

# Unappropriated Dollars: The Fed's Ad Hoc Lending Facilities and the Rules That Govern Them

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#### Abstract

In response to the spread of COVID-19, the Federal Reserve has established fourteen ad hoc facilities to lend to financial firms, foreign central banks, nonfinancial businesses, and state and local governments. This Article reviews these facilities, explains what they are for, and examines the statutory rules that govern them. It distinguishes between seven liquidity facilities designed to backstop deposit substitutes issued by shadow banks and seven credit facilities designed to invest directly in the real economy. Ten of these facilities - three of the liquidity facilities and all seven of the credit facilities – are contemplated by the CARES Act, which appropriates money for the Treasury Secretary to invest in them. But all ten are inconsistent with at least one of the following three provisions of existing law, none of which the CARES Act explicitly amends: (1) section 13(3)(B)(i) of the Federal Reserve Act, which requires the Fed to ensure that 13(3) lending is "for the purpose of providing liquidity to the financial system"; (2) section 13(3)(A), which requires the Fed to "obtain evidence" that participants are "unable to secure adequate credit accommodations" from other banks; and (3) section 10(a) of the Gold Reserve Act, codified at 31 U.S.C. § 5302, which limits the Treasury Secretary to using the Exchange Stabilization Fund to "deal" in "securities" consistent with "a stable system of exchange rates." Of the four liquidity facilities not contemplated by the CARES Act, two are inconsistent with any reasonable interpretation of section 14(2)(b) of the Federal Reserve Act, which authorizes the Fed to buy and sell government debt only "in the open market," and one is inconsistent with a similar requirement in section 14(1) regarding foreign currency. (Although these facilities are permitted by sections 13(13) and 13(3) respectively.) Hence thirteen of the Fed's fourteen facilities as currently constituted are in tension with either the Federal Reserve Act, the Gold Reserve Act, or both. Three conclusions follow. First, most of the Fed's current, critical lending activities are an exception to the baseline statutory framework, permissible only in conjunction with the CARES Act. Second, Congress's failure to amend that framework is obscuring the fact that it is asking the Fed to take on substantial new responsibilities - ones for which it was not designed and which it may struggle to discharge. Third, Congress should update our money and banking laws to clarify the rules governing Fed lending. reduce the need for monetary backstops, and improve the government's ability to respond quickly and effectively to fiscal emergencies in the future.

Keywords: Central Banking, Money, Banking, Lender of Last Resort, Monetary Policy, CARES Act, Federal Reserve, 13(3), Repo, Swap Lines, Emergency Lending, ESF, Shadow Banking, Eurodollars

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### UNAPPROPRIATED DOLLARS: THE FED'S AD HOC LENDING FACILITIES AND THE RULES THAT GOVERN THEM

#### Lev Menand<sup>†</sup> Draft as of May 15, 2020

In response to the spread of Covid-19, the Federal Reserve has established fourteen ad hoc facilities to lend to financial firms, foreign central banks, nonfinancial businesses, and state and local governments. This Article reviews these facilities, explains what they are for, and examines the statutory rules that govern them. It distinguishes between seven liquidity facilities designed to backstop deposit substitutes issued by shadow banks and seven credit facilities designed to invest directly in the real economy. Ten of these facilities – three of the liquidity facilities and all seven of the credit facilities – are contemplated by the CARES Act, which appropriates money for the Treasury Secretary to invest in them. But all ten are inconsistent with at least one of the following three provisions of existing law, none of which the CARES Act explicitly amends: (1) section 13(3)(B)(i) of the Federal Reserve Act, which requires the Fed to ensure that 13(3) lending is "for the purpose of providing liquidity to the financial system"; (2) section 13(3)(A), which requires the Fed to "obtain evidence" that participants are "unable to secure adequate credit accommodations" from other banks; and (3) section 10(a) of the Gold Reserve Act, codified at 31 U.S.C. § 5302, which limits the Treasury Secretary to using the Exchange Stabilization Fund to "deal" in "securities" consistent with "a stable system of exchange rates." Of the four liquidity facilities not contemplated by the CARES Act, two are inconsistent with any reasonable interpretation of section 14(2)(b) of the Federal Reserve Act, which authorizes the Fed to buy and sell government debt only "in the open market," and one is inconsistent with a similar requirement in section 14(1) regarding foreign currency, (Although these facilities are permitted by sections 13(13) and 13(3) respectively.) Hence thirteen of the Fed's fourteen facilities as currently constituted are in tension with either the Federal Reserve Act, the Gold Reserve Act, or both. Three conclusions follow. First, most of the Fed's current, critical lending activities are an exception to the baseline statutory framework, permissible only in conjunction with the CARES Act. Second, Congress's failure to amend that framework is obscuring the fact that it is asking the Fed to take on substantial new responsibilities - ones for which it was not designed and which it may struggle to discharge. Third, Congress should update our money and banking laws to clarify the rules governing Fed lending, reduce the need for monetary backstops, and improve the government's ability to respond quickly and effectively to fiscal emergencies in the future.

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A central bank is a banker's bank. It affords to the other banks of the community, the competitive banks, the same facilities as they afford to their customers. The competitive banks make payments to one another by drawing on balances at the central bank, they draw out currency against those balances or pay currency in, as their business may require, and they replenish their balances, when low, by borrowing from the central bank. . . . The Central Bank is the *lender of last resort*. That is the true source of its responsibility for the currency.

- RALPH HAWTREY, THE ART OF CENTRAL BANKING (1933)

#### I. Introduction

Since the start of the public health crisis earlier this year, the Federal Reserve has emerged as one of the most active institutions in the federal government. It has established fourteen ad hoc lending facilities and purchased more than two trillion dollars of financial assets. Some are saying it has gone to "war." And the Fed itself has embraced the analogy. In March, its leader, Jay Powell, assured the public that it would not "run out of ammunition."

What does Powell mean? What "ammunition" does the Fed have? And what is the extent of its arsenal? The Fed, of course, is not a military organization, it is a central bank. It administers the U.S. monetary system and to that end it issues notes known as dollar bills or cash.<sup>3</sup> Among the Fed's powers is the power to create cash *ex nihilo*. There is no statutory or theoretical limit to the number of dollars the Fed can issue.<sup>4</sup> And because the Fed is set up to operate independently from the political branches, it can create dollars without the approval of Congress or the President.<sup>5</sup> This is the ammunition to which Powell was referring.

<sup>&</sup>lt;sup>1</sup> See, e.g., Stephen G. Cecchetti & Kim Schoenholtz, "The Fed Goes to War: Part I," Money & Banking Blog (Mar. 23, 2020). David Wessel also used the word to describe the Fed's actions in 2008. IN FED WE TRUST: BERNANKE'S WAR ON THE GREAT PANIC (2010). Applying military metaphors to central banking is a popular rhetorical mien. See ADAM TOOZE, CRASHED 169-70, 613 (2018) (cataloging references to "big bazookas" and "shock and awe"). Analogies to life-saving professions are also common. See, e.g., BEN S. BERNANKE, HENRY PAULSON & TIMOTHY GEITHNER, FIREFIGHTING: THE FINANCIAL CRISIS AND ITS LESSONS (2019); BEN S. BERNANKE, HENRY PAULSON & TIMOTHY GEITHNER, FIRST RESPONDERS (2020).

<sup>&</sup>lt;sup>2</sup> Christopher Condon et al., "Fed is 'Not Going to Run Out of Ammunition,' Powell Vows," BLOOMBERG (Mar. 26, 2020).

<sup>&</sup>lt;sup>3</sup> See Lev Menand, Administering Money: The Federal Reserve System in Theory and Practice (unpublished m/s on file with author).

<sup>&</sup>lt;sup>4</sup> See 12 U.S.C. § 411 ("Federal reserve notes, to be issued at the discretion of the Board of Governors of the Federal Reserve System . . . are authorized"). The Fed *is* required to back its notes with collateral. *Id.* at § 412. Accordingly, it is limited by the amount of collateral in the economy: the sum of assets it is authorized to buy and loans it can make to authorized borrowers. This is of no practical significance given current collateral rules.

<sup>&</sup>lt;sup>5</sup> See U.S. ex rel. Kraus v. Wells Fargo, 943 F.3d 588 (2019). Congress of course can always rescind the Fed's charter or revoke its powers. This is not a wholly irrelevant consideration. The political branches allowed the charters of both the First and Second Banks of the United States to expire. And, in response to the Fed's dismal performance during the 1930s, Congress sharply reduced the autonomy of the System's twelve regional Federal Reserve Banks (FRBs). See Banking Act of 1935,

But while the Fed's ammunition is unlimited, its weaponry is not. The Fed can only put unappropriated dollars into circulation in one of two ways: by using them to buy certain financial assets or by lending them.<sup>6</sup> And when the Fed lends dollars, it has to comply with a set of statutory rules governing who gets them, in what circumstances, and on what terms.

On March 27, President Trump signed the CARES Act into law, dramatically expanding the Fed's responsibilities in ways that have so far gone largely, if not entirely, unnoticed. This neglect is likely due to the fact that the CARES Act does not amend any of the rules directly. Instead, it appropriates \$454 billion for the Treasury Secretary to invest in Fed facilities and specifies the sort of lending these facilities must do. The catch is that, although the Act does not acknowledge it, much of this vital lending is inconsistent with one or more statutory provisions still on the books.

To date, neither these baseline rules,<sup>8</sup> nor how they interact with the CARES Act, has received much attention from legal scholars.<sup>9</sup> This article addresses that gap. Its goal is: (1) to illuminate what the Fed is doing, how it is doing it, and why; (2) to

Pub. L. No. 305 – 74<sup>th</sup> Cong. (1935). There is also an important extra-legal constraint on the Fed: The President can always illegally remove one or more members of the Fed's Board and dare the courts to stop him. No President has attempted anything like this since the Supreme Court rebuffed Franklin Roosevelt in 1935 after he illegally removed a member of the Federal Trade Commission, see *Humphrey's Executor v. United States*, 295 U.S. 602 (1935), although President Johnson and President Trump have both considered it, see Ramsey Clark, Deputy Attorney General, "Tenure of Members of the Board of Governors of the Federal Reserve System" (Jul 2., 1965) (on file with author); Jeanna Smialek, *Trump Says He Could Demote Fed Chair Powell*, N.Y. TIMES (Mar. 14, 2020). Twice during the nineteenth century the Court balked at checking presidents who illegally removed territorial judges. *See* U.S. ex rel. Goodrich v. Guthrie, 58 U.S. 284 (1854) (avoiding the issue by concluding that the court had no power to mandamus the Treasury Secretary); Territory v. Lockwood, 70 U.S. 236 (1865) (avoiding the issue by concluding that a proceeding in *quo warranto* must be in the name of the United States and not in the name of the territory). *Cf.* McAllister v. U.S., 141 U.S. 174 (1891).

<sup>&</sup>lt;sup>6</sup> Technically, the Fed is still buying when it lends. It is buying a bespoke debt instrument.

<sup>&</sup>lt;sup>7</sup> Note that these facilities are still primarily lending unappropriated dollars that the Fed is issuing *ex nihilo*. As discussed herein, the appropriated dollars are there to absorb potential losses.

<sup>8</sup> The canonical treatment of the Fed's lending authorities is now nearly fifty years old. Howard Hackley, Lending Functions of the Fed's lending authorities. A History (1973). Some recent scholarship has looked at certain specific aspects of the Fed's lending authorities. See, e.g., Colleen Baker, The Federal Reserve's Use of International Swap Lines, 55 Arizona L. Rev. 603 (2013); George Selgin, The Constitutional Case for the Fed's Treasury Backstops, Alt-M (Apr. 13, 2020); Kathryn Judge, Three Discount Windows, Cornell L. Rev. (2014). See also Congressional Research Service, Federal Reserve: Emergency Lending (Mar. 27, 2020); Paul Tucker, The Lender of Last Resort and Modern Central Banking: Principles and Reconstruction (2014). For an analysis of the legal dimensions of the Fed's lending in 2008, see Scott G. Alvarez, Thomas C. Baxter Jr. & Robert F. Hoyt, The Legal Authorities Framing the Government's Response to the Global Financial Crises, 2 J. Fin. Crises 1 (2020); Phillip Wallach, To the Edge: Legality, Legitimacy, and the Responses to the 2008 Financial Crises (2015); Laurence M. Ball, The Fed and Lehman Brothers: Setting the Record Straight on a Financial Disaster (2018).

<sup>&</sup>lt;sup>9</sup> But see Robert C. Hockett, Spread the Fed: From Federal Disintegration to Central Bank Decentralization in Pandemic and Beyond (May 2020) (available on SSRN).

highlight the mismatch between the Fed's ad hoc programs and the baseline rules that govern its lending; (3) and to suggest some ways that Congress could permanently update the statutory framework.

It proceeds in four parts. Part II examines the Fed's core lending facility known as the discount window. Unlike the ad hoc facilities that are the focus of this article, the discount window is a statutory program that Congress authorized in 1913 when it established the Federal Reserve. Congress created the discount window so that the Fed could regulate the ability of banks to issue cash substitutes like deposits and so that it could ensure people could exchange those substitutes for cash at par. The window is what makes the Fed, technically speaking, the "lender of last resort." It is also at the core of the Fed's role as a "central bank."

Part III reviews the Fed's recent lending. It distinguishes between seven *liquidity facilities*, which, with one exception, are similar to the discount window and largely based on programs the Fed invented in 2008, and seven *credit facilities*, which are quite different from the discount window and which the Fed has never used before. The liquidity facilities extend the Fed's role with respect to banks (and bank deposits) to shadow banks (and the deposit substitutes they issue). Shadow banks are financial firms like securities dealers and money market mutual funds that perform similar economic functions to banks but lack their regulatory status and therefore cannot access the discount window. The economist Perry Mehrling calls backstopping these firms acting as a "dealer of last resort." Former Bank of England Deputy Governor Paul Tucker describes it as "modern" central banking. <sup>12</sup>

The credit facilities are a horse of a different color. They invest in the real economy by allocating capital to municipalities and buying corporate bonds, underwriting new corporate debt, and purchasing loans originated by banks in connection with the CARES Act. These activities are not "central banking" – traditional or "modern" – they are state banking and industrial policy.

Part IV examines the legal basis for these programs. It distinguishes between eleven established pursuant to section 13(3) of the Federal Reserve Act, which governs most of the Fed's nonbank lending, and three established pursuant to section 14, which governs the Fed's "open market operations" – its outright purchases of gold, foreign exchange, and government securities. It concludes that thirteen of the fourteen facilities as currently constituted – although authorized by a broad reading

<sup>&</sup>lt;sup>10</sup> As discussed further herein, one of the facilities, the Term Asset-backed Loan Facility or TALF, which I have categorized as a liquidity facility, has a significant credit component.

<sup>&</sup>lt;sup>11</sup> PERRY MEHRLING, THE NEW LOMBARD STREET: HOW THE FEDERAL RESERVE BECAME THE DEALER OF LAST RESORT (2010).

<sup>&</sup>lt;sup>12</sup> Tucker, *supra* note 8, at 27-28 (articulating principles for a "modern" central bank to lend to shadow banks that "form part of the *de facto* monetary system"). Kate Judge also uses this moniker. *See* Kathryn Judge, *The First Year: The Role of a Modern Lender of Last Resort*, COLUM. L. REV. (2016).

of the CARES Act and other provisions of law – are in tension with one or more provisions of either the Federal Reserve Act, the Gold Reserve Act, or both.

First, it shows that at least six of the Fed's credit facilities are inconsistent with section 13(3)(B)(i) of the Federal Reserve Act, which effectively limits the Fed to "providing liquidity to the financial system." This oft-overlooked language was added to the 13(3) in 2010. It allows the Fed to act as "dealer of last resort" to shadow banks but it prevents, at least on its face, the Fed from using 13(3) to lend to the real economy as a limited purpose national investment authority. Although Congress could have removed or explicitly suspended this restriction in March, instead it appropriated funds for the Treasury Secretary to invest in facilities that lend to the real economy and described the facilities as being for the purpose of providing liquidity to the financial system. In other words, according to Congress, the Fed's new facilities for businesses and municipalities are *for financial firms*, even though plainly they are not.

Second, it reveals that Congress employed a similar tactic in the case of three of the Fed's 13(3) liquidity facilities. These programs rely on investments by the Secretary of the Treasury using \$30 billion from an account called the Exchange Stabilization Fund (ESF). These investments are inconsistent with Section 10(a) of the Gold Reserve Act, which authorizes the Treasury Secretary to use the ESF to "deal" in "securities" in order to stabilize "exchange rates." The CARES Act, however, says that the Secretary can use the ESF to implement the CARES Act and explicitly suspends a 2008 law that prohibits the Secretary from using the ESF to guarantee the value of money market mutual fund shares. While these provisions do not resolve the conflict between the Gold Reserve Act and these investments, they imply that section 10(a) does not foreclose them.

Third, it argues that the Fed's credit facility designed to buy corporate bonds and ETFs on secondary markets is inconsistent with section 13(3)(A) of the Federal Reserve Act, which permits the Fed to use 13(3) facilities only to "discount" notes of participants, and then only after the Fed has "obtain[ed] evidence" that participants are "unable to secure adequate credit accommodations from other banking institutions." Buying bonds and ETFs does not involve discounting notes, nor is it clear how the Fed can comply with its obligation to obtain the relevant sort of evidence regarding credit accommodations, especially with regard to its ETF purchases. Nevertheless, the CARES Act, which contemplates Treasury investments in Fed facilities that "purchas[e] obligations or other interests in secondary markets," appears to authorize these purchases.

Fourth, it explains why two of the Fed's section 14 liquidity programs – its repurchase operations, which in one form or another date to 1917, and its FIMA repofacility, created just this year – are inconsistent with the requirements of section 14,

but are plainly permissible (subject to procedural constraints the Fed is not complying with) under a different, long-neglected provision, section 13(13). Section 13(13) authorizes the Fed to lend to anyone against U.S. government debt collateral. The Fed's repurchase operations and FIMA facility do precisely this, except they structure the loan as a sale-and-repurchase agreement, or repo. While section 14(2)(b) authorizes the Fed to buy and sell government debt, it requires that the Fed's purchases and sales be in "the open market." In a repo, the purchase and subsequent resale are both off-market transactions at non-market prices. Indeed, the resale is not a sale at all; it is the settlement of a forward transaction.<sup>13</sup>

Fifth, it identifies a similar issue with the Fed's foreign central bank swap lines – another of its longstanding section 14 programs. In a swap, the Fed sells dollars for foreign currency and then buys the dollars back at a later date. Section 14 permits purchases and sales of foreign currencies, but again only in the open market. In a swap, the purchases and sales transact off-market at non-market prices. And, even if swap lines *were* authorized by section 14, they are constructively loans, and the requirements of section 13(3) probably apply. Among these are that the Fed report the transactions to Congress and seek approval of the Treasury Secretary.

Three conclusions follow in Part V. First, although it is clear enough that the Fed's activities are authorized – among other things the CARES Act is a more recent pronouncement and, as a matter of statutory interpretation, the specific controls the general – the tension between the CARES Act and the background rules means that the Fed's current facilities must be understood as exceptions, not as the new normal. The best reading of the CARES Act, in other words, is that Congress suspended *sub silentio* its prior enactments for the purpose of addressing the current crisis. <sup>14</sup>

Second, *sub silentio* lawmaking is suboptimal for many of the same reasons as *sub silentio* judicial decisions – it reduces clarity, hampers accountability, and favors actors that are better able to understand the law. Here, there is reason to believe that Congress, in drafting the CARES Act this way, acted not just out of expediency but also to avoid drawing public attention to the fact that it is asking the Fed to take on a new role by pretending that the Fed has had this role all along.

Third, there are significant deficiencies in the baseline statutory rules governing Fed lending. Congress charged the Fed with managing the supply of monetary aggregates in the economy but only gave it the power to directly manage the supply of money created by banks. Although it also adopted 13(3) and revised it

<sup>&</sup>lt;sup>13</sup> The fascinating history of the Fed's long-established practice of using repo to lend is the subject of forthcoming work entitled "The Open Market Lending of the Federal Reserve."

<sup>&</sup>lt;sup>14</sup> Congress can be said to amend an existing law *sub silentio*, on my usage of the term, when it enacts a statute that is inconsistent with a prior enactment but does not repeal or explicitly suspend its prior inconsistent enactment. In this way, Congress acts like a court overruling a prior decision without acknowledging it. *See infra* Part V(A).

to allow the Fed to backstop the money liabilities issued by shadow banks, this provision does not empower the Fed to control these wholesale deposit substitutes ex ante nor does it suffice to allow the Fed to respond (without a further legislative enactment like the CARES Act) to the sort of instability in money markets that will occur whenever asset prices fall. Furthermore, the Fed is not set up to lend directly to the real economy, and in assigning the Fed that task, Congress risks jeopardizing the Fed's ability to successfully execute on its other responsibilities.

Accordingly, Congress should consider enacting several reforms. These include (1) creating a new agency to lend to the real economy; (2) creating a standing account for the Treasury to use to support the Fed's 13(3) facilities and to address future fiscal emergencies; (3) formalizing the Fed's role as a central bank for shadow banks; and (4) developing a governance framework for shadow banking and the global dollar system that allows shadow banks, foreign and domestic, to access the Fed's *standing* liquidity facility, the discount window, but also allows the government to manage its exposure to the risks these firms take. Our current monetary-financial complex relies more on these firms than banks, but it does not regulate them accordingly. This is a major source of instability, even when, as in March, the Fed acts quickly to halt panics. Moreover, the chances of insolvencies in the shadow banking system are rising rapidly, and the Fed likely lacks the tools right now – even under the CARES Act – to address them.

#### II. The Fed's Statutory Liquidity Facility

As a central bank, the Federal Reserve is designed to backstop bank deposits by lending banks cash to handle depositor withdrawals. The Fed is currently doing this through what is known as the discount window. This Part examines the window and explains how it makes the Fed a "lender of last resort" for banks.

#### A. Providing Liquidity to Banks to Backstop Deposits

First, the mechanics. The Federal Reserve System operates twelve regional Federal Reserve Banks (FRBs) located in different cities around the country. <sup>15</sup> These FRBs are supervised by a Board of Governors in Washington <sup>16</sup> and have charters from the Comptroller of the Currency, a bureau in the Treasury Department, just like the depository subsidiaries of Bank of America, J.P. Morgan Chase, and Wells Fargo. <sup>17</sup> Banks have accounts at FRBs, and the balances in them are like deposits in

<sup>&</sup>lt;sup>15</sup> 12 U.S.C. §§ 222-25; *id.* at § 341.

<sup>&</sup>lt;sup>16</sup> *Id.* at §§ 241-52

<sup>&</sup>lt;sup>17</sup> *Id.* at § 341. The FRBs are nominally owned by the banks in their districts, 12 U.S.C. §§ 222, 282, 287, which receive a fixed dividend, *id.* at § 289. Each FRB has a nine-person board of directors. *Id.* at § 302. Banks select six of the nine directors, three from their own ranks to represent their interests and three from outside their ranks to represent the public. *Id.* The Board of Governors selects the other three directors, *id.*, one of whom it picks to be chair, *id.* at § 305. FRB Presidents are selected

ordinary checking accounts. Banks call their accounts at FRBs "reserve accounts," and they call their balances "reserves." Banks use reserves to make payments to each other and to clear payments between their own customers. For example, when Person A at Bank 1 sends a wire to Person B at Bank 2, Bank 1 reduces the account balance of Person A on the books of Bank 1; Bank 2 increases the account balance of Person B on the books of Bank 2; and the Fed reduces the account balance of Bank 1 and increases the balance of Bank 2 on the books of the Fed.

If Bank 1 does not have enough reserves to cover the amount of the wire, the Fed gives Bank 1 until the end of the day to borrow reserves. <sup>19</sup> One way that Bank 1 can do this in what is known as the "federal funds" or "fed funds" market. The Fed funds market is an interbank lending market where banks lend reserves to each other. (The interest rate in this market is what the Fed targets as part of its conventional monetary policy.)<sup>20</sup>

But Bank 1 always has another option. It can borrow the reserves it needs from the Fed. The Fed stands ready at all times to lend reserves to banks<sup>21</sup> at the discount window at what is known as the "discount rate."<sup>22</sup> To encourage banks to borrow in the Fed funds market, the Fed usually sets the discount rate above the Fed funds rate. And when it changes monetary policy to make it more or less expensive for banks

by the three directors appointed by the Board and the three directors who represent the wider community with the approval of the Board. *Id.* at § 341(fifth).

<sup>&</sup>lt;sup>18</sup> See Federal Reserve System: Purposes and Functions 21-23 (2016). In 1913, Congress limited access to these accounts to national banks chartered by the Comptroller of the Currency and banks chartered by state governments that signed up to become members of the Federal Reserve System. So-called member banks were required to buy stock in their regional FRB and submit to Fed oversight. See Federal Reserve Act, § 9 ("State Banks as Members"). In 1980, Congress expanded access to the Fed's balance sheet to all state depository institutions, as part of a law that empowered the Fed to set minimum reserve requirements that apply to these banks. See id. § 19; 12 U.S.C. § 342.

<sup>&</sup>lt;sup>19</sup> The Fed still increases the balance of Bank 2 right away.

<sup>&</sup>lt;sup>20</sup> PURPOSES AND FUNCTIONS, *supra* note 18, at 17, 27-28.

<sup>&</sup>lt;sup>21</sup> In 1913, access to the discount window was limited to member banks, *see supra* note 18, but when Congress required the Fed to allow state depository institutions to open reserve accounts it also amended the law to "entitle[] [any depository institutions with transaction accounts or nonpersonal time deposits] to the same discount and borrowing privileges as member banks," FRA §19(b)(7).

<sup>&</sup>lt;sup>22</sup> One way that Bank 1 can borrow is by selling the Fed one or more of its loans for less than par (the amount the borrower owes on the loan at maturity). The difference between the purchase price and par is the "discount." The discount divided by the purchase price is the interest rate – the amount the Fed earns for giving the bank the reserves it needs. (The bank must endorse these loans so that if they default, the bank is still on the hook.) Such lending is governed by section 13(2), which was part of the original law, and is limited to notes, drafts, and bills of exchange maturing in 90 days or less arising out of actual commercial transactions meaning debt issued for agricultural, industrial, or commercial purposes. 12 U.S.C. § 343. Today, most "discount window" lending takes the form of an advance, in which the Fed swaps reserves for a debt instrument newly issued by the bank through which the bank pledges loans or other assets on its books as collateral. Advances are authorized by section 10B, added in 1932, Pub. L. 72-44, 47 Stat. 56, 57 (1932), permitting loans of up to four months secured to the satisfaction of the relevant FRB, 12 U.S.C. § 347b.

to access cash, it moves the two rates in tandem. (This gap has stigmatized the discount window, and so discount window lending has become less common.)<sup>23</sup>

#### B. As a "Lender of Last Resort"

When the Fed lends to banks at the discount window, economists say it acts as a "lender of last resort" or LLR. LLR is a term of art.<sup>24</sup> The point of LLR lending is not to *invest* in banks – to lend to banks in the way that ordinary people or banks themselves lend. It is to regulate the amount of money in the economy in a way that promotes stable, long-term economic growth. A bit of background about money is required to understand why this is the case and how it works.

Modern economies rely on two types of money.<sup>25</sup> One type is created by the government – cash and coin issued by the Fed and the Mint – known as "base money," or "high-powered money." The other, far more important type is created by financial institutions – deposits issued by banks and other promises to pay cash and coin known as "inside money." By design, most of the money in the economy is inside money. For example, all the dollars in your bank account are deposits and a type of inside money. People use deposits to conduct most transactions, transferring account balances by check or by wire, and there are far more deposits in "circulation" than cash – \$13 trillion compared to \$1.5 trillion.<sup>27</sup>

<sup>&</sup>lt;sup>23</sup> Mark Carlson & Jonathan D. Rose, *Stigma and the Discount Window*, FEDS Notes (Feb. 11, 2020). Hackley dates the decline of the discount window to 1959. Hackley, *supra* note 8, at 4.

<sup>&</sup>lt;sup>24</sup> The phrase was first used by Francis Baring in 1797 to describe the role the Bank of England played in 1793 when a spike in the government's demand for specie led to run on a bank notes and deposits. Observations on the Establishment of the Bank of England and on the Paper Circulation of the Country 47 (1797) (explaining the government securities brokers "were driven to the Bank as a *dernier resort*" and that "the Bank acted . . . to satisfy the public . . . demand for guineas" which was enormous). The concept was first developed by Henry Thornton, An Enquiry Into the Nature and Effects of the Paper Credit of Great Britain (1802) and famously expounded by Walter Bagehot, Lombard Street: A Description of the Money Market (1873). For the classic definition, see Ralph Hawtrey, "Lender of Last Resort," *in* The Art of Central Banking (1933). For the modern definition, see Thomas M. Humphrey, "Lender of Last Resort," An Encyclopedia of Keynesian Economics (2013). *See also* Tucker, *supra* note 8, at 12, 15 (describing the modern LLR as a liquidity reinsurer for liquidity insurers including banks and shadow banks). *See also*, Michael D. Bordo, *Rules for a Lender of Last Resort – An Historical Perspective*, Central Banking in the Next Century 3-4, 24 (May 29, 2014).

<sup>&</sup>lt;sup>25</sup> There are other types of money, see Lev Menand, *Regulate Virtual Currencies as Currency*, Just MONEY (Fed. 14, 2020), but they are not relevant here.

<sup>&</sup>lt;sup>26</sup> Board of Governors of the Federal Reserve System, Money Stock and Debt Measures – H.6 Release, February 14, 2019; JOHN G. GURLEY & EDWARD S. SHAW, MONEY IN A THEORY OF FINANCE 72-73 (1960) (coining the term "inside money"). Reserves are treated as base money.

<sup>&</sup>lt;sup>27</sup> "Deposits, All Commercial Banks," Fed. Res. Bank of St. Louis. Indeed, since most cash circulates overseas, extraordinarily little of it is available to banks. *See* Ruth Judson, The Death of Cash? Not So Fast: Demand for U.S. Currency at Home and Abroad, 1990-2016, International Cash Conference (2017). When a bank needs cash it has to get it from the Fed or another bank, and when the banking system needs cash, it has to get it from the Fed.

The supply of deposits exceeds the supply of cash because banks can create deposits at the stroke of a pen; they do not need cash to increase the balance in someone's account. And given this imbalance, the supply of deposits is a much more important factor affecting prices. If banks create a bunch more deposits, people will have an easier time buying things and paying their bills. If banks shut down and deposits disappear, ways to pay for things will become scarcer and prices will fall making it harder for debtors to repay their debts.<sup>28</sup>

Congress created the Fed to ensure that deposits trade at par with base money – that deposits and cash are interchangeable. When the Fed is doing its job, no one notices any difference between cash and a bank's promise to pay cash. This is what the discount window is for and what it means for the Fed to serve as the "lender of last resort." As former Fed economist and monetary historian Thomas Humphrey explains, an LLR "lend[s] to solvent banks facing massive cash withdrawals when no other source of cash is available." This is, Humphrey explains, "essentially a monetary rather than a banking or a credit function." While the lender acts to "forestall bank runs and avert credit crises," this is "nevertheless ancillary and incidental to the LLR's main task of protecting the money supply." In other words, "the lender of last resort's overriding objective" is "the prevention of panic-induced declines in the money stock, declines that might produce depressions in the level of economic activity."

The LLR is not purely a crisis role. The LLR also regulates the supply of deposits ex ante by raising and lowering the price it charges for banks to access base money.<sup>32</sup> Today, the Fed primarily uses the Fed funds rate for this purpose, so banks rarely borrow from the discount window in normal times. But bank deposit creation still takes place in the shadow of the discount rate. And, at least in theory, the Fed can use its control over the price of base money to ensure that government backing of bank deposits does not lead banks to create too many deposits (triggering inflation). The English monetary economist Ralph Hawtrey was referring to this dynamic when he said that the Fed's role as lender of last resort is "the true source of its responsibility for the currency."<sup>33</sup>

<sup>&</sup>lt;sup>28</sup> Ben S. Bernanke, *The Real Effects of the Financial Crisis*, Brookings Papers on Economic Activity (Sept. 13, 2018); Ben S. Bernanke, *Nonmonetary Effects of the Financial Crisis in the Propagation of the Great Depression*, 73 AM. ECON. REV. (1983).

<sup>&</sup>lt;sup>29</sup> Humphrey, *supra* note 24, at 1.

<sup>30</sup> *Id* 

<sup>&</sup>lt;sup>31</sup> Thomas M. Humphrey, *The Classical Concept of the Lender of Last Resort*, FED. RES. BANK OF RICHMOND ECON. REV., Jan.-Feb. 1975, at 5.

<sup>&</sup>lt;sup>32</sup> Perry Mehrling calls this quoting the "outside spread." *A Money View of Credit and Debt*, Conference on the Economics of Credit and Debt, Institute for New Economic Thinking, Waterloo, Ontario, Canada (Nov. 18, 2012) at 10.

<sup>&</sup>lt;sup>33</sup> Hawtrey, *supra* note 24, at 183.

#### III. The Fed's Ad Hoc Lending Programs

So far this year, the Fed has lent over \$50 billion to banks through the discount window and lowered its discount rate to 0.25%.<sup>34</sup> As a result, the supply of deposits in the economy has remained stable. But as discussed further herein, these loans are not enough to prevent an economic catastrophe.

Accordingly, the Fed has established fourteen ad hoc lending programs. Seven of them provide liquidity to nonbank financial firms to prevent a run on other forms of inside money and the other seven invest in nonfinancial businesses to prevent a wave of debt defaults that could fuel a deflationary spiral and sink the economy into a second Great Depression. The first type of program expands the Fed's lender of last resort role to firms known as shadow banks. The second type has the Fed acting in a wholly different capacity – as a national investment authority.

#### A. Providing Liquidity

The beneficiaries of the Fed's seven liquidity facilities are (1) domestic shadow banks, especially Wall Street securities dealers, money market mutual funds, and finance companies like the lending arms of automobile companies and various mortgage originators and (2) foreign shadow banks such as banks chartered in foreign jurisdictions issuing dollar-denominated deposits and other demandable debt.

#### (1) To Shadow Banks to Backstop Repos, MMF shares, and CP

The Fed is using five programs to backstop domestic shadow banks. Most of these shadow banks create a type of cash substitute known as a sale-and-repurchase agreement or "repo." Repo serve similar functions to deposits.<sup>35</sup> In a repo, a party known as the cash provider "buys" a debt security from a "cash borrower," the shadow bank. The cash provider pays for the security using a commercial bank deposit – the cash provider is essentially depositing its commercial bank deposit with the shadow bank. And both parties agree that the next day the cash borrower will buy back the debt security for a pre-arranged price and that any interest earned by the debt security in the interim will go to the cash borrower not the cash provider. The security is the collateral – it serves, as Jeffrey Gordon aptly puts it, as "self-help deposit insurance." In much the same way that each day bank depositors decide not to draw

<sup>&</sup>lt;sup>34</sup> See Federal Reserve, H.4.1, Factors Affecting Reserve Balances of Depository Institutions and Condition Statement of Federal Reserve Banks (Mar. 26, 2020) (reflecting 50.7 billion in primary credit outstanding as of March 25).

<sup>&</sup>lt;sup>35</sup> Norman N. Bowsher, *Repurchase Agreements*, Fed. Res. Bank of St. Louis, Sept. 1979, at 19 (explaining that "corporations and municipalities treat RPs as income-earning 'demand deposits").

down their account and ask their bank for cash, most of the time, the cash provider in a repo transaction rolls over the arrangement for another day.<sup>36</sup>

Figure 1: The Fed's Ad Hoc Lending Facilities

Date	Program	Size	Eligible Borrowers/Beneficiaries	Collateral/Assets
3/12	Repurchase Operations*	\$1.5T	24 broker dealers in U.S. government securities	Treasuries, agencies
3/15; 3/19	Swap Lines*	Various	ECB and the CBs of Canada, U.K., Japan, and Switzerland; CBs of Australia, Brazil, Denmark, S. Korea, Mexico, Norway, New Zealand, Singapore, and Sweden	Foreign currency
3/17	Commercial Paper Funding Facility (CPFF)*	NL	U.S. issuers of commercial paper rated at least A-1/P-1/F-1 by major NRSRO	Commercial paper
3/17	Primary Dealer Credit Facility (PDCF)*	NL	24 broker dealers in U.S. government securities	Treasuries, agencies, corp. bonds, equities
3/18	MMF Liquidity Facility (MMFLF)*	NL	U.S. depositories, U.S. BHCs, U.S. branches and agencies of foreign banks on-lending to prime MMFs	Treasuries, agencies, commercial paper
3/23	Term Asset-Backed Securities Loan Facility (TALF)*	\$100B	U.S. companies with eligible collateral and account relationships with one of the 24 primary dealers	Asset-backed securities
3/23	Primary Market Corporate Credit Facility (PMCCF)	\$500B	U.S. companies in the U.S. with material U.S. operations and investment grade ratings prior to March 22	Corporate bonds and business loans
3/23	Secondary Market Corporate Credit Facility (SMCCF)	\$250B	U.S. companies in the U.S. with material U.S. operations including those with junk ratings	Corporate bonds, ETFs
3/31	Foreign and International Monetary Authorities (FIMA)	NL	Foreign central banks and monetary authorities with accounts at the New York Fed	Treasuries
4/9	PPP Loan Facility (PPPLF)	\$349B	Depository institutions that originate PPP loans guaranteed by the Small Business Administration	Business loans
4/9	Municipal Liquidity Facility (MLF)	\$500B	States, cities with population > 250,000 and counties with population > 500,000	Short-term muni bonds
4/9; 4/30	Main Street New Loan Facility (MSNLF); Main Street Expanded Loan Facility (MSELF); & Main Street Priority Loan Facility (MSPLF)	\$600B	U.S. depositories & holding companies on-lending to U.S. businesses with up to 15k employees or \$5 billion in annual revenues and majority of employees in U.S.	Business loans

Credit facilities are shaded in dark gray. Liquidity facilities are unshaded except for TALF which is light gray due to its credit component.

When a cash provider decides to unwind a repo, the cash borrower must come up with a commercial bank deposit. The cash borrower, therefore, is in much the same position as a commercial bank that needs reserves to clear a payment at one of the FRBs. Whereas commercial banks have the fed funds market, dealers and other shadow banks have what is known as the "repo market" – the market for excess commercial bank deposits. (You can see where this is going.)

Thousands of cash borrowers use this market to finance their assets. The most important of them are securities broker-dealers, but hedge funds also borrow in this market. The main cash providers are money market mutual funds and corporate treasurers, although banks, which can create deposits just like the FRBs can create

<sup>\*</sup> Denominates programs based on facilities that the Fed operated in 2008.

 $<sup>^{36}</sup>$  See generally id.; MARCIA STIGUM, STIGUM'S MONEY MARKET (2007) (see chapter 13, "repo and reverse markets").

reserves, and other dealers also participate.<sup>37</sup> Money market mutual funds are investment companies registered with the Securities and Exchange Commission. MMFs issue shares to retail and institutional investors who would otherwise store their wealth in bank deposits. MMF shares are designed to trade at par with cash and offer daily liquidity. They are another form of deposit substitute.<sup>38</sup>

Figure 2: The Money Markets

	Federal Funds Market	Repo Market	<b>Eurodollar Market</b>
Monetary			
Instrument	Deposit Balances at the Fed	Deposit Balances at U.S. Banks	Deposit Balances at U.S. Banks
Primary			
Borrowers	Banks	Dealers	Foreign Banks, Foreign Dealers
Primary			
Lenders	Banks	Banks, Dealers, MMFs	Banks, Dealers, MMFs
		Government Debt Securities;	
Collateral	None	Mortgage-Backed Securities	None

In the last two decades, repo markets have grown quite large. Although banks normally serve as "lenders of last resort" to these markets by lending deposits in the repo market (in much the same way that the FRBs lend reserves at the discount window), banks are motivated by profit (not public welfare concerns) and sometimes the demand for cash will exceed the willingness of banks to supply it, driving the borrowing costs up.<sup>39</sup> In a panic, cash providers often run on shadow banks, eager to replace their repo agreements with commercial bank deposits insured by the government and backed by the Fed through the discount window. (This is what happened to Bear Stearns and Lehman Brothers in 2008.)<sup>40</sup>

The Fed has no explicit statutory or other remit to support repo market rates. But the reality is that a large fraction of economic activity depends on these cash substitutes. It would be extraordinarily difficult for the Fed to maintain price stability – for it to prevent deflation – if it allowed shadow banks to collapse. Were shadow banks to fail, they would sell huge quantities of financial assets, but there would be

 $<sup>^{37}</sup>$  See Victoria Baklanova, Adam Copeland & Rebecca McCaughrin, Reference Guide to the U.S. Repo Market, Fed. Res. Bank of N.Y. Staff Reports, No. 740, Dec. 2015, at 15-17.

<sup>&</sup>lt;sup>38</sup> See Jeffrey N. Gordon & Christopher M. Gandia, Money Market Funds Run Risk: Will Floating Net Asset Value Fix the Problem?, COLUM. BUS. L. REV. 313, 368 (2014).

<sup>&</sup>lt;sup>39</sup> See Mehrling, supra note 11, at 103.

<sup>&</sup>lt;sup>40</sup> Lehman had over 60 repo "depositors" in August 2008 with balances exceeding \$150 billion. Two weeks later it had less than 10 depositors with balances less than \$50 billion. *See* Financial Stability Oversight Council, ANNUAL REPORT 95 (2011) (Charts 5.3.19 and 5.3.20 depicting run on Lehman's repo assets in September 2008).

no buyers to buy them. Prices would plummet. Our complex monetary economy, in which constantly adjusting price signals coordinate the economic activity of millions of people, would grind to a halt.<sup>41</sup>

Thus, with the onset of the Covid crisis, one of the first steps the Fed took was to make up to \$1.5 trillion dollars available to backstop the repo market. <sup>42</sup> This was an easy step to take for two reasons. First, the Fed routinely uses small-scale repo operations with primary dealers to adjust the amount of reserves in the banking system as part of its ordinary monetary policy implementation. And second, the Fed had already been conducting scaled up repo operations designed to push repo rates in line with the fed funds rate. These efforts began on September 17, 2019 after rates to borrow commercial bank deposits overnight in the repo market spiked to ten percent (compared with fed fund rates for reserves at less than two percent). <sup>43</sup>

The Fed's repo operations are an ersatz discount window for dealers that accepts treasury securities and agency MBS as collateral. The way they work is the Fed itself enters into sale-and-repurchase agreements as a cash provider to 24 securities dealers known as "primary dealers." The primary dealers are not banks, nor do they have bank accounts at the FRBs. They are selected by the New York Fed as counterparties for its purchases and sales of government securities and so the Fed has close relationships with them. <sup>44</sup> The Fed lends to them not just to backstop their balance sheets, but also so that they can on-lend to thousands of other dealers and

<sup>&</sup>lt;sup>41</sup> Indeed, something like this happened in the 1930s when the Fed let a bloated shadow banking sector collapse. *See* Mehrling, *supra* note 11, at 41-43. Part of what some members of Congress were hoping by enacting section 13(3) was that the Fed would expand its lending to nonmember banks and shadow banks. *See* Parinitha Sastry, *The Political Origins of Section 13(3) of the Federal Reserve Act*, FRBNY ECONOMIC POLICY REVIEW 25-57 (Sept. 2018). They did not. *Id*.

<sup>&</sup>lt;sup>42</sup> Federal Reserve Bank of New York, Statement Regarding Treasury Reserve Management Purchases and Repurchase Operations (Mar 12, 2020).

<sup>&</sup>lt;sup>43</sup> Federal Reserve Bank of New York, Statement Regarding Repurchase Operation (Sept. 17, 2019) (announcing a \$75 billion operation). Although the Fed's announcements claim its operations were designed "to help maintain the federal funds rate within the target range," the federal funds rate quickly settled into range, as the scale of repo operations continued to expand. Not only could the FOMC achieve its goal of stabilizing the fed funds rate through outright purchases if it chose, but the System could also employ the discount window. Various remarks by Fed officials confirm the System's intent. See Lorie Logan, Manager of the System Open Market Account, Money Market Developments: Views from the Desk, Remarks at the Annual Primary Dealer Meeting, New York, N.Y. (Nov. 4, 2019) ("The repo operations . . . have been effective at restoring calm in money markets and maintaining control over the federal funds rate. Overnight and term money market rates have moderated, on average, relative to IOER, and the effective federal funds rate has stayed well within the FOMC's target range. Participation in the repo operations has been robust and the transmission to the broader money markets has been good."); ("On October 23, the Desk announced an increase in the amount offered in overnight repo operations from at least \$75 billion to at least \$120 billion. . . . This increased capacity was supportive to money markets.").

<sup>&</sup>lt;sup>44</sup> PURPOSES AND FUNCTIONS, *supra* note 18, at 41. For a history of the primary dealer system, see Kenneth D. Garbade, *The Early Years of the Primary Dealer System*, Fed. Res. Bank of N.Y. Staff Repots, No. 777 (Jun. 2016).

repo market participants.<sup>45</sup> In other words, the primary dealers serve as a conduit for Fed lending to repo market cash borrowers that do not have a counterparty relationship with the Fed.

On March 17, to further support dealers and other repo market participants, the Fed established the Primary Dealer Credit Facility (PDCF). The PDCF lends against a wider set of collateral than the repo facility for a term of up to 90 days. PDCF loans carry the same interest rate offered to banks via the discount window.<sup>46</sup>

The Fed also announced that it would backstop the \$1 trillion commercial paper or CP market by reopening its Commercial Paper Funding Facility (CPFF). CP is a short-term debt obligation – like a time deposit for between one week and three months. CP is issued primarily by banks and financial companies that originate consumer loans, including non-bank financial companies. <sup>47</sup> CP is primarily owned by money market mutual funds, large companies, and institutional investors. The CP market is vulnerable to runs just like the repo market, and a run in the CP market threatens to destabilize the repo market by undermining the solvency of the repo market participants. Both the borrowers and the lenders in these markets are being supported by these interventions.

Among the repo market participants most threatened by instability in the CP market are money market mutual funds. For example, the failure of the Reserve Primary Fund – one of the oldest and largest MMFs – in 2008 was due to Lehman's default on its CP. MMFs are vulnerable to runs because they also create a form of money designed to trade at par with cash. Earlier this year, fears that falling asset prices might cause MMFs to "break the buck" led to a spike in redemptions. <sup>48</sup> On March 18, the Fed established the Money Market Fund Liquidity Facility (MMFLF), to squelch this run. The MMFLF lends money to banks to on-lend to MMFs. <sup>49</sup>

<sup>&</sup>lt;sup>45</sup> Logan, *supra* note 43 (noting that the "transition to the broader money markets has been good"); Victoria Guida, *Fed's Push Into Funding Markets Stirs Fears of Widening Role*, POLITICO (Nov. 18, 2019) (quoting Bill Nelson, former deputy director of the Fed's division of monetary affairs, "you definitely get the sense that the Fed now sees itself as responsible for the level of repo rates").

<sup>&</sup>lt;sup>46</sup> Federal Reserve, Federal Reserve Board Announces Establishment of a Primary Dealer Credit Facility (PDCF) to Support the Credit Needs of Households and Businesses (Mar. 17, 2020).

<sup>&</sup>lt;sup>47</sup> Lance Pan, *A Decade of the Commercial Paper Market and Its Role in Institutional Liquidity Portfolios*, CAPITAL ADVISORS GROUP INVESTMENT RESEARCH 6 (Oct. 22, 2018) (listing top five issuers as Toronto Dominion Bank, Toyota Motor Credit Corporation, ING Financial Services, J.P. Morgan Chase, and National Australia Bank).

<sup>&</sup>lt;sup>48</sup> Tim McLaughlin, Goldman Injects \$1 Billion Into Own Money-Market Funds After Heavy Withdrawals, REUTERS (Mar. 21, 2020).

<sup>&</sup>lt;sup>49</sup> Federal Reserve, 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) (Mar. 18, 2020); Peter Eavis, *Why We Are Once Again Rescuing a 'Safe' Investment*, N.Y. TIMES (Mar. 19, 2020).

Finally, on March 23, the Fed reprised the Term Asset-Backed Securities Loan Facility (TALF) to lend a wider set of a financial firms, especially those engaged in originating automobile loans and other forms of consumer credit.<sup>50</sup> These firms often fund themselves in the CP market. This facility, however, sits in a gray area, as it is less directly targeted at backstopping deposit substitutes and thereby maintaining price stability. Instead, TALF is more geared toward lowering borrowing costs in specific debt markets. In so far as the Fed operates the TALF in such a manner, it actually is more like the credit facilities described in the next section.<sup>51</sup>

Figure 3: A Closer Look at the Ad Hoc Liquidity Facilities

Date	Facility	Underwriter	Credit Risk	Risk Level
3/12	Repurchase Operations	FRBNY	Federal Reserve	None
3/15; 3/19	Swap Lines	FRBNY	Federal Reserve	Low
3/17	Commercial Paper Funding Facility (CPFF)	FRBNY (+ Pimco & State Street)	Treasury (first \$10 billion)	Moderate
3/17	Primary Dealer Credit Facility (PDCF)	FRBNY	Federal Reserve	Low
3/18	MMF Liquidity Facility (MMFLF)	FRBNY	Treasury (first \$10 billion)	Moderate
3/23	Term Asset-Backed Securities Loan Facility (TALF)	FRBNY	Treasury (first \$10 billion)	Moderate
3/31	Foreign and International Monetary Authorities (FIMA) Repo Facility	FRBNY	Federal Reserve	None

A brief word on how these facilities are operating. For the repo facility and the PDCF, the Fed is doing the underwriting directly without any outside equity investment to absorb potential losses. The Fed has longstanding relationship with its counterparties in these programs and insight in their solvency and operations. The risk of loss is de minimis. CPFF, MMFLF, and TALF loans involve quite a bit more risk. To mitigate that risk, the Treasury Department has invested \$10 billion into each of these facilities to serve as an equity cushion if some of the loans are not paid back. MMFLF and TALF loans are also intermediated through banks and the primary dealers, respectively, so that the Fed is not taking on new direct counterparties, and the Fed has hired Pimco and State Street to help it administer the CPFF. Even before many of these facilities started lending, they achieved their

<sup>&</sup>lt;sup>50</sup> Federal Reserve, Term Asset Backed Securities Loan Facility (Mar. 23, 2020).

<sup>&</sup>lt;sup>51</sup> Ben Bernanke acknowledged this point. *The Crisis and the Policy Response* (Jan. 13, 2009) ("In contrast, our forthcoming asset-backed securities program, a joint effort with the Treasury, is not purely for liquidity provision . . . this facility combines Federal Reserve liquidity with capital provided by the Treasury, which allows it to accept some credit risk. By providing a combination of capital and liquidity, this facility will effectively substitute public for private balance sheet capacity, in a period of sharp deleveraging . . . If the program works as planned, it should lead to lower rates and greater availability of consumer and small business credit.").

<sup>&</sup>lt;sup>52</sup> Eric Platt, Fed Taps Pimco and State Street for Funding Programme, FT (Apr. 3, 2020).

goal: repo markets, CP markets, and MMF shares stabilized as shadow banks can now (cheaply) exchange their financial assets for cash at the Fed if they need to.

#### (2) To Foreign Banks to Backstop Eurodollars

The Fed has devised another two further facilities to stabilize the international dollar funding market known as the eurodollar market. Eurodollars – which have nothing to do with euros, the currency – are short-term debt denominated in dollars. Like CP, a repurchase agreement, or a money fund share, a eurodollar is an agreement in which one part, the issuer, is on the hook to pay the other dollars on demand or within a short period of time. The most important type of eurodollar is simply a dollar deposit, a bank account denominated in dollars, maintained by a bank outside of the United States.<sup>53</sup> European banks were the first to get into this business, which is why these deposits are called eurodollars.<sup>54</sup> Today, financial institutions all around the world issue eurodollars.<sup>55</sup>

Eurodollars are not authorized by the U.S. government, nor are they insured by the Federal Deposit Insurance Corporation (FDIC). Often, the banks that issue these accounts do not have access to the discount window. When the customers of these banks demand dollars, these banks typically draw down bank accounts that they maintain with correspondent banks in the United States that do have access to the discount window.<sup>56</sup> When these banks run through those accounts, they borrow from other banks with positive balances in what is known as the eurodollar market.<sup>57</sup>

In a crisis, asset prices fall, and asset owners need cash. Rates in eurodollar markets skyrocket because foreign banks do not have enough dollar reserves at U.S. banks to satisfy the demand for dollars from their eurodollar account holders. The only place these banks can turn is their own central banks, but unlike the Federal Reserve these banks cannot create dollars out of thin air. They are limited by the balances they hold in their own accounts at the Federal Reserve (foreign central banks have accounts at the Federal Reserve just like domestic member banks). Most of these central banks carry minimal balances in their accounts. Instead, they hold "reserves" of dollars in the form of U.S. treasury securities. So, when their banks come

<sup>&</sup>lt;sup>53</sup> Stephen A. Fowler, *The Monetary Fifth Column: the Eurodollar Threat*, 47 VAND. J. TRANSNATIONAL L. 825, 830 (2014) (defining eurodollars as "dollar-denominated time deposit liabilities of non-U.S. institutions"). *See also* Stigum, *supra* note 36, at 199; Ronald David Greenberg, *The Eurodollar Market: The Case for Disclosure*, 71 CALIF. L. REV. 1492, 1493 (1983); Milton Friedman, *The Euro-Dollar Market: Some First Principles*, MORGAN GUARANTY SURV., Oct. 1969.

<sup>&</sup>lt;sup>54</sup> GARY BURN, THE RE-EMERGENCE OF GLOBAL FINANCE 23 (2006) (identifying London as the origin of the market and Canada as an early competing center with its own "Cano-dollar market").

<sup>&</sup>lt;sup>55</sup> See, e.g., Inaki Aldasoro & Torsten Ehlers, The Geography of Dollar Funding of Non-US Banks, BIS QUARTERLY REV., Dec. 2018.

<sup>&</sup>lt;sup>56</sup> Sometimes banks are able to settle dollar balances entirely overseas.

<sup>&</sup>lt;sup>57</sup> Marvin Goodfriend, "The Nature of the Eurodollar," *in* Instruments of the Money Market 51 (1998).

calling for dollars, they are forced to sell U.S. treasury securities to raise dollars to lend to their banks.

Needless to say, forced selling of treasury securities can have very damaging effects on the United States and its domestic capital markets, especially in the middle of a credit crunch when few actors have the spare cash needed to buy the securities being sold. The Federal Reserve was not designed to backstop foreign central banks or foreign banks issuing dollar deposits because, as mentioned, it was built with the assumption that only domestic banks could engage in this sort of activity. To support this sort of lending, however, the Fed has sometimes resorted to a special discount window for foreign central banks that it calls a "swap line." It first started using swap lines in the 1960s, at a small scale. But eurodollar markets grew so big in the decades that followed, that in 2008 it had to open up massive swap lines to backstop foreign banks that were dealing in dollars.

The way these swap lines work is that the Federal Reserve lends dollars to a foreign central bank by increasing that bank's account balance at the Fed (creating new money out of thin air) in exactly the same way that the Fed lends at the discount window to member banks. The Fed also maintains a bank account at the foreign central bank. In exchange for raising its balance at the Fed, the foreign central bank credits the Fed's account. The banks swap: The Fed gives dollars in exchange for foreign currency.

These swaps are not well secured. After the Fed increases the account balance of the foreign central bank, the foreign central bank lends that money to its own banking system. If all goes well, at some point in the future the foreign central bank repays the Fed by replenishing its account. If things go badly, the Fed has little recourse. All it has is an account balance at the foreign central bank – nothing more than a promise to pay foreign currency in a foreign country. Unsurprisingly, then, the Fed is selective in opening swap lines. In September 2008, it offered swap lines to five central banks (known as the C5): The Bank of England, the European Central Bank (ECB), the Bank of Japan, the Bank of Canada, and the Swiss National Bank. These lines remain in place today. In October, it added nine more: Australia, Sweden, Norway, Denmark, New Zealand, Brazil, Mexico, South Korea, and Singapore. 62

<sup>&</sup>lt;sup>58</sup> In March, forced selling surpassed the dysfunction experienced in 2008. See Carolyn Sissoko, A Fire Saale in the U.S. Treasury Market, JUST MONEY (Mar. 27, 2020).

<sup>&</sup>lt;sup>59</sup> See infra Part IV(B); Robert N. McCauley & Catherine R. Schenk, Central Bank Swaps Then and Now: Swaps and Dollar Liquidity in the 1960s, BIS WORKING PAPERS, No. 851 (2020).

<sup>&</sup>lt;sup>60</sup> *Id*. at 11.

<sup>&</sup>lt;sup>61</sup> See Adam Tooze, Crashed (2018).

<sup>&</sup>lt;sup>62</sup> Michael J. Fleming & Nicholas J. Klagge, *The Federal Reserve's Foreign Exchange Swap Lines*, Current Issues in Economic and Finance, Vol. 16, Apr. 2010, at 3.

On March 15, 2020 the Fed lowered the pricing on its C5 swap lines – how much interest foreign central banks must pay – by 25 basis points (1/4 of one percent). On March 19, it added lines with the nine other central banks from 2008. He at the Fed decided that this was not enough. In the last decade eurodollar markets expanded dramatically, and especially in less wealthy countries. At the advent of this crisis, dollar banking reached a level never seen in countries with far less reliable central banks. To staunch the selling of treasury securities by these banks and help them backstop their banking systems, on March 31 the Fed set up the Foreign and International Monetary Authorities (FIMA) facility. FIMA does not use swap lines. It uses repo like the ones conducted with the primary dealers to lend dollars in exchange for collateral in the form of treasury securities. If the recipients of FIMA loans do not or cannot pay the Fed back, the Fed has U.S. government debt. As these loans are structed as sale-and-repurchase agreements, the Fed does not have to foreclose on collateral.

#### (3) As a "Dealer of Last Resort"

In operating these seven liquidity facilities, the Fed is extending the classic "lender of last resort" function it was established to perform for the banking system to the shadow banking system. Perry Mehrling calls this acting as a "dealer of last resort" because when the Fed operates these facilities it is dealing in the securities that this system uses as collateral – it is backstopping capital market lending (i.e. dealing) as opposed to bank lending, securities as opposed to loans.<sup>67</sup> While the Fed is not designed to backstop shadow money markets, it is relatively well-equipped to do so.<sup>68</sup> Its experience standing up multiple discount window-like facilities in 2008,

<sup>&</sup>lt;sup>63</sup> Federal Reserve, Coordinated Central Bank Action to Enhance the Provision of U.S. Dollar Liquidity (Mar. 15, 2020).

<sup>&</sup>lt;sup>64</sup> Federal Reserve, Federal Reserve Announces the Establishment of Temporary U.S. Dollar Liquidity Arrangements with Other Central Banks (Mar. 19, 2020).

<sup>&</sup>lt;sup>65</sup> Aldasoro & Ehlers, *supra* note 55, at 20 (showing growth of non-European, non-U.S. bank dollar liabilities growing from around \$1 trillion in 2008 to over \$3 trillion in 2018 while U.S. dollar liabilities of European banks remaining constant at \$3 trillion over the course of the same period).

<sup>&</sup>lt;sup>66</sup> Federal Reserve, Federal Reserve Announces Establishment of a Temporary FIMA Repo Facility to Help Support the Smooth Functioning of Financial Markets (Mar. 31, 2020).

<sup>67</sup> PERRY MEHRLING, THE NEW LOMBARD STREET: HOW THE FEDERAL RESERVE BECAME THE DEALER OF LAST RESORT 10 (2010) ("The main lesson is that a modern money view requires updating Bagehot's conception of the central bank as a 'lender of last resort.' Under the condition of the New Lombard Street, the central bank is better conceptualized as a 'dealer of last resort."); id. at 106-07 ("The Fed in a crisis is not so much the lender of last resort (funding liquidity) as it is the dealer of last resort (market liquidity)."). See also Mehrling, "Money View," supra note 32 ("the central bank is essentially a dealer, perhaps a dealer of last resort whose outside spread enables lower level dealers to more comfortable quote an inside spread. In doing so, however, the central bank is crucially different from other dealers, since it is concerned about the stability of the system, not its own profit, even if it is purely a banker's bank").

<sup>&</sup>lt;sup>68</sup> Kate Judge, Paul Tucker, and others have spent the past decade studying how to "modernize" the lender of last resort framework for shadow banks, further enhancing the ability of

meant that it was able to quickly react to the current crisis. Importantly, these facilities involve minimal credit risk and are highly scalable: a relatively small amount of lending can prop up giant markets. Once the central bank announces that it will backstop a promise to pay dollars, those promises — such as repurchase agreements and eurodollars — are as good as dollars. Just like that, the run stops.

#### B. Extending Credit

The Fed's seven credit facilities are entirely different animals. These programs invest money (1) in municipalities by buying their bonds; (2) in big business by buying their bonds and lending; and (3) in medium-sized business by lending indirectly through the banking system. Whereas the Fed's lender of last resort and dealer of last resort programs backstop money markets – meaning they stabilize the value of deposits and deposit substitutes (ensuring that these private moneys trade at par with actual dollars) – the Fed's credit facilities have nothing to do with money markets. These facilities are not designed to preserve existing credit arrangements by preventing fire sales and the bankruptcy of existing financial institutions. They are designed to actively *expand* credit to mitigate the impact of lost revenues.

#### (1) To Municipalities by Buying Bonds

On April 9, in response to pressure from Congress and state governments, the Fed established the Municipal Liquidity Facility (MLF) to purchase up to \$500 billion of short-term debt issued by states, cities with a population exceeding one million residents, and counties with a population exceeding two million residents.<sup>69</sup> On April 27, the Fed lowered the population threshold to 500,000 for counties and 250,000 for cities and extending eligible duration from two years to three.<sup>70</sup> The Treasury Department will invest \$35 billion of CARES Act money to absorb potential losses.<sup>71</sup>

Although the Fed has always had the authority to buy municipal debt securities as part of its open market operations,<sup>72</sup> it has long avoided using it. Unlike Treasury securities, municipal debt carries credit risk. In some cases that risk is

Fed policy makers today to react quickly and effectively to money market turmoil. *See supra* note 12. As Mehrling explains, the "Fed now recognizes that, for our market-based credit system, it must remake itself as dealer of last resort." Mehrling, *supra* note 11, at 135. Mehrling also uses the moniker "modern." *Id.* at 107 ("Under modern conditions, backstop of market liquidity requires the Fed to serve as a dealer of last resort.").

<sup>&</sup>lt;sup>69</sup> Federal Reserve, Federal Reserve Takes Additional Actions to Provide Up to \$2.3 Trillion in Loans to Support Economy (Apr. 9, 2020); Federal Reserve, Municipal Liquidity Facility (Apr. 9, 2020).

<sup>&</sup>lt;sup>70</sup> Tederal Reserve, Municipal Liquidity Facility (Apr. 27, 2020) at 1. On May 10, Bob Hockett released a memorandum suggesting ways that the Fed could further improve the MLF including by further extending duration, improving lending terms, and expanding access. *The Fed's Municipal Liquidity Facility: Present & Future Possibilities & Necessities* (May 10, 2020) (available on SSRN). *See also* Hockett, *supra* note 9, at 20 (arguing that the MLF should operate out of all the FRBs).

 $<sup>^{71}</sup>$  *Id*.

<sup>72 12</sup> U.S.C. § 355.

substantial. Accordingly, municipal debt is difficult to price. Making matters worse, municipal bond prices are not quoted on an exchange. Nor are they easily purchased from one or two Wall Street dealers – parts of the market are very illiquid. Moreover, while credit rating agencies evaluate these bonds, their ratings are of little use in the current crisis. Determining a fair price to pay for municipal debt necessarily requires extensive due diligence of local conditions including reviewing unstandardized data relating to tax revenues and other indebtedness. This is challenging for market participants in the best of times – in current conditions, even seasoned municipal bond investors are unsure how various municipalities are likely to fair in the post-Covid economy.<sup>73</sup>

The Fed is hiring staff to tackle these challenges, and it has selected PFM Financial Advisors LLC (PFM) as its administrative agent. PFM will review applications based on criteria the Fed establishes. Relevant disclosures will be required as determined by the Fed prior to purchase and pricing will be determined based on an issuer's credit rating at the time of purchase.<sup>74</sup>

#### (2) To Big Business by Buying Bonds and Lending

The Fed has also established facilities for lending to big business. On March 23, it announced the Primary Market Corporate Credit Facility (PMCCF) and the Secondary Market Corporate Credit Facility (SMCCF). The PMCCF will lend money directly to investment-grade U.S. companies headquartered in the U.S. with material U.S. operations. It will do this by purchasing eligible bonds and portions of syndicated loans that mature in four years or less. 75 The SMCCF will augment these efforts by purchasing already-issued corporate bonds on the secondary market. 76 It will also purchase corporate bond ETFs. Under revised terms announced on April 9, these ETFs will include ones that invest in high yield (aka "junk") bonds. 77

The Fed has not made business loans since the first half of the twentieth century, and then it did so sparingly.<sup>78</sup> In those days, the Fed conducted monetary policy by lending to banks against corporate credit as collateral. Accordingly, it had

 $<sup>^{73}</sup>$  See Jeanna Smialek, Why State and Local Debt is Fraught Territory for the Fed, N.Y. TIMES (Apr. 1, 2020).

<sup>&</sup>lt;sup>74</sup> Id.; Federal Reserve, Municipal Liquidity Facility (Apr. 27, 2020) at 1.

<sup>&</sup>lt;sup>75</sup> Federal Reserve, Primary Market Corporate Credit Facility (Mar. 23, 2020).

<sup>&</sup>lt;sup>76</sup> Federal Reserve, Secondary Market Corporate Credit Facility (Mar. 23, 2020). The SMCCF also has a liquidity component – although not in the same sense as the "liquidity facilities," which are designed to backstop the monetary liabilities of specific issuers. The SMCCF is providing liquidity to a *market* by serving as a buyer of last resort (a quite different function).

<sup>&</sup>lt;sup>77</sup> Federal Reserve, Secondary Market Corporate Credit Facility (Apr. 9, 2020) at 1.

<sup>&</sup>lt;sup>78</sup> See infra note 103.

expertise to bring to bear when evaluating loan applications.<sup>79</sup> But in the 1950s, the Fed shifted to conducting monetary policy through buying and selling risk free Treasury securities.<sup>80</sup> Accordingly, the Fed is now far less experienced in underwriting unsecured loans to businesses. In terms of their credit capabilities, the FRBs are much more like government agencies than operational banks. To address this gap, the Fed hired Blackrock to manage the PMCCF and SMCCF.<sup>81</sup> And to absorb losses that might be occur, the Treasury will invest \$75 billion from the CARES Act.<sup>82</sup>

Figure 4: A Closer Look at the Ad Hoc Credit Facilities

Date	Facility	Underwriter	Credit Risk	Risk Level
3/23	Primary Market Corporate Credit Facility (PMCCF)	FRBNY (+ Blackrock)	UST (first \$50 billion)	Moderate
3/23	Secondary Market Corporate Credit Facility (SMCCF)	FRBNY (+ Blackrock)	UST (first \$25 billion)	Moderate
4/9	PPP Loan Facility (PPPLF)	Depository Institutions + Small Business Administration	Guaranteed by SBA	High
4/9	Municipal Liquidity Facility (MLF)	FRBNY (+ PFM Financial Advisors)	UST (first \$35 billion)	Moderate
4/9	Main Street New Loan Facility (MSNLF)	Depository Institutions	UST (first \$75 billion) + Depository Institutions retain 5% skin-in-the-game	High
4/9	Main Street Expanded Loan Facility (MSELF)	Depository Institutions	UST (sharing first \$75 billion with other MS facilities) + Depository Institutions retain 5% skin-in-the-game	High
4/30	Main Street Priority Loan Facility (MSPLF)	Depository Institutions	UST (sharing \$75 billion with other MS facilities) + Depository Institutions retain 15% skin-in-the-game	High

#### (3) To Medium-Sized Enterprises by Lending Through Banks

The CARES Act opened the door to four new facilities targeted at businesses without credit ratings and access to the capital markets: the Main Street New Loan Facility (MSNLF), and the Main Street Expanded Loan Facility (MSELF); the Main Street Priority Loan Facility (MPLF); and the Payroll Protection Program Loan Facility (PPPLF).

<sup>&</sup>lt;sup>79</sup> Even then, as discussed *infra* at note 103, it did so reluctantly. The Fed was loss averse, and despite large backstops from Treasury, it made far fewer loans that it was authorized to by Congress. *See* Fettig, *infra* note 109; Hackley, *supra* note 8, 144-45.

<sup>&</sup>lt;sup>80</sup> Martin led this transformation. See Menand, supra note 3.

<sup>&</sup>lt;sup>81</sup> Matthew Goldstein, *The Fed Asks Blackrock for Help in an Echo of 2008*, N.Y. TIMES (Mar. 25, 2020).

<sup>&</sup>lt;sup>82</sup> Its worth noting that unlike state and local governments, big businesses can access equity markets and as of this writing equity valuations are high.

Unlike the CCFs, the Main Street loan programs are designed to invest in medium-sized enterprises, a task that is made much more challenging by the fact that many of these businesses lack the inhouse legal and accounting expertise to apply for and negotiate loan agreements. Accordingly, the Fed is using banks to underwrite, originate, and service these loans. Main Street loans are available to U.S. businesses with up to 15,000 employees or up to \$5 billion in 2019 annual revenues. Borrowers must certify compliance with applicable regulations, including restrictions on executive compensation, stock repurchase plans, and capital distribution restrictions, and make a series of attestations including that they require financing due to the exigent circumstances presented by the Covid-19 pandemic. Banks will also have to keep 5% of loans on their own balance sheets as skin-in-the-game; for the newly announced priority loan facility, banks will have to retain 15%. The Treasury Department will invest \$75 billion from its CARES Act appropriation to absorb losses the facilities might incur on the other 95%. Banks will have to retain 15%.

Figure 5: Main Street Facilities

Main Street Lending Program Loan Options	New Loans	Priority Loans	Expanded Loans
Term	4 years	4 years	4 years
Minimum Loan Size	\$500,000	\$500,000	\$10,000,000
Maximum Loan Size	Lesser of \$25M or 4x 2019 adjusted EBITDA	Lesser of \$25M or 6x 2019 adjusted EBITDA	Lesser of \$200M, 35% of outstanding and undrawn available debt, or 6x 2019 adjusted EBITDA
Risk Retention	5%	15%	5%
Payment (year one deferred for all)	Years 2-4: 33.33% each year	Years 2-4: 15%, 15%, 70%	Years 2-4: 15%, 15%, 70%
Rate	LIBOR + 3%	LIBOR + 3%	LIBOR + 3%

The PPPLF is a bit different. It resembles in some respects a liquidity facility. The Fed is taking no credit risk. The Small Business Administration (SBA) will guarantee the loans, which are really more like conditional grants.<sup>85</sup> Banks will originate them, and the Fed's facility will buy them from the banks – exchanging the loans for dollars which the banks can then use to make additional loans. The banks

<sup>&</sup>lt;sup>83</sup> See Federal Reserve, Main Street New Loan Facility 1-2 (Apr. 30, 2020); Federal Reserve, Main Street Expanded Loan Facility (Apr. 30, 2020).

 $<sup>^{84}</sup>$  *Id*.

<sup>&</sup>lt;sup>85</sup> George Selgin argues this is a better term to describe these loans. *See* George Selgin, "The Fed-Treasury Relationship, New Lending Facilities, and the Fed's Evolving Role in Response to COVID-19," *Macromusings* (Apr. 27, 2020).

will continue to service the loans, but they will not hold them on their balance sheet.<sup>86</sup> The Fed's role is basically technical—it is warehousing assets for the fiscal authorities and the banks so that neither have to put them on their own books.

#### (4) As a "National Investment Authority"

The Fed's purchases of corporate and municipal debt as well as its loans to big and medium-sized businesses are not central banking – traditional or modern. These facilities are unrelated to the Fed's role as a monetary authority, as a lender/dealer of last resort charged with ensuring that money created by the financial sector trades at par with government cash. Instead, these programs allocate capital to the real economy. They put the Fed in the role of what Bob Hockett and Saule Omarova call a national investment authority, investing state money to determine what sorts of economic activities take place. Rormally, banks do this sort of thing for profit. Rate authority does this to promote the public welfare. The Fed, of course is not a true investment authority, but it is now acting as a defacto one. Its goal is likely to underwrite projects (and municipal budgets) that it identifies as viable in the long term but potentially jeopardized in the short term by the sudden economic stop.

There are many important differences between this function and the work of a monetary authority:

- ➤ Whereas a monetary authority strives to manage the money supply in a neutral way that encourages sustainable economic growth and price stability, an investment authority is necessarily non-neutral. Its investments affect relative prices and make some projects more attractive and cheaper to finance and other projects more expensive and difficult to finance.<sup>89</sup> People holding assets that the Fed is buying experience a wealth effect,<sup>90</sup> which results from the new source of demand for those assets. These wealth effects can be large. They can happen quickly markets have already risen substantially in response to the news that the Fed will buying corporate and municipal credit. And they are lasting once these investments are made the government has a vested interest in the survival of the companies it has invested in.
- ➤ These facilities are quite technically and operationally challenging to run. Most invest in debt instruments with substantial credit risk during a time when even private market specialists are unsure how to price that risk. The

 $<sup>^{86}</sup>$  See Federal Reserve, Paycheck Protection Program Lending Facility Term Sheet (Apr. 9, 2020).

<sup>87</sup> Hockett & Omarova, infra note 195.

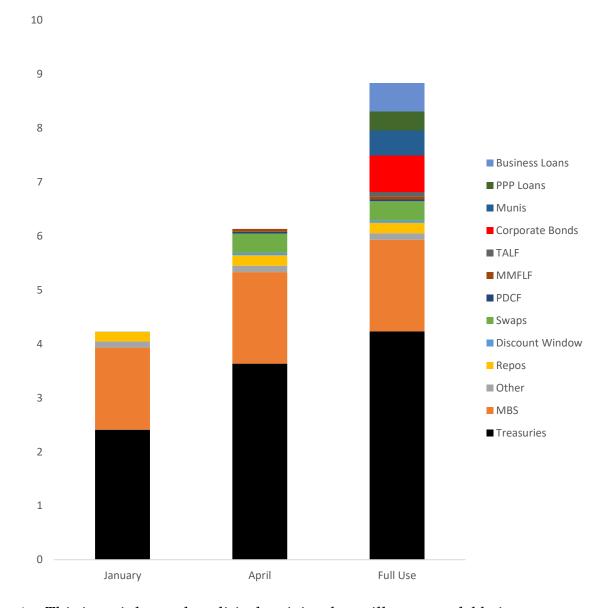
<sup>88</sup> See Hockett & Omarova, The Finance Franchise, 102 CORNELL L. REV. 1143 (2017).

<sup>&</sup>lt;sup>89</sup> See Ben Eisen & Akane Otani, The Fed's Intervention Is Widening the Gap Between Market Haves and Have-Notes, WALL St. J. (Apr. 7, 2020).

<sup>&</sup>lt;sup>90</sup> See RICHARD CANTILLON, AN ESSAY ON ECONOMIC THEORY (1755). See also Matt Stoller, The Cantillon Effect: Why Wall Street Gets a Bailout and You Don't (Apr. 9, 2020).

Fed will have to determine how much risk to take and what sorts of risk to take. For example, the Fed will have to decide whether to invest in industries like oil and gas, travel, and retail that may never bounce back. If the Fed does lend to these businesses, it may take substantial losses and face a portfolio of nonperforming debt and stranded assets. If it does not, it may dramatically quicken the decline of these industries.

Figure 6: The Fed's Balance Sheet



➤ This is an inherently political activity that will generate lobbying pressure and entanglement with the political branches. That lobbying already appears to have led the Fed to modify the terms and conditions of certain facilities to assuage powerful constituencies. For example, the Fed modified the SMCCF

to include junk bonds.<sup>91</sup> It expanded access to Main Street loans by raising the qualifying size thresholds from 10,000 employees to 15,000 employees and from \$2.5 billion in annual revenues to \$5 billion. It dropped its prohibition on using loans to refinance existing debt. It raised the maximum loan size from \$150 million to \$200 million. And it substantially reduced the limit on how indebted a company could be before taking out a loan.<sup>92</sup> It expanded access to the MLF to smaller cities and counties and pushed out duration.<sup>93</sup> There is no indication that any of these changes were in response to a lack of demand for dollars at the safer criteria. Indeed, there is evidence that the Fed was responding to significant political pressure and lobbying efforts by industry.<sup>94</sup>

➤ Finally, many of these facilities require volume to be effective. Unlike with lender of last resort lending, where a job well done involves no lending at all, success as a national investment authority is not measured by the loans that do not get made, but by the loans that do.<sup>95</sup> For the Main Street facility to work, the Fed must send dollars out the door to actual businesses, choosing who will benefit from its investments and who will not.<sup>96</sup>

#### IV. Inconsistent Statutory Provisions

This Part examines the legal dimensions of the Fed's ad hoc facilities, starting with section 13(3), which authorizes lending to nonbanks "in unusual and exigent circumstances"; the CARES Act, which appropriates money for the Treasury Secretary to invest in 13(3) facilities; and 31 U.S.C. § 5302, which governs the Secretary's use of the Exchange Stabilization Fund. It then turns to section 14, which authorizes the Fed to buy and sell gold, foreign currencies, and certain debt instruments. It concludes: (A) that the Fed's 13(3) facilities rely on provisions in the CARES Act that, on a broad reading, suspend *sub silentio* three existing statutory restrictions on the Fed and Treasury, and (B) that the Fed's section 14 operations are

<sup>&</sup>lt;sup>91</sup> Federal Reserve, Secondary Market Corporate Credit Facility (Apr. 9, 2020) at 1 (noting that the "preponderance of ETF holdings will be of ETFs whose primary investment objective is exposure to U.S. investment-grade corporate bonds" but that "the remainder will be in ETFs whose primary investment objective is exposure to U.S. high-yield corporate bonds).

<sup>&</sup>lt;sup>92</sup> Federal Reserve, Main Street New Loan Facility (Apr. 30, 2020); Federal Reserve, Main Street Extended Loan Facility (Apr. 30, 2020).

<sup>93</sup> Federal Reserve, Municipal Liquidity Facility (Apr. 27, 2020).

<sup>&</sup>lt;sup>94</sup> See, e.g., Victoria Guida & Zack Colman, Fed's Expansion of Lending Program Sparks Oil Bailout Worries, POLITICO (Apr. 30, 2020); Senator Ted Cruz, Letter to Secretary Mnuchin and Chairman Powell (Apr. 24, 2020) (requesting a new lending facility to "provide emergency liquidity for small-and-medium sized businesses that work directly or indirectly with the oil and gas industry"); Trump Administration Working to Ease Drilling Industry Cash Crunch, REUTERS (Apr. 17, 2020).

<sup>&</sup>lt;sup>95</sup> Admittedly, the Fed's announcements have had a preemptive effect on corporate credit spreads. But this effect will not persist if the Fed does not follow through on its purchases.

<sup>&</sup>lt;sup>96</sup> The SMCCF is a possible exception as it is buying existing issuance. The knowledge of Fed demand for these assets will cause prices to appreciate immediately – and there is substantial evidence that this has already occurred.

not authorized by section 14 but are permitted by provisions of section 13 governing lending to nonbanks.

Figure 4: The Fed's Ad Hoc Lending Authorities

Section 13(3)	Section 14
PDCF	Repurchase Operations
CPFF *	Swap Lines
MMFLF *	FIMA Repo Facility
TALF *	
PMCCF †	
SMCCF †	
PPPLF †	
MSNLF & MSELF †	
MLF *†	

<sup>\*</sup> Treasury Investment Authorized by 31 U.S.C. § 5302 (Exchange Stabilization Fund)

#### A. Section 13(3) Facilities

The PDCF, MMFLF, CPFF, TALF, PMCCF, SMCCF, PPPFLC, MSNLF, MSELF, MSPLF, and MLF were all established pursuant to section 13(3) of the Federal Reserve Act. The statute provides in relevant part that:

- A. In unusual and exigent circumstances, the Board . . . , by the affirmative vote of not less than five members, may authorize any Federal reserve bank . . . to discount for any participant in any program with broad-based eligibility, notes . . . when such notes . . . are . . . secured to the satisfaction of the Federal Reserve bank: *Provided*, That before discounting any such note . . . , the Federal reserve bank shall obtain evidence that such participant . . . is unable to secure adequate credit accommodations from other banking institutions.
- B. i. [The] Board shall establish . . . policies and procedures designed to ensure that any emergency lending program or facility is for the purpose of providing liquidity to the financial system, and not to aid a failing financial company, and that the security for emergency loans is sufficient to protect taxpayers from losses.

  ii The Board shall establish procedures to prohibit borrowing by borrowers
  - ii. The Board shall establish procedures to prohibit borrowing . . . by borrowers that are insolvent.  $^{97}$

<sup>†</sup> Treasury Investment Authorized by Section 4003 of the CARES Act

<sup>97 12</sup> U.S.C. § 343(3).

The law further requires that the Board (iii) prohibit programs designed to "remove assets from the balance sheet of a single and specific company" or to "assist[] a single and specific company avoid bankruptcy" or resolution, and that (iv) the Board, before authorizing any lending under section 13(3), first receive approval from the Secretary of the Treasury.<sup>98</sup>

Most of the above conditions are easily met in the current circumstances. Three provisions, however, are not: (1) the requirement that the Board establish policies and procedures to permit emergency lending only "for the purpose of providing liquidity to the financial system"; <sup>99</sup> (2) the requirement that these procedures ensure security "sufficient to protect taxpayers from losses"; <sup>100</sup> and (3) the requirement that the Fed "obtain evidence" that participants are "unable to secure adequate credit accommodations from other banking institutions" before "discounting" their notes. <sup>101</sup>

#### 1. Subsection (B)(i) Prohibiting Real Economy Lending

When the Fed was founded, it could lend only to banks. In July 1932, Congress amended the Federal Reserve Act to empower the Fed to lend to any individual, partnership, or corporation in unusual and exigent circumstances if one of the Fed's twelve FRBs determined that a creditworthy borrower was unable to access credit from the banking system. The Fed used this authority sparingly for two years before shelving it. In 2008, it invoked 13(3) to set up some of the same facilities it is using now to backstop deposit substitutes like repos, CP, and money market fund shares. It also used 13(3) to invest in AIG, whose collapse threatened to wipe out many of the major players in these money markets.

In response, Congress revised the Federal Reserve Act in 2010 to impose new restrictions on 13(3) lending.<sup>105</sup> Many of these revisions, which were included as Title XI of the Dodd-Frank Wall Street Reform and Consumer Protection Act, have

<sup>98</sup> Id. at § 343(3)(B).

<sup>99</sup> *Id*.

<sup>&</sup>lt;sup>100</sup> *Id.* at § 343(3)(B)(i).

<sup>&</sup>lt;sup>101</sup> *Id.* at § 343(3)(A).

<sup>102 47</sup> Stat. 715 (1932).

<sup>&</sup>lt;sup>103</sup> The Fed lent \$1.45 million to 123 different borrowers between August 1932 and November 1935. Over half of this lending was done by New York. Six reserve banks did not make a single loan. See Menand & Sastry (working paper). In 1934, Congress added 13(b), which authorized industrial lending on far more attractive terms. The Fed did comparatively more of this lending, but still far less than Congress authorized, despite a substantial Treasury backstop to absorb losses. See Hackley, supra note 8, at 144-45; Fettig, infra note 109. In the 1950s, the Fed successfully lobbied Congress to repeal 13(b), infra note 109, and, as discussed herein, the Fed did not invoke 13(3) again until 2008.

<sup>&</sup>lt;sup>104</sup> See Parinitha Sastry, The Political Origins of Section 13(3) of the Federal Reserve Act, FRBNY ECONOMIC POLICY REVIEW 3-4 (Sept. 2018).

<sup>105</sup> Dodd-Frank Act (2010) (Title XI).

received extensive scrutiny.<sup>106</sup> But one has gone largely overlooked – a requirement that the Fed's Board establish policies and procedures to permit 13(3) lending only "for the purpose of providing liquidity to the financial system."<sup>107</sup> This text effectively eliminates the Fed's authority to lend to the real economy and leaves it with the power only to create facilities to provide liquidity to nonbank financial firms.<sup>108</sup> Congress, in adopting this amendment, basically formalized the Fed's role as a dealer of last resort and chucked the part of 13(3) that authorized the Fed to act as a limited purpose national investment authority. The lack of extensive debate regarding this provision likely reflects a consensus, which dates to the late 1950s, that the Fed should stick to monetary policy and limit its lending to furthering its monetary mission.<sup>109</sup>

<sup>&</sup>lt;sup>106</sup> See, e.g., HAL SCOTT, CONNECTEDNESS AND CONTAGION: PROTECTING THE FINANCIAL SYSTEM FROM PANICS 93-114 (2016); FIREFIGHTING, supra note 1 ("Congress limited the Fed's discretion to judge when its loans are secured to its satisfaction, making it harder for the central bank to accept risky collateral in a future emergency."); Eric Posner, What Legal Authority Doe the Fed Need During a Financial Crisis?, 101 MINN. L. REV. 1529., 1574 (2017).

<sup>&</sup>lt;sup>107</sup> Federal Reserve Act § 13(3)(B)(i).

<sup>108</sup> This meaning is supported by the legislative history. For example, the Senate Report titles its section on 13(3): "Liquidity Programs." SENATE REPORT No. 111-176 (Apr. 30, 2010) at 6. It describes its 13(3) amendments as eliminating the ability of the Fed "to rescue an individual financial firm that is failing, while preserving" its ability "to provide needed liquidity and confidence in financial markets during times of severe stress." Id. "In the committee's words, the law "requir[es] all emergency lending to be done through widely-available liquidity facilities." Id. (emphasis added). The Conference Report also describes 13(3) as governing the Fed's "Liquidity Programs. Conference Report to ACCOMPANY H.R. 4173, No. 111-157, House of Representatives (Jun. 29, 2010) at 875. In crafting these revisions, Congress considered "whether the Fed can maintain its current role as the independent authority on monetary policy, and take on a new role, as significantly new role, as the systemic risk regulator" and whether the Fed had become "stretched too thin" in 2008 by "using its powers under section 13(3) . . . to purchase securities in distressed industries." Melvin Watt, Chairman of the Subcommittee on Domestic Monetary Policy, Regulatory Restructuring Balancing the Independence of the Federal Reserve in Monetary Policy with Systemic Risk Regulation, No. 111-53 (Jul. 9, 2009). Watt here appears to be referring to TALF, which as discussed infra, Bernanke conceded was more than a liquidity facility as it was designed to support specific credit markets.

<sup>109</sup> In the 1950s, Fed Chair William McChesney Martin asked Congress to repeal section 13(b), which the Fed used beginning in 1934 for its real economy lending. Martin argued that the country's monetary authority should not also serve as its investment authority. See Statement of William McChesney Martin, Jr., before the Subcommittee on Small Business of the Senate Banking and Currency Committees, June 20, 1957, reprinted in Fed. Res. Bulletin, Jul. 1957 at 768 ("our concern stems from the belief that it is good government as well as good central banking for the Federal Reserve to devote itself primarily to objectives set for it by the Congress, namely, guiding monetary policy and credit policy so as to exert its influence toward maintaining the value of the dollar and fostering orderly economy growth"). In 1958, Congress transferred these powers to the SBA. See Small Business Investment Act. For a useful oversight of 13(b) lending, see David Fettig, Lender of More Than Last Resort, Fed. Res. Bank of Minneapolis (Dec. 1, 2002). For a comparative analysis of 13(b) lending with 13(3) and 13(13) lending and lending by the RFC, see Menand & Sastry, supra note 78.

This text appears to be a bit of a problem for the Fed's credit facilities, most of which have nothing to do with providing liquidity to the financial system. <sup>110</sup> Congress, however, has plainly had second thoughts about the 2010 change. And in the CARES Act it amends section 13(3), in effect, *sub silentio*. Specifically, it provides in section 4003(b) that

- (a) Notwithstanding any other provision of law, to provide liquidity to eligible businesses, States, and municipalities related to losses incurred as a result of coronavirus, the Secretary is authorized to make loans, loan guarantees, and other investments in support of eligible businesses, States, municipalities . . .
- (b) . . . [Including] (4) [n]ot more than [~ \$454 billion] . . . in, programs or facilities established by the Board . . . for the purpose of providing liquidity to the financial system that supports lending to eligible businesses, States, or municipalities by—(A) purchasing obligations . . . directly; (B) . . . in secondary markets; or (C) making loans, including loans or other advances secured by collateral [emphasis added]. 111

In other words, despite the limiting language in 13(3), Congress contemplates that the Fed can set up facilities that invest in businesses, States, and municipalities. Indeed, if the Fed is not allowed to extend such loans, section 4003(b) is a dead letter. Seemingly aware of the tension with the 2010 restriction, Congress quotes the limiting language verbatim in section 4003(b), describing the real economy facilities it is authorizing the Secretary to invest in as being "for the purpose of providing liquidity to the financial system." Of course, if lending directly to business is a way to provide liquidity to the financial system, then any lending meets the requirement and the words added in 2010 have no meaning.

2. Subsection (B)(i) Requiring Loss Protection and Section 10(a) of the Gold Reserve Act Permitting Only Dealing in Securities to Stabilize Exchange Rates

A further source of trouble for the Fed's 13(3) facilities is also traceable to a provision from Title XI, this one imposing an obligation on the Board to ensure that "the security for emergency loans is sufficient to protect taxpayers from losses." 112

<sup>&</sup>lt;sup>110</sup> The SMCCF is a possible exception as it provides liquidity to secondary markets in corporate bonds, which markets are arguably part of the financial system.

<sup>&</sup>lt;sup>111</sup> CARES Act § 4003.

<sup>&</sup>lt;sup>112</sup> Congress imposed this requirement in 2010. Prior to 2010, 13(3) allowed the Reserve Banks, in a Board-authorized emergency, to extend credit in much the same way that banks do, meaning making risky investments that could lose money. It is relevant though that when the Reserve Banks used 13(3) to lend to the real economy, between 1932 and 1935, they were much more like national banks – non-government institutions controlled by their nominal owners (national banks and state banks known as member banks). After Congress amended the Federal Reserve Act in 1935, dramatically reducing private control of the FRBs, the FRBs came to resemble government agencies, and since that time have not engaged in any 13(3) lending. As George Selgin points out, such lending, especially post-1935, has a clear fiscal component because it involves spending unappropriated dollars (section 13(b) lending, which did take place after 1935, enjoyed a fiscal backstop). Dodd-Frank

Here, the Fed has undoubtedly complied with its 13(3) obligation.<sup>113</sup> The issue is how it complied. For three facilities – the CPFF, the MMFLF, and the TALF – Treasury invested \$10 billion from the country's Exchange Stabilization Fund (ESF). The ESF is a \$100 billion investment account run by the Treasury Department<sup>114</sup> comprised primarily of U.S. government debt, SDRs,<sup>115</sup> Euros, and Yen.<sup>116</sup> The ESF is designed to allow the Treasury to stabilize the value of the dollar against foreign currencies by buying and selling them. Congress has also directed the Treasury to use the ESF to fulfill the country's obligations to the IMF to buy SDRs.<sup>117</sup>

The relevant statutory provision states that:

- (a) The Department of the Treasury has a stabilization fund . . . [and]
- (b) Consistent with . . . a stable system of exchange rates, the Secretary . . . may deal in gold, foreign exchange, and other instruments of credit and securities the Secretary considers necessary.<sup>118</sup>

Because the dollar is the global reserve currency, the ESF gets little use and dealing in credit instruments and currencies to stabilize exchange rates seems unusual to a twenty-first century American public. But exchange rate stabilization is a critical government function in most countries, where responsibility for stabilizing the value of the country's currency, usually against the dollar but also against other currencies

minimizes the fiscal component of 13(3) by requiring the Board to ensure that any FRB lending is secured in such a way that the FRBs do not lose money (and by requiring, as discussed in Part III(A)(2) infra, that all such lending be for the purposes of providing liquidity to the financial system). This means that riskier ersatz discount window facilities like the CPFF and TALF that were permissible in 2008 are not permissible today without a backstop either from a private sector firm willing to take first losses (as in the case of the Fed's 13(3) loans to Bear Stearns) or the Treasury Department using funds appropriated by Congress.

policies and procedures designed to ensure security sufficient to protect against losses, but that the Board can look the other way as FRBs operate facilities the Board expects will result in losses. Not only is there no support for this interpretation in the legislative history, see Senate Report, supra at note 108, at 6 (simply describing Title XI as "requiring all emergency lending to be . . . backed by collateral sufficient to protect taxpayers from loss"), but even if this reading could be maintained, the Board would be in default of its obligations under 13(3)(B)(i) as soon as it became apparent that lending was exposing the FRBs to losses. At that point, the Board would have to act to revise the procedures. It is likely for this reason that the Fed sought investments from Treasury despite the Secretary's apparent lack of authority to make such investments. This is also likely why the Secretary announced he would make such investments – and then sought Congressional approval for them. See also FIREFIGHTING, supra note 1 (opposing the inclusion of this language due to its limiting effect).

<sup>114</sup> U.S. Treasury Department, ESF Statement of Financial Position (Mar. 31, 2020).

 $<sup>^{115}</sup>$  SDR stands for Special Drawing Rights. SDRs are a type of foreign currency issued by the International Monetary Fund (IMF).

 $<sup>^{116}</sup>$  *Id*.

<sup>&</sup>lt;sup>117</sup> See Special Drawing Rights Act, Pub. L. No. 90-349, H.R. 16911, 82 Stat. 188 (1968).

<sup>&</sup>lt;sup>118</sup> 31 U.S.C. § 5302.

used by the country's trading partners, is delegated either to the central bank or to the finance ministry. $^{119}$ 

In 2008, Treasury used the ESF to guarantee MMF liabilities, <sup>120</sup> even though guaranteeing the obligations of private investment companies does not bear a close family resemblance to dealing in gold, foreign exchange, or other instruments of credit. Indeed, Treasury's guarantee arguably encroached on the Fed's responsibility to manage the monetary system by ensuring that various monetary instruments (in this case MMFs) are interchangeable with cash.

Even though Treasury's guarantee helped to halt a destructive and destabilizing run, Congress immediately passed a law explicitly prohibiting future guarantees. Specifically, Congress provided that:

- (a) The Secretary shall reimburse the [ESF] . . . for any funds that are used for the Treasury Money Market Funds Guaranty Program for the United States money market mutual fund industry [in 2008], from funds under this Act.
- (b) The Secretary is prohibited from using the [ESF] for the establishment of any future guaranty programs for the United States [MMF] industry.<sup>121</sup>

This legislative history, and the statutory text, suggests that Treasury's recent investments are inconsistent with section 5302(b). None involve dealing in gold, foreign exchange, or other instruments of credit. Buying equity in a Fed lending facility by entering into a bespoke investment agreement is surely not what Congress had in mind when it enacted or amended the Gold Reserve Act. 122 Further, as a matter of pure textual interpretation, it is not clear how Treasury's investments are related in any way to maintaining "a stable system of exchange rates," the predicate upon which the Secretary is authorized to deal in securities. The Treasury's investment itself has nothing to do with foreign currencies or the exchange rates between those currencies and the dollar. 123 Nor does the lending of the facility itself

<sup>&</sup>lt;sup>119</sup> For a comprehensive overview of international exchange rate stabilization practices, see International Monetary Fund, Annual Report on Exchange Arrangements and Exchange Restrictions 2018 (Apr. 16, 2019).

 $<sup>^{120}</sup>$  U.S. Treasury Department, Treasury Announces Guaranty Program for Money Market Funds (Sept. 19, 2008).

<sup>121 12</sup> U.S.C. § 131.

<sup>122</sup> The ESF was a product of section 10 of the Gold Reserve Act of 1934. 73 Stat. 341. The original text read: "For the purpose of stabilizing the exchange value of the dollar, the Secretary of the Treasury, with the approval of the President, directly or through such agencies as he may designate, is authorized, for the account of the funds established in this section, to deal in gold and foreign exchange and such other instruments of credit and securities as he may deem necessary to carry out the purposes of this section." *Id*.

<sup>123</sup> The Secretary's power to deal in securities is probably best read to be limited to (a) buying securities denominated in foreign currencies using dollars and (b) buying securities denominated in dollars using foreign currencies. Needless to say, the Treasury's recent investments involve neither. (Although the large holdings of dollar denominated Treasury securities in the ESF might seem to undermine this theory, the opposite is true. The law includes an additional provision explicitly

– which backstops solely dollar denominated debt instruments using central bank dollar reserves. Moreover, it is not clear that the Secretary's investment can be construed as "dealing" in securities – being that it is the private purchase of a bespoke instrument that is not traded (or tradeable) on secondary markets. <sup>124</sup> There is also the trouble of the 2008 amendment, which appears to prohibit the Treasury Secretary from using the ESF to establish guarantee programs for the MMF industry. While the MMFLF does not explicitly guarantee MMF shares, the effect of the facility, as Peter Conti-Brown has pointed out, <sup>125</sup> is to support the industry.

But the CARES Act once again seems to force a different reading of the statute. First, it temporarily suspends the 2008 prohibition on using the ESF to guarantee MMFs. Second, it amends the ESF to provide that the fund "is available to carry out ... the Coronavirus Economic Stabilization Act of 2020."126 Third, it directs \$500 billion appropriated as part of the Treasury's CARES Act investment authority to the ESF. 127 Thus, Congress contemplates the Secretary's using the ESF to support MMFs because the suspension specifies that any "guarantee established as a result of" the suspension shall be "limited to a guarantee of the total value of a shareholder's account" as of the date before the guarantee and terminate not later than year-end. 128 And if that was Congress's intent, and Treasury's investment in the MFFLF is only permissible under a reading of the ESF statute that permits the Secretary to invest in Fed facilities that stabilize the exchange rates between cash and cash substitutes even though both are dollar instruments, arguably Treasury's investments in the CPPF and TALF are permissible as well, along with any other investment that involves the \$500 billion appropriated by the CARES Act. 129 Although it is impossible to know for sure, it seems likely that courts would read past the restrictions in the ESF in light of these CARES Act provisions. 130

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authorizing "investing in obligations of the United States Government those amounts in the fund . . . not required at the time to carry out this section." 31 U.S.C. § 5302(a)(1). The inclusion of this provision suggests that Congress interpreted the text regarding dealing in securities narrowly and did *not* think that it permitted the Secretary to buy government debt, even though it is standard practice for governments to maintain foreign reserves in debt instruments issued by finance ministries rather than in account balances at central banks or physical currency.)

<sup>&</sup>lt;sup>124</sup> The instrument here being whatever investment agreement was struck between the special purpose vehicle created by the Fed (the facility) and the Treasury Department.

<sup>&</sup>lt;sup>125</sup> Peter Conti-Brown, Interview with David Beckworth, Macromusings (Apr. 6, 2020).

<sup>&</sup>lt;sup>126</sup> Pub. L. 116-136, div. A., title IV, § 4027(b), Mar. 27, 2020, 134 Stat. 496.

<sup>&</sup>lt;sup>127</sup> CARES Act § 4207.

<sup>&</sup>lt;sup>128</sup> Id. at § 4015 ("Non-Applicability of Restrictions on ESF During National Emergency").

<sup>&</sup>lt;sup>129</sup> There are some significant differences between the MFFLF and the CPFF and TALF, however. The CP market is longer duration. The TALF arguably has a credit component.

<sup>&</sup>lt;sup>130</sup> But cf. Nat'l Fed'n of Indep. Bus. v. Sebelius, 567 U.S. 519, 666 (2012) (unsigned dissent) ("[w]hat counts is what the statute says"). The Secretary's investments, of course, are unlikely to be challenged in court by a party with standing.

3. Subsection (A) Permitting Only Discounting Notes and Requiring Evidence of Inadequate Credit Accommodations

A third provision of interest, 13(3)(A), dates to the original legislation that created section 13(3) in the summer of 1932. It says that Federal reserve banks can use 13(3) to "discount . . . notes,"

*Provided*, That before discounting any such note, draft, or bill of exchange, the Federal reserve bank shall obtain evidence that such participant . . . is unable to secure adequate credit accommodations from other banking institutions. <sup>131</sup>

Congress included this "credit availability proviso" in 13(3) in order to preserve the Fed's status as a central bank. The idea was that in normal times the Fed would operate through the banks but that if the banking system collapsed, the Fed could step in temporarily and directly lend. Charles Hamlin, the Fed Board member who came up with the idea for 13(3) and drafted the initial text (from which this portion of the provision is drawn word for word), explained the purpose of his proposal to Carter Glass, then the Chair of the Senate Banking Committee, and the member of Congress who pushed 13(3) through Congress:

I firmly believe, but cannot prove, that there are many merchants in the United States today who are unable to obtain credit, although they can give satisfactory collateral. *I know that there are large areas where there are no banks left*. I therefore, personally, would favor giving this power in emergencies to the Federal reserve banks.<sup>132</sup>

This appears to be precisely the rationale on which President Hoover supported the legislation.<sup>133</sup> And shortly after 13(3) became law, the Board issued a

<sup>&</sup>lt;sup>131</sup> 12 U.S.C. § 343(3)(A).

<sup>&</sup>lt;sup>132</sup> Charles Hamlin to Carter Glass (Jul. 9, 1932) (on file with author) (emphasis added).

<sup>133</sup> For example, the head of the Fed's Board, Eugene Meyer, wrote to Hoover that the Board had asked the FRBs to "ascertain the extent to which there may be demands for loans which are not being met by other banking institutions and which properly might be granted by the Federal Reserve Bank under the provisions of the amendment, with the view of taking steps to meet the need for loans of this character." Meyer, Governor of the Board, to Herbert Hoover, President of the United States (Jul. 26, 1932) at 3 (on file with author). And Hoover wrote back after signing the amendment:

This statement [regarding credit availability] is a complete indictment of the banking situation because its conclusions are that loans have been refused . . . of the type subject to rediscount by the Federal Reserve System, and that the result of these restrictions has been to increase unemployment and to stifle business activity in the country. The conviction I get . . . is that the Federal Reserve System should at once instruct the Federal reserve banks to undertake direct rediscount under authorities provided in the Relief Bill. We cannot stand by and see the American people suffering as they are today and to the extent that may imperil the very stability of the Government because of the unwillingness of the banks to take advantage of the facilities provided by the Government.

Herbert Hoover, President of the United States, to Eugene Meyer, Governor of the Federal Reserve Board (Jul. 23, 1932) (on file with author) (emphasis added).

circular to the Reserve Banks setting forth the terms of 13(3) lending. These terms required prospective borrowers to submit applications for discount including:

- 3. A statement of the efforts made by the applicant to obtain adequate credit accommodations from other banking institutions, including the names and addresses of all other banking institutions to which applications for such credit accommodations were made, the dates upon which such applications were made, whether such applications were definitely refused and the reasons, if any, given for such refusal;
- 4. A list showing each bank with which the applicant has had banking relations, either as a depositor or as a borrower, during the preceding year, with the approximate date upon which such banking relations commenced and, if such banking relations have been terminated, the approximate date of their termination.<sup>134</sup>

The Board also required that the FRBs, before discounting, ascertain that "there is a reasonable need for such credit accommodations" and that "the applicant is unable to obtain adequate credit accommodations from other banking institutions." The Board further elaborated that a "special effort should be made to determine whether the banking institutions with which the applicant ordinarily transacts his banking business or any other banking institution to which the applicant ordinarily would have access is willing to grant such credit accommodation." During this period, it was the practice of the FRBs to attempt to place loan applications under 13(3) with other banks. And many Reserve Banks declined to make any loans on the basis of 13(3), occasionally citing this provision as a reason. 137

While complying with subsection (A) is not a trivial matter for any of the Fed's new credit facilities, given the comparatively well capitalized state of the banking system today, it is particularly difficult for the Fed to comply in the case of the SMCCF, which is purchasing corporate bonds and ETFs on the secondary markets. 138

<sup>&</sup>lt;sup>134</sup> Chester Morrill, Secretary of the Board, to all Federal Reserve Banks, Discounts for Individuals, Partnerships and Corporations (Jul. 26, 1932) at 4 (on file with author).

<sup>&</sup>lt;sup>135</sup> *Id.* at 5-6.

<sup>&</sup>lt;sup>136</sup> *Id.* at 6. The Board's internal legal analysis of the new provision reinforced this point: "Such a note, draft or bill," it explained with reference to 13(3), "may be discounted only when the Federal reserve bank has obtained evidence that the individual or corporation for which such discount is to be made is unable to secure adequate credit accommodations from banking institutions other than Federal reserve banks." Analysis of New Paragraph of Section 13 of the Federal Reserve Act, Papers of Charles Hamlin at 2 (on file with author).

<sup>&</sup>lt;sup>137</sup> Mr. Parry to Charles Hamlin (Aug. 23, 1932) (on file with author). For example, in the first report on lending, of the 277 applications refused, three were rejected because "present credit deemed adequate," two were rejected because "denial of credit by other banks not shown," and four were rejected because the FRB was able to place the loan with other banks.

<sup>&</sup>lt;sup>138</sup> Federal Reserve Bank of New York, New York Fed Announces Start of Certain SMCCF Purchases on May 12 (May 11, 2020).

This is because, first, the Fed is not "discounting" anything when it buys a bond or an ETF on the secondary market. It is purchasing a security from a third-party. Section 14 governs purchases and sales of securities in the open market, and the power to buy corporate bonds and ETFs is conspicuously absent. Second, when the Fed purchases a bond or ETF in the secondary market, it is not extending credit, so it is not clear what it means to obtain evidence that the company is not able to access adequate credit accommodations from other banks.

Once again, though, a broad reading of the CARES Act probably permits these purchases. Specifically, section 4003(b)(4)(B) contemplates Treasury investment in Fed facilities that "purchas[e] obligations or other interests in secondary markets." This text would be rendered meaningless if the Fed's facilities could not purchase obligations in secondary markets – if they could only "discount" notes – and the use of the phrase "other interests" is probably sufficient to permit purchases of ETFs. 140 It is not clear whether this means that the Fed does not have to comply with the credit availability proviso, which really makes sense only with regard to loan applications, or whether the Fed is complying with it in some novel way by, for example, commissioning a report from its research department on the availability of credit for corporate issuers. 141

U.S.C. § 343(3)(A) (authorizing FRBs to "discount notes, drafts, and bills of exchange when such notes, drafts, and bills of exchange are indorsed or otherwise secured to the satisfaction of the Federal Reserve bank"). That 13(3) is about making loans to borrowers not purchasing securities on secondary markets is confirmed by several further aspects of the paragraph including the text of subsection (B)(i) that describes subsection (A) discounts as "emergency loans," as well as the text that requires FRBs to assign "a lendable value to all collateral for a loan executed . . . under this paragraph in determining whether the loan is secured satisfactorily for purposes of this paragraph." Subsection (B)(ii) uses the word "borrowing" and discusses "the time the borrower initially borrows under the program or facility." It also says that "the borrower" has a duty to update the Fed if it becomes insolvent.

<sup>&</sup>lt;sup>140</sup> When the Fed purchases an ETF, it is actually making an equity investment, buying shares in a trust. It is the trust that owns the corporate bonds.

<sup>141</sup> In this regard, there is a question of what to make of section 4003(c)(3)(B) of the CARES Act, which states that "[f]or the avoidance of any doubt, any applicable requirements under section 13(3) . . . including requirements relating to loan collateralization, taxpayer protection, and borrower solvency, shall apply with respect to any program or facility described in subsection (b)(4)." Is it that the credit availability proviso is not "applicable"? Assuming it is applicable, how is the Fed complying in the case of ETFs? One possibility is that the Fed is treating the ETF itself as the 13(3) participant and seeking some sort of certification regarding credit availability from the ETF's issuer. The problem with this approach is that the ETF may not even be authorized to borrow, and it is not clear what it would mean for the ETF itself to lack adequate credit accommodations. Another approach would be for the Fed to treat the issuers of the underlying bonds as the participants and to seek certifications from them (or conduct some sort of analysis of the portfolio of bonds regarding the ability of those issuers to access adequate credit). The problem with this "pass-through" approach is that it raises questions about how the Fed is meeting other 13(3) requirements regarding participants. For example, how can the Fed ensure that none of the bonds are issued by companies that are insolvent? See id. ("including requirements relating to . . . . borrower solvency"); 12 U.S.C. § 343(B)(ii) (requiring the Board to "establish procedures to prohibit borrowing from programs and facilities by borrowers that

#### B. Section 14 Operations

The Fed has drawn on section 14 of its enabling act for its repo operations, FIMA facility, and swap lines. The Fed has a long history of using section 14 to lend, with the first stretched reading of this provision dating to 1917. How this history cuts when it comes to interpreting section 14 today is a complicated question. But it is clear that the best reading of the Federal Reserve Act requires the Fed to run these facilities under section 13(3) and 13(13).

Section 14 governs the System's "Open-Market Operations." As relevant, section 14(1) authorizes FRBs to "purchase and sell in the open market, at home or abroad, either from or to domestic or foreign banks, firms, corporations, or individuals, cable transfers and bankers' acceptances and bills of exchange." Cable transfers are foreign currency instruments. Section 14(2)(b) authorizes every FRB

- 1. To buy and sell, at home or abroad, bonds and notes of the United States . . . but only in the open market [and]
- 2. To buy and sell in the open market . . . any obligation which is a direct obligation of, or fully guaranteed as to principal and interest by, any agency of the United States.

Further, section 14(2)(e) empowers FRBs to "open and maintain accounts in foreign countries . . . wheresoever it may be deemed best for the purpose of purchasing, selling, and collecting bills of exchange . . . and to open and maintain banking accounts for such foreign correspondents or agencies, or for foreign banks or bankers."

The Fed's repo operations, FIMA facility, and swap lines lend dollars to securities dealers and foreign central banks by buying U.S. treasury securities, agency mortgage-backed securities, and foreign currency from them bilaterally and obtaining their agreement to buy the securities or currency back at higher prices at a future date. The securities serve as collateral, and if the Fed's counterparty fails to repurchase them, the Fed can sell them to recoup its losses. The currency is collateral as well, but it exists merely on the books of the foreign central bank.

While, section 14 plainly authorizes the Fed to buy and sell these assets, and section 4(3) of the Federal Reserve Act permits the FRBs to enter into contracts, this disguised lending runs afoul of the critical clauses in section 14 that limit the Fed to purchase and sell in the "open market." An "open market" purchase or sale is a

are insolvent"). A third possibility, given that the Fed is requiring anyone *selling* bonds or ETFs to the Fed to certify that they are not insolvent, *see* Federal Reserve Bank of New York, Secondary Market Corporate Credit Facility Seller Certification Materials (May 5, 2020), is that the Fed is treating the sellers as the "participants." But if so, how is the Fed complying, if at all, with the credit availability proviso? Will the Fed only buy bonds and ETFs from sellers who are unable to access adequate credit from other banks?

purchase or sale at a market price.<sup>142</sup> The openness requirement ensures non-prejudicial access to the Fed's business and that the Fed's purchases take place at arm's length.

The Oxford English Dictionary defines "open market" as an "unrestricted market in which any buyer or seller may trade freely, and where prices are determined by supply and demand." (3rd ed. 2004). See also Webster's Third New International Dictionary 1580 (1981) (defining "open market" as a "freely competitive market in which any buyer or seller may trade and in which prices are determined by competition"); Random House Unabridged Dictionary 1357 (2d ed. 1993) (defining "open market" as "an unrestricted competitive market in which any buyer and seller is free to participate"). The Supreme Court has adopted this usage. See, e.g., Basic Inc. v. Levinson, 485 U.S. 224, 241 (1988) ("The fraud on the market theory is based on the hypothesis that, in an open and developed securities market, the price of a company's stock is determined by the available material information regarding the company and its business.") (emphasis added).

Legal dictionaries and courts have long defined market prices as the price in an "open market" transaction. See, e.g., HENRY CAMPBELL BLACK, A LAW DICTIONARY 761 (2d ed. 1910) (defining "market price" as "[t]he actual price at which the given commodity is currently sold, or has recently been sold, in the open market . . . "); THE STANDARD FINANCIAL DICTIONARY: AN ENCYCLOPEDIA COVERING THE ENTIRE FIELD (defining "market price" as "[a]ny price prevailing for securities in the open markets" and "valuation" as the "amount of money a security of property will bring in the open market"); WHITNEY, THE CENTURY DICTIONARY AND CYCLOPEDIA 3633 (1906) (defining "market price" as "the price a commodity will bring when sold in open market"); 3 JUDICIAL AND STATUTORY DEFINITIONS OF WORDS AND PHRASES 303 (1914) (defining "price in open market" as "what it will cost one to purchase [goods] in the open market"); S. Bus Co. v. Simpson, 214 Ark. 323, 325 (1948) ("The market value of an article or commodity is what it will bring on the open market when sold by a willing seller to a willing and able buyer "); Stein v. Idaho State Tax Comm'n, 99 Idaho 70, 71 (1978) ("We hold that the U. S. Treasury bonds have a value for inheritance tax purposes determined by the open market at the time of death; i. e., 'the price which a buyer willing but not obliged to buy would pay a seller willing but not obligated to sell, both having full knowledge of all pertinent facts affecting value."); Eastman Kodak Co. v. Altek Corp., 936 F.Supp.2d 342, 351-52 (S.D.N.Y. 2013) (concluding that an "open market price" is a price determined by supply and demand where buyers and sellers may trade freely); Fahey v. Updike Elevator Co., 102 Neb. 249 (1918) (concluding that "the prices of wheat on the open market" are "the market price"); Koella v. McHargue, 976 S.W.2d 658, 661 (Tenn. Ct. App. 1998) (concluding that in an "open market" prices are determined by competition and that "the term is not ambiguous").

The concept is derived from the ancient legal doctrine of the "market overt." JOHN BOUVIER, BOUVIER'S LAW DICTIONARY AND CONCISE ENCYCLOPEDIA 2095-96 (1914). Purchasers in a market overt are protected against third-party claims contesting title. Contracts in a market overt are binding. *Id.* Unsurprisingly, then, the term "open market" precludes private sales. *See, e.g.*, OED (2004) (quoting 14 Q. J. ECON. 274 (1900) ("The new stock is to be sold in open market, and not to the holders of the old stock, in order to forestall criticism that the bank is owned by a ring of capitalists"). An open market is public. *See* HOWARD IRVING SMITH, FINANCIAL DICTIONARY 394 (1908) (defining "open market" as "a market that is free to all, as distinguished from one participation in which is restricted to members of an exchange"); 1 COKE'S INSTITUTES (1817) (in "an open market" contracts are "made openly, for of old time, privy or secret contracts were forbidden"); Albany Supply & Equip. Co. v. City of Cohoes, 262 N.Y.S.2d 603, 605 (Sup. Ct. 1965) ("an open market is one open to all who wish to purchase at the vendor's prices"); Hous. Fin. & Dev. Corp. v. Harold K.L. Castle Found., 901 P.2d 1300, 1307 (Ct. App. 1995) (holding "that an 'open market' . . . means 'an unrestricted competitive market in which any buyer and seller is free to participate").

Transactions occur freely. *See* Miller v. Corp. Comm'n, 635 P.2d 1006, 1008–09 (OK 1981) ("The fair market value is one which can neither be inflated nor deflated by reference to special types of sales. The latter are not reflective of open-market conditions. A compulsory sale of an owner's interest

in realty, when taken by eminent domain, is the most common example of a sale not made in the open market. It is said to be affected by special circumstances which do not exist in open market transactions. . . . By its very nature, the sealed-bid process is incompatible with an open market sale. Sealed bidding reflects the seller's unwillingness to bargain openly in, and yield to the forces of, the open marketplace.").

This definition of "open market" is fundamental to securities law. Basic Inc. v. Levinson, 485 U.S. 224, 241 (1988) (discussing the impact of the allegedly fraudulent trades "upon the open market for Basic shares"). See also Hevesi v. Citigroup Inc., 366 F.3d 70, 77 (2d Cir. 2004) (explaining that the Basic v. Levinson fraud-on-the-market theory involves the presumptions "that (1) misrepresentations by the issuer affect the price of securities traded in the open market, and (2) investors rely on the market price of securities as an accurate measure of their intrinsic value") (emphasis added).

The concept also plays an important role in calculating contract damages. See, e.g., Boyer v. Cox, 34 Neb. 813 (1892) (explaining that where "the articles sold can be purchased in the open market the rule of damages on breach of an agreement is the market price at the day appointed for delivery, less the contract price, when the latter is not paid"); Albert Gas Fixture Co. v. Kabat, 109 N.Y.S. 737, 737 (App. Term 1908) ("Under the established rule the plaintiff is entitled to recover the difference between the contract price and what the wire actually cost it in the open market."); Canavan v. Neeld, 189 Pa. 208, 214 (1899) ("The reasonable construction of this clause is that put upon it by the court below; that is, it measures the damages for plaintiffs' default in this particular at a sum not exceeding the difference between the open market price and that specified in the contract.").

The term is a core concept in procurement law. Prior federal statutory use is unambiguous when purchases are not subject to notice and competitive bidding requirements, they must take place on "the open market," where the government can be assured of a fair price. For example, the Secretary of War must give notice and an opportunity for competition for government contracts unless, inter alia, "(3) the aggregate amount involved in any purchase of supplies or procurement of services does not exceed \$500; in which case such purchases of supplies or procurement of services may be made in the open market in the manner common among businessmen." FEDERAL RECLAMATION LAWS ANNOTATED 533 (1946) (emphasis added). The law further provides that "the purchase of supplies, materials and equipment or procurement of services in the open market without advertising is subject to the \$300 proviso and limitations heretofore effective." Id. at 795. See also Procurement Act, Mar. 2, 1865, c. 74, s. 7 (providing that the "Secretary of War, the Secretary of the Navy, and the Secretary of the Treasury may enter into contract, in open market, for bunting of American manufacture, as their respective services require . . . at a price not exceeding that at which an article of equal quality can be imported") (emphasis added); 19 Stat. 88 (1876) (empowering the Commissioner of Indian Affairs "to purchase in open market, without the usual advertisement, for immediate use of the Indian tribes, such supplies as are required . . . to serve until . . . the time now required by law for advertisement and acceptance of proposals shall have elapsed") (emphasis added).

The insistence by Congress that government purchases take place in the open market, *i.e.* at a market price, goes back to the founding. For example, a clear precursor to the Federal Reserve Act, the Act Providing for the Reduction of the Public Debt, created a Sinking Fund Commission to purchase Treasury securities and specifically required that purchases be made "openly." 1 Stat. 186 (1790) at § 2 (emphasis added). The commissioners appear to have interpreted this to mean that purchases should be made "at the market price, & in an open and public manner." Alexander Hamilton, Minutes of the Meeting of the Commissioners of the Sinking Fund (Aug. 27, 1790) (adopting resolution to that effect, endorsed by President Washington the next day). Indeed, in proposing the fund, Hamilton wrote that it should purchase "the public debt at the price it shall bear in the market, while it continues below its true [par] value." Hamilton to the Speaker of the House of Representatives, Report on the Public Credit (Jan. 9, 1790) (emphasis added). After the fund was established, in a letter to Secretary Hamilton, an official described the fund's purchases as taking place "at the open market." David Ross to Alexander Hamilton (Apr. 25, 1793). In 1790, during a debate in the House of Representatives one Congressman remarked that "the public securities of the United States . . . are sold in open market, and at the market price, which is always an equivalent; for the market price of

Neither of the transactions in a repo or a swap execute at a market price. The purchase price is below market – the difference is known as the haircut and protects the Fed from fluctuations in the value of the collateral during the course of the loan. And the sale price is above the purchase price – the difference is the interest rate, the Fed's profit from extending the loan. In fact, one could argue that in the case of a repo neither leg is even a "sale" or a "purchase" within the meaning of section 14, as full ownership rights do not transfer with the initial sale (e.g., the "seller" is entitled to keep any interest payments on the underlying security) and the repurchase is the settlement of a forward transaction.

There are several reasons why the Fed's contrary interpretation of the statute is unreasonable. First, is the rule against surplusage and superfluity. <sup>143</sup> On the Fed's reading, which encompasses transactions with specially selected counterparties at non-market prices, what purchase or sale would not be on the open market? <sup>144</sup>

stock was regulated by the public opinion, and depended, in great measure, on the circumstances of the nation and on events." 2 ANNALS OF CONG. 1171-72, 1281 (1790) (emphasis added).

144 The Fed's best argument is probably that the words "open market" are intended to expand the powers of the FRBs, not restrict them. On this view - call it the "emancipation" interpretation of open market – the Fed is generally confined to dealing with its members, but section 14 creates an exception: it permits the Fed to deal directly in the "open market," to transact with anyone. And surely this is correct so far so far as it goes. See HENRY PARKER WILLIS, AMERICAN BANKING 169-173 (1916) (describing open market operations as designed to allow FRBs to buy from nonmembers); Senate Documents, 63rd Cong., 1st Sess., Vol. 15, 812 (1913) (Samuel Untermeyer) (explaining that the central banks in France and Germany "buy mainly in the open market in competition with the banks"); HENRY PARKER WILLIS, THEORY AND PRACTICE OF CENTRAL BANKING 181 (1936) (explaining the need for OMOs to make discount rate "effective"). But were this the extent of the meaning of the term, much of section 14 would make no sense. For example, subsection 2(b), governing treasury securities, did not originally include the words "in the open market." Does this mean that before the law was changed the FRBs could only purchase them from member banks? That was certainly not the practice at the time. Further, subsection 2(a), which authorizes dealing in gold, still does not include the modifier "open market," even though this subsection plainly contemplates foreign transactions in gold with foreign counterparties. Even more difficult is squaring the emancipation interpretation with subsection 2(f), added in 1923, which permits FRBs "to purchase and sell in the open market, either from or to domestic banks, firms, corporations, or individuals, acceptances of Federal Intermediate Credit Banks." Act of March 4, 1923, 42 Stat. 1480 (emphasis added.) As subsection 2(f) specifies precisely who the FRBs can buy and sell from or to, on the emancipation interpretation the words "open market" would be rendered entirely redundant. Nor can the emancipation view be reconciled with subsection (h), added in 1979 and later repealed, which empowered the Treasury Secretary to borrow securities from the Fed and "sell any such obligation in the open market for the purpose of meeting [its] short-term cash needs." 93 Stat. 35 (1979). Surely it cannot be that if the words "open market" were removed the Secretary could sell only to member banks.

Similarly, two lesser-known provisions of section 13 contemplate nonmember dealing, and yet the words "open market" are absent. For example, subsection (4) permits FRBs to buy sight drafts, provided they are endorsed by a member bank, yet it does not use the term "open market" – it simply specifies that such bills may be "purchase[d]." See also § 13(6) (authorizing FRBs to discount

<sup>&</sup>lt;sup>143</sup> Cooper Indus. Inc. v. Aviall Servs., Inc., 543 U.S. 157, 166 (2004) (noting the policy against reading a provision in a way that "would render part of the statute entirely superfluous, something we are loath to do").

acceptances endorsed by a member back drawn for agricultural purposes and secured by warehouse receipts conveying title to readily marketable staples).

Section 14(2)(c) presents an interesting puzzle. It permits FRBs to "purchase from member banks and to sell, with or without its indorsement, bills of exchange," and looks to be consistent with the emancipation interpretation. After all, 2(c) does not use the words "open market." But it does specify "member banks" – suggesting that such a limitation is not implied in its absence. And as 14(1) authorizes FRBs to purchase and sell bills of exchange "in the open market, at home or abroad," subject to "rules and regulations prescribed" by the Board, it stands to reason that subsection 2(c) was included to permit FRBs to transact with their members on their own terms. Admittedly, this raises the question of whether the FRBs can conduct private sales of these instruments as well as gold bullion. I believe the answer is yes.

The real downfall of the emancipation interpretation is the amendment of subsection 2(b) in 1935 to add the phrase "but only in the open market" to modify FRB authority to buy and sell government bonds. It is inconceivable that this means the FRBs are restricted from buying government bonds from member banks. Even the Fed does not interpret it to mean that. Instead, it interprets the phrase as prohibiting buying securities directly from the Treasury. See Federal Reserve, Current FAQs, "Why Doesn't the Federal Reserve Just Buy Treasury Securities Directly From the U.S. Treasury?" ("The Federal Reserve Act specifies that the Federal Reserve may buy and sell Treasury securities only in the 'open market.""); Kenneth D. Garbade, Federal Reserve Participation in Public Treasury Offerings, Fed. Res. Bank of N.Y. Staff Reports, No. 906, Dec. 2019. The Fed's interpretation rests on a single comment in the legislative history made by an unpopular banker. See, e.g., Hearings before a Subcommittee of the Committee on Banking and Currency of the U.S. Senate, 74th Cong., 1st Sess. 409 (May 1935) (Winthrop Aldrich, chairman of the Chase National Bank of New York) (recommending that, to avoid runaway inflation, "the direct purchase of Government obligations from the Treasury . . . be specifically declared not to be open-market operations within the meaning of the act"). But not only was Aldrich's suggested language not adopted (Congress could easily have prohibited "direct purchases"), the Fed's position assumes that the words "on the open market" advance the goal of preventing handouts to Treasury, Aldrich's purported concern, by preventing the Fed from transacting with Treasury as a counterparty. They do not. See, e.g., Garbade, supra. In so far as they address Aldrich's concern, they do so by prohibiting the Fed from buying from Treasury in a private sale at a non-market price. Carter Glass explained this at the time:

Suppose, for example, the open-market quotation for Federal Reserve bonds is [substantially] below par . . . No one can conceive of any fair reason why a Federal Reserve bank should use the reserve funds of their members banks to purchase Government bonds at par directly from Treasury when they could go into the open market and buy them at a greatly depreciated price. Therefore, we require that the purchases shall be in the open market.

Act of March 4, 1923 (42 Stat. 1480). See also 88 Cong. Rec. 766 (Jan. 28, 1942) ("Mr. Vandenberg. There must have been some reason for writing in the language [but only on the open market]. Mr. Barkley. The Senator from Virginia is the author of the law. . . Mr. Glass. We simply did not want the Federal Reserve banks to go into the speculative business; that is all.") (emphasis added); Id. (Jan. 28, 1942) (Mr. Barkley) (explaining that in 1935 "it was felt, as a matter of caution, the Federal Reserve banks should be limited to the facilities enjoyed by the ordinary citizen at that time, of going into the open market and buying bonds at the market price"). Indeed, this is the only way to read "open market" consistently, as the words modify all the other asset classes just discussed where it would be incoherent to interpret them as prohibiting direct purchases from the issuer. To drive this point home, one need only consider subsection (h), which as mentioned empowered the Treasury Secretary to borrow treasury securities from the Fed and sell them "in the open market for the purpose of meeting [its] short-term cash needs." 93 Stat. 35 (1979). On the Fed's interpretation, Congress added these words to prevent Treasury from selling its securities to itself!

Second, is the policy against reading statutes piecemeal.<sup>145</sup> If the Fed were allowed to buy and sell securities at non-market prices it could evade all of the requirements of section 13 restricting its lending activities. For example, the Fed could lend to a single company without the approval of the Treasury Secretary and without reporting the transaction to Congress in contravention of section 13(3) just by structing the loan as a sale-and-repurchase agreement of agency MBS or a currency swap. It could also usurp Congress's spending power<sup>146</sup> by purchasing securities outright and overpaying for them, thereby reducing its earnings, which it is required to pay periodically to the Treasury.<sup>147</sup> And the Federal Open Market Committee (FOMC), which Congress carefully designed in 1935 to manage the System's securities portfolio, could use section 14 to effectively override the Board on lending rates and override the FRBs on lending counterparties even though Congress intentionally housed decision-making authority over these matters in the Board and the FRBs and not in the FOMC.

Third, it is inconceivable that anyone in 1913 understood section 14 to permit lending, as Congress specifically designed the legislation to condition access to the Fed's balance sheet to membership in the System, and compliance with all of the requirements that such membership entailed. The goal was to eliminate special deals, which were a despised feature of the banking system's reliance on large New York banks during panics, and to create a statutory framework governing who could access emergency loans and who could not.<sup>148</sup> Perhaps the Fed's own General Counsel put it best in 1923 when he wrote of the Fed's repurchase operations:

It was never contemplated by Congress that the Federal reserve banks should make direct loans to non-member banks nor to stock, bond and acceptance brokers or other individuals, partnerships or corporations which ordinarily would seek such accommodations from member banks.<sup>149</sup>

<sup>&</sup>lt;sup>145</sup> See, e.g., U.S. Nat. Bank of Oregon v. Indep. Ins. Agents of Am., Inc., 508 U.S. 439, 455 (1993) (quoting United States v. Heirs of Boisdore, 49 U.S. 113, 122 (1849)) ("in expounding a statute, we must not be guided by a single sentence or member of a sentence, but look to the provisions of the whole law, and to its object and policy"); PHH Corp. v. Consumer Financial Protection Bureau, 881 F.3d 75, 124 (2018) (same).

<sup>&</sup>lt;sup>146</sup> Kate Stith, Congress's Power of the Purse, 97 YALE L. J. 1343 (1988).

<sup>&</sup>lt;sup>147</sup> 12 U.S.C. § 289(a)(3)(B).

<sup>&</sup>lt;sup>148</sup> See ROGER LOWENSTEIN, AMERICA'S BANK: THE EPIC BATTLE TO CREATE THE FEDERAL RESERVE 191-94 (2015) (describing the influence on President Wilson and the legislation of Samuel Untermyer's 1913 report revealing inside dealing among New York banks). See also Ida Tarbell, "The Hunt for a Money Trust, III. The Clearing House, American Magazine, July 1913; Lowenstein at 61-63 (explaining how many financial firms were dependent on the whims of the New York Clearing Housing and J.P. Morgan who could determine which firms could access Clearing House "loan certificates" – a sort of private base money – and which could not).

<sup>&</sup>lt;sup>149</sup> Memorandum from Walter Wyatt, General Counsel of the Federal Reserve Board, to Daniel Crissinger, Governor of the Federal Reserve Board 10 (Aug. 18, 1923) (on file with author). *See also* THOMAS CONWAY & ERNEST PATTERSON, THE OPERATION OF THE NEW BANK ACT (1914) (analyzing

So concerned was Congress about fair treatment when it came to lending that it wrote section 4(8) to prohibit the FRBs from "discriminat[ing] in favor of or against any member bank or banks" when "extend[ing] to each member bank such discounts, advancements, and accommodations as may be safely and reasonably made with due regard for the claims and demands of other member banks."

Moreover, it would be truly bizarre if section 14 permitted lending against *Treasury collateral*, given that when the Act was written in 1913, U.S. government securities were not eligible assets for discounting under section 13(2). Indeed, after the United States entered World War I, Congress specifically amended the Act to authorize advances to member banks secured by treasury securities (and then *only for fifteen days*). There would have been no need for this amendment if section 14 already allowed sale-and-repurchase agreements of treasuries.

But even if artificial purchases and sales *are* permissible under section 14, it is hard to see why the requirements of section 13 do not also apply. After all, the relevant transactions are constructively loans, courts have long treated such conditional sales as loans, <sup>151</sup> and the evidence here is overwhelming that the facilities

This remains good law. For the canonical statement, see *In re Grand Union Co.*, 219 F. 353, 359 (2d Cir. 1914) ("Stripped of the verbiage with which the parties have sought to clothe their

section 14 and concluding that "a careful reading of it will show that there are a number of different ways in which the reserve banks may deal with the public. There is, however, no authorization under which they may discount or lend directly to private individuals.").

 $<sup>^{150}</sup>$  39 Stat. 753 (1916). This provision is still on the books – although it was superseded by section 10B, which gave FRBs the power to lend to banks against a wide range of collateral for up to fourth months.

<sup>&</sup>lt;sup>151</sup> The key consideration is the intent of the parties. Chief Justice Marshall established the rule in 1812: "the inquiry in every case must be, whether the contract in the specific case is a security for the repayment of money or an actual sale." Conway's Executors v. Alexander, 11 U.S. 218, 237 (1812). To determine intent, courts look to the legal documents and the "extrinsic circumstances." Id. at 238. In Conway's, Marshall concluded that there was no intent to lend. Id. at 239 ("Had there been any treaty – any conversation respecting a loan or mortgage, the deed might have been, with more reason, considered as a cover intended to veil a transaction differing in reality from the appearance it assumed. But there was no such conversation. The parties met and treated upon the ground of a sale and not of a mortgage."). When there was an intent to lend, courts treated the sale as a loan. See, e.g., Eaton v. Green, 39 Mass. 526 (1839) (holding that where land was sold subject to an agreement to resell upon the repayment of the money within a given time with interest there was "not a sale with a right to purchase on condition" but an equitable mortgage); id. at 529-30 ("whenever it appears doubtful whether the parties intended a mortgage, or a sale with an agreement to repurchase, courts of equity incline to consider the transaction a mortgage"). See also Robinson v. Farrelly, 16 Ala. 472, 477 (1849) ("The nature of a sale, with the right to repurchase for a given sum, and within a specified time, is a conveyance of the title to the purchaser . . . [but if] the purchaser retain the right to demand the money of the vendor, notwithstanding his purchase, a debt is then due from the vendor to him, and the existence of this debt within itself shows that the conveyance is a mere security for its payment."); Cake v. Shull, 45 N.J. Eq. 208, 212 (1889) ("The right of a court of equity to declare a deed or bill of sale, which is absolute on its face, to be a mortgage, is clear, as is also the competency of parol[e] evidence to prove the fact. The question turns upon the actual intention of the parties at the time of the transaction.").

at issue are lending facilities. For example, the Fed retains the right to force resale at an above-market price that serves as an interest payment. And the parties describe these price differentials as interest rates. $^{152}$ 

The subsections that follow consider the application of these conclusions (1) to the Fed's repo operations and FIMA facility, which structure their loans as repos, and (2) to its swap lines, which structure them as swaps.

1. Subsection (2)(b) Limiting Purchases and Sales of Government Debt to the Open Market

Repos are loans secured by U.S. government obligations and such loans, when extended to nonbanks, are permitted by section 13(13) of the Federal Reserve Act, added to the law by Congress during the Great Depression specifically to authorize such lending. Section 13(13), which authorizes "advances to individuals, partnerships, and corporations on direct obligations of the United States," provides that, "[s]ubject to such limitations, restrictions and regulations as the Board... may prescribe," any FRB may make such advances when secured by treasuries or U.S. agency debt. The law limits such advances to periods not exceeding 90 days at "interest at rates fixed from time to time by the Federal reserve bank, subject to the review and determination of the Board."

There are two aspects of section 13(13) that are relevant to the Fed's current lending. The first is procedural. Unlike section 14, which is subject to the special

transactions, the naked facts disclose that what they were doing was not a sale, but a loan, and that the leases were turned over simply by way of security. The Grand Union Company needed money, and the Hamilton Company advanced it."). See also In re Renshaw, 222 F.3d 82, 88 (2d Cir. 2000) ("To constitute a loan there must be (i) a contract, whereby (ii) one party transfers a defined quantity of money, goods, or services, to another, and (iii) the other party agrees to pay for the sum or items transferred at a later date. . . Where such is the intent of the parties, the transaction will be considered a loan regardless of its form.") (citing In re Grand Union, 219 F. at 356). These principles have also been applied to purchases and sales of financial securities by banks. See, e.g., Knass v. Madison and Kedzie State Bank, 354 Ill. 554 (1933); Awotin v. Atlas Exchange National Bank of Chicago, 275 Ill. App. 530 (1934); Inquiry May Reveal Hidden Bank Loans, N.Y. TIMES (Aug. 14, 1913) (describing crack down by the Comptroller of the Currency on national banks hiding interbank loans through, inter alia, sale-and-repurchase agreements); Fed. Bank. L. Rep. P. 95175 (C.CH.), 1969 WL 208863, Deposit Liabilities Subject to Regulations D and Q – Repurchase Agreement – Exemption (subjecting repos to regulations governing deposit liabilities).

<sup>&</sup>lt;sup>152</sup> See, e.g., Federal Reserve, Press Release, Coordinated Central Bank Action to Enhance the Provision of U.S. Dollar Liquidity (Mar. 15, 2020) (noting that the Fed and its counterparties "have agreed to lower the pricing on the standing U.S. dollar liquidity swap arrangements to 25 basis points, so that the new rate will be the U.S. dollar overnight index swap (OIS) rate plus 25 basis points") (emphasis added); Federal Reserve, FIMA Repo Facility FAQs (Mar. 31, 2020) (noting that the repurchase agreements will "be conducted at an interest rate of 25 basis points over the rate of IOER (Interest on Excess Reserves), which generally exceeds private repo rates when the Treasury market is functioning well, so the facility would primarily be used only in unusual circumstances such as those prevailing at present") (emphasis added).

<sup>&</sup>lt;sup>153</sup> Emergency Banking Act of March 9, 1933, 48 Stat. 7; 12 U.S.C. § 347c.

direction of the Federal Open Market Committee, section 13 lending requires approval by the Board of Directors of the relevant FRB. (This is, by the way, yet another reason why the Fed's interpretation of section 14 is implausible: the Fed's internal governance was carefully debated and when Congress created the FOMC in 1935 and gave it the power to override the regional reserve banks for the purpose of establishing a single System-wide open market policy no one thought that it could override the power of the regional banks to decide when, or on what terms, to lend.) Section 13(13) also empowers the Board, not the FOMC, to set the rate governing these loans.

The second regards regulations that the Board has voluntarily imposed on section 13(13) lending. As mentioned, section 13(13) empowers the Board to subject 13(13) lending to "limitations, restrictions and regulations" and the operative version of those regulations – promulgated in 2015 – applies many of the same restrictions required by statute in the case of section 13(3) lending to 13(13) lending as well. <sup>154</sup> Among these are the requirements (1) that FRBs "obtain evidence that credit is not available from other sources and failure to obtain such credit would adversely affect the economy," (2) that credit be extended "at a rate above the highest rate in effect for advances to depository institutions as determined in accordance with section 14(d)," and (3) that 13(13) lending be limited to "unusual and exigent circumstances." <sup>155</sup>

It is not clear why the Board has tied its hands in this way. Part of the reason may be path dependence. The Fed has a long history of entering into sale-and-repurchase agreements, one that dates to before 13(13) was on the books. Although a resurrection of the saga of Fed open market lending is beyond the scope of this article, several historical details bear recounting.

The FRBs first entered into sale-and-repurchase agreements in 1917 with the permission of the Board. They were inspired to stretch the limits of section 14 by expediency: the country was in the midst of the First World War and Congress had just passed a new revenue measure that, inter alia, imposed a tax on promissory notes issued by banks. The Treasury determined that this tax applied to the notes used by banks for borrowing against U.S. government securities, the had been authorized in 1916 for periods of up to 15 days in order to help finance the war. Unfortunately, the way the tax was calculated, it made notes with very short

<sup>&</sup>lt;sup>154</sup> Extensions of Credit by Federal Reserve Banks, Board of Governors of the Federal Reserve System, 80 Fed. Reg. 78964 (Dec. 18, 2015) ("Regulation A").

<sup>&</sup>lt;sup>155</sup> 12 C.F.R. § 201.4 (13) (2019) at 10.

<sup>&</sup>lt;sup>156</sup> William Harding, Governor of the Federal Reserve Board, to all Federal Reserve Banks dated November 30, 1917 (on file with author).

<sup>&</sup>lt;sup>157</sup> William Harding, Governor of the Federal Reserve Board, to all Federal Reserve Banks dated Dec. 1, 1917 (on file with author) (noting that "the stamp tax imposed by the War Revenue Act has been held to apply to the promissory notes of member banks").

maturities uneconomical.<sup>158</sup> So the Board determined that the System might properly avoid the tax by structuring its section 13 15-day advances on government obligations as sale-and-repurchase agreements with a 15-day duration.<sup>159</sup> The Treasury appears to have blessed this practice (the Secretary, of course, was a member of the Board back then and the administration was eager for the Fed to continue to accommodate banks dealing in government debt).

In April 1918, Congress carved out an exception to the tax. <sup>160</sup> And, the Board suggested that the FRBs discontinue repo lending. <sup>161</sup> Some FRBs, however, continued. The Board ultimately acquiesced, <sup>162</sup> and in the early 1920s certain FRBs expanded the practice to support nonmember banks, in particular the New York Fed, under the leadership of former trust company executive Benjamin Strong, began to use repo to lend to Wall Street dealer firms. <sup>163</sup> Thereafter, faced with the question of how banks engaging in these transactions should account for them, the Comptroller of the Currency issued a ruling that they were loans. <sup>164</sup> The Board's general counsel then also decided they were loans and concluded that the FRBs had no legal authority to enter into them. Among other things, whereas the 1917 practice of lending to

<sup>158</sup> *Id.* at 1 ("this tax practically prohibits this form of short-term borrowing by member banks").
159 *Id.* FRBs likely got the idea for this from commercial banks which used such arrangements to evade lending regulations. I could find no evidence that this practice was used much before the turn of the century or that any bank had ever entered into an agreement that required repurchase within fifteen days. That was plainly inspired by the Board's understanding that its authority to lend against this sort of security was limited to fifteen-day advances under the 1916 law. *See* William Harding to Governor Wold, FRB Minneapolis (Jan. 26, 1918) (on file with author) (explaining that the law "does not provide for banks borrowing longer than fifteen days and the Board doubts its power to authorize sale and repurchase agreements for longer periods"). The purpose of these advances, in turn, was to assist banks that bought government securities with the intention of reselling them to finance their inventory.

 $<sup>^{160}</sup>$  An Act to Provide Further for the National Security and Defense, Pub. L. No. 121, 40 Stat. 514 (Apr. 5, 1918)  $\S$  301.

<sup>&</sup>lt;sup>161</sup> Henry Parker Willis, Secretary of the Board, to Federal Reserve Agents (Apr. 6, 1918) (on file with author) ("It is suggested, therefore, that the practice of purchasing Liberty Bonds and Certificates of Indebtedness under so-called repurchase agreements be discontinued and that such borrowing by member banks be made on their own promissory notes secured by such bonds and certificates.").

<sup>&</sup>lt;sup>162</sup> William Harding to Federal Reserve Agents (Jul. 22, 1918) (on file with author) (noting that the practice is authorized under its 1917 ruling and that it "sees no occasion to withdraw the ruling").

<sup>&</sup>lt;sup>163</sup> Benjamin Strong, Governor of the FRB New York, to William Harding, Governor of the Board (Nov. 22, 1921) (on file with author) (discussing the merits of lending to securities dealers through repos); Harding to Strong (Dec. 2, 1921) (replying that "the Board is of the opinion that the practice in question is legal" and that the "practice seems also to be legal, the Board has no objection to its adoption in some form," but that "the Board feels . . . it is only proper to give careful consideration to the question of whether it is advisable to modify in any way the practice as outlined in your letter").

<sup>&</sup>lt;sup>164</sup> Wyatt, *supra* note 149, at 1 (noting that the Comptroller "has ruled that national banks which have sold securities to the Federal reserve banks under [repo] agreements shall consider the transactions as borrowings of money and shall carry them on their books accordingly").

member banks was used to avoid a tax, loans to dealer firms plainly exceeded the System's lending powers. 165 As he put it:

The practice . . . of buying bonds and bankers' acceptances under so-called "repurchase agreements" amounts to nothing more nor less than the making of direct loans on the security of such bonds or acceptances; and the making of such loans to parties other than member banks is manifestly inconsistent with the purposes of the Act in that it enables nonmember banks and stock, bond and acceptance brokers to tap the resources of the Federal reserve banks directly and without the intervention of a member bank. 166

. . . Federal reserve banks have no power to engage in such transactions and such agreements on the part of these banks are entirely ultra vires. 167

Several FRB Presidents, led by Strong in New York, fought the Board to a standstill, and in 1925, the banks agreed to modify the practice so that they were no longer contractually obligated to resell the collateral. The Board then agreed to reauthorize the practice on that basis, securing in writing the approval of Andrew Mellon, the Treasury Secretary. To

In 1926, Congress learned of the New York Fed's loans to dealer firms.<sup>171</sup> And several members of the House Banking and Currency Committee publicly challenged Strong and W. R. Burgess, another New York official. As the exchange between Burgess and the Committee is remarkable in many respects – illuminating key questions of equity, discretion, and institutional design – it bears reproducing at length:

Mr. Wingo: We are talking about the repurchase agreement which Mr. Goldsborough and I call an indirect loan and in contravention of the law – what is the reason that leads the bank to believe that it is in keeping with its duty and the original philosophy of the act, for them to make practically a loan to an individual through this sale and repurchase agreement to one class of borrowers, to wit, the bill dealers in New York City, when they will not allow

<sup>&</sup>lt;sup>165</sup> *Id.* at 2, 8.

<sup>&</sup>lt;sup>166</sup> Id. at 10.

<sup>&</sup>lt;sup>167</sup> Id. at 9.

<sup>&</sup>lt;sup>168</sup> George B. Vest, Historical Background with Respect to Repurchase Agreements by the Federal Reserve Banks 5 (Oct. 1, 1954) (explaining that "[a]n optional form of agreement was suggested, and Mr. Wyatt apparently felt that, if divested of its loan features, such an option agreement might be construed as constituting a purchase").

<sup>&</sup>lt;sup>169</sup> Governor Crissinger to Governor Harding (Mar. 6, 1925) (on file with author).

<sup>&</sup>lt;sup>170</sup> Andrew Mellon, Secretary of the Treasury, to D.R. Crissinger, Governor of the Board (Mar. 6, 1925) (on file with author) ("the resolution [regarding "the 15-day repurchase agreement"] has my approval").

<sup>&</sup>lt;sup>171</sup> The Federal Reserve Banks disclosed information regarding repo lending in their annual reports, so the information had been publicly available for some time.

it to the ordinary business man who is just as much in need of funds and the business activities and interests arising out of that have just as much a claim as the bill dealers? . . .

Mr. Burgess: I would like to make three points on that, Mr. Wingo. The first one is that these dealers have a type of security which has a liquidity and a goodness which is totally different from the security of the business man. . . . The second point is that the existence of these markets is not only desirable but is essential to carrying on a sound money market operation with central banks in the same way as they do in European countries. It is an essential way of giving elasticity to the money market and making possible a free flow of funds about the country.

Mr. Goldsborough: Do you mean that these operations, in practice, cannot take place successfully without the intervention of the Federal reserve banks; in other words, could not take place successfully through dealings through the member banks?

Mr. Burgess: Exactly; that we would have no American bill market and no market for short-term Government securities if the Federal reserve banks did not have that arrangement.

Mr. Wingo: What is the reason?

Mr. Burgess: They cannot get the funds they require at a rate they can live on.

Mr. Wingo: The fact is you have one class of securities or people dealing with the Federal reserve banks that gets a preferential rate as compared with other interests in the country?

Mr. Burgess: Not compared with the member banks.

Mr. Wingo: That brings us to the proposition that you are setting up and creating and serving banks that are not really contemplated by the act. These bill dealers, as a matter of fact, are bankers to a certain degree, are they not?

. . .

The Chairman: Suppose Mr. Wingo had \$10,000,000 of Government bonds, could be enter into a repurchase agreement with the Federal Reserve Bank of New York?

Mr. Burgess: No, sir; we do not know his name. He is not a dealer set up to deal with these. It is not wholly a question of responsibility. It is a question of what end you serve by doing it.

Mr. Wingo: Certainly; that is the question.

The Chairman: It strikes me . . . the Federal reserve banks are in partnership with the dealers in the market. They are not members of the Federal reserve system and are in the business of making money.

Mr. Wingo: And the most favorable view of the thing is that these bill dealers are bankers and should be protected by the Federal reserve system because you do think they serve a useful purpose, and you will treat them as member banks, although under the Federal reserve system act there is no provision justifying that.

After the hearing, the New York Fed wrote the Committee: "if there is still any doubt as to the legality of these arrangements, then the law might well be amended specifically and expressly to authorize them." The law was not so amended, but no contrary legislation was enacted either. Perhaps in response to this episode, Congress added 13(13) in March 1933 (the legislative history is not clear). That power was used sparingly for about two years, and then 13(13) lending and open market repo lending largely ceased for nearly two decades. 174

In the 1950s, the practice was revived and expanded dramatically by William McChesney Martin, who – as former head of the New York Stock Exchange and a former securities dealer – was determined to reorient Fed monetary policy around Wall Street dealers. As part of this effort, he expanded the role of open market operations, which depend on dealers, not banks, as counterparties, and the Fed started using section 14 to provide an ersatz discount window for these new "members." 176

Internally, the Fed prepared legal memos blessing the practice. These memos emphasized four things: first, that courts "give weight to the interpretation . . . adopted by the administering agency in any case in which [an enabling] statute is ambiguous"; second, that the Fed's interpretation was longstanding and its activities disclosed to Congress; third, that repo agreements no longer required the Fed to resell the collateral; and fourth, that the Fed's *intent* in entering into repos was not to extend credit to dealers but to temporarily expand reserves in the banking system

<sup>&</sup>lt;sup>172</sup> Benjamin Strong, Governor of the Federal Reserve Bank of New York, Memorandum Concerning Sales Contracts Covering Open-Market Operations in Government Securities and Bankers' Acceptances, *reprinted in* Stabilization Hearings, 69<sup>th</sup> Cong., 1<sup>st</sup> Sess. I:434 (Apr. 12, 1926).

<sup>&</sup>lt;sup>173</sup> Hearings before the Committee on Banking and Currency, House of Representatives, 69<sup>th</sup> Cong. 1<sup>st</sup> Session on H.R. 7895, A Bill to Amend Paragraph (d) of section 14 of the Federal Reserve Act, as amended, to Provide for the Stabilization of the Price Level for Commodities in General, March-April 1926, 326.

<sup>174</sup> The New York Fed did not enter into a single repurchase agreement between 1933 and June 27, 1949. See Letter from Coheen to Leonard & Myrick (Jun. 28, 1949) (on file with author)

<sup>&</sup>lt;sup>176</sup> Federal Open Market Committee Report of Ad Hoc Subcommittee on the Government Securities Market, November 12, 1952, reprinted in Federal Reserve System After Fifty Years.

and thereby manage monetary conditions. According to the lawyers, this meant that repos were not constructively loans under prevailing doctrine. <sup>177</sup> (The lawyers did not consider the requirement that transactions take place on the open market.)

Soon after the Fed ramped up its repo operations, Congress challenged the practice. In 1957, Rep. Wright Patman said:

Martin, like Strong before him, asked Congress to amend the Federal Reserve Act to "clarify" the legality of the Fed's repo operations. The While the relevant provisions have been amended many times since, I am not aware of any amendment that can be read to ratify or endorse the Fed's continued use of repo transactions to lend to nonbanks without complying with the requirements of section 13. Indeed, the House of Representatives rejected one vehicle that would have done so in 1957. Nevertheless, Martin's section 14 lending continues.

How does this history bear on the question of whether the Fed's current practice is kosher? It cuts two ways.

Legality and History of Repurchase Agreements of Federal Reserve Banks 1 (Oct. 1, 1954) ("It is my opinion that under the present law the use of repurchase agreements is within the legal authority of the Federal Reserve Banks under section  $14\ldots$  because - (1) Although they contain certain features normally found in loans, such transactions which are in form purchases and sales of Government securities are entered into for the primary purpose of implementing open market policies . . . rather than for the purpose of providing credit accommodations to particular institutions; and (2) The use of such repurchase agreements as purchases and sales pursuant to section 14 has been recognized and approved administratively for some 30 years, first by the Board and later by the [FOMC], and this administrative practice has been called to the attention of Congress in the Board's annual reports); id. at 3 ("The form of the agreement now in use is as a legal matter optional rather than obligatory . . . it is believed clear that, even though such agreements may incidentally have the effect of providing dealers with credit, their primary purpose is, by providing funds to the market, to implement open market policies determined by the [FOMC].").

<sup>&</sup>lt;sup>178</sup> Hearings before the Committee on Banking and Currency, House of Representatives, 85<sup>th</sup> Cong. 1<sup>st</sup> Session on S 1451 and H.R. 7026 (1957) at 1546-47.

<sup>&</sup>lt;sup>179</sup> Statement of Chairman William McChesney Martin on Behalf of the Board of Governors, Federal Reserve System, reprinted in *id.* at 25 (noting that repurchase "transactions admittedly have some of the attributes of a loan and present law contains no specific reference to these transactions. Accordingly, the Board believes that a clarifying amendment which would specifically authorize such repurchase agreements by the Federal Reserve banks would be desirable.").

On the one hand, Congress has been on notice of the Fed's interpretation. The Fed's repo activities are open and notorious. They appear in countless reports to Congress, and the practice has been debated on the Hill on several occasions.

On the other hand, the Fed's current initiatives differ from its past use of section 14 repo. For example, it cannot reasonably be argued that the purpose of entering into repo with foreign central banks is to temporarily increase the amount of reserves in the U.S. banking system. Similarly, the Fed's expanded repo operations beginning in September of last year were very much designed to bring down borrowing costs in the repo market – to ensure smooth functioning of the treasury market by subsidizing dealer firms and other repo market participants that were unable to borrow from banks at equivalent rates. 181

Moreover, the Fed appears to recognize that its current repo operations are intended to achieve different goals. Applying the Fed's own legal analysis, a court looking to determine whether the Fed's intent in executing a repo was to lend or to temporarily infuse reserves into the banking system would have to overlook substantial evidence that the goal of the current programs is to lend. For example, the New York Fed described its March 12 actions as designed to address highly unusual disruptions in Treasury financing markets. And the Board stated on March 31 that the new FIMA facility should help support the smooth functioning of the U.S. Treasury market by providing an alternative temporary source of U.S. dollars other than sales of securities in the open market. The Board, in other words, conceded that a foreign central bank's sale of treasuries to the Fed in a repo is not an

<sup>&</sup>lt;sup>180</sup> Another recent initiative, the Overnight Reverse Repurchase Facility (ON RRP) also bears mentioning. Unlike the lending programs discussed herein, ON RRP is designed to open up the right-hand side of the Fed's balance sheet by allowing select counterparties to have ersatz deposit accounts at the New York Fed. ON RRP purchases and sales are plainly not at market rates. They are also seemingly inconsistent with section 13(1), which governs FRB deposit accounts and section 11, which governs the pricing of FRB services.

<sup>&</sup>lt;sup>181</sup> See supra note 43. Concededly, in private memos, and even some publicly testimony, past Fed leadership have admitted that the Fed's open market lending is in part designed to reduce the funding costs of dealer firms. See, e.g., Memorandum of Benjamin Strong, Stabilization Hearings at 433 ("The margin of profit on their business being so small, unless they have recourse to the Federal reserve banks at relatively stable rates in times of need, they would not be able to continue in business. At such times of need, when it is impossible for the dealers to procure funds in the market either at all or at rates economically possible for them, assistance must be given to them by the Federal reserve banks by means of spot purchases of a portion of their supply of bankers' acceptances or Government securities. But as they are retailers of goods and must have them available for sale in the future, the Federal reserve banks have made arrangements with them so that they may repurchase such acceptances or securities at some time in the future.").

<sup>&</sup>lt;sup>182</sup> See supra notes 151 & 177.

<sup>&</sup>lt;sup>183</sup> Federal Reserve Bank of New York, Statement Regarding Treasury Reserve Management Purchases and Repurchase Operations (Mar. 12, 2020).

<sup>&</sup>lt;sup>184</sup> Federal Reserve, Federal Reserve Announces Establishment of a Temporary FIMA Repo Facility to Help Support the Smooth Functioning of Financial Markets (Mar. 31, 2020) (emphasis added).

open market sale of securities – this despite the fact that section 14 by its plain terms permits the Fed to purchase such securities "only in the open market."

2. Subsection 2(A) Limiting Purchases and Sales of Foreign Currency to the Open Market

A similar problem plagues the Fed's swap lines. Foreign currency swaps are unsecured loans with foreign central banks. As mentioned above, in a swap the Fed increases on its books the account balance of a foreign central bank. In exchange, the foreign central bank increases the Fed's balance on its books denominated in whatever currency it issues. The arrangement is structured as a purchase of foreign currency, but it is really a loan. Sometime in the future, the foreign central bank will repurchase its currency for an artificial price, the difference being the interest rate paid to the Fed on the loan. Loans to foreign central banks secured by promises to pay foreign currency are governed by section 13(3), which permits such lending in unusual and exigent circumstances, provided that there is "broad-based eligibility" and that the lending complies with policies and procedures designed to ensure that the loans are "for the purpose of providing liquidity to the financial system," "not to aid a failing financial company," and that "the security . . . is sufficient to protect taxpayers from losses." In the case of the Fed's swap lines, all of these requirements arguably could be met. 185

But the Fed would likely need to make several changes. It would have to establish a central bank swap facility, following the procedural requirements of 13(3).<sup>186</sup> These include supermajority approval by the Fed's Board, approval by the Board of Directors of the Federal Reserve Bank of New York, approval by the Secretary of the Treasury, and a series of findings by the Board and the New York Fed regarding the circumstances and the ability of foreign central banks to borrow dollars from the U.S. commercial banking system.<sup>187</sup> It would also have to meet the relevant reporting obligations to Congress.

Why isn't the Fed complying with these requirements already? The likely answer, once again, is path dependence.<sup>188</sup> The Fed established its first swap lines

<sup>&</sup>lt;sup>185</sup> Except perhaps the requirement that there be security to protect taxpayers from losses.

that the legislature's policy goals are advanced by the Fed's lending activities. As discussed *supra* these goals were relatively narrow as regards lending outside the banking system. As Mel Watt explained in 2009, the Fed was designed to serve as a monetary authority and other powers including limited-purpose national investment authority powers could cut against its ability to perform that function properly. *See supra* note 108.

<sup>&</sup>lt;sup>187</sup> There would be no need to revise Regulation A.

<sup>&</sup>lt;sup>188</sup> There is also likely a strong incentive, shared by the Administration and Congress, to reduce awareness of these foreign lending activities due to the difficulty the government would presumably have explaining and justifying them to the public. Section 14 allows the Fed to conduct this lending without labeling it as lending, depicting it instead as related to routine monetary policy management.

around the same time Chairman Martin oversaw the expansion of dealer repo. The system's leadership was well aware then that swaps were a stretch. The Board's general counsel, Howard Hackley, acknowledged as much in 1961 in a memo blessing the practice. 189 Specifically, Hackley wrote that "this matter is admittedly subject to question; and, while it is unlikely that the plan would be challenged in court, there can be no assurance, in the absence of legislation, that it would not be criticized from some sources on legal grounds." With regard to the "open market" clause, Hackley reasoned that a "term may sometimes be differently construed in the light of different statutory contexts and purposes." Accordingly, "an 'open market' in cable transfers may be regarded as embracing any person with whom a Reserve bank may feel free to deal . . . which is part of that market." <sup>190</sup> Hackley was determined to distinguish purchases of foreign currency from foreign central banks from bilateral purchases of treasury securities from Treasury, which it was widely agreed was prohibited by the requirement that section 14(b)(1) purchases occur only in the open market. 191 But he provides no theory of what the words "open market" mean in the context of foreign currency transactions.

Like the Fed's repo operations, the Fed's swap lines with foreign central banks are open and notorious. The Fed relied on swap lines heavily during the 2008 global financial crisis. <sup>192</sup> And, as far as I am aware, Congress did not attempt to amend the statute to explicitly prohibit it. Moreover, unlike the Fed's recent FIMA facility, the Fed's swap lines are not appreciably different in design from the Fed's earlier practice during the twentieth century. There is however the question of intent. When Hackley was writing, the purpose of the proposed swap lines was to stabilize exchange rates. Today, the purpose is to lend dollars to foreign central banks so that they can on-lend the dollars to their domestic banks and shadow banks. <sup>193</sup> On the one hand, in both cases the swap lines were designed to preserve the dollar's status as a world reserve currency. On the other hand, the Fed's approach to doing so today involves a more explicit intent to lend, which implicates the very legal bases on which the Fed has historically rested its activities and suggests that the twenty-first century use of these

<sup>&</sup>lt;sup>189</sup> Memorandum of Howard Hackley, General Counsel, to the Federal Open Market Committee (Nov. 22, 1961), *reprinted in* Hearings Before the Committee on Banking and Currency, House of Representatives, Eighty-Seventh Congress, Second Session 144 (Feb. 27 & 28, 1962).

 $<sup>^{190}</sup>$  *Id*.

<sup>&</sup>lt;sup>191</sup> See supra note 144.

<sup>&</sup>lt;sup>192</sup> ADAM TOOZE, CRASHED (2018).

<sup>&</sup>lt;sup>193</sup> Hackley, *supra* note 189, at 113 ("[T]he principal purposes of operations in foreign currencies through such accounts would be to promote international monetary cooperation among the central banks of countries maintaining convertible currencies, to foster orderly conditions in exchange markets for such currencies, to facilitate the expansion and balance growth of international trade, and to supplement the activities of the International Monetary Fund in this field. It is assumed that the underlying basic objective would be to accommodate commerce and business and maintain sound credit conditions in the United States, in accordance with the governing principles stated in section 12A of the Federal Reserve Act.").

authorities cannot necessarily be legally justified simply with reference to the long history of prior practice.

#### V. Statutory Reform

This Part considers (A) the downsides of our muddled statutory framework and (B) some ways Congress could improve it.

#### A. The Costs of Sub Silentio Lawmaking

It is perhaps unsurprising that the statutory framework of an institution established to administer a two-tiered monetary system as a bank for banks is inconsistent with an act of Congress charging that institution with backstopping money issued by nonbanks and lending to businesses and municipalities amidst a sudden economic stop. But the failure of Congress to update the statutory design to empower the Fed to perform these roles – or even to explicitly suspend the rules that conflict with them for the duration of the current crisis – has significant costs along at least three dimensions.

First, clarity. By enacting the CARES Act on top of inconsistent existing law, Congress has obscured the limits of the Fed's authority to lend. Which requirements of 13(3) still apply and which do not? There can be no certain answer. Although the CARES Act controls as the more recent pronouncement, and the more specific, it does not, on its own, resolve all of the questions raised by interaction of § 4003(b) with the Federal Reserve and Gold Reserve Acts.

Moreover, the CARES Act does not specify the extent of the Fed's authority after the law expires. Does the CARES Act leave any lasting mark on the rules governing Fed lending? The tension between the CARES Act and the background rules means, in my view, that the Fed's current facilities must be understood as exceptions, not as the new normal. But in the absence of further legislative pronouncements, there will surely be efforts in the future to read the CARES Act not as suspending inconsistent provisions but as, in effect, adopting interpretations of them that leave them with little or no meaning.

Second, accountability. While part of the explanation for the way in which the CARES Act deals with the Federal Reserve and Gold Reserve Acts is expediency, it is likely that other factors were also at work. For example, by drafting the CARES Act in this way, Congress avoided drawing public attention to the fact that it is asking the Fed to take on a new role. In other words, although Congress is shifting part of the responsibility for averting the crisis to a technocratic domain beyond democratic

<sup>&</sup>lt;sup>194</sup> If we assume that Congress is a rational legislature that reads its own statutes reasonably, then it must have decided not to explicitly amend inconsistent provisions of background law because it wanted only to suspend them temporarily. If it had wanted to strike these requirements, it could have easily done so.

politics, it is not explicitly acknowledging that it is doing so. Instead the CARES Act is framed as providing the Treasury Secretary with resources to put toward Federal Reserve facilities that would, by implication, exist even without the CARES Act.

Congress is also avoiding suspending rules that prior Congresses have put in place to limit the Fed's ability to lend. For example, while the CARES Act visibly appropriated money for Fed facilities to lend to businesses and municipalities, it did not acknowledge that such lending was inconsistent with existing statutory restrictions requiring the Fed not to compete with banks. Nor did Congress acknowledge in the CARES Act that the Secretary was not, in fact, authorized to carry out his announced investment in the CPFF and TALF using ESF funds under the law as it stood prior to enactment.

#### B. Some Potential Amendments

The tensions between the CARES Act and the Federal Reserve Act, as well as between the Fed's section 14 operations and section 13, also reflect significant deficiencies in the baseline statutory rules governing Fed lending. This subpart considers some potential amendments that might realign law and practice.

#### 1. Transferring Credit Activities to Another Agency

The most straightforward way to rectify the inconsistency between subsection (b)(i) and the CARES Act would be to amend 13(3) to restore the Fed's power to serve as a national investment authority in an emergency. This would require little more than striking words from 13(3). However, there are strong arguments for seizing this opportunity to design a more robust institutional structure for national industrial policy. Among these are the tension between the Fed's role as a monetary authority, and the desirable political independence that role entails, and the work of an investment authority and the political entanglement that role demands. Also relevant are concerns ranging from the propriety and cost effectiveness of using the Fed's balance sheet to manage such lending to the lack of relevant expertise at the central bank for operating a program of nationwide investment. When it comes to national investment, the Fed's laudable culture of avoiding losses may undermine its ability to accomplish public goals that depend upon taking credit risks that are not fully secured.

Several scholars have already proposed alternative approaches. The most ambitious would have the government establish a new agency along the lines of the now-defunct Reconstruction Finance Corporation. The RFC played a major role in

<sup>&</sup>lt;sup>195</sup> Saule T. Omarova, Why We Need a National Investment Authority (Apr. 1, 2020).Robert C. Hockett & Saule T. Omarova, Private Wealth and Public Goods: A Case for a National Investment Authority, 43 J. CORP. L. 437 (2018), Robert C. Hockett & Saule T. Omarova, White Paper: A National Investment Authority (2018).

combatting the Great Depression and in implementing the successful national industrial policy that allowed the United States to win the Second World War. A new RFC, along the lines recommended by Bob Hockett and Saule Omarova, would offer a way for the government to pursue an industrial policy designed to protect Americans workers and prepare the economy for the post-Covid world. Properly funded it would eliminate the need for the Fed to pursue its existing credit programs. 196

Congress could also simply transfer the responsibility for disbursing CARES Act funds to the Treasury Secretary or the Small Business Administration, two existing agencies that are designed to engage in politically fraught fiscal policy implementation. <sup>197</sup> Indeed, the SBA is specifically designed to extend credit on behalf of the government, and has already taken over industrial lending responsibilities from the Fed once before, when Chairman Martin convinced Congress in the 1950s to repeal section 13(b) of the Federal Reserve Act (a provision that was added in 1934 to facilitate Fed lending to the real economy). <sup>198</sup>

#### 2. Establishing a Treasury Emergency Fund to Replace the ESF

Another area where Congress could grab an off-the-shelf solution is the ESF. Even assuming that the CARES Act legalizes the Treasury's \$30 billion investments in the CPFF, MMFLF, and TALF, ESF governance has become an embarrassment. Section 13(3), as amended in 2010, requires outside backstopping for certain sorts of emergency lending that we can expect the Fed to pursue in every business cycle downturn – assuming we do not reform our monetary system (see below). Rather than leave it to a future Congresses to scramble during a crisis to authorize Treasury investment in 13(3) facilities, Congress could create a standing authority for the Treasury to make 13(3) investments and design rules in advance to ensure that the

<sup>196</sup> The sort of lending that Hockett and Omarova's proposed national investment authority would do is quite different from what the Fed is doing now. The similarly is that the new agency would be an organ of industrial policy, just as the Fed is pursuing a de facto industrial policy. The difference is that the new agency would be built to make industrial policy, whereas the Fed is doing industrial policy begrudgingly and with a focus on easing financial conditions. See id. Hockett addresses some of the issues with the Fed's current approach to municipal lending in his recent memorandum. See supra note 70.

<sup>&</sup>lt;sup>197</sup> Kathryn Judge, *The Design Flaw at the Heart of the CARES Act*, FORBES (Apr. 20, 2020). Peter Conti-Brown, *Explaining the New Fed-Treasury Emergency Fund*, Brookings Series on Financial Markets and Regulation (Apr. 3, 2020) (explaining that the CARES Act "invites pressure on a traditional line between monetary and financial policy controlled by the central bank and the financial, economic, and fiscal policy controlled by the President of the United States and his representatives"); George Selgin, *The Constitutional Case for the Fed's Treasury Backstops*, ALT-M (Apr. 13, 2020).

<sup>&</sup>lt;sup>198</sup> Part of the impetus for 13(b) was the lack of lending under 13(3). After Congress passed 13(3), the FRBs basically shifted to using 13(b) for real economy lending.

authority is not used improperly. Jeff Gordon and Chris Muller proposed such a revision in 2009 and designed corresponding safeguards. 199

#### 3. Regulating Dealers as Banks

Congress could, of course, do away with 13(3) in its present incarnation and the need for Treasury backstopping if it reformed the monetary system to regulate shadow banks as banks and provide them with access to the discount window. If the last crisis was not clear enough, the current crisis confirms that shadow banks will need a government backstop in every business cycle downturn in order to maintain par between their monetary liabilities and cash. This is not at all surprising, as the Fed was designed specifically to address the fact that private money creation requires public elasticity when asset prices fall and the shadow banking system has grown to displace the banking system in size and scope.

Congress should use this opportunity to relearn the lessons that led to the creation of the Federal Reserve and reform the statutory framework for money and banking to impose the same structural safeguards it designed in the twentieth century to stabilize money markets. There is little fundamentally different between the federal funds market and the repo market and if the Fed is going to backstop both Congress should amend the law to formalize the arrangement. Given that banks are subject to a slew of prudential safeguards in exchange for government backstopping, it is only fair and proper that those same safeguards be imposed on Wall Street securities dealers and other financial firms seeking to finance their assets using repurchase agreements.<sup>200</sup> Erik Gerding<sup>201</sup> and Katharina Pistor<sup>202</sup> have examined this problem. Morgan Ricks has forcefully made the case for such reform and proposed a framework Congress could work from.<sup>203</sup>

#### 4. Creating a Governance Framework for the Global Dollar System

The biggest policy challenge facing the government likely relates to the Fed's backstopping of foreign dollar creation. Even were Congress to reform the domestic shadow banking system, it would still have to deal with the ever-expanding eurodollar markets overseas. The U.S. derives substantial benefits from these

<sup>&</sup>lt;sup>199</sup> Jeffrey N. Gordon & Christopher Muller, Confronting Financial Crises: Dodd-Frank's Dangers and the Case for a Systemic Emergency Insurance Fund, 28 YALE J. REG. 151 (2011).

<sup>&</sup>lt;sup>200</sup> See Perry Mehrling, Beyond Bancor (Jun. 29, 2015); Perry Mehrling, Liquidity Changes Everything (Mar. 12, 2019); CHARLES KINDLEBERGER, MANIAS, PANICS AND CRASHES (1987).

<sup>&</sup>lt;sup>201</sup> Erik Gerding, Law, Bubbles, and Financial Regulation (2014).

<sup>&</sup>lt;sup>202</sup> KATHARINA PISTOR, THE CODE OF CAPITAL 106 (2019) (explaining that unfortunately after the 2008 crisis "few if any brakes" on the ability of shadow banks "to mint private money" have been put in place); *id.* at 92 (arguing that's states should recognize that "the more they bend to the will of private debt minters in boom times, the more they will be on the hook when it turns out that the economy cannot sustain the debt burden they created").

<sup>&</sup>lt;sup>203</sup> Morgan Ricks, The Money Problem: Rethinking Financial Regulation (2016).

markets, and the dollar's status as a reserve currency, but currently many of those benefits are captured by private financial institutions. Furthermore, the costs to the government of supporting this system have not been sufficiently examined.<sup>204</sup> Since the dollar is a global currency, a framework for addressing runs overseas is urgently needed. Countries around the world that depend on financial institutions issuing deposit substitutes face extreme economic peril in the absence of Fed backstopping.<sup>205</sup> Given the absence of a statutory regime for such backstopping, the Fed has turned to ad hoc solutions.<sup>206</sup> While the Fed could comply with the relevant section 13 requirements, in the future a more robust framework would allow policy makers to impose conditions on access to dollars and exert ex ante control over foreign dollar creation. This is an area in need of further attention.

#### VI. Conclusion

When it comes to responding to the coronavirus outbreak in the United States, the Federal Reserve has emerged as one of the most active institutions at the national level. Its bold and timely interventions have halted a monetary breakdown that would have guaranteed a second Great Depression. And its continuing efforts to avert a vicious cycle of debt defaults are helping to address a sudden economic stop that has made a deep and lasting recession all but inevitable. Unfortunately, the Fed has repeatedly had to scramble because it was not designed to address the current crisis. Although the CARES Act suspends various requirements restricting the Fed's freedom of movement, it does so *sub silentio* and without addressing the underlying inadequacies of our existing statutory framework. At the earliest possible opportunity, Congress should confront these challenges head on with an eye toward reducing the need for Fed ad hoc facilities in the future by establishing a permanent framework for backstopping deposit substitutes and a permanent framework for emergency credit provisioning to the real economy either within the Fed itself, or in another agency specially designed to perform the task.

<sup>&</sup>lt;sup>204</sup> But see Colleen Baker, The Federal Reserve's Use of International Swap Lines, 55 ARIZONA L. REV. 603 (2013); Katherine Harris, Hidden in Plain Sight: The Federal Reserve's Role in U.S. Foreign Policy, 40 YALE J. INT. L. 393 (2015); Peter Conti-Brown & David Zaring, The Foreign Affairs of the Federal Reserve, 44 J. CORP. L. 665 (2019); Peter Conti-Brown & David Zaring, Shining a Light on the Federal Reserve's Foreign Affairs, PENN WHARTON PUBLIC POLICY INITIATIVE (2019);

<sup>&</sup>lt;sup>205</sup> ADAM TOOZE, CRASHED (2018); Adam Tooze, *The Coronavirus Is the Biggest Emerging Markets Crisis Ever*, FOREIGN POLICY (Mar. 28, 2020).

<sup>&</sup>lt;sup>206</sup> Brad W. Setser, Addressing the Global Dollar Shortage: More Swap Lines? A New Repo Facility for Central Banks? More IMF Lending?, Follow the Money, CFR (Mar. 17, 2020).

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