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POLICY RESPONSES TO THE COVID-19 PANDEMIC

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Johns Hopkins Institute for Applied Economics,
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Policy Responses to the COVID-19 Pandemic

By Alexandria Edwards

About the Series

The *Studies in Applied Economics* series is under the general direction of Professor Steve H. Hanke, Founder and Co-Director of the Johns Hopkins Institute for Applied Economics, Global Health, and the Study of Business Enterprise (hanke@jhu.edu)

About the Author

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Abstract

The COVID-19 pandemic has created severe economic disruptions, shutting down fundamental sectors of the United States economy and rocking financial markets. Unlike any prior financial crises, the current crisis is a necessary result of deliberate government actions implemented in order to prioritize public health and mitigate the spread of the virus. Consequently, both monetary and fiscal authorities have initiated major programs intended to inject liquidity into the financial system and provide support to businesses and individuals. This paper presents an outline and analysis of the recent actions taken by the Federal Reserve, as well as the Coronavirus Aid, Relief, and Economic Security (CARES) Act signed by the President on March 27th.

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Amended as of May 17, 2020

I. Monetary Policy Response

Introduction

On March 9, 2020, Steve H. Hanke, Founder and Co-Director of the Institute for Applied Economics, Global Health, and the Study of Business Enterprise and Professor of Applied Economics at Johns Hopkins University, and John Greenwood, Chief Economist at Invesco in London and Fellow at the Johns Hopkins Institute for Applied Economics, Global Health, and the Study of Business Enterprise wrote an op-ed published in the Wall Street Journal, *How the Federal Reserve Can Ease the Coronavirus Panic*, in which they argued that, rather than rely solely on interest rates as the driver of monetary policy, the Federal Reserve should supply more liquidity to ease markets destabilized by the spread of the coronavirus.

Hanke and Greenwood argue that monetary policy should not be centered on interest rates, but rather the correct level of broad money in the economy. In the event of a panic such as the coronavirus crisis, the Fed should function as a lender of last resort and follow Walter Bagehot's classic rule: supply ample funds at a penalty rate against decent collateral. To supply adequate liquidity to tumultuous markets, Hanke and Greenwood suggest measures such as quantitative easing purchases of long-term bonds, Treasury bill purchases, repos, and, most importantly, increasing the amounts of U.S. dollar swaps available to the central banks of Japan, China, South Korea, Taiwan and Hong Kong.[1]

In a subsequent letter, *The Fed's Liquidity Stimulus Must Be Enough to Succeed*, [2] responding to the Wall Street Journal editorial, *The Fed's Market Emollients*,[3] Hanke and Greenwood suggest that the magnitude of the necessary liquidity injection will likely be much higher than is widely believed, as regulations imposed by Dodd-Frank after the Global Financial Crisis and Basel III from 2015 effectively prevent banks from using their high levels of capital and liquidity to lend to customers. These regulations require banks to maintain Treasuries and agencies in times of stress under the liquidity coverage requirement (LCR).

The below chronology indicates that the Fed has precisely followed these recommendations. The central bank injected substantial funds into short term money markets, enacted an unlimited quantitative easing program of Treasury bond purchases, increased US dollar swap arrangements with foreign central banks, extending them to central banks not previously part of the program, and adopted numerous other measures in what is the biggest balance sheet expansion in the central bank's history.

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[1] Greenwood, J. and Hanke, S. (2020, March 9). *How the Federal Reserve Can Ease the Coronavirus Panic.* Wall Street Journal. https://www.wsj.com/articles/interest-rates-wont-work-against-coronavirus-11583766853

[2] Greenwood, J. and Hanke, S. (2020, March 15). *The Fed's Liquidity Stimulus Must Be Enough to Succeed.* Wall Street Journal. https://www.wsj.com/articles/the-feds-liquidity-stimulus-must-be-enough-to-succeed-11584295366

[3] The Editorial Board. (2020, March 9*). The Fed's Market Emollients*. Wall Street Journal. https://www.wsj.com/articles/the-feds-market-emollientsthe-feds-market-emollients-11583794286

Background: Monetary Policy Implementation

The Federal Reserve aims to achieve three broad goals in accordance with its Congressional mandate: maximum employment, stable prices, and moderate long-term interest rates. These goals are achieved by managing the level of short-term rates via a target range for the federal funds rate, which in turn influences the availability and cost of credit in the broader economy.[4]

The Federal Open Market Committee's monetary policy implementation approach has evolved over the years. Since 1936, the New York Fed has executed transactions for the System Open Market Account (SOMA), the largest asset on the Federal Reserve's balance sheet, and the New York Fed's Open Market Trading Desk executes open market operations.

Prior to the financial crisis of 2007-08, the FOMC achieved its federal funds target by directing the New York Fed to actively manage the supply of reserves in the banking system through open market purchases and sales of Treasury securities, as well as through repo and reverse repo agreements. However, the onset of the crisis necessitated numerous modifications in the implementation of monetary policy, as interest rates were effectively reduced to the zero-lower bound by December 2008. From late 2008 through 2014, the Fed initiated three rounds of quantitative easing, beginning to make large-scale purchases in longer term assets, including Treasury securities, agency mortgage-backed securities, and agency debt.

The Fed first announced a shift towards monetary policy "normalization" in September 2014, with the objective of gradually raising the federal funds rate target range and reducing holdings of securities. In an environment of abundant reserve balances, the interest rate on excess reserves became the primary operational tool, as small changes in reserves supply would have been insufficient to meaningfully change rates. The FOMC began to normalize its portfolio in October 2017 by gradually reducing its reinvestment in securities. This has been supplemented as necessary with overnight reverse repos, offered through open operations conducted by the New York Fed. The FOMC began to normalize its portfolio in October 2017 by gradually reducing its reinvestment in securities.[5]

With the outbreak of the COVID-19 pandemic and the associated economic impacts, the Fed has dramatically altered this monetary policy stance away from "normalization" and implemented massive liquidity programs on an even larger scale than those used in 2008, as outlined below.

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[4] Federal Reserve Bank of New York. Monetary Policy Implementation. https://www.newyorkfed.org/markets/domestic-market-operations/monetary-policy-implementation

[5] Ibid.

Timeline of Recent Actions

March 3

The Federal Open Market Committee (FOMC) **lowered the federal funds rate target range by 50 basis points** to 1-1.25%[6]

March 12

The Federal Reserve Bank of New York announced a **$1.5 trillion repo offering** through three separate repo auctions, promising to intervene substantially in short-term money markets[7]

On March 12, $500 billion in a three-month repo operation was offered, and an additional $500 billion in a three-month repo operation and $500 billion in a one-month repo operation were offered the next day. Three-month and one-month repo operations will also be offered on a weekly basis for remainder of monthly schedule. In addition, the Federal Reserve will continue offering at least $175 billion in daily overnight repo operations and at least $45 billion in two-week operations.

The New York Fed also announced that it would adjust its monthly $60 billion "reserve management" purchases to bring the maturity of the Fed's holdings in line with their existing portfolio by spreading its purchases across nominal coupons, Treasury bills, and Treasury Inflation Protected Securities (TIPS), among other securities.[8] It is important to note that that these purchases are distinct from quantitative easing. In October 2019, the Fed had announced it would begin monthly purchases of approximately $60 billion in Treasury bills to help counteract the spike in repo rates in September 2019, which was triggered by the Fed's $600 billion reduction of its balance sheet during the period 2017-2019.[9] These purchases were intended to keep market rates aligned with the federal funds target range, rather than materially alter its monetary policy stance.

March 15

On March 15, the Fed announced a large-scale emergency program in response to economic disruptions caused by the COVID-19 outbreak. **The FOMC lowered the federal funds rate target range to 0-0.5%, the "zero lower bound," and announced a new round of quantitative easing**.[10] The Fed announced it would purchase at least $700 billion in assets over the coming

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[6] Federal Reserve Board of Governors. (2020, March 3). *Federal Reserve issues FOMC statement.* [Press Release] https://www.federalreserve.gov/newsevents/pressreleases/monetary20200303a.htm

[7] Federal Reserve Bank of New York. (2020, March 12). *Statement regarding Treasury reserve management purchases and repurchase operations.* [Press Release] https://www.newyorkfed.org/markets/opolicy/operating_policy_200312a?mod=article_inline

[8] Ibid.

[9] Federal Reserve Bank of New York. (2019, October 11). *Statement regarding Treasury bill purchases and repurchase operations.* [Press Release] https://www.newyorkfed.org/markets/opolicy/operating_policy_191011

[10] Federal Reserve Board of Governors. (2020, March 15). *Federal Reserve issues FOMC statement*. [Press Release] https://www.federalreserve.gov/newsevents/pressreleases/monetary20200315a.htm

months, including at least $500 billion in Treasury securities and $200 billion in agency mortgage backed securities.

The Fed took measures to encourage banks to actively use discount window lowering primary credit rate by 150 basis points to 0.25% and permitting depository institutions to borrow from the discount window for as long as 90 days.[11] In addition, the Fed relaxed bank capital requirements by eliminating reserve requirements and encouraging banks to use capital and liquidity buffers to lend to households and businesses.[12]

The Fed also announced a coordinated international central bank effort with the Bank of Canada, the Bank of England, the Bank of Japan, the European Central Bank, and the Swiss National Bank, to lower pricing on U.S. dollar liquidity swap arrangements by 25 basis points and expand offerings.[13] These actions are intended to enhance liquidity in the US dollar markets outside the US.

March 17

The Fed announced the introduction of two new facilities.[14]

The **Commercial Paper Funding Facility (CPFF)** is authorized to buy corporate paper at the three-month overnight index swap (OIS) rate plus 200 basis points, and will be structured as a credit facility to a special purpose vehicle (SPV) that will purchase unsecured and asset-backed commercial paper. The Treasury will provide $10 billion of credit protection from the Exchange Stabilization Fund (ESF)

The Fed also announced the revival of the **Primary Dealer Credit Facility (PDCF)**, first set up in 2008.[15] This facility will provide overnight and term funding with maturities up to 90 days, beginning March 20, allowing primary dealers to support smooth market functioning and credit availability to businesses and households. Credit extended may be collateralized by a broad range of investment grade debt and equity securities, and the interest rate charged will be the primary credit rate.

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[11] Federal Reserve Board of Governors. (2020, March 15). *Federal Reserve Actions to Support the Flow of Credit to Households and Businesses.* [Press Release] https://www.federalreserve.gov/newsevents/pressreleases/monetary20200315b.htm

[12] Ibid.

[13] Federal Reserve Board of Governors. (2020, March 15). *Coordinated Central Bank Action to Enhance the Provision of U.S. Dollar Liquidity.* [Press Release] https://www.federalreserve.gov/newsevents/pressreleases/monetary20200315c.htm

[14] Federal Reserve Board of Governors. (2020, March 17). *Federal Reserve Board announces establishment of a Commercial Paper Funding Facility (CPFF) to support the flow of credit to households and businesses*. [Press Release] https://www.federalreserve.gov/newsevents/pressreleases/monetary20200317a.htm

[15] Federal Reserve Board of Governors. (2020, March 17). *Federal Reserve Board announces establishment of a Primary Dealer Credit Facility (PDCF) to support the credit needs of households and businesses*. [Press Release] https://www.federalreserve.gov/newsevents/pressreleases/monetary20200317b.htm

March 18

The Fed announced the creation of an additional facility, the **Money Market Mutual Fund Liquidity Facility (MMLF)**[16] Loans are available to eligible financial institutions, secured by high-quality assets purchased from money market mutual funds, and the Treasury will provide $10 billion of credit protection from the ESF. The structure of the MMLF is similar to that of the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF) that operated from late 2008-2010.

March 19

The Fed announced a further expansion of US dollar liquidity swap lines. Temporary US dollar liquidity swap lines were extended to additional central banks. Up to $60 billion each was extended to the central banks of Australia, Brazil, Mexico, Singapore, South Korea, and Switzerland, and up to $30 billion each was extended to those of Denmark, Norway, and New Zealand.[17] These U.S. dollar liquidity arrangements will remain in place for at least six months.

March 20

The frequency of US dollar liquidity swap operations was updated from weekly to daily in a coordinated effort with Bank of Canada, Bank of England, Bank of Japan, the European Central Bank, and the Swiss National Bank. Daily operations will begin March 23 and continue at least through the end of April.

Additionally, the MMLF expanded acceptable collateral to include high-quality municipal debt.[18]

March 23

On March 23, the Fed took major actions to provide substantial liquidity to the economy through what is in effect an unlimited quantitative easing purchase program, exercised through the introduction of additional lending facilities.[19]

In an expansion of the asset purchase program announced on March 15, the Fed announced purchases of $375 billion in Treasury securities and $250 billion in mortgage securities that

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[16] Federal Reserve Board of Governors. (2020, March 18). *Federal Reserve Board broadens program of support for the flow of credit to households and businesses by establishing a Money Market Mutual Fund Liquidity Facility (MMLF)* [Press Release] https://www.federalreserve.gov/newsevents/pressreleases/monetary20200318a.htm

[17] Federal Reserve Board of Governors. (2020, March 19). *Federal Reserve announces the establishment of temporary U.S. dollar liquidity arrangements with other central banks.* [Press Release] https://www.federalreserve.gov/newsevents/pressreleases/monetary20200319b.htm

[18] Federal Reserve Board of Governors. (2020, March 20). *Federal Reserve Board expands its program of support for flow of credit to the economy by taking steps to enhance liquidity and functioning of crucial state and municipal money markets.* [Press Release] https://www.federalreserve.gov/newsevents/pressreleases/monetary20200320b.htm

[19] Federal Reserve Board of Governors. (2020, March 23). *Federal Reserve announces extensive new measures to support the economy.* [Press Release] https://www.federalreserve.gov/newsevents/pressreleases/monetary20200323b.htm

week, with **no limit on future purchases.** The Fed will also begin to purchase agency commercial mortgage backed securities (CMBS).

$300 billion in new financing to employers and businesses will be provided through three lending facilities:

1. The **Primary Market Corporate Credit Facility (PMCCF)**, which is open to investment grade companies and provides bridge financing of four years. Companies can issue bonds and sell them directly to the Fed.
2. The **Secondary Market Corporate Credit Facility (SMCCF)**, which will purchase investment grade corporate bonds in the secondary market and US-listed exchange trade funds with broad exposure to the corporate bond market. The goal of this program is to increase liquidity in the secondary corporate bond market.
3. The **Term Asset-Backed Securities Lending Facility (TALF)**, which enables issuance of asset-backed securities backed by student loans, auto loans, credit card loans, SBA loans, and other certain assets by lending to holders of these securities.

The Treasury will provide $30 billion in equity to cover losses using the Exchange Stabilization Fund. Additionally, the Fed tapped BlackRock to help operationalize these programs "after considering their expertise with purchasing large amounts of all relevant types of corporate debt issuance and corporate bonds in the secondary market, deep knowledge and substantial experience in the corporate debt markets, and robust operational and technological capabilities."[20] The Fed had also turned to BlackRock in 2008 to manage portfolios of mortgage assets from Bear Stearns and AIG.[21]

However, these liquidity programs exclude large segments of bond markets, as the TALF leaves out the vast majority of collateralized loan obligations (CLO). Ratings agencies have started to place many firms on watch for downgrades and highly leveraged companies may struggle to repay their loans, creating additional liquidity pressures. The Fed excluded two popular segments that constitute nearly $70 billion of the $120 billion market of nongovernment-backed bond issuance: single-asset, single borrower securities and commercial real estate CLOs.[22]

The Fed also announced a further expansion of the MMLF to include a wider range of securities, including municipal variable rate demand notes (VRDNs) and bank certificates of deposit, as

[20] Federal Reserve Bank of New York (2020, March 24). *Secondary Market Corporate Credit Facility.* [Press Release] https://www.newyorkfed.org/markets/secondary-market-corporate-credit-facility
[21] Massa, A. (2020, March 24). Fed Enlists BlackRock In Its Massive Debt-Buying Programs. *Bloomberg.* https://www.bloomberg.com/news/articles/2020-03-24/fed-hires-blackrock-for-agency-cmbs-corporate-debt-programs
[22] Podkul, C. (2020, April 22). The Bonds the Fed Left Behind in Coronavirus Bailout are Struggling. *Wall Street Journal.* https://www.wsj.com/articles/the-bonds-the-fed-left-behind-in-coronavirus-bailout-are-struggling-11587567820

well as an expansion of CPFF and reduction in pricing. The CPFF will now include high quality, tax-exempt commercial paper as eligible securities.

March 24

The Fed announced that it would scale back non-critical regulatory oversight of financial institutions, with the biggest reductions targeted to smaller firms. However, large banks are still required to submit their capital adequacy plans by April 6.[23]

March 26

The New York Fed announced it would immediately begin purchases of agency CMBS, with a $1 billion purchase of fixed rate Fannie Mae Delegated Underwriting and Servicing (FNMA DUS) pools, with a 10 year loan term, a yield maintenance protection term of 9.5 years (FNMA DUS 10/9.5), and a weighted average life greater than or equal to 7 years. The New York Fed also anticipates three additional operations next week, totaling approximately $3 billion. Purchases will be made across fixed-rate FNMA DUS pools, fixed-rate Freddie Mac K-series Deals, and Ginnie Mae Project Loan pools, and details of each operation will be released one day prior.[24]

The Fed also announced that it would provide regulatory reporting relief to small financial institutions. Recognizing the disruptions felt especially by smaller firms, the Fed will not take action against any financial institution with less than $5 billion in total assets that submits financial statements after filing deadlines, as long as required reports are submitted within 30 days of the initial deadline.[25]

March 27

Regulatory agencies will now allow the early adoption of the "standardized approach for measuring counterparty credit risk" rule, or SA-CCR, which is a new methodology on how certain banking institutions are required to measure counterparty credit risk in derivatives contracts. This change is intended to help improve current market liquidity and reflects improvements in the derivatives market since 2007-2008, including central clearing and margin requirements.[26]

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[23] Federal Reserve Board of Governors. (2020, March 24). *Federal Reserve provides additional information to financial institutions on how its supervisory approach is adjusting in light of the coronavirus.* [Press Release] https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200324a.htm

[24] Federal Reserve Bank of New York. (2020, March 26). Statement regarding agency commercial mortgage-backed securities operations. [Press Release] https://www.newyorkfed.org/markets/opolicy/operating_policy_200326

[25] Federal Reserve Board of Governors. (2020, March 26). *Federal Reserve offers regulatory reporting relief to small financial institutions affected by the coronavirus.* [Press Release] https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200326b.htm

[26] Federal Reserve Board of Governors. (2020, March 27). *Agencies announce two actions to support lending to households and businesses.* [Press Release] https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200327a.htm

Regulatory agencies also issued a new rule allowing banks to mitigate effects of the new "current expected credit loss" (CECL) accounting standard by extending the transition period for up to two years, in addition to the three-year transition period already place.

March 31

On March 31, the Fed announced the establishment of a temporary **foreign and international monetary authorities, or FIMA Repo Facility**, allowing foreign central banks to convert their Treasury holdings into dollars.[27] This new facility allows foreign central banks and other monetary authorities with reserve accounts at the Federal Reserve Bank of New York to more easily channel dollars to lend to their respective domestic institutions, signifying a major expansion in scope compared to previously established swap lines. The program will begin on April 6 and remain available for six months.

The Fed also announced it would delay the effective date of its revised control framework by six months to reduce operational burdens on financial institutions. This framework was finalized in January 2020 and simplifies its rules for determining when one company controls another for purposes of the Bank Holding Company Act and Home Owners' Loan Act. The rule will now take effect on September 30.[28]

April 1

The Fed announced it would temporarily ease capital requirements for big banks through changes to its supplemental leverage ratio (SLR), which applies to banks with over $250 billion in consolidated assets.[29] This change excludes US Treasury securities and deposits at Federal Reserve Banks for the SLR calculation, remaining in effect until March 31, 2021. Currently, banks hold substantial amounts of cash in the form of US government debt and safe assets, and this adjustment allows banks more flexibility to grow their assets with loans to households and businesses.

April 3

Federal regulatory agencies issued a joint policy statement providing regulatory flexibility to enable mortgage servicers to work with struggling homeowners affected by COVID-19 through

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[27] Federal Reserve Board of Governors. (2020, March 31). *Federal Reserve announces establishment of a temporary FIMA Repo Facility to help support the smooth functioning of financial markets.* [Press Release] https://www.federalreserve.gov/newsevents/pressreleases/monetary20200331a.htm

[28] Federal Reserve Board of Governors. (2020, March 31). *Federal Reserve Board announces it will delay by six months the effective date for its revised control framework*. [Press Release] https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200331a.htm

[29] Federal Reserve Board of Governors. (2020, April 1). *Federal Reserve Board announces temporary change to its supplementary leverage ratio rule to ease strains in the Treasury market resulting from the coronavirus and increase banking organizations' ability to provide credit to households and businesses.* [Press Release] https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200401a.htm

short-term forbearance programs, such as the one established by the CARES Act.[30] Under the CARES Act, borrowers in federally backed mortgage loans experiencing financial hardship due to COVID-19 may request forbearance, and servicers must allow borrowers to defer mortgage payments for up to 180-days and possibly longer. The joint policy statement affirms that agencies do not intend to take enforcement action against mortgage servicers for delays in sending certain early intervention and loss mitigation notices, provided that they are making good faith efforts to provide these within a reasonable timeframe.

April 6

The community bank leverage ratio was temporarily reduced to 8% beginning in Q2 2020, in accordance with Section 4012 of the CARES Act.[31] Community banking organizations will have until January 1, 2022 before the minimum leverage ratio requirement is re-established at 9%.

April 9

The Fed announced another massive lending program **providing up to $2.3 trillion** in loans and expanding its previously announced corporate-debt backstops.[32]

The **Main Street Lending Program** will offer 4-year loans to small and mid-sized businesses employing up to 10,000 workers or revenues less than $2.5 billion, **totaling up to $600 billion.** Through the CARES Act, the Treasury will provide $75 billion in equity to the facility.

The Fed also announced an **expansion of the previously established PMCCF, SMCCF and TALF.** The three programs will now support **up to $850 billion** in credit, and the Treasury will provide $85 billion in credit protection. The PMCCF and SMCCF were expanded to include some pieces of riskier corporate debt, including "fallen angel" issuers that were rated at least BBB-/Baa3 as of March 22, 2020 but were subsequently downgraded to at least BB-/Ba3. Additionally, the TALF was expanded to include highest-rated tranches of outstanding CMBS and newly issued collateralized loan obligations as eligible collateral.

The combined size of the PMCCF and SMCCF will be up to $750 billion, and the TALF SPV will provide up to $100 billion in loans.

A **Municipal Liquidity Facility** will offer **up to $500 billion** in lending to states and municipalities, with the Treasury providing $35 billion in credit protection using funds appropriated by the CARES Act.

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[30]Federal Reserve Board of Governors. (2020, April 3). *Federal agencies encourage mortgage servicers to work with struggling homeowners affected by COVID-19.* [Press Release] https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200403a.htm

[31] Federal Reserve Board of Governors. (2020, April 6). *Agencies announce changes to community bank leverage ratio.* [Press Release] https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200406a.htm

[32] Federal Reserve Board of Governors. (2020, April 9). *Federal Reserve takes additional actions to provide up to $2.3 trillion in loans to support the economy.* [Press Release] https://www.federalreserve.gov/newsevents/pressreleases/monetary20200409a.htm

The **Paycheck Protection Program (PPP) Liquidity Facility** aims to bolster the effectiveness of the SBA's PPP by supplying liquidity to participating financial institutions though financing backed by loans to small businesses, extending credit to institutions that originate PPP loans and accepting the loans as collateral at face value.[33] This facility was fully operational as of April 16.

April 14

The Federal Reserve and other regulatory agencies issued an interim rule to temporarily defer required real estate related appraisals and evaluations for up to 120 days after closing of residential or commercial real estate loan transactions, excluding those involving acquisition, development, and construction.[34]

April 23

The Fed announced the information it would make publicly available regarding its liquidity and lending facilities, which will include: Names and details of participants in each facility, amounts borrowed and interest rate charged, and the overall costs, revenues, and fees for each facility.[35]

Additionally, the Fed announced temporary actions aimed at increasing availability of intraday credit. The Board will temporarily adjust the manner in which Reserve Banks administer Part II on the Federal Reserve Policy on Payment System Risk (PSR Policy) by (1) suspending uncollateralized intraday credit limits (net debit caps) and waiving overdraft fees for institutions eligible for the primary credit program, and (2) permitting a streamlined procedure to secondary credit institutions to request collateralized intraday credit (max caps).[36]

The Fed also announced it is working to expand access to the PPPLF for additional SBA-qualified lenders, with details to be announced soon.

April 27

On April 27, the Fed announced **an expansion of the scope and duration of the Municipal Liquidity Facility** to include smaller cities and counties. Under the new guidelines, the facility will purchase up to $500 billion of short-term notes issued by U.S. states (including the District

[33] Federal Reserve Board of Governors. (2020, April 9*). Federal bank regulators issue interim rule for Paycheck Protection Program Facility*. [Press Release] https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200409a.htm

[34] Federal Reserve Board of Governors. (2020, April 14). *Federal banking agencies to defer appraisals and evaluations for real estate transactions affected by COVID-19.* [Press Release] https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200414a.htm

[35] Federal Reserve Board of Governors. (2020, April 23). *Federal Reserve Board outlines the extensive and timely public information it will make available regarding its programs to support the flow of credit to households and businesses and thereby foster economic recovery.* [Press Release] https://www.federalreserve.gov/newsevents/pressreleases/monetary20200423a.htm

[36] Federal Reserve Board of Governors. (2020, April 23). *Federal Reserve Board announces temporary actions aimed at increasing the availability of intraday credit extended by Federal Reserve Banks*. [Press Release] https://www.federalreserve.gov/newsevents/pressreleases/other20200423a.htm

of Columbia), U.S. counties with a population of at least 500,000 residents, and U.S. cities with a population of at least 250,000 residents, allowing substantially more entities to borrow directly from the MLF than the initial plan announced on April 9.[37]

April 29

The Federal Reserve issued an FOMC statement reiterating its monetary policy stance and leaving rates at their current levels. The FOMC announced it will maintain the federal funds rate target range of 0 to 0.25 percent, the interest on reserves at 0.10 percent, and the primary credit rate at 0.25 percent. The Desk will continue to increase SOMA holdings of Treasury securities, agency MBS, and agency CMBS and conduct repo operations and overnight reverse repo operations as necessary.[38]

April 30

The Fed announced it is expanding the scope and eligibility for the Main Street Lending Program. Changes to the initial program include creating a third loan option with increased risk sharing by lenders for borrowers with greater leverage, lowering the minimum loan size for certain loans to $500,000, and expanding the pool of eligible borrowers.[39]

The central bank also announced it is expanding access to the PPPLF to include additional lenders, as well as an expansion of eligible collateral. Under the revised terms, all PPP lenders approved by the SBA, including non-depository institution lenders, are now eligible to participate in the PPPLF. SBA-qualified PPP lenders include banks, credit unions, Community Development Financial Institutions, members of the Farm Credit System, small business lending companies licensed by the SBA, and some financial technology firms.[40]

May 4

In a press release, the NY Fed confirmed that the PMCCF and SMCCF lending facilities would become operational in early May and released additional details on eligibility of issues and

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[37] Federal Reserve Board of Governors. (2020, April 27). *Federal Reserve Board announces an expansion of the scope and duration of the Municipal Liquidity Facility.* https://www.federalreserve.gov/newsevents/pressreleases/monetary20200427a.htm [Press Release]
[38] Federal Reserve Board of Governors. (2020, April 29). *Federal Reserve issues FOMC Statement.* [Press Release] https://www.federalreserve.gov/newsevents/pressreleases/monetary20200429a1.htm
[39] Federal Reserve Board of Governors. (2020, April 30). *Federal Reserve Board announces it is expanding the scope and eligibility for the Main Street Lending Program.* [Press Release] https://www.federalreserve.gov/newsevents/pressreleases/monetary20200430a.htm
[40] Federal Reserve Board of Governors. (2020, April 30). *Federal Reserve expands access to its Paycheck Protection Program Liquidity Facility (PPPLF) to additional lenders, and expands the collateral that can be pledged.* [Press Release] https://www.federalreserve.gov/newsevents/pressreleases/monetary20200430b.htm

issuers, guidance on compliance with CARES Act requirements, and terms applicable for new issue syndications.[41]

May 5

The Fed announced an interim final rule that modifies the Liquidity Coverage Ratio (LCR) requirements for banks participating in the MMLF and the PPPLF. To encourage participation in these programs, the modified rule will neutralize the LCR impact associated with funding provided by these facilities.[42]

May 12

The SMCCF began purchases of ETFs, with $305 million purchased on the first day of operation.[43] As outlined in the facility's term sheet, the preponderance of ETF holdings will include those with exposure to US investment grade corporate bonds, with the remainder in ETFs with exposure to US high yield corporate bonds.[44] The Fed has not yet released details of which ETFs were purchased. Under the SMCCF, the Fed plans to make outright purchases corporate bonds, in addition to ETFs with exposure to the asset class.

May 14

The Fed issued its *Report on the Economic Well-Being of US Households*, drawing from the Survey of Household Economics and Decision-making (SHED) that examines the economic well-being and financial lives of US adults and families. In April 2020, fewer adults reported that they were at least doing okay financially than had been the case 6 months earlier. The April supplemental survey showed that 72% of adults were either "doing okay" financially (43%) or "living comfortably" (29%), which is down from the 75% of adults who were at least doing okay financially and the 36% who were living comfortably in the fall of 2019. Declines in self-reported financial well-being were largely concentrated among those who lost a job or had work hours cut. Thirteen percent of adults, representing 20 percent of people who had been working in February, reported that they lost a job or were furloughed in March or the beginning of April 2020, and another 6 percent of all adults saw their hours reduced or took unpaid leave.

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[41] Federal Reserve Bank of New York. (2020, May 4). *New York Fed Releases Additional Information on Primary Market and Secondary Market Corporate Credit Facilities in Preparation for Series of May Launches.* [Press Release] https://www.newyorkfed.org/newsevents/news/markets/2020/20200501

[42] Federal Reserve Board of Governors. (2020, May 5). *Federal bank regulatory agencies modify liquidity coverage ratio for banks participating in Money Market Mutual Fund Liquidity Facility and Paycheck Protection Program Liquidity Facility.* [Press Release] https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200505a.htm

[43] Boesler, M. (2020, March 12). Fed Buys $405 Million of ETFs at Launch of Historic Program. *Bloomberg*. https://www.bloomberg.com/news/articles/2020-05-14/fed-buys-305-million-of-etfs-at-start-of-historic-program?sref=ovfckm9x

[44] Federal Reserve Bank of New York. (2020, May 11) *New York Fed Announces Start of Certain Secondary Market Corporate Credit Facility Purchases on May 12*. [Press Release] https://www.newyorkfed.org/newsevents/news/markets/2020/20200511

Combined, 19 percent of all adults reported either losing a job or experiencing a reduction in work hours in March.[45]

May 15

On May 15, the Fed released its *Financial Stability Report*, in which the central bank reviewed the effect of market shocks associated with Covid-19 and highlighted the continued risks facing the US financial system. The report warned that asset prices could suffer steep declines if the pandemic worsens, noting that the commercial real estate market could be among the hardest hit sectors and that defaults on leveraged loans ticked up in February and March and are likely to continue to increase.[46] The report focused on vulnerabilities in four broad categories: asset valuation pressures, excessive borrowing by businesses and households, excessive leverage in the financial sector, and funding risks in the event of widespread investors runs on particular institutions or sectors.[47]

The Fed also announced temporary changes to the supplemental leverage ratio (SLR) rule, which includes subsidiaries of bank holding companies with more than $250 billion in total consolidated assets and requires them to hold a minimum ratio of 3%. The interim final rule permits depository institutions to choose to exclude U.S. Treasury securities and deposits at Federal Reserve Banks from the calculation of the supplementary leverage ratio.[48]

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[45] Federal Reserve Board of Governors. (2020, May 14). *Federal Reserve Board Issues Report on the Economic Well-Being of U.S. Households*. [Press Release] https://www.federalreserve.gov/newsevents/pressreleases/other20200514a.htm

[46] Ibid.

[47] Federal Reserve Board of Governors. (2020, May 15). *Financial Stability Report*. https://www.federalreserve.gov/publications/files/financial-stability-report-20200515.pdf

[48] Federal Reserve Board of Governors. (2020, May 15). *Regulators temporarily change the supplementary leverage ratio to increase banking organizations' ability to support credit to households and businesses in light of the coronavirus response*. [Press Release] https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200515a.htm

II. Fiscal Policy Response

Introduction

On the fiscal policy front, Professor Hanke and several former White House colleagues, including Ambassador C. Boyden Gray, who has previously served as White House Counsel, Ambassador to the European Union, United States Special Envoy for European Affairs, and United States Special Envoy for Eurasian Energy, have advocated for a program that provides direct cash payments to Americans and businesses. With mandatory shutdowns of major parts of the economy, the federal government has effectively made it illegal for most of the population to work. Thus, the government must compensate Americans for this loss of freedom to work, which is tantamount to an infringement of property rights. The federal government must also replace lost cash flows of businesses resulting from these mandated shutdowns.

The roughly $2.2 trillion relief package signed by the President on March 27 includes these fundamental recommendations. The Coronavirus Aid, Relief, and Economic Security (CARES) Act includes $301 billion in direct payments to individuals, as well as provisions for upwards of $500 billion in grants, loans, and other aid to both small and large businesses. Congress has also started planning a "Phase 4" stimulus bill they hope to pass in late April or early May, although the details remain unclear.

While the legislation rightly allocated substantial amounts of direct aid to households and jhb, many of the additional provisions fall outside the bounds of this mandate, creating a massive expansion of government that will likely have lasting long-term effects. Beyond the targeted relief programs and extension of unemployment insurance, the bill expands virtually every component of the social safety net, signifying a substantial growth of the welfare state with no clear distinction between immediate needs and permanent government expansion.

"'Emergencies' have always been the pretext on which the safeguards of individual liberty have been eroded." – Friedrich A. Hayek[49]

In the context of the current crisis, Friedrich Hayek's words are especially pertinent. Once liberties are effectively suspended in a true emergency, Hayek further notes that "it is not difficult for anyone who has assumed such emergency powers to see to it that the emergency will persist."[50] It falls on the American voting public to remain on guard once this crisis subsides to ensure the system returns to some semblance of normalcy, rather than allowing the current moment to function as a pretense for a permanent expansion of government power.

In a 2001 article published in the Financial Times, Professor Hanke and economist Robert Higgs applied Hayek's theory to historical examples and reached the same conclusion. In what they describe as the "the Law of the Ratchet," national crises result in enlarged budgets and new

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[49] Hayek, F. A. (1982). *Law, Legislation and Liberty.* (Vol. 3) University of Chicago Press.
[50] Ibid.

laws and government agencies, acting as a ratchet that "shifts the trend line of government's size and scope up to a higher level."[51] While increased spending may be necessary during crises, opportunists in government often perceive that these national emergencies can function as a pretext to advance their objectives.

This ratchet effect is evident in numerous historical cases. During the Great Depression, organized farm lobbies succeeded in securing the passage of the Agricultural Adjustment Act, an ostensibly temporary emergency relief measure, and the agricultural sector has continued to receive massive government subsidies. During World War II, virtually every interest group tried to benefit from the newly enlarged government budget, and even those remote from the war effort claimed to be performing "essential war work."[52]

These are just a few historical examples of the validity of Hayek's warning, which will become increasingly relevant in the current crisis.

CARES Act: Key provisions

The main provisions of the $2 trillion CARES bill can be broken down into five key categories:[53]

1. **Direct payments to households**

The bill allocates around **$301 billion 1.4% of GDP[54]** to provide direct cash payments to Americans from the US Treasury. Under this program, adults are eligible for up to $1,200 and $2,400 per couple, with additional payments of $500 per child. These payments phase out for individuals earning over $75,000 per year, or $150,000 per couple. Individuals earning $99,000 and married couples earning $198,000 are ineligible.

2. **Support for businesses through grants and loans**

$500 billion (2.3% of GDP) has been allocated for loans and other direct aid to businesses impacted by COVID-19, authorizing the federal government to take direct equity stakes in distressed companies. Of this, $25 billion is earmarked for passenger airlines, $4 billion for cargo airlines, and $17 billion to companies deemed "critical to national security," such as Boeing. In exchange for the grants, air carriers must agree not to furlough, lay off, or cut pay for employees until September 30. Assistance is also dependent on companies agreeing not to buy back shares or issue dividends, as well as limits on executive compensation.

The remaining $454 billion (2.1% of GDP) is allocated to the Treasury's ESF to backstop losses of the lending facilities introduced by the Federal Reserve.

3. **Expansion of unemployment insurance**

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[51] Hanke, S. and Higgs, R. (2001, November 26). Wake Up to the Law of the Ratchet. *Financial Times*. Retrieved from: https://www.cato.org/publications/commentary/wake-law-ratchet

[52] Ibid.

[53] 2020, (March 26). What's in the $2 Trillion Senate Coronavirus Bill. Wall Street Journal. https://www.wsj.com/articles/whats-in-the-2-trillion-senate-coronavirus-bill-11585185450

[54] Q4 2019 GDP was $21.73 trillion. Source: U.S. Bureau of Economic Analysis, Gross Domestic Product [GDP], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/GDP

$250 billion (1.2% of GDP) has been allocated to expand unemployment insurance payments. The bill includes a $600 per week increase for the first four months and allowing each state to contribute to additional benefits. Additionally, availability is extended to contract workers, freelancers, and other nontraditional workers, and the duration of jobless benefits was extended to 39 weeks from the 26 previously available in most states.

4. **Increased funding for healthcare**

$150 billion (0.7% of GDP) has been earmarked for direct aid to state and local governments in order to provide funds for hospitals, equipment, testing supplies, and hiring of medical professionals. An additional **$117 billion (0.5% of GDP)** has also been directly allocated for hospitals and veterans' care, and **$27 billion** will be added to emergency fund that would boost dozens of projects developing drugs and vaccines against coronavirus.

5. **Aid to small businesses**

$367 billion (1.7% of GDP) will be available to provide loans and grants to businesses with fewer than 500 employees.

Many of the nation's major lenders, including JPMorgan Chase, Citigroup, and Wells Fargo, have struggled to process loan applications due to the high volume, as well as delays and uncertainty regarding final rules from the Treasury and the SBA. Initial funding for the small business loan program was exhausted on April 16, and additional funding was provided on April 24.[55]

The SBA's Paycheck Protection Program contains numerous exclusions, many of which were inherited from the agency's founding in 1953. Categories deemed "morally questionable" or "speculative," including casinos, strip clubs, and cannabis companies, are ineligible for PPP loans under the current guidelines.[56]

Tax and personal finance provisions[57]

Taxes

$221 billion (1.04% of GDP) will be provided in numerous tax benefits for businesses, including deferrals and extended deadlines. Employers will be able to defer 2020 payroll taxes, paying half in 2021 and half in 2022. A tax credit will be provided for retaining employees equal to 50% of payroll, which is limited to $10,000 per employee per quarter and for employers with 100+ employees. Businesses may also claim deductions by applying today's losses against past profits to claim cash refunds. Restaurants and retailers would also benefit from the fixing of a 2017 tax

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[55] Duehren, A, (2020, April 16). Funding Exhausted for $350 Billion Small-Business Paycheck Protection Program. *Wall Street Journal.* https://www.wsj.com/articles/funding-exhausted-for-350-billion-small-business-paycheck-protection-program-11587048384

[56] Davis, B. (2020, April 22). Small-Business Loans: Strip Clubs, Marijuana Stores Need Not Apply. *Wall Street Journal.* https://www.wsj.com/articles/small-business-loans-strip-clubs-cannabis-shops-need-not-apply-11587573925

[57] 2020, (March 26). What's in the $2 Trillion Senate Coronavirus Bill. *Wall Street Journal.* https://www.wsj.com/articles/whats-in-the-2-trillion-senate-coronavirus-bill-11585185450

law mistake that limited depreciation deductions. In addition, individuals who do not itemize deductions may claim up to $300 for charitable contributions.

Bankruptcy

The bill would ensure that people who file for bankruptcy do not have to use stimulus checks to pay past debt and extends repayment time frame from 5 to 7 years.

Credit reporting

Lenders that allow struggling consumers to defer or skip loan payments will be required to report the borrowers as current on their payments, even if they are not.

Mortgages

Companies that service federally backed mortgages will be required to grant forbearance of up to 360 days to borrowers harmed by the outbreak**.** Servicers are also prohibited from initiating foreclosure and processing foreclosure-related evictions for 60 days, beginning March 18**.** Owners of multifamily properties can request forbearance up to 90 days, during which tenants cannot be evicted for nonpayment

Retirement

The law temporarily loosens rules on hardship distributions from retirement accounts, giving affected individuals access to up to $100,000 without the 10% penalty**, d**oubles the amount 401(k) participants can take in loans from an account for the next 6 months to the lower of $100,000 or 100% of the account balance, and suspends mandatory distributions government requires most to take from tax-deferred accounts for 2020

Student loans

The Act permits suspension of federal student loan payments through September 30, without any interest accruing.

Additional industry-specific provisions

Banking

The Act delays the implementation of new accounting rule that would have required banks to immediately use reserves for estimated loan losses all at once, rather than spreading out over life of the loan. Additionally, the Office of the Comptroller of the Currency is authorized to allow banks to lend above typical size restrictions. More lending flexibility is also allowed to smaller community banks with less than $10 billion in assets via a higher leverage ratio.

Farming

Over $48 billion has been allocated to agriculture and nutrition programs, including $14 billion to replenish the Commodity Credit Corp., a Depression-era program to stabilize farm incomes, and $9.5 billion to support producers of specialty crops, livestock, and dairy, as well as those who supply farmer's markets, restaurants, and schools.

Hotels and restaurants

The hotel and restaurant sectors benefit from a patchwork of loans, grants, and tax relief, primarily from the $350 billion for small businesses. The Act also defines each individual hotel as its own business, allowing hotel owners with several properties to qualify for aid packages.

Public transportation

$25 billion in supplemental spending was allocated for public transit. National passenger railroad Amtrak secured about $1 billion to cover COVID-19 related revenue losses, as well as enhanced unemployment benefits.

The "Pork"

While massive amounts were allocated to important purposes, considerable funds have been directed to agencies with questionable relevance to the COVID-19 pandemic. For example, NASA will receive $60 million, the National Archives will receive $8 million, and the Energy Department will receive an additional $99 million.[58]

The bill goes even further: The Forest Service will receive $27 million for "capital improvement and maintenance," $3 million for "forest and rangeland research," and $7 million for wildfire management. The National Foundation on the Arts and the Humanities gets $75 million, the Kennedy Center gets $25 million, the Institute of American Indian and Alaska Native Culture and Arts Development receives a $78,000 "payment," and a water project in central Utah gets $500,000, to name a few examples of special interest provisions.[59] Clearly, a great deal can be obscured in 880 pages of legislation.

Additional relief appropriations

On April 24, 2020, the President signed into law an additional $484 billion relief package. The bill allocates an additional $321 billion to the depleted Paycheck Protection Program, with $30 billion set aside for banks and credit unions with $10-50 billion in assets and another $30 billion for smaller institutions. In addition, $60 billion was added to the Economic Injury Disaster Loan Program and expands eligibility to farms and ranchers. The bill also allocates $75 billion for hospitals and $25 billion for testing.[60]

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[58] Strassel, K. (2020, March 26). Big-Government Contagion. *Wall Street Journal.* https://www.wsj.com/articles/big-government-contagion-11585262351

[59] Ibid.

[60] Litvan, L., Wasson, E., and House, B. (2020, April 21). House Set to Pass New Stimulus with Plans to Dole out More. *Bloomberg*. https://www.bloomberg.com/news/articles/2020-04-21/senate-passes-484-billion-interim-economic-stimulus-package?sref=ovfckm9x

HEROES Act

On May 15, the House narrowly passed a fourth stimulus relief package totaling $3 trillion against Republican opposition.[61] The new bill includes roughly $1 trillion in direct aid to states and localities, a new round of one-time cash payments of up to $1,200 for individuals and up to $6,000 for families, and an extension of the $600 a week in enhanced unemployment benefits until January, which were initially set to expire at the end of July.

However, Republicans have expressed strong opposition to the new legislation and have called for measures to protect companies from liability during the pandemic. Senate Majority Leader Mitch McConnell characterized the legislation as “a $3 trillion left-wing wish list like the speaker is apparently going to try to jam down the throats of her majority.” The President has stated he is open to providing more funding for states and localities as long as the funding is not used to “bail out states that haven’t necessarily had their act together.”[62]

Conclusion

The Fed has rolled out an unprecedented balance sheet expansion in response to the economic downturn, reviving many of its 2008 crisis-era programs and introducing new initiatives. The announcement of an unlimited quantitative easing program reflects the recognition that the scale of the necessary liquidity injections will likely be unprecedented as well, as Hanke and Greenwood suggested.

The current program also repudiates the commonly held notion that the Fed has essentially run out of ammunition in the low interest rate environment of the last decade. Rather than suppressing interest rates, the primary function of the Fed’s balance sheet expansion is to supply a sufficient quantity of broad money to the economy to enhance liquidity and allow the flow of credit.

On the fiscal side, the federal government took swift action to implement a substantial program to mitigate the economic disruptions caused by the pandemic. Providing direct cash payments to Americans and businesses functions as temporary compensation for restricting the right to work, and loan programs will further support industries deeply affected by the outbreak and mandatory shutdowns.

However, the legislation could signify a long-term expansion of government if these large-scale programs become permanently institutionalized. Many programs enacted during the Great Depression are still around today and have become core fibers of the modern social safety net. The $2.2 trillion CARES act is more than twice the size of the New Deal and the largest aid

[61] Peterson, K. and Duehren, A. (2020, May 15). House Narrowly Passes $3 Trillion Aid Package. *Wall Street Journal.* https://www.wsj.com/articles/house-set-to-vote-on-democrats-3-trillion-aid-package-11589561178
[62] Ibid.

package in history. While the government must provide relief to Americans and businesses and support the economy during its compulsory shutdown, and has rightly done so, there must also be a balance to prevent the exploitation of a crisis to permanently enlarge the federal government.

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