counter the specific economic consequences from the COVID-19 shutdown. Direct assistance to aviation has precedent in the response to the aviation shutdown resulting from the terrorist attacks of September 11, 2001 (Barret, Bash, and Snow 2001).

The two most significant financial assistance programs were the Paycheck Protection Program (PPP) and a fund Congress authorized and appropriated in the CARES Act for the Federal Reserve to support the general economy and financial markets. Both programs utilized the financial system 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 senses of the word. Many of the definitions of these indirect programs, and some of the programs themselves, were targeted for these types of employers. For example, the PPP provided money to select nonprofits, including private schools, and nonprofit lobbying organizations were eventually eligible for PPP assistance (Constantine and Steinberg 2021). For purposes of this paper, we 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.

## Paycheck Protection Program

To assist small businesses impacted by the immediate COVID-19 shutdown, Congress created the Paycheck Protection Program. The Treasury Department was placed in charge, with the Small Business Administration (SBA) assisting. Congress allocated \$350 billion for PPP purposes, with broad discretion for the Treasury to disburse the funds (CRFB 2020). Senator Marco Rubio (R-FL), one of its main sponsors, described the program: “PPP had two main goals: help workers keep their jobs, and protect small businesses from being forced to permanently close their doors” (Rubio 2020).

PPP was structured to reach businesses through the financial system. Banks, credit unions, and later financial technology companies (fintechs) were the disbursement arms, setting up PPP “loan” applications. The “loans” were funded by Treasury through the bank to the applicant. The “loans” were forgivable as long as borrowers maintained employee compensation levels. Originally set at 75% for payroll, that figure was reduced to 60% in later legislation. Thus, up to 40% of funds designed to protect paychecks could be spent on “other eligible expenses” (US SBA n.d.). Reflecting the belief at the time that the economic shutdown would be short, businesses were given eight to 24 weeks to use the funds. If these criteria were met, the “loan” was forgiven, becoming a “grant.”

Economically, a loan that is forgiven if key conditions are met and a grant that must be repaid if certain conditions are not met are the same. 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.”

Congress may have appreciated this distinction and reversed the nomenclature as a result of the Troubled Assets Relief Program (TARP), the main program used in the Global Financial Crisis to recapitalize banks. TARP appeared to the public as a grant, even though the program required repayment from banks (Samuelson 2011). As banks that received TARP funds repaid the capital with interest and Treasury received limited levels of equity as part of its investment through warrants, the Treasury Department actually made a small profit in the end on TARP funding to banks, as measured by the total amount returned to Treasury compared to the amount disbursed (Isidore 2014). Yet, the public continues to believe that the TARP bailout was grants to banks that were not repaid (Green 2010).

Whereas TARP funds went directly to regulated banks through a series of reviews, the Treasury Department used the SBA and a multitude of banks, credit unions, and later other financial intermediaries such as fintechs to disperse PPP funds. With the intention to spend funds quickly, Treasury decided to make funds available on a first-come, first-served basis. The result was a rush to fund. The entire \$350 billion was given out in 14 days, beginning April 2, almost immediately after the CARES Act was signed and before any automatic stabilizer tied to the unemployment data would have been able to kick in (Kurtzleben 2020).

First come, first served had the effect of prioritizing companies and those with preexisting banking relationships. This approach favored large businesses and those that had been in business longer (Schweitzer and Borawski 2021). It also favored wealthier businesses,



which ironically were in a better financial position to handle the economic disruption (Cowley and Flitter 2020). Given historically limited relationships between banks and minority-owned small businesses and microbusinesses (those with 10 or fewer employees), this resulted in more difficult and less overall access to the first round of PPP funding (Liu and Parilla 2020).

The first-come, first-served approach also resulted in businesses' receiving PPP grants that were relatively untargeted to either the level of COVID-19 the business's home area was experiencing or how significant state-based lockdown regimes were. For example, Texas companies received the largest share of initial PPP funding of any state despite a relative lack of the virus at the time and the state's having far fewer local lockdown restrictions (Gandel 2020). The definition of "small business" in the legislation was quite lenient, allowing publicly traded companies and professional sports teams to qualify (Hansen 2020). As firms were eventually named, a slew of media coverage began, and many firms decided to return the money. The situation was significant enough that a joint statement by Treasury Secretary Steven Mnuchin and SBA Administrator Jovita Carranza, "noted the large number of companies that have appropriately reevaluated their need for PPP loans and repaid funds" (Mnuchin and Carranza 2020).

After the initial round of PPP funding provided in the CARES Act was exhausted, Congress appropriated an additional \$321 billion in PPP funding in April 2020. Attempting 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 those with assets of less than \$10 billion), and community development financial institutions (CDFIs). This decision assumed that smaller banks were more likely to be the conduits to reach these communities.

Initial research has shown reliance on the financial system resulted in racial bias in allocation of funding and that focusing on bank size was an ineffective solution: Black-owned businesses were less likely to receive PPP funding through a bank (Howell et al. 2021). This study finds 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. However, other work indicates that fintech firms had other issues in processing PPP applications, approving significantly more fraudulent loans (Griffin, Krueger, and Mahajan 2021). Congress could have written into law different criteria for the loans, targeting smaller companies by prioritizing smaller-dollar loans. Instead, Congress chose to prioritize certain types of financial institutions, believing those institutions would allocate funding differently.

### **Differences among International Systems**

While the US used the banking system to provide short-term government PPP grants disguised as loans to "small businesses" in the hopes that those businesses would in turn keep employees on payroll, many other countries chose more straightforward systems. The United Kingdom's Coronavirus Job Retention Scheme (CJRS) lasted 18 months, at its peak covered 80% of salary (up to a cap), and supported just more than 8.8 million workers (Dent

2021). Germany leaned on its Kurzarbeit worker support program, in which the government pays employees replacement wage income when their hours fall. Responding to COVID-19, Germany increased the replacement wage rate from 60% to 70% when workers were out of work longer, and eventually provided 80% of lost wages (IMF 2020). Japan engaged in a system similar to Germany's, using existing wage subsidy programs and increasing the government's share of wages to 90% for small and medium-sized businesses and enlarging coverage to part-time workers, with the requirement that workers be retained (Goodman 2020). Japan also engaged in credit support with JPY 135 trillion in loan guarantees (Goodman 2020).

America's unemployment rate rose far more sharply than other countries' (see Figure 1), and early studies of the PPP have raised questions as to its effectiveness. One study from Chetty et al. finds that PPP loans "increased employment at small businesses by only 2%, implying a cost of \$377,000 per job saved" (Chetty et al. 2020). Other studies raise questions regarding the lack of targeting of impacted businesses (Granja et al. 2021). If correct, these studies indicate that the PPP was a very costly program whose funding was driven up by a combination of a lack of targeting to effected businesses and the indirect nature of using the financial system as an intermediary. The findings questioning the efficacy of PPP coupled with the European experience of more direct worker support and sharply lower unemployment rates led to calls to replace the PPP with direct assistance to workers and businesses (Gotbaum 2020).

### **Why the Fed: The Curse of Competence**

The CARES Act placed tremendous authority and unprecedented financial resources in the hands of the Federal Reserve to indirectly support the broader economy through the creation of a fund with \$454 billion in seed capital to allow the Fed to buy up to an estimated \$4 trillions in assets. This fund, to be implemented at the discretion of the Fed, is at least a blurring of the lines between monetary and fiscal policy, if not a stepping over the boundary to having the Fed engage in fiscal policy. Congress avoided crossing another Rubicon of directly appropriating funds to the Fed, instead using the Treasury Department to capitalize newly created emergency facilities the Fed establishes through existing authority under section 13(3) of the Federal Reserve Act. As a result, the Fed was charged with managing the monetary policy response to the crisis; ensuring the banking system remained able to support the real economy; providing short-term liquidity; and assisting a wide range of assets, companies, and even state and local governments.

Congress did not make the tough choices regarding which types of entities would or would not receive this aid. Instead, it empowered the Fed to make choices regarding which businesses were eligible for credit, which company's bonds could be purchased, and which municipalities could directly receive credit and at what price. The Fed was forced to answer questions regarding whether it should buy only highly rated corporate debt or bonds that were investment grade at issuance but had been downgraded to junk (so-called fallen angels) and which local government municipal debt should be eligible. These decisions had economic and political consequences.

Why did Congress choose the Fed to do the bulk of this work, given all that the Fed was already doing as part of its core mission of conducting monetary policy and aggressively using its emergency authority to stabilize short-term markets? Several answers are possible, but perhaps Congress felt it didn't have a better alternative.

The alternatives facing Congress in passage of the CARES Act were to come to a bipartisan, bicameral compromise and decide itself, empower the president to decide directly or through a Cabinet agency, or empower an alternative institution such as the Fed. The Fed may be ill-suited to address many of these challenges but 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 companies. The Fed may be less susceptible to corruption, more competent, more able to make credible commitments, and more able to act quickly, all factors that matter with these types of decisions.

In this paper, we also consider some of the challenges that arise as the Fed is asked to stretch into new domains. We focus on two in particular, though there are others. The first is how expanding the Fed's role may impact the degree of independence and discretion it enjoys, factors that were critical in making it such an effective first responder to the COVID-19 crisis. The second is the unintended consequences of expanding the Fed's role in this manner, including the possibility of disproportionate support to providers of capital even in efforts to help workers, greater corporate concentration, leverage among nonfinancial firms, and even further financialization.

Whether the Fed ought to be playing such a central role, or how the benefits of asking it to do so much compare with the costs, is a complicated question we do not purport to answer. The aim here is to examine how we got to this point and the consequences of the blurring of the lines between monetary and fiscal policy in response to recessions. Given the expanded responsibilities placed on the Fed in the last two recessions, it may well be that this is a new and growing role for America's central bank. One point is simply a point. Two points make a line, and from a line, there is a trend.

## **IV. How We Got Here**

Article I of the Constitution gives Congress the power of the purse, that is, the authority to tax and spend, perhaps its greatest authority. Congress has used this power to direct fiscal support to fight recessions multiple times. Delegation has often also been part of how Congress exercises this authority, particularly as the administrative state has grown in size and competence. Typically, however, such emergency power has been delegated directly to the administration's Cabinet agencies, preserving democratic accountability. During the GFC, for example, the Emergency Economic Stabilization Act of 2008 (EESA) granted broad authority to the Treasury Secretary, as the member of the president's Cabinet with economic expertise to stabilize the financial and banking system. This delegation occurred in the final throes of the George W. Bush presidency, 30 days before an election, and was passed by a Democratic Congress. Even then, Congress still empowered the outgoing Treasury Secretary to implement the Troubled Assets Relief Program through his lame-duck period.

Within the context of the financial crisis response, the passage of EESA shifted the focal point of decision-making authority from the Fed to Treasury. During the early phases of the crisis, the Fed took significant actions, from the creation of new types of liquidity support for banks and broker-dealers to the rescue of the investment bank Bear Stearns and the insurance giant American International Group (AIG), relying on the existing legal authority of its lender-of-last-resort function. The Fed's lender-of-last-resort function is codified in Section 13(3) of the Federal Reserve Act (1913), which grants the Fed broad emergency authority to lend to almost anyone. Wallach (2015) concludes that the Fed and Treasury were creative in stretching the Section 13(3) authority, while other studies, including Mehra (2010), argue that they were being more than creative and that the Fed exceeded its legal authority.

Using the broad discretion Congress provided in EESA, Treasury designed TARP to inject capital into banks, provide assistance to struggling homeowners, and eventually rescue domestic auto companies. The original proposal by the Treasury Department was only for authority to purchase assets through auction (Paletta and Solomon 2008). Had the original proposal from then-Treasury Secretary Henry M. Paulson, Jr., been enacted, Treasury would have lacked the legal authority to inject capital into banks. Congress modified the proposal to allow for capital injections, the path ultimately taken.

Congress set up oversight of the emergency authority it vested in Treasury, empowering three bodies, including two arms of Congress: the Government Accountability Office (GAO) and the Congressional Oversight Panel, and the Special Inspector General for TARP (SIGTARP). By vesting Treasury with authority, Congress reduced pressure on the Fed to continue to stretch the bounds of its authority. This move was welcomed by the Fed, as then Fed Chairman Ben Bernanke told Congress: "The Federal Reserve would like to get out of dealing with some of these crises we have been dealing with because there is no broader authority, no broader support, and we prefer to get back to monetary policy, which is our function, our key mission" (Bernanke 2008).

When COVID-19 struck, control of Congress was divided between the parties, with Democrats holding a substantial majority in the House and Republicans having a relatively narrow majority in the Senate. Divided control coupled with party-line voting—which increased dramatically between the 1970s and 2010s—increases leverage for both sides (Dancey and Sheagley 2017). It requires legislators to come to a bicameral, bipartisan agreement, which often makes it more difficult to get legislation passed.

Moreover, these thresholds must be satisfied in an environment where politicians are accountable to an increasingly polarized electorate. Given high levels of distrust between the political parties and the ensuing election, Congress demonstrated significant effectiveness in being able to respond quickly and powerfully to the economic threat posed by COVID-19. Congress passed and President Donald Trump signed multiple pieces of legislation in response to COVID-19, including the CARES Act, enacted March 27, 2020. Aspects of the CARES Act attest to the power of Congress to accommodate priorities of both parties in reaching agreements to send stimulus payments directly to American families, aid to state and local governments, and fund a wide variety of programs for medical and economic purposes.

The CARES Act was signed into law one week after California became the first state to issue a stay-at-home order (AJMC 2021) and one week before the Friday, April 3, release of the March unemployment data. When the CARES Act was signed into law, the most recent data from the Bureau of Labor Statistics was the February employment report that showed the US economy adding 289,000 jobs (AJMC 2021; BLS 2021). This means that Congress acted faster than any automatic stabilizer would have kicked in, which would have required another week's worth of waiting until the March employment report was released.

Arguments in favor of putting fiscal policy on “autopilot” in which fiscal policy is triggered by economic statistics, often cite this approach as superior because of legislative delays. However, the COVID-19 experience highlights that sometimes Congress is capable of acting faster than data can be gathered and reported. Automatic stabilizers are not always faster than legislation, and when the economy experiences shocks beyond the bounds of any historical experience, emergency action can be achieved even during divided government with high partisanship in an election year.

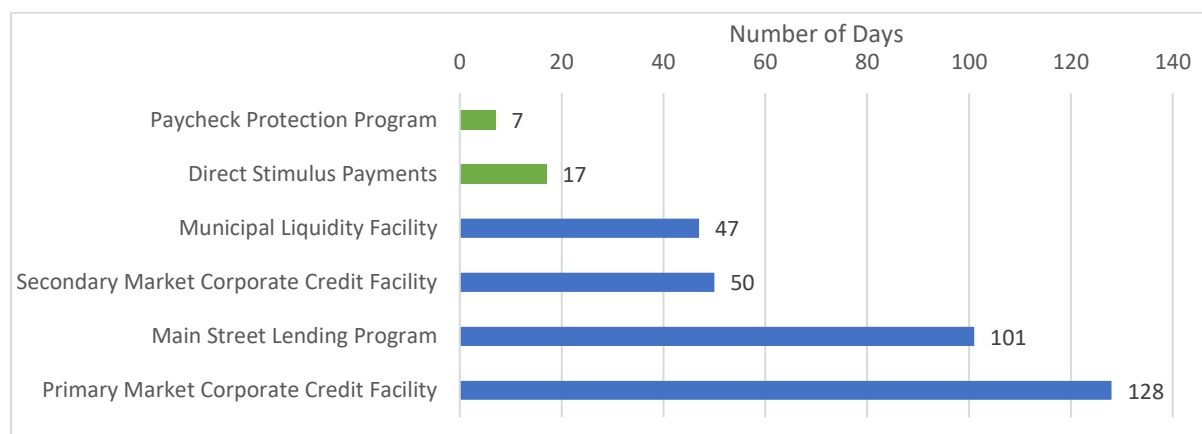
Congress's ability to pass legislation with the speed and scale needed to confront the looming crisis came at a price. The decisions regarding which businesses should get fiscal support inherently required difficult decisions to be made, and at a time when information was limited. Congress made some priorities, most notably with the conditional grant program for small businesses and the funds targeted for airlines and other specified industries. In this process, Congress set aside a very large pool of funds—measured not only by the \$454 billion Congress authorized but also by the expectation that \$4 trillion in aggregate amounts would be loaned as a result of additional loans from the Fed. This decision reflects Congress's awareness of its own infirmities and its limited capacity to take on difficult, complex decisions about how best to protect private enterprise.

Interestingly, the argument regarding speed of policymaking tends to assume the Fed is capable of acting more quickly than Congress or the administration from program conception to operation. Certainly, when it comes to monetary policy, the central bank has far fewer hurdles and more powerful levers than Congress or the administration that can enable remarkably swift action. Similarly, the 2020 Fed was able to quickly put into place the emergency lending facilities that replicated those created in 2007 and 2008. But, as the GFC episode and efforts to implement the CARES Act reveal, the central bank is not always speedy. This is reflected in a close look at the process of implementing the CARES Act. Figure 2 highlights the number of days from enactment of the CARES Act until programs were operationalized. Interestingly, despite problems with the rollouts of both the Paycheck Protection Program and direct stimulus payments to households known formally as Economic Impact Payments (EIPs), both initiatives were able to inject hundreds of billions of dollars more quickly than any of the Fed's new CARES Act programs, such as the Main Street Lending Program, Municipal Liquidity Facility, and Market Corporate Credit Facilities.

It is worth noting that the official date on which a program becomes active may not be the date that it has full effect. Direct stimulus payments reached 45% of eligible Americans in the quick period mentioned below, but an additional 10% had to wait many more weeks; even by September, 5% had not yet received their first payment (Murphy 2021). Programs

that engage with financial markets may experience the opposite effect, where the announcement itself eases financial tensions/concerns and causes a positive effect. Just the announcement of the Corporate Credit Facilities, and changes in the FAQs about their scope, had a meaningful impact on the availability and pricing of credit for companies issuing bonds that might qualify (D’Amico, Kurakula, and Lee 2020). By contrast, the Main Street Lending Program was slow to launch and struggled to have much of an impact (Rosalsky 2020).

**Figure 2: Implementation Speed of CARES Act Facilities**



Sources: Adamczyk 2020; Bräuning and Paligorova 2021; Clarida, Duygan-Bump, and Scotti 2021.

### Speed of the Banking System

Two major components of the CARES Act were direct payments to individuals and payments to small businesses to avoid disruptions through the shutdown. Direct payments to individuals (through EIPs) were structured as refundable tax cuts, with the Treasury Department’s tax agency (Internal Revenue Service) instructed to proactively send these payments directly to eligible Americans. Most Americans were eligible (90%, according to the Tax Policy Center) with benefits on the order of \$1,400 per person plus a benefit per child (Gleckman 2020).

Three conditions were necessary to send people money quickly and in a usable format: Americans needed bank accounts to receive the funds, the Treasury Department needed to know the information for those accounts, and the payment system had to be able to send the money quickly. All three of these issues posed varying degrees of difficulty, although the second was the largest problem (Klein 2020). Although approximately 95% of American families had a bank account (FDIC 2020), the Treasury Department had information for only a much smaller share. In addition, some of that information the Treasury Department had was inaccurate. An estimated 20 million or more taxpayers had used temporary “shell” bank accounts structured as part of loans set up by tax preparation companies to expedite prior-year tax refunds (NCLC 2020). The result was that only 45% of eligible Americans received their EIPs in the first wave of disbursement, and even four months later, 10% of Americans had not yet received their EIP funds (Murphy 2021).

America's lack of a real-time payment system resulted in further delays. Most of the rest of the developed major economies have established real-time payment systems, with Japan being the first in the 1970s and the European Union finalizing a cross-union system a few years before COVID-19 struck (Klein 2018). To be clear, private banks and fintech companies have developed real-time payment systems, including PayPal, Zelle, Venmo, and the Clearing House's RTP system. However, the Federal Reserve has not. The Fed continues to use its automated clearing house (ACH) system, which operates on a batch system running periodically during nonholiday weekdays (Klein and Selgin 2020).

The Treasury Department chose to send all EIP disbursements through the Fed's ACH system (Nacha n.d.). This choice resulted in a delay. Electronic payment instructions were sent a few days before funds became available. This resulted in additional costs, both from the lack of funds availability and charges from financial institutions for running out of money. In America, these overdraft fees are typically \$35 per consumer overdraft, with estimates of cumulative costs ranging from \$15 billion to more than \$30 billion a year (Klein 2020). A handful of financial institutions and fintechs offered consumers earlier access to their EIPs (Chime n.d.).

For the first round of EIPs, the Treasury Department was able to provide electronic payments to only approximately three-quarters of Americans. The remaining quarter mostly received paper checks, with less than 5% receiving debit cards (Murphy 2021). Paper checks are subject to additional delays in deposit as governed by the Expedited Funds Availability Act of 1987 (EFAA 1987). To avoid this delay, some consumers chose to use check cashers that provide immediate cash in exchange for a few (often a flat fee of \$20 or a certain percentage of the check, sometimes about 1% for government-issued checks, although the exact amounts are governed by state-based regulations). The result is an estimated cost of \$66 million in total check cashing fees from EIP funds (Murphy 2021).

### **The Relative Esteem and Efficacy of the Fed**

The Fed's reputation, like that of many central banks, has been built up over time. Central bankers take credibility and commitment seriously (Blinder 2000). In the United States, Fed chairs such as Paul Volcker and Alan Greenspan played a critical role in establishing broad, even if far from uniform, faith in the Fed as a capable and trusted actor.

The economic collapse of 2007–2009 and the Fed's efforts to protect key financial institutions and structures did incite a meaningful backlash. The GFC revealed substantial shortcomings in the Fed's supervision of the largest banks, but it was the ways that the Fed intervened that likely created the most controversy. The decisions to rescue Bear Stearns and AIG seemed to many Americans to be salient examples of Wall Street's coming out ahead, even as Main Street—homeowners and workers across the country—suffered mightily. Additionally, the Dodd–Frank Wall Street Reform and Consumer Protection Act of 2010 did restrict the authority of the Fed to repeat some of the more controversial actions it had taken to combat the crisis, although it stopped short of making the more significant changes advocated by some across the political spectrum (for example, Senators Bernie Sanders [I-VT] and Rand Paul [R-KY]).

Nonetheless, regardless of the role the Fed played in allowing the risks to the financial system to grow to the point of collapse, the Fed's willingness to act forcefully and powerfully during the collapse proved more helpful than not to the long-term health of the economy (Sherman 2009). In subsequent years, the Fed emerged with its reputation intact and possibly strengthened (Gallup 2021). The overall success of the Fed's efforts to contain the crisis helped establish it as a body able to act quickly and decisively in the face of threats to the economy. The Fed's power also expanded overall as a result of the Dodd–Frank Act, as the act broadened the Fed's regulatory authority beyond chartered banks to any financial institution deemed systemically important (Schnidman 2011). Entering the COVID-19 crisis, the Fed found itself in an unusual position of having a chairman appointed by a sitting president who had since publicly soured on him, although many Democrats remained supporters; Senator Sherrod Brown (D-OH), the lead Democrat on the Senate Committee on Banking, Housing, and Urban Affairs, at one point paid Chairman Jerome Powell the highest compliment possible, saying he “is a man of integrity” (Mohsin and Torres 2020).

Powell's decisions since assuming the chairmanship have reaffirmed the Fed's credibility and perceived political independence. Ironically, Trump himself may have provided Chairman Powell the most significant opportunities to gain the trust of the public and Congress. The Fed chair's refusal to respond to the president's public attacks on him, going so far as to call him a “traitor” (Luce 2019), helped Powell come across to others as an independent and honest broker (Tett 2019; Yglesias 2019).<sup>3</sup>

Looking past reputation and trust to features of the Fed and how it differs from the administration or Congress provides additional insight into why the Fed may have been the optimal actor to play a central role in structuring fiscal support for businesses during this time. In particular, the ability to make long-term commitments and be free from certain types of political pressure may be meaningful advantages for the Fed when it comes to these tasks. The Fed has more ability to signal a longer-term commitment to markets and businesses than the president or Treasury, which can be critical to spurring hiring and investment by firms. That is one reason why the Fed's facilities focused on longer-term lending to businesses rather than the shorter-term support delivered through the Paycheck Protection Program operated through the Treasury Department. The need to provide a longer-term creditable commitment is important when attempting to fix longer-term markets including bank lending and issuance of multiyear debt.

In the US, 2020 was an election year, with the president, every member of the House of Representatives, and one-third of the country's senators standing for election in November. By contrast, Chairman Powell's term lasted until 2022. Fed chairs have been frequently reappointed, even when there is a change in administration, and other members of the Fed's Board of Governors have even longer terms. The continuity of the Fed's leadership enhances its ability to make credible commitments that it will maintain or modify programs in ways that can encourage the private buy-in often needed for programs to succeed.

---

<sup>3</sup> Financial Times columnist Gillian Tett is just one of many commentators who inferred from the Fed's responses (or lack thereof) to Trump's tweets “that Fed officials seem unlikely to play ball with Mr. Trump” (Tett 2019).



Expanding the Fed's role in policy will result in new challenges in warding off corruption and the perception of corruption. This problem has come to greater light with the trading scandals involving the presidents of the Federal Reserve Banks of Boston and Dallas (Derby 2021). Both presidents traded in financial assets during the COVID-19 crisis. Both presidents assert that their trades were considered ethical and were approved by their respective regional banks under an ethics regime approved by the Federal Reserve Board of Governors. In his Capitol Hill testimony, Powell said their actions complied with existing guidelines, though "the appearance is just obviously unacceptable" (Siegel 2021). Yet, when the trades of both presidents were publicly revealed (more than a year after they occurred), both presidents resigned, and the Fed Board undertook an ethics review, conducted in an expedited 45-day period, designed in part to immediately restore public trust. "Our need to sustain the public's trust is the essence of our work," said Powell (Horsley 2021).

This in itself is not a reason to vest authority in a relatively more independent executive agency. EESA was passed just one month before a presidential election, and one that had a 100% probability of administration change, given the term limit President Bush faced (and a high probability of a change in party as well). Congress still made the decision to vest massive discretion in the position of Treasury secretary, despite knowing that the person who would occupy that office would almost certainly be someone other than Secretary Paulson in the near future.

## **V. Looking Ahead**

Although the US economy has emerged from the COVID-19 crisis, it is premature to reach final conclusions about this expanded role for the Fed. Nonetheless, even at this stage, some of the potential ramifications and issues with this state of affairs are coming into focus. We briefly consider the implications for the Fed, for the structure of the economy that emerges from this crisis, and for governance in the years ahead.

### **The Future of the "Independent Central Bank"**

Placing the Fed in the role of arbiter of emergency credit subjects the central bank to a host of new political pressures. Consider the growing issue of environmental sustainability. Thirty nonprofits, including Greenpeace and the Sierra Club, sent a letter to Chairman Powell asking the Fed to avoid "stealth fossil fuel company bailouts" as part of the Fed's lending facilities, arguing that no funds should flow through the Fed's facilities to fossil fuel companies without conditions requiring the "recognition of human rights, Indigenous rights and clear Paris-compliant transition plans" (350.org et al. 2020). Chairman Powell also received a letter from Senator Ted Cruz (R-TX) and 16 other Republican senators concerned about the impact of COVID-19 on "[i]ndustries, like the energy and transportation sectors." They urged the Fed to ensure these companies would be eligible (Cruz 2020). Oil and gas industry leaders weighed in, asking for specific terms as part of the Main Street New Loan Facility (Russell 2020). In the end, oil and gas comprised the fourth-largest sector, receiving approximately \$1.5 billion (Bräuning and Paligorova 2021).

The oil and gas industry's requests for changes to more favorably access the Fed's Main Street Lending Program is one of many examples of how the Fed was placed into a more inherently political role in allocating assistance through these CARES Act programs. In this case, the Fed chose a path similar to the policy preferences of the president at the time. It is unknown whether the Fed would have taken a different path had there been a president with a different political agenda on climate and fossil fuels. However, it is worth noting that subsequent to the election, the Federal Reserve took a series of differing steps on climate, including joining the international network for Greening the Financial System (Federal Reserve Board 2020e) and launched a new Climate Supervision Committee (Cox 2021).

On April 9, 2020, the Fed announced it would take the previously unprecedented step of providing up to \$500 billion in financing to states and select municipalities. Confronted with the fact that the Fed's initial eligibility criteria would exclude the 35 most African American cities in the country (Klein and Busetto 2020), the Fed dramatically expanded eligibility. The Fed made this announcement after multiple members of Congress wrote to the Board complaining and the day before the Fed chairman was scheduled for one of his regular press conferences (Federal Reserve Board 2020a; Van Hollen et al. 2020; Waters 2020).

More striking than the outcome of these choices is the fact that the Fed was asked to address them at all. Housing policy, support for states and municipalities, and changes to allow oil and gas companies access to credit are all areas that supposedly stand outside the Federal Reserve's remit (Powell 2020).<sup>4</sup> More to the point, none of these issues lie at the core of the Fed's competence or mandate. They are not issues that threaten the stability or functioning of the financial system of which the Fed has become the unwitting guard, nor can they be addressed through monetary policy. The more embroiled the Fed becomes in contentious policy matters, the greater its relative autonomy could come under threat.

### **Structure of the Economy**

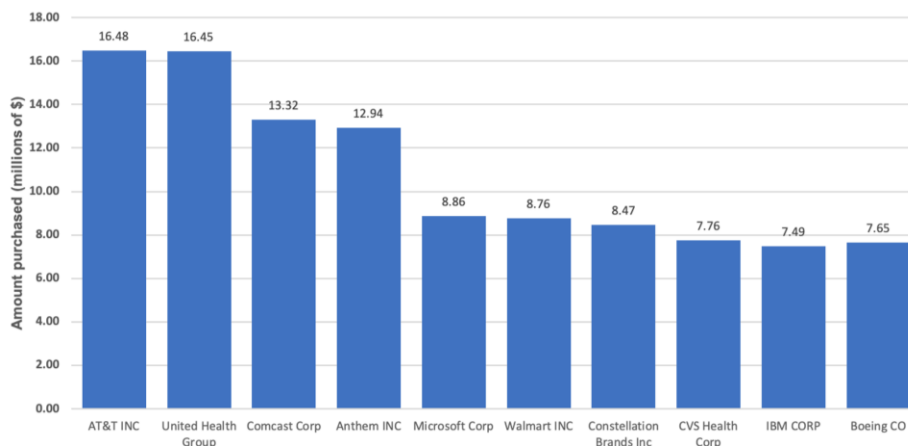
Placing the Fed in a central position in the government's efforts to provide fiscal support for businesses could also have a profound, lasting impact on the corporate landscape. Many have concerns about great benefits being bestowed on the largest companies, and their current shareholders and creditors, and what recent developments likely portend about overall levels of corporate debt ahead. With respect to size, the Fed's interventions benefited the biggest companies far more than any others. The mere announcement of the Primary and Secondary Market Corporate Credit Facilities dramatically reduced spreads for investment-grade borrowers. The Fed's subsequent announcement that it would also buy fallen angels and exchange-traded funds (ETFs) holding below-investment-grade debt similarly reduced spreads for companies in these categories (Haddad, Moreira, and Muir 2021). The Fed followed through on its plan to purchase corporate debt primarily through the creation of a

---

<sup>4</sup> Keen Fed watchers will correctly point out that Section 14 of the Federal Reserve Act does empower the Fed to purchase short-duration municipal debt. However, the Fed has historically resisted using that authority, refusing to do so even when California ran out of money during the recession in 2009 and was forced to briefly issue script.

new index it created to track qualifying bonds. As Figure 3 shows, the Fed owns bonds of large companies, most of which have not shown need for government support.

**Figure 3: Top 10 Companies' Debt Purchased by the Fed**



Source: Reuters n.d.

Even though nonfinancial corporate debt was at an all-time high going into the COVID-19 crisis, it has only increased subsequently. The largest companies are having little trouble accessing debt markets. One implication of this situation is that corporate debt levels are rising, leading some to worry about the possibility of debt overhang, which could impede investment and growth in the years ahead.

A second ramification could be to provide a thumb on the scale favoring the largest companies relative to their smaller counterparts, leading over time to a relative expansion of the former and decline in the latter. This conclusion comes through by comparing the easy access and relatively low financing costs the largest companies currently enjoy with the slow start of the Main Street Lending Program and the conspicuous lack of any program using CARES Act funds to increase support for truly small companies. The Main Street Lending Program is the Fed's efforts to help companies that are large but not able to readily access public debt markets, applying to companies with up to 15,000 employees or \$5 billion in annual revenue. The program was announced in late March 2020, alongside the two corporate credit facilities, but in contrast, there was no immediate favorable impact on the ability of eligible companies to access the financing they needed to survive. 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 Program even became fully operational.

Roughly half of the entire volume conducted through the Main Street initiative occurred in December 2020, just weeks before the facility was ceasing to accept loans (Bräuning and Paligorova 2021). In total, the Main Street Lending Program conducted only 1,830 loans with

a total lending of \$17.5 billion. This pales in comparison to the funds allocated by Congress and Treasury for the Main Street facility. At announcement, Main Street was projected for up to \$600 billion in total loans, with \$75 billion set aside for potential losses (CRS 2020). Put another way, 16% of the total CARES Act \$454 billion appropriation was set aside for Main Street to cover possible losses of \$600 billion in total credit. At the end of the day, less than 3% of potential lending occurred, and Treasury set aside money to cover losses in excess of 425% of lending. Approximately 30% of loans were to industries not categorized as “Covid-affected.” (Bräuning and Paligorova 2021) This was a poor use of pandemic funds, to say the least, or as the nonpartisan Congressional Research Service summarized commentary, the Main Street was “too small to be effective” (CRS 2020).

Shifting to small businesses, the Fed created a facility that eased implementation of the government’s separate PPP, which was targeted largely to small businesses and those they employ. But it has yet to even propose an emergency lending facility that would otherwise increase access to funding for these companies, despite recent surveys that just shy of half are concerned about cash flow (US Chamber of Commerce 2020). Given that businesses with fewer than 500 employees employ 47% of American workers—or at least did before the COVID-19 crisis—the failure to do more for these businesses that are both fragile and critical employers cannot be readily explained away as outside the Fed’s employment mandate.

The Federal Reserve’s Primary Market Corporate Credit Facility (PMCCF) and Secondary Market Corporate Credit Facility (SMCCF) were structured with \$75 billion of loss-absorbing capital from the CARES Act’s \$454 billion, which theoretically could support up to \$750 billion in purchases (Federal Reserve Board 2020c; Federal Reserve Board 2020d). Put another way, Treasury allocated loss-absorption capital equal to 540% of total purchases. The PMCCF and the SMCCF, in the end, purchased almost nothing compared to what they were authorized to, or how much money Treasury and the Federal Reserve set aside from Congress’s allocation. The Federal Reserve agreed to return Treasury’s excess funding as the programs expired at the end of 2020 (COC 2020b).

These programs may have had an effect greater than their tiny purchases, through the power of expectations. There is evidence of announcement effects from the Fed in stabilizing corporate bonds for larger companies, states, and municipal governments (COC 2020a). However, the COVID-19 recession was quite different, given that the ceasing of markets was related to the economic consequences of the spread of the coronavirus rather than the spread of financial contagion.

The Fed should be concerned about small businesses, as Chairman Powell has explained: “The 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.” “The heart of our economy and . . . the work of generations” is at stake (Powell 2020). Nonetheless, the Fed lacks the institutional capability to screen or monitor these borrowers, and the struggles it has confronted in setting up the Main Street facilities show how hard it can be for the Fed to partner with the banks that specialize in making these loans, even when big dollars are involved. The net effect of placing the Fed in the driver’s seat with administering fiscal support to businesses thus may yet be to provide further funding advantages to large

businesses while leaving smaller ones more vulnerable to bankruptcy, distressed acquisition, or shrinking to survive.

## VI. Conclusion

The US government acted quickly in response to the COVID-19-induced recession. Congress and the president, controlled by different political parties in a time of hyperpoliticization and in an election year, were able to come to agreement on a mammoth stimulus bill. This agreement occurred before standard economic data were available, meaning automatic stabilization policies would have been slower than the political process that unfolded. The policies that were enacted leaned heavily on the financial system to disperse assistance. The Federal Reserve was given a broad and important new role in providing assistance to nonfinancial companies, blurring the line between monetary and fiscal policy, if not actively placing the Fed on the fiscal side of the ledger. What this expanded authority means for the role of the Federal Reserve going forward is not entirely clear. What is clear is that the Fed is amassing more power as a result of agreements across parties and branches of government.

There are no easy answers to the challenges raised here. Nonetheless, we see this framing as critical to furthering the discussion. Asking questions such as whether the Fed is well-suited to a particular task misses the point. It may be poorly suited and yet still positioned better than the alternatives. But, as shown, even that distinction does not suffice to resolve the inquiry. The Fed may be the right solution when the challenge is defined by easing the economic pain inflicted by COVID-19 but a very bad solution if the aim is to protect the country's system of governance. Trade-offs exist not only between economic concepts of employment and price stability but also political considerations in terms of maximizing economic growth and public accountability for policies that inherently determine winners and losers. A smooth and sharp recovery might not just extricate the Fed; it could result in the Fed's being more empowered and trusted than ever, creating a central bank that not only has broad official powers but will reliably be given even more authority when crisis strikes. Likewise, continued dysfunction and distrust between the political parties, and among the Congress and the White House and Treasury Department, may well serve to continually increase reliance on the central bank to implement crisis response policies.

The first global recession of this century was caused by a disease created in America's mortgage-finance system, while the second was a disease that began in China. Despite radically different root causes, America's responses to these recessions leaned heavily on the Federal Reserve to use a series of previously unprecedented actions and authorities to stabilize financial markets. The lines between monetary and fiscal policy are blurring, with the Fed's action on the edge, or even over it.

In the COVID-19 crisis, even when using more traditional fiscal policy such as direct payments to people and businesses, policy makers relied more heavily on the financial system. Grants to small businesses were called loans disbursed through the banking system. The result favored larger entities and those with closer ties to banks. Direct payments to

individuals were slowed by weeks and months for people who did not use their personal bank accounts for tax refunds. America's slow payment system added further delay for the more than one in five people who received paper checks. The results had disproportionately negative impacts for minorities and lower-income Americans.

## VII. References

350.org, 350 Butte County, 350 PDX, Amazon Watch, American Economic Liberties Project, Center for International Environmental Law, Earth Ethics, Inc., et al. 2020. "Letter to the Honorable Jerome Powell, Chair of the Board of Governors of the Federal Reserve System." March 27, 2020.

[https://d17a0173-b97b-4c08-a2e3-f8ea72c0874b.usrfiles.com/ugd/d17a01\\_62f18f6e12614fddac890d692066aea8.pdf](https://d17a0173-b97b-4c08-a2e3-f8ea72c0874b.usrfiles.com/ugd/d17a01_62f18f6e12614fddac890d692066aea8.pdf)

Adamczyk, Alicia. 2020. "The first coronavirus stimulus checks were deposited this week—here's when you can expect yours." *CNBC*, April 13, 2020.

<https://www.cnbc.com/2020/04/13/first-coronavirus-stimulus-checks-deposited.html>

*American Journal of Managed Care (AJMC)*. 2021. "A Timeline of COVID-19 Developments in 2020." Updated January 1, 2021.

<https://www.ajmc.com/view/a-timeline-of-covid19-developments-in-2020>

Barret, Ted, Dana Bash, and Kate Snow. 2001. "Congress Approves \$15 Billion Airline Bailout." *CNN*, September 22, 2001.

<https://edition.cnn.com/2001/US/09/21/rec.congress.airline.deal/>

Bernanke, Ben. 2008. "Turmoil in U.S. Credit Markets: Recent Actions Regarding Government-Sponsored Entities, Investment Banks, and Other Financial Institutions." Testimony before the Committee on Banking, Housing, and Urban Affairs, US Senate, September 23, 2008.

<https://www.govinfo.gov/content/pkg/CHRG-110shrg50414/html/CHRG-110shrg50414.htm>

———. 2017. "How Big a Problem Is the Zero Lower Bound on Interest Rates?" Brookings Institution, April 12, 2017.

<https://www.brookings.edu/blog/ben-bernanke/2017/04/12/how-big-a-problem-is-the-zero-lower-bound-on-interest-rates/>

———. 2020. "The New Tools of Monetary Policy." Brookings Institution, January 4, 2020.

<https://www.brookings.edu/blog/ben-bernanke/2020/01/04/the-new-tools-of-monetary-policy/>

Blinder, Alan S. 2000. "Central-Bank Credibility: Why Do We Care? How Do We Build It?" *American Economic Review* 90, no. 5: 1421–31.

<https://ideas.repec.org/a/aea/aecrev/v90y2000i5p1421-1431.html>

Bräuning, Falk, and Teodora Paligorova. 2021. "Uptake of the Main Street Lending Program." Board of Governors of the Federal Reserve System, FEDS Notes, April 16, 2021.  
<https://www.federalreserve.gov/econres/notes/feds-notes/uptake-of-the-main-street-lending-program-20210416.htm>

Bullard, James. 2020. "Monetary Policy and Fiscal Policy Responses to the COVID-19 Crisis." Federal Reserve Bank of St. Louis, *Regional Economist* 28, no. 4 (November).  
<https://www.stlouisfed.org/publications/regional-economist/fourth-quarter-2020/monetary-policy-fiscal-policy-responses-covid-crisis>

Bureau of Economic Analysis (BEA). 2020. "Gross Domestic Product, Fourth Quarter and Year 2019." News release, January 30, 2020.  
<https://www.bea.gov/news/2020/gross-domestic-product-fourth-quarter-and-year-2019-advance-estimate>

Bureau of Labor Statistics (BLS). 2021. "COVID-19 Ends Longest Employment Recovery and Expansion in CES History, Causing Unprecedented Job Losses in 2020." *Monthly Labor Review*, June 2021.  
<https://www.bls.gov/opub/mlr/2021/article/COVID-19-ends-longest-employment-expansion-in-ces-history.htm>

Chetty, Raj, John N. Friedman, Nathaniel Hendren, and Michael Stepner. 2020. "How Did COVID-19 and Stabilization Policies Affect Spending and Employment? A New Real-time Economic Tracker Based on Private Sector Data." National Bureau of Economic Research Working Paper No. 27432, November 2020.  
[https://www.nber.org/system/files/working\\_papers/w27431/w27431.pdf](https://www.nber.org/system/files/working_papers/w27431/w27431.pdf)

Chime. n.d. "Stimulus Payments and Chime." Accessed October 14, 2022.  
<https://www.chime.com/stimulus-payments-and-chime/>

Clarida, Richard H., Burcu Duygan-Bump, and Chiara Scotti. 2021. "The COVID-19 Crisis and the Federal Reserve's Policy Response." Board of Governors of the Federal Reserve System, Finance and Economics Discussion Series 2021-035, June 3, 2021.  
<https://doi.org/10.17016/FEDS.2021.035>

Committee for a Responsible Federal Budget (CRFB). 2020. "A July Update on the Paycheck Protection Program." *Bottom Line* (blog), July 10, 2020.  
<https://www.crfb.org/blogs/july-update-paycheck-protection-program>

Congressional Budget Office (CBO). 2020. "The Federal Budget in 2019: An Infographic." April 15, 2020.  
<https://www.cbo.gov/publication/56324>

Congressional Oversight Commission (COC). 2020a. "The Third Report of the Congressional Oversight Commission." July 20, 2020.  
[https://www.banking.senate.gov/imo/media/doc/COC%203rd%20Report\\_7.20.20.pdf](https://www.banking.senate.gov/imo/media/doc/COC%203rd%20Report_7.20.20.pdf)

———. 2020b. “The Seventh Report of the Congressional Oversight Commission.” November 30, 2020.

<https://coc.senate.gov/sites/default/files/2020-12/COC%20November%20Report%20with%20Appendix.pdf>

Congressional Research Service (CRS). 2020. “The Federal Reserve’s Main Street Lending Program.” In Focus No. 11632, November 4, 2020.

<https://crsreports.congress.gov/product/pdf/IF/IF11632>

Constantine, George E., and Andrew L. Steinberg. 2021. “SBA Clarifies Lobbying and Economic Need Rules for Nonprofit PPP Borrowers.” Venable LLP, Insights, March 5, 2021.

<https://www.venable.com/insights/publications/2021/03/sba-clarifies-rules-for-nonprofit-ppp-borrowers>

Cowley, Stacey, and Emily Flitter. 2020. “Banks Gave Richest Clients ‘Concierge Treatment’ for Pandemic Aid.” *New York Times*, April 22, 2020.

<https://www.nytimes.com/2020/04/22/business/sba-loans-ppp-coronavirus.html>

Cox, Jeff. 2019. “September Unemployment Rate Falls to 3.5%, a 50-Year Low, as Payrolls Rise by 136,000.” CNBC, *Jobs*, October 4, 2019.

<https://www.cnbc.com/2019/10/04/jobs-report---september-2019.html>

———. 2020. “Second-Quarter GDP Plunged by Worst-Ever 32.9% amid Virus-Induced Shutdown.” CNBC, *Economy*, July 30, 2020.

<https://www.cnbc.com/2020/07/30/us-gdp-q2-2020-first-reading.html>

———. 2021. “Fed Sets Up Panels to Examine Risks That Climate Change Poses to the Financial System.” CNBC, *Federal Reserve*, March 23, 2021.

<https://www.cnbc.com/2021/03/23/fed-to-examine-risks-climate-change-poses-to-financial-system.html>

Cruz, Ted. 2020. Letter to Treasury Secretary Steven T. Mnuchin and Federal Reserve Chairman Jerome Powell, April 24, 2020.

<https://www.cruz.senate.gov/files/documents/Letters/4.24.2020%20Oil%20Gas%20Fed%20Lending%20Facility%20Letter.pdf>

D’Amico, Stefania, Vamsidhar Kurakula, and Stephen Lee. 2020. “Impacts of the Fed Corporate Credit Facilities through the Lenses of ETFs and CDX.” Federal Reserve Bank of Chicago Working Paper No. 2020-14, May 17, 2020.

<https://doi.org/10.21033/wp-2020-14>

Dancey, Logan, and Geoffrey Sheagley. 2017. “Partisanship and Perceptions of Party-Line Voting in Congress.” *Political Research Quarterly* 71, no. 1: 32–45.

<https://journals.sagepub.com/doi/full/10.1177/1065912917722233>



Dent, Nicholas. 2021. "End of the UK Furlough Scheme—What's Next for Employers." JD Supra, October 25, 2021.

<https://www.jdsupra.com/legalnews/end-of-the-uk-furlough-scheme-what-s-2343512/>

Derby, Michael S. 2021. "Fed Faces Calls to Remove Officials over Trades They Made while Setting Policy." *Wall Street Journal*, September 21, 2021.

[https://www.wsj.com/articles/fed-faces-calls-to-remove-officials-over-trades-they-made-while-setting-policy-11632226559?mod=article\\_inline](https://www.wsj.com/articles/fed-faces-calls-to-remove-officials-over-trades-they-made-while-setting-policy-11632226559?mod=article_inline)

<https://www.wsj.com/articles/fed-faces-calls-to-remove-officials-over-trades-they-made-while-setting-policy-11632226559>

Expedited Funds Availability Act of 1987 (EFAA). 1987. "Expedited Funds Availability Schedules." 12 U.S.C. § 4002.

Fabo, Brian, Martina Jančoková, Elisabeth Kempf, and Ľuboš Pástor. 2021. "Fifty shades of QE: Comparing findings of central bankers and academics." *Journal of Monetary Economics* 120: 1–20.

<https://doi.org/10.1016/j.jmoneco.2021.04.001>

Federal Deposit Insurance Corporation (FDIC). 2020. "How America Banks: Household Use of Banking and Financial Services." 2019 FDIC Survey, October 19, 2020.

<https://www.fdic.gov/analysis/household-survey/index.html>

Federal Reserve Act of 1913 (FRA), Section 13(3). 1913. "Discounts for Individuals, Partnerships, and Corporations." 12 U.S.C. § 343.

Federal Reserve Board of Governors (Federal Reserve Board). 2020a. "Federal Reserve Board Announces an Expansion of the Scope and Duration of the Municipal Liquidity Facility." Press release, April 27, 2020.

<https://www.federalreserve.gov/newsevents/pressreleases/monetary20200427a.htm>

———. 2020b. "Federal Reserve Takes Additional Actions to Provide Up to \$2.3 Trillion in Loans to Support the Economy." Press release, June 27, 2020.

<https://www.federalreserve.gov/newsevents/pressreleases/monetary20200409a.htm>

———. 2020c. "Primary Market Corporate Credit Facility Term Sheet." Press release, July 28, 2020.

<https://www.federalreserve.gov/newsevents/pressreleases/files/monetary20200728a9.pdf>

———. 2020d. "Secondary Market Corporate Credit Facility Term Sheet." Press release, July 28, 2020.

<https://www.federalreserve.gov/newsevents/pressreleases/files/monetary20200728a1.pdf>

———. 2020e. “Federal Reserve Board Announces It Has Formally Joined the Network of Central Banks and Supervisors for Greening the Financial System, or NGFS, as a Member.” Press release, December 15, 2020.

<https://www.federalreserve.gov/newsevents/pressreleases/bcreg20201215a.htm>

Gallup. 2021. “How Would You Rate the Job Being Done by ... ? Would You Say It Is Doing an Excellent, Good, Only Fair or Poor Job?” In *Depth: Topics A to Z*, Government poll, September 2021.

<https://news.gallup.com/poll/27286/government.aspx>

Gandel, Stephen. 2020. “Paycheck Protection Program Billions Went to Large Companies and Missed Virus Hot Spots.” CBS News, *Money Watch*, April 20, 2020.

<https://www.cbsnews.com/news/paycheck-protection-program-small-businesses-large-companies-coronavirus/>

Gleckman, Howard. 2020. “How Will the Coronavirus Stimulus Bill’s Individual Payments Work?” Tax Policy Center, *TaxVox: Federal Budget and Economy*, March 26, 2020.

<https://www.taxpolicycenter.org/taxvox/how-will-coronavirus-stimulus-bills-individual-payments-work>

Goodman, Matthew. 2020. “Comparing U.S., Japanese, and German Fiscal Responses to COVID-19.” Center for Strategic & International Studies, October 28, 2020.

<http://www.csis.org/analysis/comparing-us-japanese-and-german-fiscal-responses-covid-19>

Gotbaum, Joshua. 2020. “Don’t Fix the Paycheck Protection Program, Replace It.” Brookings Institution, July 20, 2020.

<https://www.brookings.edu/opinions/dont-fix-the-paycheck-protection-program-replace-it/>

Granja, Joao, Christos Makridis, Constantine Yannelis, and Eric Zwick. 2020. “Did the Paycheck Protection Program Hit the Target?” Becker Friedman Institute for Economics at the University of Chicago Working Paper No. 2020-52, September 21, 2021.

<https://bfi.uchicago.edu/working-paper/did-the-paycheck-protection-program-hit-the-target/>

Green, Joshua. 2010. “TARP, the Forbidden Bipartisan Success.” *Atlantic*, September 29, 2010.

<https://www.theatlantic.com/politics/archive/2010/09/tarp-the-forbidden-bipartisan-success/63803/>

Griffin, John M., Samuel Kruger, and Prateek Mahajan. 2021. “Did FinTech Lenders Facilitate PPP Fraud?” *SSRN Electronic Journal*, August 18, 2021.

<https://doi.org/10.2139/ssrn.3906395>

Haddad, Valentin, Alan Moreira, and Tyler Muir. 2021. “When Selling Becomes Viral: Disruptions in Debt Markets in the COVID-19 Crisis and the Fed’s Response.” *Review of*

*Financial Studies* 34, no. 11 (November): 5309–51.  
<https://doi.org/10.1093/rfs/hhaa145>

Hansen, Sarah. 2020. “Potbelly, Shake Shack, Axios: Here Are All the Companies Returning PPP Money after Public Backlash.” *Forbes*, April 29, 2020.  
<https://www.forbes.com/sites/sarahhansen/2020/04/29/potbelly-shake-shack-axios-here-are-all-the-companies-returning-ppp-money-after-public-backlash>

Hartman, Mitchell. 2021. “What’s “Full Employment” for Yellen, Powell & Co.?” *Marketplace*, March 15, 2021.  
<https://www.marketplace.org/2021/03/15/whats-full-employment-for-yellen-powell-co/>

Horsley, Scott. 2021. “Janet Yellen Says U.S. Could Run Out of Cash to Pay Its Bills in Less Than 3 Weeks.” NPR, *All Things Considered*, September 28, 2021.  
<https://www.npr.org/2021/09/28/1041126764/janet-yellen-jerome-powell-debt-ceiling-standoff>

Howell, Sabrina T., Theresa Kuchler, David Snitkof, Johannes Stroebel, and Jun Wong. 2021. “Racial Disparities in Access to Small Business Credit: Evidence from the Paycheck Protection Program.” *SSRN Electronic Journal*, October 11, 2021.  
<https://doi.org/10.2139/ssrn.3939384>

Ihrig, Jane E., Gretchen Weinbach, and Scott A. Wolla. 2020. “How the Fed Has Responded to the COVID-19 Pandemic.” Federal Reserve Bank of St. Louis, *Open Vault* (blog), August 12, 2020.  
<https://www.stlouisfed.org/open-vault/2020/august/fed-response-covid19-pandemic>

International Monetary Fund (IMF). 2020. “Kurzarbeit: Germany’s Short-Time Work Benefit.” IMF Country Focus, June 15, 2020.  
<https://www.imf.org/en/News/Articles/2020/06/11/na061120-kurzarbeit-germanys-short-time-work-benefit>

———. 2021. “Policy Responses to COVID-19.” IMF Policy Tracker. Retrieved October 26, 2021.  
<https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19>

Isidore, Chris. 2014. “U.S. Ends TARP with \$15.3 Billion Profit.” *CNN Business*, December 19, 2014.  
<https://money.cnn.com/2014/12/19/news/companies/government-bailouts-end/>

———. 2019. “Black Unemployment Rate Falls to a Record Low.” *CNN Business*, September 6, 2019.  
<https://www.cnn.com/2019/09/06/economy/black-unemployment-rate/index.html>

Jahan, Sarwat, Ahmed Saber Mahmud, and Chris Papageorgiou. 2014. “What Is Keynesian Economics?” International Monetary Fund, *Finance & Development* 51, no. 3 (September).  
<https://www.imf.org/external/pubs/ft/fandd/2014/09/basics.htm>

Johns Hopkins Medicine. 2021. "COVID-19 vs. the Flu." September 28, 2021.  
<https://www.hopkinsmedicine.org/health/conditions-and-diseases/coronavirus/coronavirus-disease-2019-vs-the-flu>

Klein, Aaron. 2018. "Implementing a Real Time Payment System." Brookings Institution, December 14, 2018.  
[https://www.federalreserve.gov/SECRS/2018/December/20181221/OP-1625/OP-1625\\_121418\\_133277\\_428769914666\\_1.pdf](https://www.federalreserve.gov/SECRS/2018/December/20181221/OP-1625/OP-1625_121418_133277_428769914666_1.pdf)

———. 2020 "Examining Overdraft Fees and Their Effects on Working Families." Testimony before the Committee on Banking, Housing, and Urban Affairs, United States Senate, May 4, 2020.  
<https://www.banking.senate.gov/imo/media/doc/Klein%20Testimony%205-4-22.pdf>

Klein, Aaron, and Camille Busette. 2020. "Improving the Equity Impact of the Fed's Municipal Lending Facility." Brookings Institution, April 14, 2020.  
<https://www.brookings.edu/research/a-chance-to-improve-the-equity-impact-of-the-feds-municipal-lending-facility/>

Klein, Aaron, and George Selgin. 2020. "We Shouldn't Have to Wait for FedNow to Have Faster Payments." American Banker, *BankThink*, February 28, 2020.  
<https://www.americanbanker.com/opinion/we-shouldnt-have-to-wait-for-fednow-to-have-faster-payments>

Klein, Aaron, and Ember Smith. 2021. "Explaining the Economic Impact of COVID-19: Core Industries and the Hispanic Workforce." Brookings Institution, February 4, 2021.  
<https://www.brookings.edu/research/explaining-the-economic-impact-of-COVID-19-core-industries-and-the-hispanic-workforce/>

Kurtzleben, Danielle. 2020. "Small Business Emergency Relief Program Hits \$349 Billion Cap in Less Than 2 Weeks." NPR, *Coronavirus Updates*, April 16, 2020.  
<https://www.npr.org/sections/coronavirus-live-updates/2020/04/16/835958069/small-business-emergency-relief-program-hits-349-billion-cap-in-less-than-2-week>

Li, Yun. 2019. "This Is Now the Longest US Economic Expansion in History." CNBC, *Economy*, July 2, 2019.  
<https://www.cnbc.com/2019/07/02/this-is-now-the-longest-us-economic-expansion-in-history.html>

Liu, Sifan. and Joseph Parilla. 2020. "New Data Shows Small Businesses in Communities of Color Had Unequal Access to Federal COVID-19 Relief." Brookings Institution, September 17, 2020.  
<https://www.brookings.edu/research/new-data-shows-small-businesses-in-communities-of-color-had-unequal-access-to-federal-COVID-19-relief/>

Logan, Lorie K. 2020. "The Federal Reserve's Market Functioning Purchases: From Supporting to Sustaining." Speech delivered at the Securities Industry and Financial Markets

Association webinar, July 15, 2020.

<https://www.newyorkfed.org/newsevents/speeches/2020/log200715#footnote3>

Long, Heather, and Jeff Stein. 2019. "The U.S. deficit hit \$984 Billion in 2019, soaring during Trump era." *Washington Post*, October 25, 2019.

<https://www.washingtonpost.com/business/2019/10/25/us-deficit-hit-billion-marking-nearly-percent-increase-during-trump-era/>

Luce, Edward. 2019. "Donald Trump's War on the Federal Reserve." *Financial Times*, August 24, 2019.

<https://www.ft.com/content/fb32cd68-c4c3-11e9-a8e9-296ca66511c9>

Mehra, Alexander. 2010. "Legal authority in unusual and exigent circumstances: The federal reserve and the financial crisis." *University of Pennsylvania Journal of Business Law* 13, no. 1 (Fall 2010): 221-274.

Messner, Wolfgang, and S.E. Payson. 2020. "Variation in COVID-19 Outbreaks at the US State and County Levels." *Public Health* 187 (October): 15–18.

<https://doi.org/10.1016/j.puhe.2020.07.035>

Mnuchin, Steven, and Jovita Carranza. 2020. "Joint Statement by Secretary Steven T. Mnuchin and Administrator Jovita Carranza on the Review Procedure for Paycheck Protection Program Loans." Press release, April 28, 2020.

<https://home.treasury.gov/news/press-releases/sm991>

Mohsin, Saleha, Craig Torres. 2020. "Fed Adapts as Congress Urges More Credit Risk on Corporate Loans." *Bloomberg*, June 15, 2020.

<https://www.bloomberg.com/news/articles/2020-06-16/fed-adapts-as-congress-urges-more-credit-risk-on-corporate-loans>

Murphy, Dan. 2021. "Economic Impact Payments: Uses, Payment Methods, and Costs to Recipients." Brookings Institution, February 17, 2021.

<https://www.brookings.edu/research/economic-impact-payments-uses-payment-methods-and-costs-to-recipients/>

Nacha. n.d. "Direct Deposit Delivers." Accessed November 7, 2022.

<https://directdeposit.org/ACHDelivers>

National Bureau of Economic Research (NBER). 2021. "US Business Cycle Expansions and Contractions." Public use data archive, July 19, 2021.

<https://www.nber.org/research/data/us-business-cycle-expansions-and-contractions>

National Consumer Law Center (NCLC). 2020. "Tax Season: More Delays and Higher Costs for Struggling Taxpayers." January 2020.

<https://www.nclc.org/images/pdf/taxes/rpt-tax-time-jan2020.pdf>

Organisation for Economic Co-operation and Development (OECD). 2022. "Unemployment rate (indicator)." Accessed November 7, 2022.

<https://data.oecd.org/unemp/unemployment-rate.htm>

Paletta, Damian, and Deborah Solomon. 2008. "Paulson, Bernanke Describe Mechanics of Auction Proposal." *Wall Street Journal*, September 24, 2008.

<https://www.wsj.com/articles/SB122221614525469481>

Powell, Jerome. H. 2020. "Semiannual Monetary Policy Report to the Congress." Testimony before the Committee on Banking, Housing, and Urban Affairs, United States Senate, June 16, 2020.

<https://www.federalreserve.gov/newsevents/testimony/powell20200616a.htm>

Reuters. n.d. "Top 10 Fed company bond holdings." Accessed November 7, 2020.

<https://graphics.reuters.com/USA-FED/BONDS/dgkvlxdxlvb/>

Rosalsky, Greg. 2020. "Trouble on Main Street." NPR, *Planet Money*, October 13, 2020.

<https://www.npr.org/sections/money/2020/10/13/922199563/trouble-on-main-street>

Rubio, Marco. 2020. "Rubio Chairs Hearing on the Paycheck Protection Program and Its Future." Press release, December 10, 2020.

<https://www.rubio.senate.gov/public/index.cfm/2020/12/now-rubio-chairs-hearing-on-the-paycheck-protection-program-and-its-future>

Russell, Barry. 2020. Letter to the Honorable Jerome H. Powell, Chairman, Board of Governors of the Federal Reserve System, from Barry Russell, President and CEO, Independent Petroleum Association of America, April 15, 2020.

<https://www.ipaa.org/wp-content/uploads/2020/04/Main-Street-Lending-Letter-04-15-2020.pdf>

Samuelson, Robert J. 2011. "Why TARP Has Been a Success Story." *Washington Post*, March 27, 2011.

[https://www.washingtonpost.com/opinions/why-tarp-has-been-a-success-story/2011/03/25/AFEe6jkB\\_story.html](https://www.washingtonpost.com/opinions/why-tarp-has-been-a-success-story/2011/03/25/AFEe6jkB_story.html)

Sastry, Parinitha. 2018. "The Political Origins of Section 13(3) of the Federal Reserve Act." Federal Reserve Bank of New York, *Economic Policy Review* 24, no. 1 (September).

[https://www.newyorkfed.org/medialibrary/media/research/epr/2018/epr\\_2018\\_political-origins\\_sastry.pdf](https://www.newyorkfed.org/medialibrary/media/research/epr/2018/epr_2018_political-origins_sastry.pdf)

Schnidman, Evan. 2011. "Why the Federal Reserve Is Dodd-Frank's Big Winner." *Harvard Business Law Review Online* 1, no. 88 (June 19, 2011).

<https://www.hblr.org/2011/06/why-the-federal-reserve-is-dodd-franks-big-winner/>

Schweitzer, Mark, and Garrett Borawski. 2021. "How Well Did PPP Loans Reach Low- and Moderate-Income Communities?" Federal Reserve Bank of Cleveland, Economic

Commentary No. 2021-13 (May 27): 1–5.  
<https://doi.org/10.26509/frbc-ec-202113>

Sherman, Matthew. 2009. “A Short History of Financial Deregulation in the United States.” Center for Economic and Policy Research, July 2009.  
<https://www.cepr.net/documents/publications/dereg-timeline-2009-07.pdf>

Siegel, Rachel. 2021. “Fed Says Trading Activity by Top Officials under Independent Review.” *Washington Post*, October 4, 2021.  
<https://www.washingtonpost.com/us-policy/2021/10/04/fed-ethics-powell-warren/>

Snell, Kelsey. 2020. “What's Inside the Senate’s \$2 Trillion Coronavirus Aid Package.” NPR, *Special Series: The Coronavirus Crisis*, March 26, 2020.  
<https://www.npr.org/2020/03/26/821457551/whats-inside-the-senate-s-2-trillion-coronavirus-aid-package>

Tepper, Taylor, and Benjamin Curry. 2021. “September FOMC Minutes: Fed Is Prepared to Taper QE.” *Forbes Advisor*, October 13, 2021.  
<https://www.forbes.com/advisor/investing/fomc-meeting-federal-reserve/>

Tett, Gillian. 2019. “Do Not Underestimate Jay Powell in a Fight with Trump.” *Financial Times*, October 31, 2019.  
<https://www.ft.com/content/cdb3edb4-fbc2-11e9-a354-36acbbb0d9b6>

US Chamber of Commerce. 2020. Small Business Coronavirus Impact Poll. June 3, 2020.  
<https://www.uschamber.com/small-business/small-business-coronavirus-impact-poll-june>

US Small Business Administration (US SBA). n.d. “PPP Loan Forgiveness.” COVID-19 Relief Option, Paycheck Protection Program. Accessed October 15, 2022.  
<https://www.sba.gov/funding-programs/loans/covid-19-relief-options/paycheck-protection-program/ppp-loan-forgiveness>

Van Hollen, Chris, Charles E. Schumer, Elizabeth Warren, Sherrod Brown, Tammy Baldwin, Kyrsten Sinema, and Jeanne Shaheen. 2020. Letter to the Honorable Jerome H. Powell, Chairman, Board of Governors of the Federal Reserve System, April 17, 2020.  
[https://www.vanhollen.senate.gov/imo/media/doc/Letter%20to%20Chairman%20Powell%20041720.002.clean%20\(002\).pdf](https://www.vanhollen.senate.gov/imo/media/doc/Letter%20to%20Chairman%20Powell%20041720.002.clean%20(002).pdf)

Wallach, Phillip. 2015. *To the Edge: Legality, Legitimacy, and the Responses to the 2008 Financial Crisis*. Washington, DC: Brookings Institution Press.

Waters, Maxine. 2020. Letter to the Honorable Jerome H. Powell, Chairman of the Board of Governors of the Federal Reserve System, April 16, 2020.  
[https://financialservices.house.gov/uploadedfiles/ltr\\_to\\_fed\\_on\\_facilities\\_041620.pdf](https://financialservices.house.gov/uploadedfiles/ltr_to_fed_on_facilities_041620.pdf)

Yglesias, Matthew, 2019. "Donald Trump's Escalating War of Words with Fed Chair Jay Powell, Explained." Vox, August 29, 2019.  
<https://www.vox.com/policy-and-politics/2019/8/29/20836652/donald-trump-jay-powell-fed-feud>

This open access article is distributed under the terms of the [CC-BY-NC-ND 4.0](https://creativecommons.org/licenses/by-nc-nd/4.0/) license, which allows sharing of this work provided the original author and source are cited. The work may not be changed or used commercially.