

December 2021

The Financialization of Recession Response

Aaron Klein

Senior Fellow
The Brookings Institution

B | Economic Studies
at BROOKINGS

The Brookings Economic Studies program analyzes current and emerging economic issues facing the United States and the world, focusing on ideas to achieve broad-based economic growth, a strong labor market, sound fiscal and monetary policy, and economic opportunity and social mobility. The research aims to increase understanding of how the economy works and what can be done to make it work better.

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 (CARES Act) that reduced the severity of the recession. The political response occurred faster than any automatic policy response would have, based on the delays in data reporting. This raises questions about the supposed benefits of automatic policy: speed and ability to avoid political gridlock. The economic policy choices contained in the CARES Act 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 weaker ties to the financial system received aid more slowly and in some instances, not at all. One result is a disparity in assistance according to historical factors such as racial discrimination. Relying on the Federal Reserve to distribute recession assistance through the financial system blurs the lines between monetary and fiscal policy. This is a continuation of a response 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.

ACKNOWLEDGEMENTS

This paper benefited tremendously from earlier collaboration with Kathryn Judge. The author also acknowledges the excellent research assistance of Kira Hobson. He thanks Peter Conti-Brown and Sarah Binder for helpful comments for an earlier version and prior research assistance from Ben Aronson and Bella Dunbar.

Introduction

The depth and nature of the recession that began as a result of COVID-19 was unprecedented in modern economic history. The speed at which the pandemic travelled, both physically and economically, highlight the modern worlds' interconnectedness. While COVID-19 was felt globally, the economic implications and responses varied significantly internationally. This 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 U.S. 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, a select set of businesses, and produced a faster economic recovery than 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 policy response. America's COVID-19 response leaned heavily on the Federal Reserve, blurring the line between monetary and fiscal policy. This is a continuation of the trend from the prior recession, and somewhat surprising given the distinction in the causes between the two recessions: financial and biological.

US Economy Pre-Covid

Before Covid struck, the American economy was enjoying its longest period of economic expansion ever (Li, 2019).¹ The unemployment rate had reached 3.5%² and real GDP grew by 2.3% in 2019 (Cox 2019; Bureau of Economic Analysis, 2020).³ Policy makers were actively considering whether the economy had exceeded so-called full employment (Hartman, 2015).⁴ Part of this debate was on the impact sustained periods of long-run economic growth and tight labor markets have on historically difficult to reach sectors of the American economy, particularly the unemployment rate for Black workers which had reached a historical low of 5.5% (Isidore, 2019).⁵

America had not used 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 defense sector (Long and Stein, 2019).⁶ As a result, the fiscal deficit was at a nominal record, nearly \$1 trillion, equal to 4.6% of real GDP (CBO, 2020).⁷ Asset markets had appreciated substantially, with both the equity and real estate markets surpassing previous record levels before the Great Financial Crisis.

¹ Li, Y. (July 2, 2019) *This is now the longest US economic expansion in history*. CNBC <https://www.cnbc.com/2019/07/02/this-is-now-the-longest-us-economic-expansion-in-history.html>

² Cox, J. (October 4, 2019) *September unemployment rate falls to 3.5%, a 50-year low, as payrolls rise by 136,000*. CNBC. <https://www.cnbc.com/2019/10/04/jobs-report---september-2019.html>

³ Bureau of Economic Analysis (January 30, 2020) *Gross Domestic Product, Fourth Quarter and Year 2019* <https://www.bea.gov/news/2020/gross-domestic-product-fourth-quarter-and-year-2019-advance-estimate>

⁴ Hartman, M. (March 15, 2021) *What's "full employment" for Yellen, Powell & Co.?*. Marketplace. <https://www.marketplace.org/2021/03/15/whats-full-employment-for-yellen-powell-co/>

⁵ Isidore, C. (September 6, 2019) *Black unemployment rate falls to a record low*. CNN <https://www.cnn.com/2019/09/06/economy/black-unemployment-rate/index.html>

⁶ Long, H., Stein, J. (June 6, 2019) *The U.S. deficit hit \$984 billion in 2019, soaring during Trump era*. The Washington Post.

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

⁷ Congressional Budget Office (April 15, 2020) *The Federal Budget in 2019: An Infographic* <https://www.cbo.gov/publication/56324>

The Covid Recession

COVID-19, originating in China, began causing severe illness and death at rates substantially higher than existing diseases such as influenza (Johns Hopkins, 2021).⁸ This disease quickly spread throughout China and then most of the rest of the world. To combat the spread of this lethal disease, public health officials began a series of shutdowns of various forms of activities. The shutdown of activities, often starting with travel, eventually led to full-scale closures of basic forms of economic activity and public gatherings. The pace and severity of shut-downs varied across and sometimes within nations. In the U.S., there was substantial variance in the depth of shutdowns (and illness rates) within and between states (Messner and Payson, 2020).⁹

Economic activity is integrated across geographies. The COVID-19 pandemic caused shutdowns that impacted local and national economies. Economic activity that depended on the movement of people and goods was broadly speaking more vulnerable to the COVID-19 shock than activity that depended on the movement of information (Klein and Smith 2021).¹⁰ Some forms of economic activity benefited from the Covid shutdowns, for example companies that charged for video-conferencing (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 the services sector, and parts of the economy that dealt with the movement of people such as travel, 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 COVID-19 induced recession as beginning in April 2020 (NBER, 2021).¹¹ Real GDP began to shrink in March 2020 with the second quarter of 2020 posting the largest quarterly decrease in economic activity in history (Cox, 2020).¹² Chart 1 shows the decline in GDP in the United States and select other G7 nations who all experienced sudden, swift, and synchronized recessions.

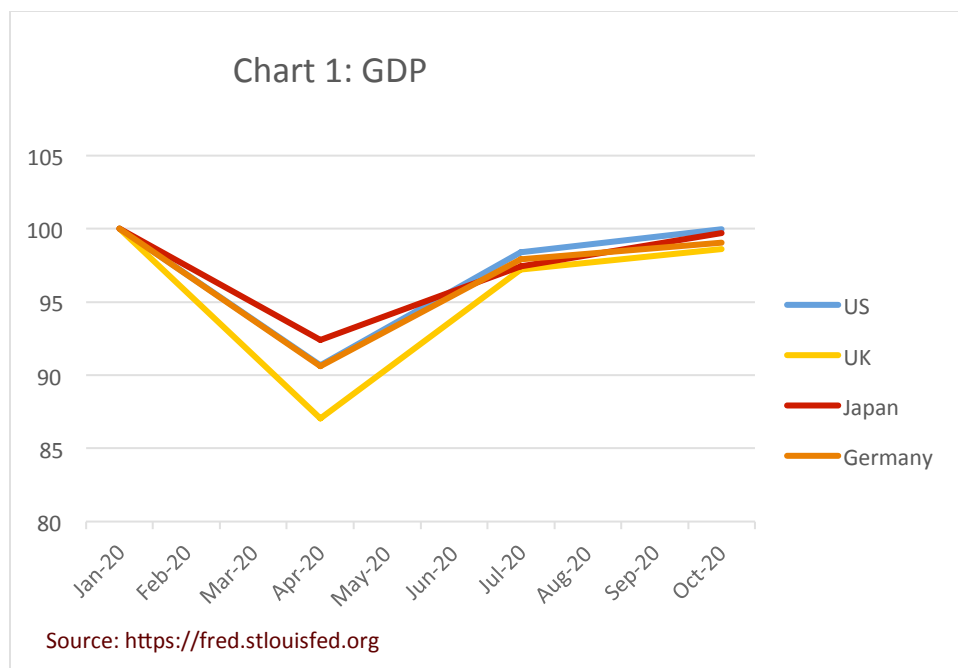
⁸ Johns Hopkins Medicine (September 28, 2021) *COVID-19 vs. the Flu*. <https://www.hopkinsmedicine.org/health/conditions-and-diseases/coronavirus/coronavirus-disease-2019-vs-the-flu>

⁹ Messner, W., Payson, S.E. "Variation in COVID-19 outbreaks at the US state and county levels" *Public Health*, Volume 187, (2020) <https://doi.org/10.1016/j.puhe.2020.07.035>.

¹⁰ Klein, A., Smith, E (February 4, 2021) "Explaining the Economic Impact of COVID-19: Core Industries and the Hispanic Workforce" The Brookings Institution. <https://www.brookings.edu/research/explaining-the-economic-impact-of-COVID-19-core-industries-and-the-hispanic-workforce/>

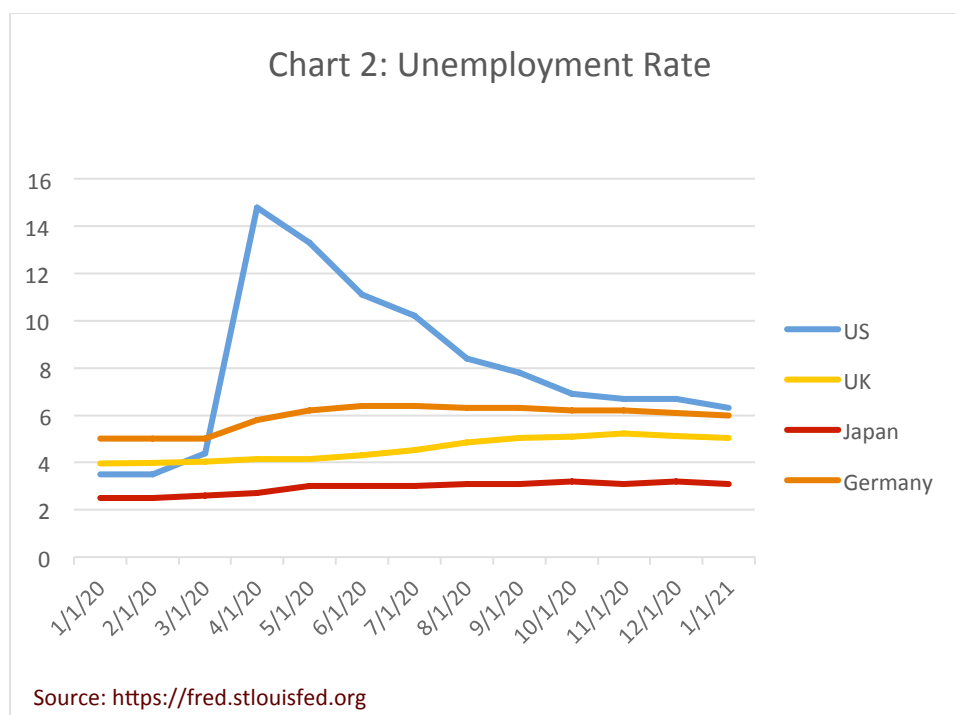
¹¹ National Bureau of Economic Research (July 19, 2021) *Business Cycle Dating Committee Announcement July 19, 2021*. <https://www.nber.org/news/business-cycle-dating-committee-announcement-july-19-2021>

¹² Cox, J. (July 30, 2020) *Second-quarter GDP plunged by worst-ever 32.9% amid virus-induced shutdown*. CNBC. <https://www.cnbc.com/2020/07/30/us-gdp-q2-2020-first-reading.html>



Despite similar reductions in production, the path on employment differed. In the United States, employment fell off a cliff, with 20.7 million jobs shed in April 2020, and a total of 22.4 million jobs lost before the employment began to rebound in May (BLS, 2021).¹³ Other nations suffered much smaller declines in official unemployment. As Chart 2 demonstrates the United States suffered an unprecedented rise in unemployment while other G-7 countries, facing the same biological threat of COVID-19 and often imposing similar lockdowns/shutdowns of economic activity did not. This is a function of differing rigidities in labor market policy and different governmental policy responses to Covid, as the paper will detail in later sections.

¹³ U.S. Bureau of Labor Statistics (June 2021). *COVID-19 ends longest employment recovery and expansion in CES history, causing unprecedented job losses in 2020*. <https://www.bls.gov/opub/mlr/2021/article/COVID-19-ends-longest-employment-expansion-in-ces-history.htm>



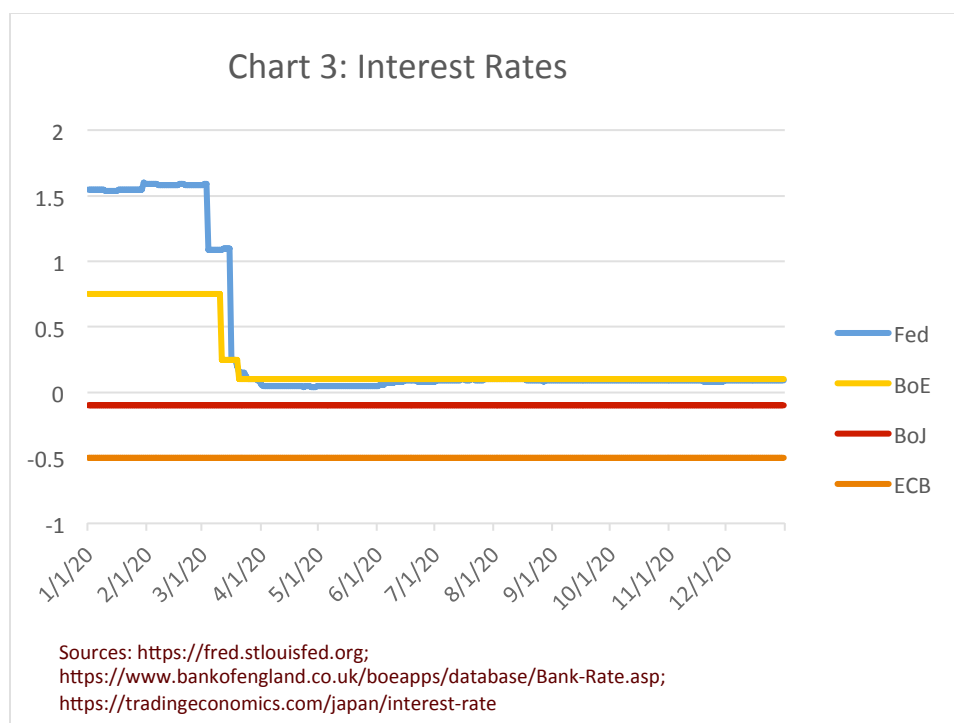
Facing a sharp and largely unforeseen recession, policy makers responded forcefully with both fiscal and monetary policy as standard economic theory calls (Bullard, 2020).¹⁴ These responses followed both standard and non-standard practices. The Federal Reserve cut interest rates by 150 basis points in March,¹⁵ reaching the so-called ‘zero lower bound’ of nominal interest rates that the Fed has been unwilling to go below (Ihrig, Weinbach, and Wolla, 2020; Bernanke, 2018).¹⁶ Central banks around the world facing similar drops in economic activity cut rates, if they were not already at their lower bound, as expected (see chart 3 and *Policy Responses*, 2021).¹⁷

¹⁴ Bullard, James (November 10, 2020) *Monetary Policy and Fiscal Policy Responses to the COVID-19 Crisis*. Federal Reserve Bank of St. Louis <https://www.stlouisfed.org/publications/regional-economist/fourth-quarter-2020/monetary-policy-fiscal-policy-responses-covid-crisis>

¹⁵ Ihrig, J., Weinbach, G., Wolla, S. (August 12, 2020). *How the Fed Has Responded to the COVID-19 Pandemic*. Federal Reserve Bank of St. Louis. <https://www.stlouisfed.org/open-vault/2020/august/fed-response-covid19-pandemic>

¹⁶ Bernanke, B. (April 12, 2017) *How big a problem is the zero lower bound on interest rates?* The Brookings Institution. <https://www.brookings.edu/blog/ben-bernanke/2017/04/12/how-big-a-problem-is-the-zero-lower-bound-on-interest-rates/>

¹⁷ *Policy Responses to COVID-19*. IMF. Retrieved October 26, 2021, from <https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19>



The Fed then employed quantitative easing (QE) a tool that when first used during the 2008 global financial crises was considered non-standard/unprecedented but now has been used in the last two recessions (Bernanke 2020).¹⁸ 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).¹⁹ The Fed's decision to rely on QE to continue to ease monetary conditions to stimulate the economy is evidence as to 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).²⁰ More than 18 months after Covid first began to impact the American economy, the Fed is still in the communication phase of winding down QE (Derby, 2021).²¹

The Federal Reserve also 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).²² It bought \$1.7 trillion worth of Treasury securities between March and June 2020 (Ihrig, Weinbach, and Wolla, 2020).²³ Through these

¹⁸ Bernanke, B. (January 4, 2020) *The New Tools of Monetary Policy*. The Brookings Institution. <https://www.brookings.edu/blog/ben-bernanke/2020/01/04/the-new-tools-of-monetary-policy/>

¹⁹ Tepper, T., Curry, B. (October 13, 2021) *September FOMC Minutes: Fed Is Prepared To Taper QE*. Forbes. <https://www.forbes.com/advisor/investing/fomc-meeting-federal-reserve/>

²⁰ Fabo, B., Jančoková, M., Kempf, E., Pástor, L. (April 2021) *Fifty Shades of QE: Comparing Findings of Central Bankers and Academics*. NBER. <https://www.nber.org/papers/w27849>

²¹ Derby, M. (September 27, 2021) *Fed's Williams: Tapering Bond Buying 'May Soon Be Warranted'*. WSJ. <https://www.wsj.com/articles/feds-williams-tapering-bond-buying-may-soon-be-warranted-11632758413>

²² Logan, L. (July 15, 2020) *The Federal Reserve's Market Functioning Purchases: From Supporting to Sustaining*. Federal Reserve Bank of New York. <https://www.newyorkfed.org/newsevents/speeches/2020/log200715#footnote3>

²³ Ihrig, J., Weinbach, G., Wolla, S. (August 12, 2020). *How the Fed Has Responded to the COVID-19 Pandemic*. Federal Reserve Bank of St. Louis. <https://www.stlouisfed.org/open-vault/2020/august/fed-response-covid19-pandemic>

purchases, the Fed supported markets when assets were hard to sell, signaling that they would prop up key parts of the financial system if needed.

The United States Congress responded as well with large fiscal stimulus. The first significant legislative response was the Coronavirus Aid, Relief, and Economic Security Act, also known as the CARES Act, a \$2.2 trillion fiscal stimulus bill. The Act was designed to provide fiscal firepower, quickly and in large amounts, to try to blunt the economic damage of the pandemic. 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 includes \$454 billion to support lending facilities that the Fed may create pursuant to its authority under Section 13(3) of the Federal Reserve Act 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 seemed to position the Fed to take on a largely unprecedented role (Snell, 2020).²⁴

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).²⁵ The Fed, however, made only modest use of the power and failed to use it at all between 1936 and 2008. When Section 13(3) was invoked by the Fed, in response to the 2008 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 any loans directly to nonfinancial companies. The Fed’s only other major experiment making loans to the real economy, providing working capital pursuant to what was then Section 13(b) of the Federal Reserve Act, sputtered along until Congress brought it to an end in 1958, with the full support of then-Fed Chair William McChesney Martin (Selgin, 2020).²⁶ In short, 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, it 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 has ever embraced, until now. The scale of the potential interventions also far exceed anything done in response to the 2008 crisis, with the Fed itself lauding its potential to provide trillions in new loans (Board of Governors, 2020).²⁷

This paper focuses heavily on the decisions made in the beginning of the Covid recession. These choices large set the precedent for future programs that generally authorized additional money for programs or policies created in the first set of Covid 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 both 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 contributed to giving

²⁴ Snell, K. (March 26, 2020). *What's Inside The Senate's \$2 Trillion Coronavirus Aid Package*. NPR. <https://www.npr.org/2020/03/26/821457551/whats-inside-the-senate-s-2-trillion-coronavirus-aid-package>

²⁵ Sastry, P. (September, 2018). *The Political Origins of Section 13(3) of the Federal Reserve Act*. The Federal Reserve Bank of New York. https://www.newyorkfed.org/medialibrary/media/research/epr/2018/epr_2018_political-origins_sastry.pdf. Between 1932-1936 the Fed made a total of \$1.5M in section 13(3) loans. 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.

²⁶ George Selgin, *When the Fed Tried to Save Main Street*, Alt-M, March 30, 2020, at <https://www.alt-m.org/2020/03/30/when-the-fed-tried-to-save-main-street/>.

²⁷ Board of Governors of the Federal Reserve System. (Last updated: June 27, 2020). *Federal Reserve takes additional actions to provide up to \$2.3 trillion in loans to support the economy*. <https://www.federalreserve.gov/newsevents/pressreleases/monetary20200409a.htm>

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 had had the effect of substantially empowering the central bank over much of the last 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, the CARES Act, follows a different track than historical fiscal policy of directed spending and tax cuts. The CARES Act spent an astounding \$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)²⁸ 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. It included directly targeted assistance of \$54 billion to the airline industry, for example, to counter the specific economic consequences from the Covid shutdown. This is not unprecedented in the American context as airlines received direct assistance after the aviation shutdown resulting from the terrorist attacks of September 11, 2001 (Barret, Bash, and Snow).²⁹

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 term. 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 (Venable 2021).³⁰ 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.

²⁸ Jahan, S., Mahmud, A. S., and Papageorgiou, C (September 2014) "What Is Keynesian Economics?" IMF. <https://www.imf.org/external/pubs/ft/fandd/2014/09/basics.htm>

²⁹ Barret, T., Bash, D., and Snow, K. (September 22, 2001) "Congress approves \$15 billion airline bailout" CNN. <https://edition.cnn.com/2001/US/09/21/rec.congress.airline.deal/>

³⁰ Constantine, G., Lewin, C., Steinberg, A. (March 5, 2021) "SBA Clarifies Lobbying and Economic Need Rules for Nonprofit PPP Borrowers" Venable, LLP. <https://www.venable.com/insights/publications/2021/03/sba-clarifies-rules-for-nonprofit-ppp-borrowers>

Paycheck Protection Program

To assist small businesses impacted by the immediate Covid shutdown, Congress created the Paycheck Protection Program (PPP) as part of the CARES Act. The Treasury Department was placed in charge of PPP with the Small Business Administration working to help small businesses qualify for funding. Congress set aside \$350 billion of CARES Act money for PPP purposes with broad discretion for the Treasury Department to disburse it (CRFB 2021).³¹ As one of its main sponsors, Senator Marco Rubio (R-FL), 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)³²

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 then funded by Treasury through the bank to the applicant. To achieve the goals of the program, the “loans” were forgivable as long as borrowers maintained employee compensation levels. Originally set at 75 percent for payroll, that figure was reduced to 60 percent in later legislation. Thus, up to 40 percent of funds supposedly designed to protect paychecks could be spent on “other eligible expenses” (SBA 2020).³³ Reflecting the belief at the time that the economic shutdown would be short, businesses were given eight to 24 weeks to use the funds for those purposes. If these criteria were met, the “loan” was forgiven. Thus, the “loan” 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”.

Congress may have appreciated this distinction and reversed the nomenclature as a result of the experience of the Troubled Asset Repurchase Program (TARP), the main program used in the 2008 financial crisis to recapitalize banks appeared to the public as a grant (Samuleson 2011).³⁴ TARP funds required repayment. As most banks who received TARP funds survived the crisis, repaid the capital with interests, and Treasury received limited levels of equity as part of their investment through warrants, the Treasury Department actually made a small profit in the end on TARP funding to banks, as measured by total amount returned to Treasury compared to amount disbursed (Isidore, 2014).³⁵ Yet the public continues to believe that the TARP bailout were grants to banks that were not repaid (Green 2010).³⁶

Whereas TARP funds went directly to regulated banks through a series of reviews, the Treasury Department was using SBA and a multitude of banks, credit unions, and later other financial intermediaries like FinTechs to disperse PPP funds. With the intention to spend funds

³¹ Committee for a Responsible Federal Budget (July 10, 2020) “A July Update on the Paycheck Protection Program” <https://www.crfb.org/blogs/july-update-paycheck-protection-program>

³² Rubio, M. (December 10, 2020) “Rubio Chairs Hearing on the Paycheck Protection Program and Its Future” Marco Rubio US Senator for Florida, <https://www.rubio.senate.gov/public/index.cfm/2020/12/now-rubio-chairs-hearing-on-the-paycheck-protection-program-and-its-future>

³³ U.S. Small Business Administration “PPP loan forgiveness” <https://www.sba.gov/funding-programs/loans/COVID-19-relief-options/paycheck-protection-program/ppp-loan-forgiveness>

³⁴ Samuelson, R. (March 27, 2011) “Why TARP has been a success story” The Washington Post, https://www.washingtonpost.com/opinions/why-tarp-has-been-a-success-story/2011/03/25/AFEe6jKB_story.html

³⁵ Isidore, C. (December 19, 2014) “U.S. ends TARP with \$15.3 billion profit” CNN Business. <https://money.cnn.com/2014/12/19/news/companies/government-bailouts-end/>

³⁶ Green, J. (September 29, 2010) “TARP, the Forbidden Bipartisan Success” The Atlantic, <https://www.theatlantic.com/politics/archive/2010/09/tarp-the-forbidden-bipartisan-success/63803/>

quickly, Treasury decided to make funds available in a first come, first serve basis. The result was a rush to fund. The entire \$350 billion was given out in 14 days, beginning April 2nd (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).

First come first serve had the effect of prioritizing companies and those with preexisting banking relationship. This favored large businesses and those who had been in business longer (Schweitzer, 2021).³⁷ It also favored wealthier businesses, whom ironically were in better financial position to handle the economic disruption (Flitter and Cowley).³⁸ Given historical 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).³⁹

First come first serve resulted in businesses receiving PPP grants that were relatively untargeted with either the level of Covid the business's home area was experiencing or how significant state based lock-down regimes were. 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 (CBS 2020).⁴⁰ The definition of 'small business' in the legislation was quite lenient allowing publicly traded companies and professional sports teams to qualify (among the most famous were ShakeShack and the LA Lakers) (Hansen, 2020).⁴¹ 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 their need for PPP loans and repaid funds" (Treasury 2020).⁴² That same release promised greater scrutiny for firms that took more than \$2 million in PPP.

The initial decision to allocate funds on a first come first serve basis was made by the Treasury Department. After the initial round of PPP funding provided in 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. 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 assets of under \$10 billion) and community development financial institutions (CDFIs) to allocate. This decision reflected Congress's belief that smaller banks were more likely to be the conduits to reach these communities.

³⁷ Schweitzer, M. (May 27, 2021) "How Well Did PPP Loans Reach Low- and Moderate-Income Communities?" Federal Reserve Bank of Cleveland. <https://www.clevelandfed.org/newsroom-and-events/publications/economic-commentary/2021-economic-commentaries/ec-202113-reach-of-ppp-loans-in-lmi-communities.aspx#U2>

³⁸ Cowley, S. and Flitter, E. (April 22, 2020) "Banks Gave Richest Clients 'Concierge Treatment' for Pandemic Aid" New York Times. <https://www.nytimes-com.dartmouth.idm.oclc.org/2020/04/22/business/sba-loans-ppp-coronavirus.html>

³⁹ Liu, S. and Parilla, J. (September 17, 2020) "New data shows small businesses in communities of color had unequal access to federal COVID-19 relief" Brookings. <https://www.brookings.edu/research/new-data-shows-small-businesses-in-communities-of-color-had-unequal-access-to-federal-COVID-19-relief/>

⁴⁰ Gandel, S. (April 20, 2020) "Paycheck Protection Program billions went to large companies and missed virus hot spots" CBS. <https://www.cbsnews.com/news/paycheck-protection-program-small-businesses-large-companies-coronavirus/>

⁴¹ Hansen, S. (Apr 29, 2020) "Potbelly, Shake Shack, Axios: Here Are All The Companies Returning PPP Money After Public Backlash" Forbes. <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=7cb91aa07eao>

⁴² Mnuchin, S. and Carranza, J. (April 28, 2020) "Joint Statement by Secretary Steven T. Mnuchin and Administrator Jovita Carranza on the Review Procedure for Paycheck Protection Program Loans" Treasury. <https://home.treasury.gov/news/press-releases/sm991>

Initial research has shown the reliance on the financial system resulted in racial bias in allocation of funding, and that focusing on bank size was not an effective solution. Howell, Kuchler, et. al. 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 (Howell, Kuchler, et. al. 2021)⁴³. 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 counter productive. The study did indicate FinTech firms were more successful in reaching minority owned firms. However, other work indicated that FinTech firms had their own issues in processing PPP applications, approving significantly more fraudulent loans (Griffin, Krueger, Mahajan, 2021)⁴⁴.

Bisecting players in the financial system to allocate funding to specific subsections of the population is further reliance on banks, credit unions and other credit providers to implement public, fiscal policy. Congress could have written into law different criteria for the loans, targeting smaller companies by prioritizing smaller dollar loans. Congress could have instructed the Treasury Department to achieve different aims in providing the funding such as prioritizing reaching areas of concentrated poverty, or reaching minority owned businesses directly. Congress may not have chosen this route, in part, because of distrust with the current Treasury Department as the House of Representatives Select Subcommittee on the Coronavirus blamed Treasury for failing to reach these populations (Committee Report 2020).⁴⁵ Instead, Congress chose to prioritize certain types of financial institutions with the belief that those institutions would allocate funding differently.

International Systems Differed

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 percent of salary (up to a cap) and supported just over 8.8 million workers (JD Supra 2021).⁴⁶ When CJRS ended around 4 million workers were still receiving benefits (Guardian 2021).⁴⁷ 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 percent when workers were out of work longer, and eventually reaching 80 percent of lost wages (IMF 2020)⁴⁸. Germany also set aside 25 billion Euros for small businesses beyond worker salaries, but tied eligibility to a

⁴³ Howell, Kuchler, Snitkof, Stroebel, Wong, Racial Disparities in Access to Small Business Credit: Evidence from the Paycheck Protection Program, October 2021, papers.ssrn.com/sol3/papers.cfm?abstract_id=3939384

⁴⁴ Griffin, Kruger, Mahajan, Did FinTech Ledners Facilitate PPP Fraud? October 2021, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3906395

⁴⁵ Select Subcommittee on the Coronavirus Crisis (October 16, 2020) “New PPP Report Shows Trump Administration And Big Banks Left Behind Struggling Small Businesses” <https://coronavirus.house.gov/news/press-releases/new-ppp-report-shows-trump-administration-and-big-banks-left-behind-struggling>

⁴⁶ Dent, N. (October 25, 2021) “End of the UK Furlough Scheme – What’s Next for Employers” JD Supra. <https://www.jdsupra.com/legalnews/end-of-the-uk-furlough-scheme-what-s-2343512/>

⁴⁷ Partington, R. (February 3, 2021) “The UK’s COVID-19 unemployment crisis in six charts” The Guardian. <https://www.theguardian.com/business/2021/feb/03/the-uks-COVID-19-unemployment-crisis-in-six-charts>

⁴⁸ IMF Country Focus, *Germany’s Short-time work benefit*, June 2020, <https://www.imf.org/en/News/Articles/2020/06/11/na061120-kurzarbeit-germanys-short-time-work-benefit>

demonstrated drop in revenue and worker payroll (Finance Ministry 2020).⁴⁹ Managerial salaries were expressly excluded. The funds were paid out by each Land (state government) directly to businesses that demonstrated meeting the criteria. Japan engaged in a similar system to Germany using existing wage subsidy programs and increasing the governments share of wages to 90 percent for small and medium sized businesses and enlarging coverage to part-time workers, with the requirement that workers be retained (Goodman, 2020)⁵⁰. Japan also engaged in credit support with 135 trillion yen in loan guarantees and support through public and private financial institutions, which resulted in record low corporate bankruptcies despite COVID-19's economic impact (ibid).

America's unemployment rate rose far more sharply than other countries (see chart 2). Early studies of the PPP have raised questions as to its effectiveness. One study from Chetty et. al. found that PPP loans, "increased employment at small businesses by only 2%, implying a cost of \$377,000 per job saved" (Chetty et al., 2020).⁵¹ Other studies found questions regarding the lack of targeting of impacted businesses (Granja et al., 2021).⁵² If correct this would be a very costly program 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. These 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).⁵³ Further international comparison study is needed given structural differences in labor market laws and employment rigidity, but at first glance the differing approaches and results remain striking.

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 \$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 remains able to support the real economy, providing short-term liquidity, and, now, a meaningful portion of the fiscal policy response to assist a wide range of

⁴⁹ Federal Ministry of Finance "German government launches temporary aid scheme as part of coronavirus stimulus" Accessed November 22, 2021. <https://www.bundesfinanzministerium.de/Content/EN/Standardartikel/Topics/Priority-Issues/Articles/2020-07-08-temporary-aid-scheme-launched.html>

⁵⁰ Goodman, Matthew "Comparing U.S., Japanese, and German Fiscal Responses to COVID-19" CSIS, October 2020 www.csis.org/analysis/comparing-us-japanese-and-german-fiscal-responses-covid-19

⁵¹ Chetty, R., Friedman, J., Hendren, N., and Stepner, M. (November 2020) "How did COVID-19 and Stabilization Policies Affect Spending and Employment? A New Real-time Economic Tracker Based on Private Sector Data" NBER. https://www.nber.org/system/files/working_papers/w27431/w27431.pdf

⁵² Granja, J., Makridis, C., Yannelis, C., and Zwick, E. (September 21, 2021) "Did the Paycheck Protection Program Hit the Target?" Becker Friedman Institute for Economics at the University of Chicago. <https://bfi.uchicago.edu/working-paper/did-the-paycheck-protection-program-hit-the-target/>

⁵³ Gotbaum, J. (July 20, 2020) "Don't fix the paycheck protection program, replace it" The Brookings Institution. <https://www.brookings.edu/opinions/dont-fix-the-paycheck-protection-program-replace-it/>

assets, companies, and even state and local governments with their ability to navigate the Covid crisis.

Congress did not make the tough choices regarding which types of entities would or would not receive aid. Instead the CARES Act empowered the Fed to make choices of which businesses are eligible for credit, which company's bonds can be purchased, and which municipality can directly receive credit and at what price. The Fed had to make a series of choices to implement these programs, inevitably created winners and losers and subject the central bank to a host of new criticisms. Should the Fed buy only highly rated corporate debt or should it included bonds that were investment grade at issuance but had been downgraded to junk (so called 'fallen angles')? Which local government municipal debt should be eligible? These decisions had economic and political consequences. For example, the original set of municipalities deemed eligible for Fed assistance avoided any of the most heavily African American cities and appeared so statistically correlated to race that it might have failed the Fed's own test for racial bias in commercial lending (Klein and Busette 2020).⁵⁴

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 monetary policy and aggressively using emergency authority to stabilize short-term markets such as money market mutual funds, why did Congress lay such a daunting new challenge on its shoulders? Several answers are possible. Starting with the reality that policy, like life, is not about abstractions but alternatives. Perhaps Congress felt it didn't have a better alternative.

As Neil Komesar has illuminated in his work on the importance of "deciding who decides," institutional choice is always relative (Komesar, 1994).⁵⁵ 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 the challenges it is now being asked to help solve, 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 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 core part of the line of first defense for providing fiscal support to businesses in a recession.

Understanding how the Fed came to these new tasks does not necessarily support the conclusion that the Fed or the U.S. system of governance generally is 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. We therefore 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

⁵⁴ Klein, A. and Busette, C. (April 14, 2020) "Improving the equity impact of the Fed's municipal lending facility." Brookings. <https://www.brookings.edu/research/a-chance-to-improve-the-equity-impact-of-the-feds-municipal-lending-facility/>

⁵⁵ Komesar, Neil K. *Imperfect Alternatives: Choosing Institutions in Law, Economics, and Public Policy*. University of Chicago Press, 1994.

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 increasing role placed upon the Fed in both the last two recessions, the current Covid induced recession of 2020 and the so-called Great Recession stemming from the global financial crisis of 2008, it may well be that this is likely a new and growing role for America's central bank. One point is simple a point. Two points make a line and from a line there is a trend.

How we got here

The Limits of Congress

Article I of the Constitution gives Congress the power of the purse, that is, the authority to tax and spend. Perhaps Congress's greatest authority, it had guarded this right zealously,⁵⁶ including the ability to direct fiscal support to fight recessions (House Committee on the Budget, 2020). During the "Great Recession," for example, Congress began in early 2008 by sending stimulus payments to all Americans. As the recession worsened in 2009 it passed the American Recovery Act (ARRA) pumping over \$800 billion through tax cuts to households, direct aid to state and local governments, and other highly specified programs. (Contrary to some narratives less than 10% of the Recovery Act went to fund infrastructure). This was nothing new. During the 2001 recession Congress sent checks to households as part of a massive tax cut and in 1993 debated but ultimately failed to pass a fiscal stimulus package.

To be sure, 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 cabinet agencies, preserving democratic accountability. During the financial crisis of 2008, 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 throws of the Bush Presidency, thirty days before an election, and was passed by a Democratic Congress. Even then, Congress still empowered the outgoing Treasury Secretary to implement the Troubled Asset Relief Program (TARP) 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 Bear Stearns and AIG, relying on 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 (12 U.S.C. 343)⁵⁷ which grants the Fed broad emergency authority to

⁵⁶ House Committee on the Budget (April 2, 2020) *Protecting Congress' Power of the Purse and the Rule of Law*. <https://budget.house.gov/publications/report/protecting-congress-power-purse-and-rule-law>

⁵⁷ *Federal Reserve Act* (1913) 12 U.S.C. 343

lend to almost anyone. The Fed and Treasury were creative in stretching its 13(3) authority (Wallach 2015)⁵⁸ while others including Mehra (2011) argue they were more than being creative, the Fed exceed its legal authority.⁵⁹ The non-partisan Congressional Research Service uses the term ‘unorthodox’ (CRS 2020)⁶⁰ in describing the various 13(3) facilities set up using the moniker ‘Maiden Lane’ which is the street the Federal Reserve Bank of New York is located on in but in effect were rescues of Bear Stearns and AIG.

After EESA, Treasury took centerstage. Using the broad discretion Congress provided in EESA, Treasury designed the program to inject capital into banks, provide assistance to struggling homeowners, and eventually rescue domestic auto companies. While history shows these outcomes with varying degrees of success, it is important to recall two facts as they occurred in real time. First, the original proposal by the Treasury Department was only for authority to purchase assets through auction (Paletta and Solomon, 2008)⁶¹. Had the original proposal from Treasury Secretary Paulson been enacted into law, Treasury would have lacked legal authority to inject capital into banks. It was Congress that modified the proposal to allow for capital injections, the path ultimately taken. Second, Congress attempted to legislate the terms of the auto rescue outside of the funds set aside in EESA. The Democratically controlled Congress did reach an agreement with the outgoing Bush Administration, with legislation passing the House (Herszenhorn and Sanger, 2008).⁶² However, Senate Republicans objected, mounting a filibuster effectively killing the agreement. The new Obama Administration then decided to use EESA funds to rescue the auto companies (“Auto bailout” 2013).⁶³

Congress also set up meaningful mechanisms for ongoing oversight of the emergency authority it vested in Treasury, empowering three different bodies, including two arms of Congress (GAO and the Congressional Oversight Panel) to carefully follow every dollar and choice Treasury made. By vesting Treasury with authority suited to the challenge at hand, Congress reduced pressure on the Fed to continue to stretch the bounds of its lawful authority or institutional capacity. This was welcomed by the Fed, as then Fed Chairman Bernanke told Congress at the hearing in which TARP was first proposed: “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.”⁶⁴

⁵⁸ Wallach, P. To the Edge: Legality, Legitimacy, and the Responses to the 2008 Financial Crisis. Brookings, 2015.

⁵⁹ Alexander Mehra, “Legal Authority in Unusual and Exigent Circumstances: The Federal Reserve and the Financial Crisis,” University Of Pennsylvania Journal of Business Law, vol. 13, no. 1, p. 235. This article also presents arguments that the Fed nevertheless exceeded its legal authority for some transactions under Section 13(3).

⁶⁰ Congressional Research Service (March 27, 2020) “Federal Reserve: Emergency Lending,” page 17 <https://sgp.fas.org/crs/misc/R44185.pdf>

⁶¹ Paletta, D., and Solomon, D. (September 24, 2008) “Paulson, Bernanke Describe Mechanics of Auction Proposal” The Wall Street Journal. <https://www.wsj.com/articles/SB122221614525469481>

⁶² Herszenhorn, D., and Sanger, D. (December 19, 2008) “Bush approves \$17.4 billion auto bailout” The New York Times. <https://www.nytimes.com/2008/12/19/business/worldbusiness/19iht-20autoB.18826530.html>

⁶³ “Auto bailout saved 1.5 million U.S. jobs” (December 9, 2013) Reuters. <https://www.reuters.com/article/autos-bailout-study/auto-bailout-saved-1-5-million-u-s-jobs-study-idUSL1NoJOoXU20131209>

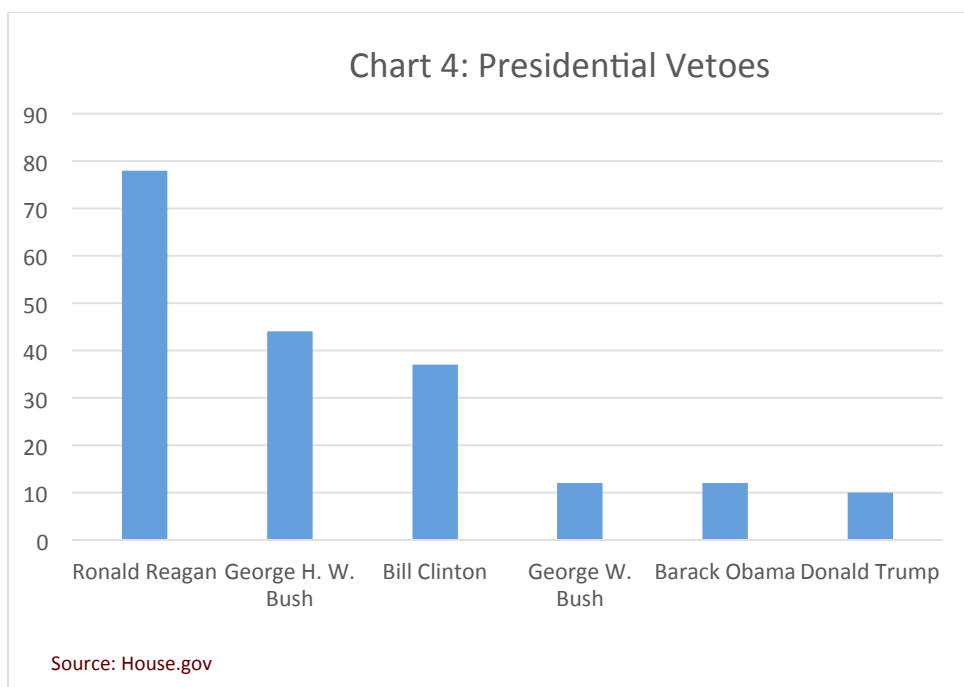
⁶⁴ Answer to question from Sen. Akaka: <https://www.govinfo.gov/content/pkg/CHRG-110shrg50414/html/CHRG-110shrg50414.htm>. Full exchange:

Senator Akaka. Chairman Bernanke, should we worry about the Treasury being given the ability to move \$700 billion in and out of the economy and the potential impact that this could have on monetary policy, and also the political independence of the Federal Reserve?

Mr. Bernanke. I don't see any problem in terms of macroeconomics, only a positive effect in terms of stabilizing the financial system. The Federal Reserve would like to get out of dealing with some of these crises we have been

Covid Strikes at a Different Time

When Covid struck, control of Congress was divided between the parties, with Democrats controlling the House with a substantial majority 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).⁶⁵ It requires they come to a bicameral, bipartisan agreement, often making it more difficult to get legislation passed unless a bill has something in it for both parties. In theory divided government may make it more possible for Congress to enact legislation over a Presidential objection, given the requirement for bipartisan consensus before anything reaches the President’s desk for signature or veto. However, recent political congruence within parties has in practice meant legislation rarely is agreed to by the President’s own party without the President’s agreement. This can be seen by the decline in the number of Presidential vetoes as shown in Chart 4 (note Presidents George H.W. Bush and Donald Trump only served one term).



Moreover, these thresholds must be satisfied in an environment where politicians are accountable to an increasingly polarized electorate. A Pew survey from 2016 found that the majority of both Republicans and Democrats held not just “unfavorable” but “very unfavorable” views of the other party. This was the first time Pew had such a finding for a survey it has been conducting since 1992. Of the respondents who vote regularly and either volunteer for or donate to campaigns – that is, the very people politicians must appeal to in order to be re-elected -- a full

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.

⁶⁵ Dancey, L., Sheagley, G. (July 24, 2017). *Partisanship and Perceptions of Party-Line Voting in Congress*. <https://journals.sagepub.com/doi/full/10.1177/1065912917722233>

⁶⁶ <https://history.house.gov/Institution/Presidential-Vetoes/Presidential-Vetoes/>

70% of Democrats and 62% of Republicans say they are afraid of the other party (Doherty, Jameson, and Kiley, 2016).⁶⁷

Given these high levels of distrust 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 Trump signed multiple pieces of legislation to respond to COVID-19, including the CARES Act. Further, other aspects of 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.

President Trump signed the CARES Act into law on March 27, 2020 (DeBonis, Kane, and Werner, 2020).⁶⁸ This was one week after California became the first state to issue a stay-at-home order (AJMC, 2020)⁶⁹ and one week before the release of the March unemployment data, which was released Friday, April 3rd. In fact, 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 (BLS, 2020; AJMC, 2021).⁷⁰ This means that Congress acted faster than any automatic stabilizer would have kicked in, which would have required another weeks worth of waiting until the March employment report was released.

Arguments in favor of putting fiscal policy on ‘auto-pilot’ in which fiscal policy is triggered by economic statistics often argue that this is superior because of legislative delays. The Covid recession is unprecedented with job losses in the millions in March and tens of millions in April and the unemployment rate shooting up at a correspondingly unprecedented speed. However, the Covid 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 highly partisanship in an election year.

Congress’s ability to pass legislation with the speed and scale needed to confront the looming crisis has come at a price. The issue here is not just on whether Congress can act, but how the growing partisanship has affected the range of actions it is capable of taking, particularly when speed is of the essence. The decisions regarding which businesses should get fiscal support were inherently ones that would require 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—to Fed, and Treasury, with limited new conditions beyond those already imposed on the Fed’s emergency lending programs. As the New York Times headline described it: “How the Fed’s Magic Money Machine Will Turn \$454

⁶⁷ Doherty, C., Jameson, B., & Kiley, J. (June, 2016). *Partisanship and Political Animosity in 2016*. The Pew Research Center. <https://www.people-press.org/wp-content/uploads/sites/4/2016/06/06-22-16-Partisanship-and-animosity-release.pdf>

⁶⁸ DeBonis, M., Kane, P., and Werner, E. (March 27, 2020) “Trump signs \$2 trillion coronavirus bill into law as companies and households brace for more economic pain” The Washington Post. <https://www.washingtonpost.com/us-policy/2020/03/27/congress-coronavirus-house-vote/>

⁶⁹ AJMC (January 1, 2021) “A Timeline of COVID-19 Developments in 2020” <https://www.ajmc.com/view/a-timeline-of-covid19-developments-in-2020>

⁷⁰ These are revised figures. Unrevised data still showed a strong gain at the time.

Billion into \$4 Trillion” (Smialek, 2020).⁷¹ 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 policy 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 powerful levers 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 2008 episode and efforts to implement the CARES Act reveals, the central bank is not always speedy. This is reflected in a close look at the process of implementing the CARES Act. The chart below (Figure 1) 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 (PPP) and direct stimulus payments to households (EIP) both 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. For programs that directly pay people, this means this impact was more delay. Direct stimulus payments reached 45% of eligible Americans in the quick period mentioned below but another 10% had to wait many more weeks, even by September 5% had not yet received their first payment (Murphy, 2020).⁷² Programs that engage with financial markets may experience the opposite effect, where the announcement itself eases financial tensions/concerns and cause 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 (Amico, Kurakula, and Lee, 2020).⁷³ The re-deployed 2008 credit facilities were also effective soon after announcement. By contrast, the Main Street Lending Program was not only slow to launch, struggled to have much of an impact (Rosalsky, 2020).⁷⁴

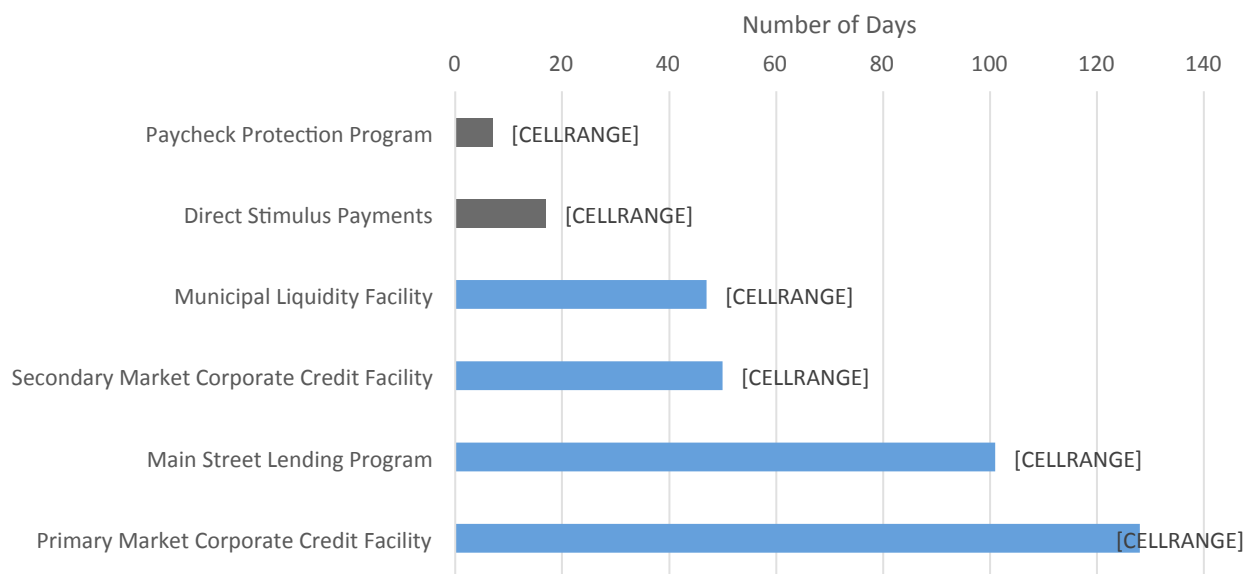
⁷¹ Smialek, J. (March 27, 2020) “How the Fed’s Magic Money Machine Will Turn \$454 Billion Into \$4 Trillion” The New York Times. <https://www.nytimes.com/2020/03/26/business/economy/fed-coronavirus-stimulus.html>

⁷² Murphy, D. (February 17, 2021) “Economic Impact Payments: Uses, payment methods, and costs to recipients” Brookings. <https://www.brookings.edu/research/economic-impact-payments-uses-payment-methods-and-costs-to-recipients/>

⁷³ Amico, S., Kurakula, V., and Lee, S. (May 17, 2020) “Impacts of the Fed Corporate Credit Facilities through the Lenses of ETFs and CDX” Federal Reserve Bank of Chicago <https://www.chicagofed.org/~media/publications/working-papers/2020/wp2020-14-pdf.pdf>

⁷⁴ Rosalsky, G. (October 13, 2020) “Trouble On Main Street” NPR. <https://www.npr.org/sections/money/2020/10/13/922199563/trouble-on-main-street>

Chart 5 Implementation Speed of CARES Act Facilities



Sources: [cnbc.com/2020/04/13/first-coronavirus-stimulus-checks-deposited.html](https://www.cnn.com/2020/04/13/first-coronavirus-stimulus-checks-deposited.html);
<https://www.federalreserve.gov/econres/feds/files/2021035pap.pdf>
<https://www.federalreserve.gov/econres/notes/feds-notes/uptake-of-the-main-street-lending-program-20210416.htm>

Direct Aid: Relying on 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, formally known as Emergency Impact Payments (EIP), were structured as refundable tax cuts with the Treasury Department's tax agency (IRS) instructed to proactively send these payments directly to eligible Americans. Most Americans were eligible (90 percent according to Tax Policy Center) with benefits on the order of (insert benefits) (Gleckman, 2020).⁷⁵

Three conditions were necessary to send people their money quickly and in a usable format:

- 1) Americans needed bank accounts to receive the funds;
- 2) The Treasury Department needs to know the information for those accounts;
- 3) The payment system has to be able to send the money quickly.

All three of these issues posed varying degrees of problems, although the second was the largest problem (Klein 2020). While approximately 95 percent of American families have a bank account (FDIC 2020),⁷⁶ the Treasury Department only had information for a much smaller share. In addition, some of that information the Treasury Department had was inaccurate. Estimates

⁷⁵ Gleckman, H. (March 26, 2020) "How Will The Coronavirus Stimulus Bill's Individual Payments Work?" Tax Policy Center. <https://www.taxpolicycenter.org/taxvox/how-will-coronavirus-stimulus-bills-individual-payments-work>

⁷⁶ Federal Deposit Insurance Corporation (October 19, 2020) "How America Banks: Household Use of Banking and Financial Services" <https://www.fdic.gov/analysis/household-survey/index.html>

ranged that 20 million or more taxpayers had used temporary ‘shell’ bank accounts structured as part of loans set up by tax preparation companies to expedited prior year tax refunds (NCLC 2020).⁷⁷ The result was that only 45 percent of eligible Americans received their EIP in the first wave of disbursement and even four months later ten percent of Americans had not yet received their EIP payment (Murphy 2021).⁷⁸

America’s lack of a real-time payment system resulted in further delays. Most of the rest of the developed major economies developed real-time payment systems with Japan being the first in the 1970s and the European Union finalizing a cross-EU system only a few years before COVID struck (Klein 2018).⁷⁹ To be clear, private banks and financial technology (FinTech) companies have developed real-time payment systems, including Paypal, Zelle, Venmo, and The Clearinghouse’s RTP system. However, the Federal Reserve has not. The Fed continues to use its automated clearing house (ACH) system that operates on a batch system running periodically during non-holiday weekdays (Klein and Selgin). The Federal Reserve committed in 20XX to build a real-time payment system, FedNow, but that is not expected to be operational until 2023 or 2024.

The Treasury Department chose to send all EIP payments through the Fed’s ACH system (Fed, 2020).⁸⁰ This choice resulted in recipients of EIP funds experiencing 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 (cite Corey Stone). Estimates of total overdrafts in the U.S. are as high as \$35 billion (cite Moebs). A handful of financial institutions and FinTechs offered consumers earlier access to their EIPs (for an example see Chime) (Chime, 2021).⁸¹

For the first round of EIPs, the Treasury Department was only able to provide electronic payment to approximately three-quarters of Americans. The remaining quarter mostly received paper checks, with under five percent 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).⁸² To avoid this delay some consumers chose to use check cashers who provide immediate cash in exchange for a fee (often a flat fee of \$20 or a certain percentage of the check, sometimes around 1 percent 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 (Murphy 2021).

⁷⁷ National Consumer Law Center (January 2020) “2020 Tax Season: More Delays and Higher Costs for Struggling Taxpayers” <https://www.nclc.org/images/pdf/taxes/rpt-tax-time-jan2020.pdf>

⁷⁸ Murphy, D. (February 17, 2021) “Economic Impact Payments: Uses, payment methods, and costs to recipients” Brookings. <https://www.brookings.edu/research/economic-impact-payments-uses-payment-methods-and-costs-to-recipients/>

⁷⁹ Klein, A. (December 14, 2018) “Implementing a real time payment system” The Brookings Institution https://www.federalreserve.gov/SECRS/2018/December/20181221/OP-1625/OP-1625_121418_133277_428769914666_1.pdf

⁸⁰ Fed (August 6, 2020) “Federal Reserve announces details of new 24x7x365 interbank settlement service with clearing functionality to support instant payments in the United States” Board of Governors <https://www.federalreserve.gov/newsevents/pressreleases/other20200806a.htm>

⁸¹ “Stimulus payments and Chime” Chime, Accessed November 22, 2021, <https://www.chime.com/stimulus-payments-and-chime/>

⁸² Expedited Funds Availability Act, 12 U.S. Code § 4002 (1987)

The Decline of the Administration

The Administration as an institution capable of bridging partisan divides has not fared well in recent years. Like Congress, it has become increasingly embroiled in partisan politics facing difficulties gaining broader public support (Jacobson, 2007).⁸³ Overall, following a trend already in the making, “trust in government” hit a new low during the Obama administration, driven largely by Republicans (NPR, 2010).⁸⁴ Two years into Obama’s term, a full 30% of Republicans were “angry” at the federal government and 43% saw it as a threat. The disdain that many on the right had for President Obama persisted even after he left office (Bovard, 2018).⁸⁵ These partisan trends have persisted despite the change in administration, with Democrats far less likely than their Republican peers to approve of Trump. The election of President Biden has not reversed this, witness the decline in consumer confidence by Republicans who now see an economy with unemployment rate of 4.6 percent as worse than that during the peak of the Great Recession (Weisenthal 2021).⁸⁶

These dynamics were in full display during the response to COVID. Treasury Secretary Mnuchin one of few cabinet officials to remain through the entire Trump Administration, despite record turnover of senior officials in this Administration (Tenpas, 2020),⁸⁷ faced concerns that any money given over to the discretion of Treasury Secretary would operate as a “slush fund” that Mnuchin and Trump could use to reward favored firms and industries (Belz and Wessel, 2020).⁸⁸

Given that issues of trust have infected the relationship between Congress and the White House, it is worth bearing in mind just how recently Congress was willing to hand far more authority to the President and his team. The 2008 financial crisis saw a Democratic Congress repeatedly trust the Republican executive branch with new legislative authority including administering the TARP program as well as new legal authority over the housing giants Fannie Mae and Freddie Mac. Similarly, in 2001 after 9/11, a divided Congress again empowered the Executive Branch with new authorities both domestic and abroad.

In both those instances, though, the Administration was in the lead. It was the President and who went to Congress and asked for the power to address the challenge at hand. It was in response to an Administration initiative that the President was granted that authority in a bipartisan fashion. Congress played a meaningful role asking questions, adding conditions and providing additional the additional features needed to secure passage, but the core proposals came from the Administration. That has yet to happen this time around. The Administration has not offered any grand vision, nor has it asked for broad authority to execute a rescue of the economy. Through tweets and in press conferences, President Trump has expressed plenty of opinions, and he even has attempted to use executive orders to push pieces of what he wants to see done, but neither he nor his top officials have sought to take the reins. There was no grand

⁸³ Jacobson, G. (2007) *A Divider, Not a Uniter: George W. Bush and the American People*

⁸⁴ NPR. (April 18, 2010). *In Depth: Americans' Distrust of Government*.
<https://www.npr.org/templates/story/story.php?storyId=126002349>

⁸⁵ Bovard, J. (September 13, 2018). *Barack Obama's Return Just Reminds Us How He Fueled American Distrust*.
<https://mises.org/power-market/barack-obamas-return-just-reminds-us-how-he-fueled-american-distrust>

⁸⁶ Weisenthal, J. (November 15, 2021) “Republican Consumer Sentiment Is Worse Today Than It Was During The Height Of The Financial Crisis” Bloomberg. <https://www.bloomberg.com/news/articles/2021-11-15/republican-consumer-sentiment-is-worse-today-than-it-was-during-the-height-of-the-financial-crisis?srnd=oddlots&sref=vuYGisLZ>

⁸⁷ Tenpas, K. D. (July 2020). *Tracking Turnover in the Trump administration*. The Brookings Institute.
<https://www.brookings.edu/research/tracking-turnover-in-the-trump-administration/>

⁸⁸ Belz, S. & Wessel, D. (March 24, 2020). *What is the Exchange Stabilization Fund? And how is it being used in the coronavirus (COVID-19) crisis?* The Brookings Institute. <https://www.brookings.edu/blog/up-front/2020/03/24/what-is-the-exchange-stabilization-fund-and-how-is-it-being-used-in-the-coronavirus-COVID-19-crisis/>

alternative vision for how to implement an emergency rescue as part of the Administration's initial proposal for the CARES Act. As much as the issues around trust and partisanship, this may help to explain why the Treasury Secretary is not the clear leader in engineering the country's economic containment efforts (Blinder, 2000).⁸⁹

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 have a tradition of taking credibility and commitment seriously. Alan Blinder established as much using surveys by central bankers back in the 1990s, and most signs suggest that central bankers have continued to pay heed to these considerations in the intervening decades (Blinder 2000).⁹⁰ 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.

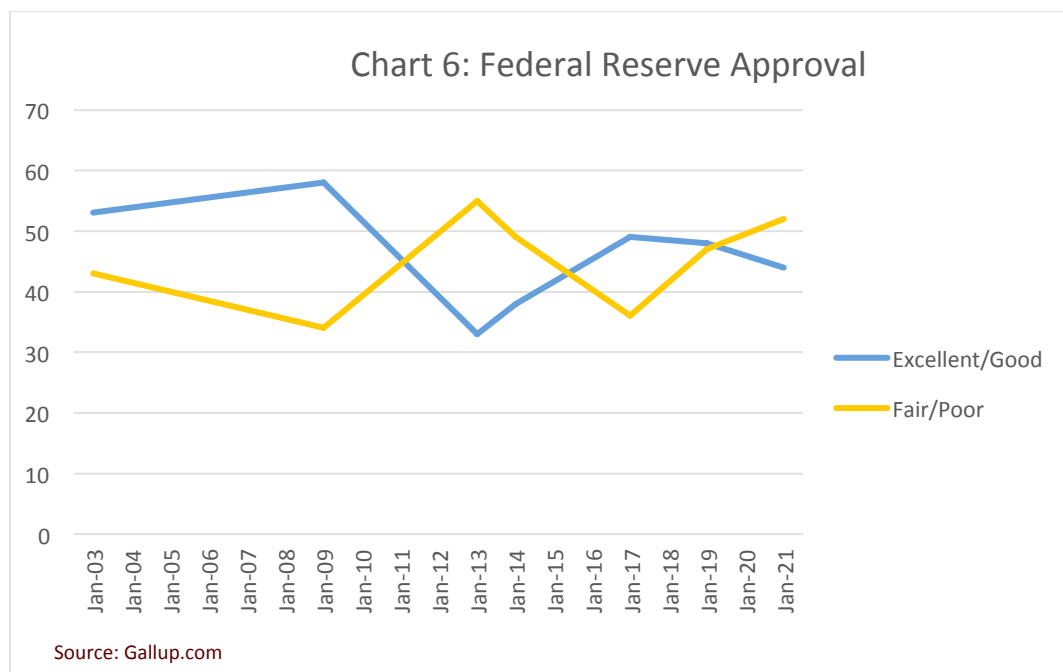
The economic collapse of 2008 and the Fed's efforts to protect key financial institutions and structures did incite a meaningful backlash. The 2008 crisis revealed meaningful shortcomings in the Fed's supervision of the largest banks, but it was the ways that the Fed intervened that likely created the most controversy. The decisions to rescue investment bank Bear Stearns and insurance giant AIG seemed to many Americans as salient examples of Wall Street coming out ahead, even as Main Street—homeowners and workers across the country—suffered mightily. There was a meaningful decline from the high levels of public support that the Fed had built up in the years before the crisis. Additionally, the Dodd-Frank Act 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 more significant changes advocated by some across the political spectrum (e.g. Senators Sanders (I-VT) and 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,⁹¹ 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). Ultimately the Great Recession was not another Depression, avoiding an outcome that could have resulted in a substantial loss of faith in the Fed.

⁸⁹ The language of the CARES Act appears to give much of the new authority to Treasury, which must authorize each of the Fed's 13(3) facilities in addition to the size of the first-loss position that Treasury will take. In practice, however, Chair Powell has become the face of many of these programs. This in part reflects the fact that each of the new facilities must be created and run by Federal Reserve Banks, so it is the Fed, not Treasury, that is responsible for operationalizing each of the facilities. The Treasury can make recommendations and impose limitations, but the Fed is the one running the programs.

⁹⁰ Blinder, A. S. "[Central-Bank Credibility: Why Do We Care? How Do We Build It?](#)," *American Economic Review*, 2000, v90(5,Dec), 1421-1431.

⁹¹ Sherman, M. (July, 2009). *A Short History of Financial Deregulation in the United States*, Center for Economic and Policy Research. Center for Economic and Policy Research. <https://www.cepr.net/documents/publications/dereg-timeline-2009-07.pdf>



In subsequent years, the Fed emerged with its reputation in tact and possibly strengthened (Gallup, 2021).⁹² 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 (Schidman 2011).⁹³

Entering the Covid 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. As a result, even though Trump chose to elevate Powell to chair the Fed, Powell is perceived as independent of him. Powell was originally appointed to the Fed Board by President Obama, and had previously been appointed by George H. W. Bush to serve as the Under Secretary of the Treasury for Domestic Finance. Among other roles, he had worked at the Bipartisan Policy Center prior to his original nomination to the Fed. Senator Sherrod Brown (D-OH) the lead Democrat on the Senate Banking Committee at one point gave Chairman Powell the highest compliment possible, saying he “is a man of integrity.” (Mohsin and Torres, 2020)⁹⁴

Powell’s decisions since assuming the chairmanship have further added to his 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 or to give in to the President’s public attacks on him, going so far as to

⁹² Gallup (September 2021) “How would you rate the job being done by ... ? Would you say it is doing an excellent, good, only fair or poor job?” <https://news.gallup.com/poll/27286/government.aspx>

⁹³ Schnidman, E. (June 19, 2011) “Why the Federal Reserve is Dodd-Frank’s Big Winner” Harvard Business Law Review <https://www.hblr.org/2011/06/why-the-federal-reserve-is-dodd-franks-big-winner/>

⁹⁴ Mohsin, S & Torres, C. (June 15, 2020). *Fed Adapts as Congress Urges More Credit Risk on Corporate Loans*. Bloomberg. <https://www.bloomberg.com/news/articles/2020-06-16/fed-adapts-as-congress-urges-more-credit-risk-on-corporate-loans>

call him a “Traitor” (Luce, 2019),⁹⁵ seem to have helped Powell come across to others as an independent and honest broker (see Yglesias, 2019 or Tett 2019 for examples).⁹⁶ (Yglesias, 2019)⁹⁷

In addition to its esteem, the Fed had proven its eagerness to minimize the economic harms inflicted by COVID-19 in both the real economy and financial markets. It acted more quickly than most other central banks in responding to the COVID-19 crisis. By the time the CARES Act had passed, the Fed had already slashed interest rates, committed to effectively unlimited quantitative easing, and announced a plan to support both public debt markets and new loans for somewhat smaller businesses.

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 (PPP) operated through the Treasury Department. While the time horizon the economy would be impacted by COVID was repeatedly under-estimated, it was generally appreciated that in the advent of an immediate shut-down longer-term decisions on corporate investment and borrowing would also be severely impacted, absent government intervention. The need to provide a longer-term creditable commitment is important when attempting to fix longer-term markets including bank lending and issuance of multi-year debt.

Additionally, 2020 was a Presidential election year: the President, every member of the House of Representatives, and one-third of the country’s senators stand for election in November. The outcome of these elections was quite unclear as evidenced by the narrow results. By contrast, Chairman Powell’s term lasted until 2022. Moreover, Fed Chairs have been frequently re-appointed, 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.

A related benefit that the Fed offers is its relative insulation from the less savory aspect of the political process, the potential for politicians to be corrupted. Concerns that President Trump may be engaged in crony capitalism, and that he may exert pressure on those directly accountable to him to exercise any fiscal discretion in ways that benefit Trump, family members, or friends have plagued Trump throughout his administration. But such challenges are not unique to Trump, or the United States. And even apart from concerns about individual corruption, there are growing concerns voiced by Lawrence Lessig and others that money and

⁹⁵ Luce, E. (August 24, 2019). *Donald Trump’s war on the Federal Reserve*. The Financial Times. <https://www.ft.com/content/fb32cd68-c4c3-11e9-a8e9-296ca66511c9>

⁹⁶ 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.” Do not underestimate Jay Powell in a fight with Trump, Financial Times, Oct. 31, 2019, at <https://www.ft.com/content/cdb3edb4-fbc2-11e9-a354-36acbbb0d9b6>.

⁹⁷ Yglesias, M. (August 29, 2019) “Donald Trump’s escalating war of words with Fed Chair Jay Powell, explained” Vox, <https://www.vox.com/policy-and-politics/2019/8/29/20836652/donald-trump-jay-powell-fed-feud>

interest groups have corrupted the institutional legitimacy of Congress, raising concerns that industries that give generously during election time may disproportionately benefit should Congress retain for itself a greater role in doling out fiscal funds (Lessig, 2009).⁹⁸

The insulation from corruption or the perception of corruption is also a function of the role the Fed has played. Monetary policy can involve corruption in the case of leaked information, a problem which the Fed faced over the last decade.⁹⁹ Additional concerns regarding the Fed's role as a financial regulator have grown, particularly with its relationship with some of the former investment banks that now are regulated by the Fed such as Goldman Sachs (Pierson and Raymond, 2015).¹⁰⁰ Further expansion of the Fed's mission into purchasing corporate debt comes with new concerns regarding real or perceived conflict of interests, including with the selection of BlackRock asset management firm as its advisor (da Costa, 2020).¹⁰¹

Expanding the Fed's role in policy will result in new challenges in warding against corruption and the perception of corruption. This problem has come to greater light with the trading scandals involving the Presidents of the Federal Reserve Regional Banks of Boston and Dallas (Derby, 2021).¹⁰² Both Presidents traded in financial assets during the Covid 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).¹⁰³ Yet when the trades of both Presidents were publicly revealed (more than a year after they occurred), both Presidents resigned. The Fed Board undertook an unprecedented ethics review, conducted in an expedited 45 day time 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).¹⁰⁴

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-limits 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.

Nonetheless, administration changes do bring policy uncertainty. One function of elections is to enable the broader public to bring about a change if they do not like the policies that an elected official is pursuing. The same lynchpin that establishes legitimacy brings with it

⁹⁸ Lessig, L. (October, 2009). *Republic: Lost*. Twelve.

⁹⁹ This particular incident resulted in the abrupt resignation of the Richmond Federal Reserve Bank President after an FBI inquiry that followed an insufficient internal investigation (Appelbaum, B. (April 4, 2013). *Richmond Fed President Resigns, Admitting he Violated Confidentiality*. The New York Times. <https://www.nytimes.com/2017/04/04/business/lacker-leak-fed.html>)

¹⁰⁰ Pierson, B., Raymond, N. (November 5, 2015) *Ex-Goldman employee pleads guilty over N.Y. Fed leaks*. Reuters. <https://www.reuters.com/article/goldman-sachs-fed-crime/ex-goldman-employee-pleads-guilty-over-n-y-fed-leaks-idINKCNoSU32N20151105>

¹⁰¹ da Costa, P. (April 20, 2020) *A Glaring New Conflict of Interest Undermines Public Trust In Federal Reserve*. Forbes. <https://www.forbes.com/sites/pedrodacosta/2020/04/20/a-glaring-new-conflict-of-interest-undermines-public-trust-in-federal-reserve/?sh=7ccda0e6135d>

¹⁰² Derby, M. (September 21, 2021) "Fed Faces Calls to Remove Officials Over Trades They Made While Setting Policy" The Wall Street Journal. <https://www.wsj.com/articles/fed-faces-calls-to-remove-officials-over-trades-they-made-while-setting-policy-11632226559>

¹⁰³ Siegel, R. (October 4, 2021) "Fed says trading activity by top officials under independent review" The Washington Post. <https://www.washingtonpost.com/us-policy/2021/10/04/fed-ethics-powell-warren/>

¹⁰⁴ Horsley, S. (September 28, 2021) "Janet Yellen Says U.S. Could Run Out Of Cash To Pay Its Bills In Less Than 3 Weeks" NPR. <https://www.npr.org/2021/09/28/1041126764/janet-yellen-jerome-powell-debt-ceiling-standoff>

limitations on the nature and extent of commitments any current group of elected officials can make. Congress and executive bodies have a range of tools they can use to make rule changes more difficult but there is always a tradeoff as such limitations can also limit the ability of executive officials to respond to new information or developments. The same flexibility in EESA that allowed Treasury Secretary Paulson to revise his plan to buy toxic assets into a plan to recapitalize banks also ensured that any new Treasury Secretary could steer a very different course. In choosing Timothy Geithner, who as New York Fed President had played a lead role in the early policy response to the crisis, as his first Treasury Secretary, President Obama signaled his commitment to maintain the course, but Congress had no assurance that this would be the case when it passed EESA. In fact, Congress divided the total fiscal authority provided under EESA in a manner that ensured the new Treasury Secretary post-election would have funds at his/her disposal.¹⁰⁵

Taking a step back from the US focus that is the heart of this analysis reveals that some of these dynamics may also be at work in other jurisdictions. The Fed is not the only central bank being asked to do so much. The ECB has been the unexpected savior of the Euro zone for a decade now. In the process, it allowed its balance sheet to continue to grow even as the Fed sought to normalize. It also had to buy up riskier sovereign bonds and corporate bonds, while the Fed could largely constrict its activities to trades and repos involving Treasuries and agency mortgage-backed securities. Japan's central bank too has had to be exceptionally creative in recent years. This suggests at least the possibility of a global shift toward further empowering central banks and tasking them with broader mandates, often as the political fabric of the nation or nations, loosens (Tooze 2018, 2020).¹⁰⁶

Looking Ahead

While the U.S. economy has emerged from the COVID-19 crisis, its full impact on businesses and the legacy of the emergency lending programs that the Fed implemented are still uncertain, 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, in turn, the implications for the Fed, for the structure of the economy that emerges from this crisis, and governance in the years ahead.

What: The Future of the 'Independent Central Bank'.

Placing the Fed in the role of arbiter of emergency credit for the economy 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. In their view, 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, 2020).¹⁰⁷ Just over a week later, Chairman Powell received a very different letter from Senator Ted Cruz (R-TX) and sixteen of his fellow

¹⁰⁵ Emergency Economic Stabilization Act of 2008, 12 US Code Ch. 52 (2008)

¹⁰⁶ Adam Tooze *Crashed: How a Decade of Financial Crises Changed the World* (2018); Adam Tooze, *America Is Ailing—and Leading the World*, *Foreign Policy*, Apr. 1, 2020; Adam Tooze, *Shockwave*, *London Rev. of Book*, Vol. 42 No. 8, April 16, 2020.

¹⁰⁷ 350.org, 350 Butte County, 350 PDX, Amazon Watch, et al. (March 27, 2020). *Letter to Chairman Jerome Powell*. https://d17a0173-b97b-4c08-a2e3-f8ea72c0874b.usrfiles.com/ugd/d17a01_62f18f6e12614fddac890d692066aea8.pdf

Republican senators concerned about the impact of COVID-19 on “[i]ndustries, like the energy and transportation sectors”. They wanted to “urge” the Fed to ensure these companies would be among those able to access federal support (Cruz, 2020).¹⁰⁸ Predictably oil and gas industry leaders weighed in, asking for specific terms as part of the Main Street New Loan Facility (Independent Petroleum Association of America (IPAA), letter to the Fed 2020).¹⁰⁹

How should the Fed adopt policies regarding lending to the oil sector? Those questions are challenging enough on basic economic principles: witness the price of oil briefly reached negative \$45 a barrel in May due to market place dynamics creating illogical outcomes (how is a barrel of oil worth a negative amount?). But now consider that the Fed has to weigh a broader political lens over its decisions, which will impact the future economics of energy production. The future of the fossil fuel industry and the steps it ought to be taking to mitigate the adverse environmental impact of its activities are among the most important and contested policy issues of the day. Because of Congress’s choice, the Fed is now faced with the reality that its decisions will have lasting consequences on this issue.

The Fed’s decision to allow oil and gas companies access provoked the expected backlash. Former Federal Reserve Governor Sarah Bloom Raskin wrote, “The decision to bring oil and gas into the Fed’s investment portfolio not only misdirects limited recovery resources but also sends a false price signal to investors about where capital needs to be allocated.” (Bloom Raskin 2020).¹¹⁰ Nearly 10 percent of the Fed’s corporate bond purchases went to companies identified as part of the oil and gas industry, sparking further backlash (Juhaz 2020).¹¹¹ The Federal Reserve altered initial rules in the program consistent with requests made from the industry (Gelzinis, Madowitz, and Vijay 2020).¹¹² These changes were clear enough to be noticed by the press as one headline put it: “Fed’s expanded lending program opens funding to oil and gas industry” (Beitsch, 2020).¹¹³ Oil industry executives cited the Trump Administration and its oil favorable policies as a reason why the Fed changed its rules. As the IPAA industry trade association stated, “The Federal Reserve’s announcement today sends a clear signal to IPAA members that the Administration is willing to address some of our recommendations for assuring that producers have access to the Main Street Lending Program” (Beitsch, 2020).¹¹⁴ In the end, Oil and gas comprised the fourth largest sector with approximately \$1.5 billion of total volume (Fed 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

¹⁰⁸ Cruz, T. (April 24, 2020) *Letter to Secretary Steve Mnuchin and Chairman Jerome Powell*.

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

¹⁰⁹ Russell, B. (April 15, 2020) “Letter to the Fed” Independent Petroleum Association. <https://www.ipaa.org/wp-content/uploads/2020/04/Main-Street-Lending-Letter-04-15-2020.pdf>

¹¹⁰ Bloom Raskin, S. (May 28, 2020) “Why Is the Fed Spending So Much Money on a Dying Industry?” The New York Times. <https://www.nytimes.com/2020/05/28/opinion/fed-fossil-fuels.html>

¹¹¹ Juhasz, A (August 26, 2020) “Bailout: Billions of Dollars of Federal COVID-19 Relief Money Flow to the Oil Industry” The Sierra Club. <https://www.sierraclub.org/sierra/bailout-billions-dollars-federal-COVID-19-relief-money-flow-oil-industry>

¹¹² Gelzinis, G., Madowitz, M., and Vijay, D. (July 31, 2020) “The Fed’s Oil and Gas Bailout Is a Mistake” Center for American Progress <https://americanprogress.org/article/feds-oil-gas-bailout-mistake/>

¹¹³ Beitsch, R. (April 30, 2020) “Fed’s expanded lending program opens funding to oil and gas industry” The Hill.

<https://thehill.com/policy/energy-environment/495549-feds-expanded-lending-program-opens-funding-to-oil-and-gas-industry>

¹¹⁴ Ibid.

election the Federal Reserve took a series of differing steps on climate, including joining the international Greening of the Financial System (Fed, December 2020)¹¹⁵ and launched a new Climate Supervision Committee (Cox 2021).¹¹⁶

Yet even in an environment where the governance role of central banks in non-authoritarian states is on the ascent, the scale and scope of tasks being laid at the Fed's door in response to COVID-19 is unprecedented, so far as we can tell. It is not just that the Fed is being asked to work closely with Treasury or that it is being tasked with a role in fiscal matters. Although sometimes pushed to the corners of our collective memory, these things have happened before, the very reason for the Fed-Treasury Accord which is so central to the Fed's current independence is that the Fed allowed the Treasury to play such a central role setting Fed policy during World War II. What is striking this time is just how much more the Fed is doing than other Beltway actors. It is not uncommon during crises or war times for the Administration to grab for power. But this time around, we see Congress in one of its most significant maneuvers was to expand the Fed's fire power by placing the \$454 billion of government capital with a desire for the Fed to leverage that to over \$4 trillion in lending.

Around the same time, then Federal Housing Finance Agency Director Mark Calabria suggested he had seen “seen zero [evidence] to suggest that there's a systemic crisis across the nonbank servicers.” Fed Chairman Jay Powell, by contrast, was “watching the situation carefully.” In his assessment, mortgage companies and servicers are “a key market that does support households and consumer spending, really, which is of course 70% of the economy” (Kiernan, 2020).¹¹⁷ This may help explain why Democratic lawmakers were among those asking the Fed to find ways to provide support for mortgage servicers (Dexheimer, 2020).¹¹⁸

Also in April and into May, Congress was deadlocked over whether to provide further federal aid to states or municipalities, which faced mounting expenses and revenue declines from COVID-19. Meanwhile, the Fed was taking action. On April 9, 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 its initial terms would have excluded the 35-most African-American cities in the country and other concerns about the narrowness of its scope (Klein and Busette 2020), the Fed dramatically expanded eligibility and also extended the duration. 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 (cite Schumer and House letters and timing of Fed action).

More striking than the current status of any of these policy issues is the fact that the Fed is being asked to address them at all. Housing policy, support for states and municipalities, changes to allow oil and gas companies access to credit, are all areas that supposedly outside of the

¹¹⁵ Fed (December 15, 2020) “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” Board of Governors. <https://www.federalreserve.gov/newsevents/pressreleases/bcreg20201215a.htm>

¹¹⁶ Cox, J. (March 23, 2021) “Fed sets up panels to examine risks that climate change poses to the financial system” CNBC. <https://www.cnbc.com/2021/03/23/fed-to-examine-risks-climate-change-poses-to-financial-system.html>

¹¹⁷ Kiernan, P. (April 9, 2020). *Fed's Housing-Market Concerns Increase Pressure to Help Mortgage Firms*. The Wall Street Journal. <https://www.wsj.com/articles/feds-housing-market-concerns-increase-pressure-to-help-mortgage-firms-11586471411>

¹¹⁸ Dexheimer, E. (April 15, 2020) “Key Democrats Urge Mnuchin, Powell to Rescue Mortgage Servicers” Bloomberg. <https://www.bloomberg.com/news/articles/2020-04-16/key-democrats-urge-mnuchin-powell-to-rescue-mortgage-servicers>

Federal Reserve's remit.¹¹⁹ 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. Although a capacious reading of the Fed's full employment mandate might well reach these issues, so broad a reading would also reach questions like whether the country should go to war, corporate taxes, and education policy.

These issues matter because the more embroiled the Fed becomes in contentious policy matters, the greater its relative autonomy could come under threat. Although the degree of independence the Fed enjoys is often overstated, it has retained a remarkable ability to act quickly and powerfully without first getting political approval.¹²⁰ For example, March 2020 has already been described as the greatest liquidity crunch of all times. There were numerous signs of market dislocations even in the market for U.S. Treasuries. The Fed's commitment to unlimited quantitative easing, a tool often seen as a means of pushing more accommodative monetary policy at the zero lower bound, was in this instance a very effective tool for stabilizing the Treasury market, and the numerous others influenced by it. This is a prime example of the Fed going "big" and moving quickly, but using familiar tools and in furtherance of a financial stability aim that, at this point, few contest.

The backlash against the Fed following its rescue efforts in 2008 are instructive. For a time, meaningful new restraints on the Fed's powers long advocated by a lonely few, gained substantial bipartisan support (see the 'Audit the Fed' campaign by Senators Paul (R-KY) and Sanders (I-VT)). The Fed's credibility may have been built up over decades, but it remains fragile and subject to change. It is telling that many of those who are most worried about the Fed's entry into helping implement fiscal policy are not Fed critics, but rather, long-time supporters who are worried about its continued ability to move quickly and powerfully as it did in March, prior to the passage of the CARES Act (Cecchetti and Schoenholtz, 2020).¹²¹

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 impact on the corporate landscape and funding costs in ways that could shape the economy for years, if not generations to come.

More broadly than concerns regarding specific industries, such as oil and gas discussed above, are the 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 corporate credit facilities dramatically reduced spreads for investment-grade borrowers. The Fed's subsequent announcement that it would also buy fallen angels and ETFs holding below-

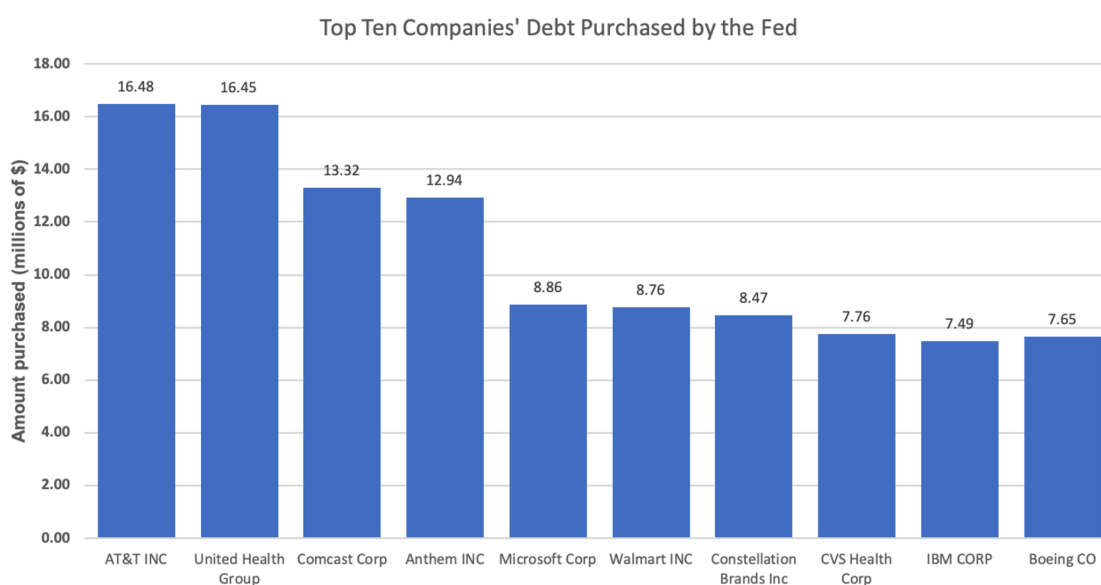
¹¹⁹ Keen Fed watchers will correctly point out that Section 14 of the Federal Reserve Act does empower the Fed to purchase short duration municipal debt. However, the Fed has historically resisted using that section of authority, refusing to do so even when California ran out of money during the 2009 recession and was forced to briefly issue script.

¹²⁰ This does not mean that the Fed operates free from political oversight, just that it can act without first getting permission, and often has. For a thorough account of the relationship between Congress and the Fed, see Binder & Spindel, *The Myth of Independence: How Congress Governs the Federal Reserve* (2017).

¹²¹ Cecchetti, S. & Schoenholtz, K., *The Fed Goes to War: Part 2, Money and Banking Blog*, March 25, 2020, <https://www.moneyandbanking.com/commentary/2020/3/25/the-fed-goes-to-war-part-2> ("We urge the Fed to limit its involvement in the allocation of credit to the private nonfinancial sector.").

investment-grade debt similarly reduced spreads for companies in these categories (Haddad, et. al 2021).¹²²

The Fed followed through on its plan to purchase corporate debt primarily through the creation of a new index it created to track qualifying bonds. As a result, the Fed is now purchasing the bonds of large, robust companies, most of which have not shown the slightest need for government support as shown in Chart 7.



Source: graphics.reuters.com

As a result, even though nonfinancial corporate debt was at an all-time high going into the COVID-19 crisis, it has only increased subsequently. Data from SIFMA shows that “investment grade issuance was strong in March through May (+178% to 2019 levels on average)” and even though the issuance of high yield fell dramatically in March, it too “had recovered well by May (+60% to 2019 levels)” (Kolchin, 2020)¹²³ In short, the largest companies are having little trouble accessing debt markets.

One implication 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. This rise in corporate debt could also lead to further bankruptcies, which courts may or may not be able to handle, depending on just how long and in what form the public health crisis persists.

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 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

¹²² Haddad, V., Moreira, A., and Muir, T. "When Selling Becomes Viral: Disruptions in Debt Markets in the COVID-19 Crisis and the Fed's Response," *The Review of Financial Studies*, Volume 34, Issue 11, November 2021, Pages 5309–5351, <https://doi.org/10.1093/rfs/hhaa145>

¹²³ Kolchin, K. (July 6, 2020). *COVID-19 Related Market Turmoil Recap: Part II. SIFMA insights.* <https://www.sifma.org/resources/research/COVID-19-related-market-turmoil-recap-part-2/>

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. Under the current guidelines, companies with up to 15,000 employees or \$5 billion in annual revenue (as of 2019) are eligible. 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 actually access the financing they need 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 Facility even became fully operational.

In fact roughly half of the entire volume conducted through Main Street occurred in December 2020, just weeks before the facility was ceasing to accept loans (Federal Reserve 2021).¹²⁴ In total Mains Street 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 Main Street. At announcement Main Street was projected for up to \$600 billion in total loans with \$75 billion set aside for potential losses (CRS 2020).¹²⁵ 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 that occurred. According to the Fed's own definitions approximately 30 percent of loans were to industries that were not categorized as 'Covid impacted.' A poor use of pandemic funds to say the least or as the non-partisan Congressional Research Service summarized commentary on Main Street as "too small to be effective" (CRS 2020).¹²⁶

Shifting to small businesses, the Fed created a facility that facilitated implementation of the government's separate paycheck protection program, which was targeted largely to small businesses and those they employee. But it has yet to even propose an emergency lending facility that would otherwise increase access to funding for these companies, despite the fact that recent surveys suggest that just shy of half are concerned about cash flow and the overall health of their businesses. (US Chamber of Commerce Survey – June). Given that businesses with fewer than 500 employees employ 47% of American workers—or, at least did before the Covid 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 facilities for primary market corporate credit (PMCCF) and secondary market corporate credit (SMCCF) were structured with \$75 billion of loss absorbing capital from the CARES Act's \$454 billion which could in theory support up to \$750 billion in purchased (Federal Reserve 2020).¹²⁷ Through the entire existence of these facilities in 2020 the PMCCF purchased zero debt while the SMCCF reported purchasing \$13.9 billion of outstanding corporate bonds and ETFs at its end date in November, 2020 (Federal Reserve,

¹²⁴ Bräuning, F. and Paligorova, T. (April 16, 2021) "Uptake of the Main Street Lending Program" Board of Governors of the Federal Reserve System. <https://www.federalreserve.gov/econres/notes/feds-notes/uptake-of-the-main-street-lending-program-20210416.htm>

¹²⁵ Congressional Research Service (November 4, 2020) "The Federal Reserve's Main Street Lending Program" <https://crsreports.congress.gov/product/pdf/IF/IF11632>

¹²⁶ Ibid.

¹²⁷ Board of Governors of the Federal Reserve System, Primary Market Corporate Credit Facility Term Sheet, July 28, 2020, <https://www.federalreserve.gov/newsevents/pressreleases/files/monetary20200728a9.pdf>; Board of Governors of the Federal Reserve System, Secondary Market Corporate Credit Facility Term Sheet, July 28, 2020, <https://www.federalreserve.gov/newsevents/pressreleases/files/monetary20200728a1.pdf>. 7 Board of Governors of the Federal Reserve System, Secondary Market Corporate Credit Facility

2020).¹²⁸ Combined these two programs purchased 1 tenth of one-percent (13.3 basis points to be precise) of their potential. Put another way, Treasury allocated loss absorption capital equal to 540% of total purchases. These programs 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 (COP, November 2020).¹²⁹

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 (Congressional Oversight Panel, July 2020).¹³⁰ This would mirror experiences from the great financial crisis when announcements of actions by the Federal Reserve eased market tensions (cite). However, the COVID recession was quite different, given that the ceasing of markets was related to the economic consequences of the spread of Covid, rather than the spread of financial contagion.

This is not to suggest that the Fed is unconcerned about these companies. If anything, the opposite seems to be true. 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).¹³¹ 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 who 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 yet further funding advantages to large businesses while leaving smaller ones more vulnerable to bankruptcy, distressed acquisition, or shrinking to survive.

Function and Dysfunction within the Administration and Congress

Even in an environment where the governance role of central banks is on the ascent, the scale and scope of tasks being laid at the Fed's door in response to COVID-19 is remarkable. It is not just that the Fed is being asked to work closely with Treasury or that it is being tasked with a role in fiscal matters. Rather, what is most striking this time around is just how much more the Fed is doing than other Beltway actors.

This is not just about the structure of the CARES Act but the relative roles Secretary Mnuchin and Chairman Powell assumed in public announcements and other discussions regarding the Fed's facilities that use this funding. Although each is authorized and has fiscal support from Treasury, the Fed is still typically the face of these initiatives. The Fed is doing more than serving as a check on the fiscal support become a slush fund for the administration, the Fed is the one coming up with the visions and executing on them. The result has been a picture of Treasury and

¹²⁸ Board of Governors of the Federal Reserve System, Statistical Release H.4.1, Factors Affecting Reserve Balances of the Depository Institutions and Condition Statement of Federal Reserve Banks, Nov. 27, 2020, at n.4, <https://www.federalreserve.gov/releases/h41/>. The SPV is the Corporate Credit Facilities LLC.

¹²⁹ Congressional Oversight Panel (November 30, 2020) "The Seventh Report of the Congressional Oversight Commission" <https://coc.senate.gov/sites/default/files/2020-12/COC%20November%20Report%20with%20Appendix.pdf>

¹³⁰ Congressional Oversight Panel (July 20, 2020) "The Third Report of the Congressional Oversight Commission" https://www.banking.senate.gov/imo/media/doc/COC%203rd%20Report_7.20.20.pdf

¹³¹ Powell, J. H. (June 16, 2020). *Testimony on the Semiannual Monetary Policy Report to the Congress*. The Federal Reserve. <https://www.federalreserve.gov/newsevents/testimony/powell20200616a.htm>

the Fed working hand in hand, or perhaps due to Covid elbow to elbow. This image from a Congressional oversight hearing on CARES Act depicts this reality (AP)



Connecting this to the myriad questions this paper raises about what is at stake in having the Fed play the new and expanded role it has been tasked with, we are skeptical that this question can be answered within the frame so many now put it: Should a central bank do X, Y, or Z? If a pandemic or other exogenous event requires the government to do X, Y, and Z and if other governmental actors don't step up or step up solely to delegate, then it is likely that the Fed and other central banks will continue to have their roles expanded in ways that no one would recommend based solely on their competence or other characteristics.

Broadening the lens momentarily, Europe provides an instructive counterpoint. As noted, the role of the ECB and its effective power has been increasing since the 2008 financial crisis and the sovereign debt crisis that followed. This expansion has been notable given the ECB's seemingly narrower mandate, but can also be explained readily by a relative institutional analysis—there simply was no Euro-level fiscal authority and the member states had a difficult time coming to agreement on core fiscal questions, resulting in a gradual expansion of the effective roles being played by the ECB. A critical turning point came in May 2020, when Angela Merkel announced that Germany, along with France, would support an EU “recovery fund.” Although not yet finalized, this type of move would a more traditional balance between elected officials and the ECB and would reduce pressure on the ECB to engage in some of its more controversial actions. Significantly, however, Merkel supported the recovery fund only *after* Germany's constitutional court-imposed limitations on the ability of the Bundesbank to continue to implement certain ECB actions. Further, news accounts suggest Merkel's support for the recovery fund was a result of that ruling, and the shadow it cast on the legal authority of the ECB to continue to stretch its authority in support of maintaining the EU (Chazan, Fleming, and

Mallet, 2020).¹³² In short, politicians didn't want to get involved in difficult fiscal decisions in Europe any more than they have wanted to in the United States; nonetheless, they started down that path once it became clear there would be a limit to just how much the ECB could do.

Much is different in the United States, and we certainly do not see close judicial scrutiny of the Fed's efforts as the optimal path forward. Nonetheless, both the expansion of the ECB and current efforts by elected officials across Europe to find the common ground needed to implement a recovery fund serve as powerful reminders that the Fed's authority cannot easily be scaled back unless other actors, most likely the Administration (including Treasury) or Congress, is willing and able to step up. The interactions among these three and the allocation of authority and responsibility among them may well prove to be one of the most interesting and important sets of dynamics at play in the 21st century.

Conclusion

The American government acted very quickly in response to the Covid induced recession. Congress and the President, controlled by different political parties in a time of hyper politicization and in an election year, were able to come to agreement on a mammoth stimulus bill. This agreement occurred before standard data to confirm the recession were even available (the unemployment rate, GDP, etc.). Automatic stabilization policies that have been proposed to overcome political stalemate, would have been slower than the political process that unfolded. The package of 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. This blurs the line between monetary and fiscal policy, if not actively placing the Fed on the fiscal side of the ledger. What this 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, and we don't purport to have them. 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 better than the alternatives. But, as we have shown, even that 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 ones 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 with the Fed more empowered and trusted than ever, one that not only has broad official powers but which will reliably be given even more authority when crisis strikes. Likewise, continued dysfunction and distrust between the political parties, and between the Congress and the White House and Treasury Departments may well serve to continually increase reliance on the central bank to implement crisis response policies.

¹³² Chazan, G., Fleming, S., & Mallet, V. (May 22, 2020). *The change of events that led to Germany's change over Europe's recovery fund*. Financial Times. <https://www.ft.com/content/1d8853f4-726d-4c06-a905-ed2f37d25eee?segmentId=114a04fe-353d-37db-f705-204c9a0a157b>

The two global recessions of this century have little in common in their root cause. The first was a disease created in America's mortgage finance system, used the global financial system to spread and metastases, caused the seizure of the global financial system, infecting the real economy. The second was a disease that began in China, spread by people using the global transportation system to become a global pandemic, infecting millions of people with a deadly virus, causing the seizure of the real economy through a series of unprecedented shutdowns, that of course was felt by global financial markets as it caused a global recession. Despite radically different root causes, America's response 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 Covid, 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 down 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.

References

- 350.org, 350 Butte County, 350 PDX, Amazon Watch, et al. (March 27, 2020). *Letter to Chairman Jerome Powell*. https://d17a0173-b97b-4c08-a2e3-f8ea72c0874b.usrfiles.com/ugd/d17a01_62f18f6e12614fddac890d692066aea8.pdf
- AJMC (January 1, 2021) “A Timeline of COVID-19 Developments in 2020” <https://www.ajmc.com/view/a-timeline-of-covid19-developments-in-2020>
- Alexander Mehra, “Legal Authority in Unusual and Exigent Circumstances: The Federal Reserve and the Financial Crisis,” *University Of Pennsylvania Journal of Business Law*, vol. 13, no. 1, p. 235.
- Appelbaum, Binyamin (April 4, 2013). *Richmond Fed President Resigns, Admitting he Violated Confidentiality*. The New York Times. <https://www.nytimes.com/2017/04/04/business/lacker-leak-fed.html>
- “Auto bailout saved 1.5 million U.S. jobs” (December 9, 2013) Reuters. <https://www.reuters.com/article/autos-bailout-study/auto-bailout-saved-1-5-million-u-s-jobs-study-idUSL1N0JO0XU20131209>
- Barret, Ted, Bash, Dana, and Snow, Kate (September 22, 2001) “Congress approves \$15 billion airline bailout” CNN. <https://edition.cnn.com/2001/US/09/21/rec.congress.airline.deal/>
- Beitsch, Rebecca (April 30, 2020) “Fed’s expanded lending program opens funding to oil and gas industry” The Hill. <https://thehill.com/policy/energy-environment/495549-feds-expanded-lending-program-opens-funding-to-oil-and-gas-industry>
- Belz, Sage & Wessel, David (March 24, 2020). *What is the Exchange Stabilization Fund? And how is it being used in the coronavirus (COVID-19) crisis?* The Brookings Institute. <https://www.brookings.edu/blog/up-front/2020/03/24/what-is-the-exchange-stabilization-fund-and-how-is-it-being-used-in-the-coronavirus-covid-19-crisis/>
- Bernanke, Ben (April 12, 2017) *How big a problem is the zero lower bound on interest rates?* The Brookings Institution. <https://www.brookings.edu/blog/ben-bernanke/2017/04/12/how-big-a-problem-is-the-zero-lower-bound-on-interest-rates/>
- Bernanke, Ben (January 4, 2020) *The New Tools of Monetary Policy*. The Brookings Institution. <https://www.brookings.edu/blog/ben-bernanke/2020/01/04/the-new-tools-of-monetary-policy/>
- Binder, Sarah and Spindel, Mark *The Myth of Independence: How Congress Governs the Federal Reserve* (2017).
- Blinder, Alan S. "[Central-Bank Credibility: Why Do We Care? How Do We Build It?](#)," *American Economic Review*, 2000, v90(5,Dec), 1421-1431.
- Bloom Raskin, Sarah (May 28, 2020) “Why Is the Fed Spending So Much Money on a Dying Industry?” The New York Times. <https://www.nytimes.com/2020/05/28/opinion/fed-fossil-fuels.html>
- Board of Governors of the Federal Reserve System, Primary Market Corporate Credit Facility Term Sheet, July 28, 2020, <https://www.federalreserve.gov/newsevents/pressreleases/files/monetary20200728a9.pdf>; Board of

Board of Governors of the Federal Reserve System, Secondary Market Corporate Credit Facility. <https://www.federalreserve.gov/newsevents/pressreleases/files/monetary20200728a1.pdf>.

Board of Governors of the Federal Reserve System, Statistical Release H.4.1, Factors Affecting Reserve Balances of the Depository Institutions and Condition Statement of Federal Reserve Banks, Nov. 27, 2020, at n.4, <https://www.federalreserve.gov/releases/h41/>. The SPV is the Corporate Credit Facilities LLC.

Board of Governors of the Federal Reserve System. (Last updated: June 27, 2020). *Federal Reserve takes additional actions to provide up to \$2.3 trillion in loans to support the economy*. <https://www.federalreserve.gov/newsevents/pressreleases/monetary20200409a.htm>

Bovard, James (September 13, 2018). *Barack Obama's Return Just Reminds Us How He Fueled American Distrust*. <https://mises.org/power-market/barack-obamas-return-just-reminds-us-how-he-fueled-american-distrust>

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

Bullard, James (November 10, 2020) *Monetary Policy and Fiscal Policy Responses to the COVID-19 Crisis*. Federal Reserve Bank of St. Louis <https://www.stlouisfed.org/publications/regional-economist/fourth-quarter-2020/monetary-policy-fiscal-policy-responses-covid-crisis>

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

Cecchetti, Stephen and Schoenholtz, Kim, The Fed Goes to War: Part 2, Money and Banking Blog, March 25, 2020, <https://www.moneyandbanking.com/commentary/2020/3/25/the-fed-goes-to-war-part-2>

Chazan, Guy, Fleming, Sam, & Mallet, Victor (May 22, 2020). *The change of events that led to Germany's change over Europe's recovery fund*. Financial Times. <https://www.ft.com/content/1d8853f4-726d-4c06-a905-ed2f37d25eee?segmentId=114a04fe-353d-37db-f705-204c9a0a157b>

Chetty, Raj, Friedman, John, Hendren, Nathaniel, and Stepner, Michael (November 2020) “How did Covid-19 and Stabilization Policies Affect Spending and Employment? A New Real-time Economic Tracker Based on Private Sector Data” NBER. https://www.nber.org/system/files/working_papers/w27431/w27431.pdf

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

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

Congressional Oversight Panel (July 20, 2020) “The Third Report of the Congressional Oversight Commission” https://www.banking.senate.gov/imo/media/doc/COC%203rd%20Report_7.20.20.pdf

Congressional Oversight Panel (November 30, 2020) “The Seventh Report of the Congressional Oversight Commission” <https://coc.senate.gov/sites/default/files/2020-12/COC%20November%20Report%20with%20Appendix.pdf>

Congressional Research Service (March 27, 2020) “Federal Reserve: Emergency Lending,” page 17 <https://sgp.fas.org/crs/misc/R44185.pdf>

Congressional Research Service (November 4, 2020) “The Federal Reserve’s Main Street Lending Program” <https://crsreports.congress.gov/product/pdf/IF/IF11632>

Constantine, George, Lewin, Cynthia, and Steinberg, Andrew (March 5, 2021) “SBA Clarifies Lobbying and Economic Need Rules for Nonprofit PPP Borrowers” Venable, LLP. <https://www.venable.com/insights/publications/2021/03/sba-clarifies-rules-for-nonprofit-ppp-borrowers>

Cowley, Stacy and Flitter, Emily (April 22, 2020) “Banks Gave Richest Clients ‘Concierge Treatment’ for Pandemic Aid” New York Times. <https://www.nytimes.com/2020/04/22/business/sba-loans-ppp-coronavirus.html>

Cox, Jeff (July 30, 2020) *Second-quarter GDP plunged by worst-ever 32.9% amid virus-induced shutdown*. CNBC. <https://www.cnbc.com/2020/07/30/us-gdp-q2-2020-first-reading.html>

Cox, Jeff (March 23, 2021) “Fed sets up panels to examine risks that climate change poses to the financial system” CNBC. <https://www.cnbc.com/2021/03/23/fed-to-examine-risks-climate-change-poses-to-financial-system.html>

Cox, Jeff (October 4, 2019) *September unemployment rate falls to 3.5%, a 50-year low, as payrolls rise by 136,000*. CNBC. <https://www.cnbc.com/2019/10/04/jobs-report---september-2019.html>

Cruz, Ted (April 24, 2020) *Letter to Secretary Steve Mnuchin and Chairman Jerome Powell*. <https://www.cruz.senate.gov/files/documents/Letters/4.24.2020%20Oil%20Gas%20Fed%20Lending%20Facility%20Letter.pdf>

da Costa, Pedro (April 20, 2020) *A Glaring New Conflict of Interest Undermines Public Trust In Federal Reserve*. Forbes. <https://www.forbes.com/sites/pedrodacosta/2020/04/20/a-glaring-new-conflict-of-interest-undermines-public-trust-in-federal-reserve/?sh=7ccda0e6135d>

D’Amico, Setefania, Kurakula, Vamsidhar, and Lee, Stephen (May 17, 2020) “Impacts of the Fed Corporate Credit Facilities through the Lenses of ETFs and CDX” Federal Reserve Bank of Chicago <https://www.chicagofed.org/~media/publications/working-papers/2020/wp2020-14-pdf.pdf>

Dancey, Logan, Sheagley, Geoffrey (July 24, 2017). *Partisanship and Perceptions of Party-Line Voting in Congress*. <https://journals.sagepub.com/doi/full/10.1177/1065912917722233>

DeBonis, Mike, Kane, Paul, and Werner, Erika (March 27, 2020) “Trump signs \$2 trillion coronavirus bill into law as companies and households brace for more economic pain” The Washington Post. <https://www.washingtonpost.com/us-policy/2020/03/27/congress-coronavirus-house-vote/>

Dent, Nicholas (October 25, 2021) “End of the UK Furlough Scheme – What’s Next for Employers” JD Supra. <https://www.jdsupra.com/legalnews/end-of-the-uk-furlough-scheme-what-s-2343512/>

Derby, Michael (September 21, 2021) “Fed Faces Calls to Remove Officials Over Trades They Made While Setting Policy” The Wall Street Journal. <https://www.wsj.com/articles/fed-faces-calls-to-remove-officials-over-trades-they-made-while-setting-policy-11632226559>

Derby, Michael (September 27, 2021) *Fed’s Williams: Tapering Bond Buying ‘May Soon Be Warranted’*. WSJ. <https://www.wsj.com/articles/feds-williams-tapering-bond-buying-may-soon-be-warranted-11632758413>

Dexheimer, Elizabeth (April 15, 2020) “Key Democrats Urge Mnuchin, Powell to Rescue Mortgage Servicers” Bloomberg. <https://www.bloomberg.com/news/articles/2020-04-16/key-democrats-urge-mnuchin-powell-to-rescue-mortgage-servicers>

Doherty, Carroll, Jameson, Bridget, & Kiley, Jocelyn (June, 2016). *Partisanship and Political Animosity in 2016*. The Pew Research Center. <https://www.people-press.org/wp-content/uploads/sites/4/2016/06/06-22-16-Partisanship-and-animosity-release.pdf>

Emergency Economic Stabilization Act of 2008, 12 US Code Ch. 52 (2008)

Expedited Funds Availability Act, 12 U.S. Code § 4002 (1987)

Fabo, Brian, Jančoková, Martina, Kempf, Elisabeth, Pástor, Ľuboš (April 2021) *Fifty Shades of QE: Comparing Findings of Central Bankers and Academics*. NBER. <https://www.nber.org/papers/w27849>

Fed (August 6, 2020) “Federal Reserve announces details of new 24x7x365 interbank settlement service with clearing functionality to support instant payments in the United States” Board of Governors <https://www.federalreserve.gov/newsevents/pressreleases/other20200806a.htm>

Fed (December 15, 2020) “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” Board of Governors. <https://www.federalreserve.gov/newsevents/pressreleases/bcreg20201215a.htm>

Federal Deposit Insurance Corporation (October 19, 2020) “How America Banks: Household Use of Banking and Financial Services” <https://www.fdic.gov/analysis/household-survey/index.html>

Federal Ministry of Finance “German government launches temporary aid scheme as part of coronavirus stimulus” Accessed November 22, 2021. <https://www.bundesfinanzministerium.de/Content/EN/Standardartikel/Topics/Priority-Issues/Articles/2020-07-08-temporary-aid-scheme-launched.html>

Federal Reserve Act (1913) 12 U.S.C. 343

Tett, Gillian “Do not underestimate Jay Powell in a fight with Trump,” Financial Times, Oct. 31, 2019, at <https://www.ft.com/content/cdb3edb4-fbc2-11e9-a354-36acbbb0d9b6>.

Gallup (September 2021) “How would you rate the job being done by ... ? Would you say it is doing an excellent, good, only fair or poor job?” <https://news.gallup.com/poll/27286/government.aspx>

Gandel, Stephen (April 20, 2020) “Paycheck Protection Program billions went to large companies and missed virus hot spots” CBS. <https://www.cbsnews.com/news/paycheck-protection-program-small-businesses-large-companies-coronavirus/>

Gelzinis, Gregg, Madowitz, Michael, and Vijay, Divya (July 31, 2020) “The Fed’s Oil and Gas Bailout Is a Mistake” Center for American Progress <https://americanprogress.org/article/feds-oil-gas-bailout-mistake/>

George Selgin, When the Fed Tried to Save Main Street, Alt-M, March 30, 2020, at <https://www.alt-m.org/2020/03/30/when-the-fed-tried-to-save-main-street/>.

Gleckman, Howard (March 26, 2020) “How Will The Coronavirus Stimulus Bill’s Individual Payments Work?” Tax Policy Center. <https://www.taxpolicycenter.org/taxvox/how-will-coronavirus-stimulus-bills-individual-payments-work>

Goodman, Matthew “Comparing U.S., Japanese, and German Fiscal Responses to Covid-19” CSIS, October 2020 www.csis.org/analysis/comparing-us-japanese-and-german-fiscal-responses-covid-19

Gotbaum, Joshua (July 20, 2020) “Don’t fix the paycheck protection program, replace it” The Brookings Institution. <https://www.brookings.edu/opinions/dont-fix-the-paycheck-protection-program-replace-it/>

Governors of the Federal Reserve System, Secondary Market Corporate Credit Facility Term Sheet, July 28, 2020,

Granja, Joao, Makridis, Christos, Yannelis, Constantine, and Zwick, Eric (September 21, 2021) “Did the Paycheck Protection Program Hit the Target?” Becker Friedman Institute for Economics at the University of Chicago. <https://bfi.uchicago.edu/working-paper/did-the-paycheck-protection-program-hit-the-target/>

Green, Joshua (September 29, 2010) “TARP, the Forbidden Bipartisan Success” The Atlantic, <https://www.theatlantic.com/politics/archive/2010/09/tarp-the-forbidden-bipartisan-success/63803/>

Griffin, John, Kruger, Samuel, and Mahajan, Prateek Did FinTech Ledners Facilitate PPP Fraud? October 2021, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3906395

Haddad, Valentin, Moreira, Alan, and Muir, Tyler “When Selling Becomes Viral: Disruptions in Debt Markets in the COVID-19 Crisis and the Fed’s Response,” *The Review of Financial Studies*, Volume 34, Issue 11, November 2021, Pages 5309–5351, <https://doi.org/10.1093/rfs/hhaa145>

Hansen, Sarah (Apr 29, 2020) “Potbelly, Shake Shack, Axios: Here Are All The Companies Returning PPP Money After Public Backlash” Forbes. <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=7cb91aa07ea0>

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

Herszenhorn, David, and Sanger, David (December 19, 2008) “Bush approves \$17.4 billion auto bailout” The New York Times. <https://www.nytimes.com/2008/12/19/business/worldbusiness/19iht-20autoB.18826530.html>

Horsley, Scott (September 28, 2021) “Janet Yellen Says U.S. Could Run Out Of Cash To Pay Its Bills In Less Than 3 Weeks” NPR. <https://www.npr.org/2021/09/28/1041126764/janet-yellen-jerome-powell-debt-ceiling-standoff>

House Committee on the Budget (April 2, 2020) *Protecting Congress’ Power of the Purse and the Rule of Law*. <https://budget.house.gov/publications/report/protecting-congress-power-purse-and-rule-law>

Howell, Sabrina, Kuchler, Theresa, Snitkof, David, Stroebe, Johannes, and Wong, Jun Racial Disparities in Access to Small Business Credit: Evidence from the Paycheck Protection Program, October 2021, papers.ssrn.com/sol3/papers.cfm?abstract_id=3939384

<https://history.house.gov/Institution/Presidential-Veto/Presidential-Veto/>

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

IMF Country Focus, *Kurzarbeit: Germany’s Short-time work benefit*, June 2020, <https://www.imf.org/en/News/Articles/2020/06/11/na061120-kurzarbeit-germanys-short-time-work-benefit>

Isidore, Chris (December 19, 2014) “U.S. ends TARP with \$15.3 billion profit” CNN Business. <https://money.cnn.com/2014/12/19/news/companies/government-bailouts-end/>

Isidore, Chris (September 6, 2019) *Black unemployment rate falls to a record low*. CNN <https://www.cnn.com/2019/09/06/economy/black-unemployment-rate/index.html>

Jacobson, Gary (2007) *A Divider, Not a Uniter: George W. Bush and the American People*

Jahan, Sarah, Mahmud, Ahmed Saber, and Papageorgiou, Chris (September 2014) “What Is Keynesian Economics?” IMF. <https://www.imf.org/external/pubs/ft/fandd/2014/09/basics.htm>

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

Juhasz, Antonia (August 26, 2020) “Bailout: Billions of Dollars of Federal COVID-19 Relief Money Flow to the Oil Industry” The Sierra Club, <https://www.sierraclub.org/sierra/bailout-billions-dollars-federal-covid-19-relief-money-flow-oil-industry>

Kiernan, Paul (April 9, 2020). *Fed’s Housing-Market Concerns Increase Pressure to Help Mortgage Firms*. The Wall Street Journal. <https://www.wsj.com/articles/feds-housing-market-concerns-increase-pressure-to-help-mortgage-firms-11586471411>

Klein, Aaron (December 14, 2018) “Implementing a real time payment system” The Brookings Institution https://www.federalreserve.gov/SECRS/2018/December/20181221/OP-1625/OP-1625_121418_133277_428769914666_1.pdf

Klein, Aaron and Busetto, Camille (April 14, 2020) “Improving the equity impact of the Fed’s municipal lending facility.” Brookings. <https://www.brookings.edu/research/a-chance-to-improve-the-equity-impact-of-the-feds-municipal-lending-facility/>

Klein, Aaron, and Smith, Ember (February 4, 2021) “Explaining the Economic Impact of COVID-19: Core Industries and the Hispanic Workforce” The Brookings Institution.

<https://www.brookings.edu/research/explaining-the-economic-impact-of-covid-19-core-industries-and-the-hispanic-workforce/>

Kolchin, Katie (July 6, 2020). *COVID-19 Related Market Turmoil Recap: Part II. SIFMA insights*. <https://www.sifma.org/resources/research/covid-19-related-market-turmoil-recap-part-2/>

Komesar, Neil K. *Imperfect Alternatives: Choosing Institutions in Law, Economics, and Public Policy*. University of Chicago Press, 1994.

Lessig, Lawrence (October, 2009). *Republic: Lost*. Twelve.

Li, Yun (July 2, 2019) *This is now the longest US economic expansion in history*. CNBC <https://www.cnbc.com/2019/07/02/this-is-now-the-longest-us-economic-expansion-in-history.html>

Liu, Sifan, and Parilla, Joseph (September 17, 2020) “New data shows small businesses in communities of color had unequal access to federal COVID-19 relief” Brookings. <https://www.brookings.edu/research/new-data-shows-small-businesses-in-communities-of-color-had-unequal-access-to-federal-covid-19-relief/>

Logan, Lorie (July 15, 2020) *The Federal Reserve’s Market Functioning Purchases: From Supporting to Sustaining*. Federal Reserve Bank of New York. <https://www.newyorkfed.org/newsevents/speeches/2020/log200715#footnote3>

Long, Heather, and Stein, Jeff (June 6, 2019) *The U.S. deficit hit \$984 billion in 2019, soaring during Trump era*. The Washington Post. <https://www.washingtonpost.com/business/2019/10/25/us-deficit-hit-billion-marking-nearly-percent-increase-during-trump-era/>

Luce, Edward (August 24, 2019). *Donald Trump’s war on the Federal Reserve*. The Financial Times. <https://www.ft.com/content/fb32cd68-c4c3-11e9-a8e9-296ca66511c9>

Messner, Wolfgang, Payson, Sarah “Variation in COVID-19 outbreaks at the US state and county levels” *Public Health*, Volume 187, (2020) <https://doi.org/10.1016/j.puhe.2020.07.035>.

Mnuchin, Steven and Carranza, Jovita (April 28, 2020) “Joint Statement by Secretary Steven T. Mnuchin and Administrator Jovita Carranza on the Review Procedure for Paycheck Protection Program Loans” Treasury. <https://home.treasury.gov/news/press-releases/sm991>

Mohsin, Saleha & Torres, Craig (June 15, 2020). *Fed Adapts as Congress Urges More Credit Risk on Corporate Loans*. Bloomberg. <https://www.bloomberg.com/news/articles/2020-06-16/fed-adapts-as-congress-urges-more-credit-risk-on-corporate-loans>

Murphy, Dan (February 17, 2021) “Economic Impact Payments: Uses, payment methods, and costs to recipients” Brookings. <https://www.brookings.edu/research/economic-impact-payments-uses-payment-methods-and-costs-to-recipients/>

National Bureau of Economic Research (July 19, 2021) *Business Cycle Dating Committee Announcement July 19, 2021*. <https://www.nber.org/news/business-cycle-dating-committee-announcement-july-19-2021>

National Consumer Law Center (January 2020) “2020 Tax Season: More Delays and Higher Costs for Struggling Taxpayers” <https://www.nclc.org/images/pdf/taxes/rpt-tax-time-jan2020.pdf>

NPR. (April 18, 2010). *In Depth: Americans' Distrust of Government*.
<https://www.npr.org/templates/story/story.php?storyId=126002349>

Paletta, Damian, and Solomon, Deborah (September 24, 2008) “Paulson, Bernanke Describe Mechanics of Auction Proposal” *The Wall Street Journal*.
<https://www.wsj.com/articles/SB122221614525469481>

Partington, Richard (February 3, 2021) “The UK's Covid-19 unemployment crisis in six charts” *The Guardian*. <https://www.theguardian.com/business/2021/feb/03/the-uks-covid-19-unemployment-crisis-in-six-charts>

Pierson, Brendan, and Raymond, Nate (November 5, 2015) *Ex-Goldman employee pleads guilty over N.Y. Fed leaks*. Reuters. <https://www.reuters.com/article/goldman-sachs-fed-crime/ex-goldman-employee-pleads-guilty-over-n-y-fed-leaks-idINKCN0SU32N20151105>

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

Powell, Jerome (June 16, 2020). *Testimony on the Semiannual Monetary Policy Report to the Congress*. The Federal Reserve.
<https://www.federalreserve.gov/newsevents/testimony/powell20200616a.htm>

Rosalsky, Greg (October 13, 2020) “Trouble On Main Street” NPR.
<https://www.npr.org/sections/money/2020/10/13/922199563/trouble-on-main-street>

Rubio, Marco (December 10, 2020) “Rubio Chairs Hearing on the Paycheck Protection Program and Its Future” Marco Rubio US Senator for Florida,
<https://www.rubio.senate.gov/public/index.cfm/2020/12/now-rubio-chairs-hearing-on-the-paycheck-protection-program-and-its-future>

Russell, Barry (April 15, 2020) “Letter to the Fed” Independent Petroleum Association.
<https://www.ipaa.org/wp-content/uploads/2020/04/Main-Street-Lending-Letter-04-15-2020.pdf>

Samuelson, Robert (March 27, 2011) “Why TARP has been a success story” *The Washington Post*, https://www.washingtonpost.com/opinions/why-tarp-has-been-a-success-story/2011/03/25/AFEe6jKB_story.html

Sastry, Parinitha (September, 2018). *The Political Origins of Section 13(3) of the Federal Reserve Act*. The Federal Reserve Bank of New York.
https://www.newyorkfed.org/medialibrary/media/research/epr/2018/epr_2018_political-origins_sastry.pdf.

Schnidman, Evan (June 19, 2011) “Why the Federal Reserve is Dodd-Frank’s Big Winner” *Harvard Business Law Review* <https://www.hblr.org/2011/06/why-the-federal-reserve-is-dodd-franks-big-winner/>

Schweitzer, Mark (May 27, 2021) “How Well Did PPP Loans Reach Low- and Moderate-Income Communities?” Federal Reserve Bank of Cleveland.
<https://www.clevelandfed.org/newsroom-and-events/publications/economic-commentary/2021-economic-commentaries/ec-202113-reach-of-ppp-loans-in-lmi-communities.aspx#U2>

Select Subcommittee on the Coronavirus Crisis (October 16, 2020) “New PPP Report Shows Trump Administration And Big Banks Left Behind Struggling Small Businesses”

<https://coronavirus.house.gov/news/press-releases/new-ppp-report-shows-trump-administration-and-big-banks-left-behind-struggling>

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

Siegel, Rachel (October 4, 2021) “Fed says trading activity by top officials under independent review” The Washington Post. <https://www.washingtonpost.com/us-policy/2021/10/04/fed-ethics-powell-warren/>

Smialek, Jeanna (March 27, 2020) “How the Fed’s Magic Money Machine Will Turn \$454 Billion Into \$4 Trillion” The New York Times. <https://www.nytimes.com/2020/03/26/business/economy/fed-coronavirus-stimulus.html>

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

“Stimulus payments and Chime” Chime, Accessed November 22, 2021, <https://www.chime.com/stimulus-payments-and-chime/>

Tenpas, Kathryn Dunn (July 2020). *Tracking Turnover in the Trump administration*. The Brookings Institute. <https://www.brookings.edu/research/tracking-turnover-in-the-trump-administration/>

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

Tooze, Adam “Crashed: How a Decade of Financial Crises Changed the World” (2018)

Tooze, Adam “America Is Ailing—and Leading the World,” *Foreign Policy*, Apr. 1, 2020

Tooze, Adam “Shockwave,” *London Rev. of Book*, Vol. 42 No. 8, April 16, 2020.

U.S. Bureau of Labor Statistics (June 2021). *COVID-19 ends longest employment recovery and expansion in CES history, causing unprecedented job losses in 2020*. <https://www.bls.gov/opub/mlr/2021/article/covid-19-ends-longest-employment-expansion-in-ces-history.htm>

U.S. Small Business Administration “PPP loan forgiveness” <https://www.sba.gov/funding-programs/loans/covid-19-relief-options/paycheck-protection-program/ppp-loan-forgiveness>

Wallach, Philip *To the Edge: Legality, Legitimacy, and the Responses to the 2008 Financial Crisis*. Brookings, 2015.

Weisenthal, Joe (November 15, 2021) “Republican Consumer Sentiment Is Worse Today Than It Was During The Height Of The Financial Crisis” Bloomberg. <https://www.bloomberg.com/news/articles/2021-11-15/republican-consumer-sentiment-is-worse-today-than-it-was-during-the-height-of-the-financial-crisis?srnd=oddlots&sref=vuYGisIZ>

Yglesias, Matthew (August 29, 2019) “Donald Trump’s escalating war of words with Fed Chair Jay Powell, explained” Vox, <https://www.vox.com/policy-and-politics/2019/8/29/20836652/donald-trump-jay-powell-fed-feud>