Federated Hermes

Federated Hermes, Inc.
1001 Liberty Avenue
Pittsburgh, PA 15222-3779

VIA E-MAIL RULE-COMMENTS@SEC.GOV

July 3, 2023

Ms. Vanessa A. Countryman, Secretary
U.S. Securities and Exchange Commission
100 F Street NE
Washington, DC 20549-1090

Re: Comment Letter of Federated Hermes, Inc. on the U.S. Securities and Exchange Commission's Proposed Amendment to Rule 2a-7 (SEC File No. S7-22-21)

Dear Ladies and Gentlemen:

In recent communication with SEC Commissioners and the rule-making staff, and in public comments by SEC Chair Gensler, there may be a misunderstanding regarding the purpose of the Federal Reserve (the "Fed") discount window as compared with the Fed's emergency lending facilities. This is relevant to the applicability of the discount window: (1) as a means of addressing market illiquidity such as witnessed in March 2020; and (2) as an alternative to the use of emergency targeted facilities, such as the MMLF. There may be a belief that the discount window lends directly only to depository institutions (without any assistance intended for non-bank entities), while the emergency lending facilities lend directly to other types of private sector entities (individuals, corporations and partnerships). In particular, there may be a belief that the discount window is not intended as a tool for assisting non-bank entities during periods of market illiquidity. This perception is fundamentally incorrect: the discount window was the original (and only) tool that the framers of the Federal Reserve Act ("FRA" or the "Act") of 1913 established as the mechanism for providing liquidity to the private sector in order to avert panics. And an express additional purpose, as stated in its preamble[1], was to promote the liquidity of the commercial paper market – the failure of which led to several targeted emergency lending facilities created by the Fed in March 2020, including the MMLF. Our objective in providing this letter[2] is to clarify the intent and functioning of these alternative lending facilities.

1. The Panics of 1893 and 1907: The Birth of the Federal Reserve System

The origin of the Federal Reserve and the original purpose of the discount window are instructive. In his 1919 treatise on the legislative history of the Federal Reserve Act, co-author Senator Robert Owen provided a first-hand account of the destructive impact of the panic of 1893:

> In 1890 I had established the First National Bank of Muskogee, Oklahoma, was its president for ten years, and in 1893 witnessed the panic that took place at that time. This bank, like very many other banks, lost fifty per cent of its deposits within as many days because of the panic, which frightened people and caused them to withdraw their funds for hoarding throughout the United States and led creditors to strenuously press their debtors for settlement. Money suddenly appreciated in value, so that property measured in money fell in value in some cases to half of its previously estimated value. This enabled thousands of creditors to take over the property of thousands of debtors on a basis that was ruinous to debtors, causing the bankruptcy of hundreds of thousands of people; causing a violent

[1] "AN ACT: To provide for the establishment of Federal reserve banks, to furnish an elastic currency, ***to afford means of rediscounting commercial paper*** [emphasis added], to establish a more effective supervision of banking in the United States, and for other purposes." *available at* https://fraser.stlouisfed.org/title/federal-reserve-act-966.
[2] Federated Hermes July 2023 Comment Letter I dated July 3, 2023, available from Federated Hermes, Inc.

> dislocation of business; and throwing out of employment vast numbers of people and inflicting injuries which required years to repair in the industrial and commercial life of the nation. Thousands of millions of dollars were lost and many more thousands of millions, the normal earnings of a prosperous, active people, were left unmade during the next five comparatively idle years. This panic demonstrated the complete instability of the financial system of America and the hazards which businessmen had to meet under a grossly defective banking system.[3]

In the ensuing years, Owen made a study of the banking systems in England, France, Germany and Canada to discern guiding principles that should inform US banking reform. Some legislative advancements were made, but nothing of consequence prior to the panic of 1907 that was described by Senator Aldrich, then Chairman of the Committee on Finance, as:

> … the most acute and disastrous in its immediate consequences of any which has occurred in the history of the country. That the shrinkage in values of securities and property, and the losses from injury to business resulting from and incident to the crisis, amounted to thousands of millions of dollars; That a complete disruption of the exchanges between cities and communities throughout the country took place; That it is impossible to estimate the losses which were inflicted by this suspension of payments by the banks, and the resultant interruptions of exchanges ; That there was financial embarrassment on every hand, and an impossibility of securing the proper funds to move crops or to carry on the ordinary business of the country; That the suspension or disarrangement of business operations threw thousands of men out of employment and reduced the wages of the employed; That if the business interests of the country are left defenseless through the inaction of Congress, the most serious consequences may follow.[4]

Responding to this calamity, in 1908 the Aldrich Vreeland Act established, among other things, the National Monetary Commission with the intention of studying banking systems around the world: to recommend a balanced structure that reflected the economic and political reality of the country. The National Monetary Commission provided its report to Congress in 1912. During and after the Commission's work, strenuous debates occurred that sought, among other things, to balance agricultural and rural interests against those of Wall Street; and to provide liquidity to the financial system while not incurring credit losses. As the FRA took form, some 800 amendments were contemplated. By then, Senator Owen was Chairman of the Committee on Banking and Currency and, in partnership with Senator Carter Glass, in such a position of knowledge, respect and influence with bankers and congressional colleagues to drive passage of the final bill, signed by President Woodrow Wilson on December 23rd, 1913.[5] Wilson viewed it as a Christmas present to the nation. As a fitting statement of the accomplishment, Wilson wrote to Owen: [6]

> THE WHITE HOUSE
>
> *December 23, 1913*
>
> HON. ROBERT L . OWEN
> UNITED STATES SENATE
> WASHINGTON, D. C.
>
> MY DEAR SENATOR:
>
> Now that the fight has come to a successful issue, may I not extend to you my most sincere and heartfelt congratulations, and also tell you how sincerely I admire the way in which you have conducted a very difficult and trying piece of business? The whole country owes you a debt of gratitude and admiration. It has been a pleasure to be associated with you in so great a piece of constructive legislation.
>
> Cordially and sincerely yours
>
> WOODROW WILSON

---

[3] https://fraser.stlouisfed.org/files/docs/publications/books/fra_owen_1919.pdf
[4] *Ibid.*
[5] Federal Reserve Act of 1913, *available at* https://fraser.stlouisfed.org/title/federal-reserve-act-966
[6] *Supra* note 3.

As a businessman, statesman and scholar of central banking, what is striking about Senator Owen's insights about the legislative ordeal is his clarity regarding its central purpose:

> It should always be kept in mind that it is not the welfare of the bank, nor the welfare of the depositor which is the main object to be attained, but it is the ***prevention*** of panic [emphasis added], the protection of our commerce, the stability of business conditions, and the maintenance in active operation of the productive energies of the nation which is the question of vital importance.[7]

Indeed, early in his volume, Senator Owen summarized the FRA as follows:

The backbone of the Federal Reserve Act is:

a) A quick available supply of elastic currency for businessmen;

b) Issued and controlled by the Government;

c) Against adequate security, consisting of gold, commodity or commercial bills or acceptances, and U. S. bonds;

d) Under an interest charge high enough to prevent inflation by compelling contraction.

In its original form, the FRA contained Section 13(2) that created the discount window and allowed discounting of (borrowing against) notes, drafts (an order to pay), and bills of exchange (commercial paper) entered for commercial purposes (all representing short term debt from business); but not solely for financial purposes with the exception of U.S. Treasury bonds as collateral. Thus, instruments that were the liabilities of financial companies, such as investment banks, could not be discounted so as not to promote the interests of Wall Street.[8] Precise definitions of the allowed paper would be determined through regulation by the Federal Reserve Board within the meaning of the Act.[9] Eligible paper could be issued by individuals, corporations, etc. with a maturity not greater than 90 days.

While only bank members of the Federal Reserve System were allowed access to the discount window[10], and it was designed as a lending facility to banks, it was also intended as a means of providing liquidity to the private sector and to enable the Fed to serve as lender of last resort. Although 13(2) was not expressly worded as a loan facility for businesses, in practice, business customers of a member bank could present eligible collateral (such as commercial paper) for a loan from that bank. If the bank was not able to fund the loan, it could take it to the discount window, indorse the collateral (a kind of guarantee) [11], and receive a loan from the district Reserve bank, which it would then use to fund the customer's loan. Thus, the member bank could effectively serve as an intermediary between the customer and the Fed; and could determine the nature and type of customer for which such intermediation would be performed. The requirement that eligible collateral arise out of commercial transactions, and was short term business debt,

---

[7] *Ibid*.

[8] This was a likely outcome of the fact that the "call loan" market, which was short term financing for security holdings, was a flash point for the panic of 1907.

[9] As evidence of its priority on the Fed's "to do" list, this was provided in Regulation A, which specifies the terms and process of the discount window.

[10] Non-member banks were given access to the discount window in 1980 by the Monetary Control Act.

[11] UCC § 3-204(a): "Indorsement" means a signature, other than that of a signer as maker, drawer, or acceptor, that alone or accompanied by other words is made on an instrument for the purpose of (i) negotiating the instrument, (ii) restricting payment of the instrument, or (iii) incurring indorser's liability on the instrument, but regardless of the intent of the signer, a signature and its accompanying words is an indorsement unless the accompanying words, terms of the instrument, place of the signature, or other circumstances unambiguously indicate that the signature was made for a purpose other than indorsement. For the purpose of determining whether a signature is made on an instrument, a paper affixed to the instrument is a part of the instrument.

was the Real Bills Doctrine. This was subsequently relaxed and Regulation A now allows a wide range of financial collateral.

The essential insight regarding the discount window is that it was the mechanism that the framers of the FRA of 1913 intended for preventing panics. In a crisis, business could take eligible collateral (e.g. sound commercial paper) to a bank. If the bank itself did not have the available capital to provide a loan, it could obtain a loan through the discount window that would fund the loan to business. The Fed's emergency lending facilities (i.e. Section 13(3) of the FRA) did not yet exist. The discount window alone could do the job. As Owen summarized:

> This in effect puts behind the individual credit of the farmer, merchant, manufacturer, shipper, and business man the credit of the United States, and furnishes him with elastic currency whose validity cannot be questioned, in exchange for his own notes, enabling him to meet his current obligations without difficulty and providing an ever-present supply of sound currency for business needs.
>
> It gives assurance to the business men of the country that they never need fear a currency famine.
>
> It assures them absolutely against the danger of financial panic, due to hoarding of currency or sudden denial of legitimate credit.[12]

There was considerable use of the discount window in the early years after passage, although it began to decline in the 1920s when the Fed began the use of open market operations to control supply of money to the economy. Owen summarizes the success of the Act in the years after 1913 with a fitting quote:

> Hon. John Skelton Williams, Comptroller of the Currency, in a public statement recently said, in regard to the Federal Reserve Act:
>
> Every businessman, banker and capitalist knows what it is and what it has done. It is the best financial system the world has ever seen. It has made this Nation and Government an impregnable financial force and the strongest the mind of man has devised. . . . THAT ONE MEASURE WON THE WAR. It enabled our finances to endure, without a quiver, every shock and strain. It gave us the power to help our allies instantly and without stint when their need was sorest, with a help most needed. [13]

And in ending his treatise, Owen concludes where he began:

> I hope the little volume may prove of value in making the simple principles of the Reserve Act more clear:
>
> **1. A quick supply of elastic money, easily available;**
>
> **2. Under Government control;**
>
> **3. Secured by gold, commercial bills and U. S. bonds;**
>
> **4. Under an interest charge to compel contraction and prevent inflation.**

ROBERT L . OWEN

Nov. 15,1918

---

[12] *Supra* note 3.
[13] *Ibid.*

2. The Continuing Evolution of the FRA During the Depression Years

In early 1932, and in the midst of the Great Depression, Congress joined with President Hoover in creating the Reconstruction Finance Corporation ("RFC"), a GSE, to fund loans primarily to a broad array of financial intermediaries that would help lift the economy. Hoover also anticipated that, in the improving climate of 1932, commercial banks would expand loans to the private sector. In fact, he became frustrated that banks were reluctant to make loans owing to their depleted capital. While desiring that the Fed play a role in boosting lending, Hoover proposed that the RFC be given expanded powers to lend directly to the private sector. Amid the debate on how to allocate this power, the Fed became alarmed at the prospect of another entity having this responsibility. Fed Board member Charles Hamlin privately contacted Senator Carter Glass, a major architect of the FRA of 1913, and proposed an amendment to the FRA that would establish such power.[14] Glass introduced an amendment to the Emergency Relief and Reconstruction Act of 1932 that was subsequently enacted.[15] The amendment was new Section 13(3) of the FRA:

> In unusual and exigent circumstances, the Federal Reserve Board, by the affirmative vote of not less than five members, may authorize any Federal Reserve Bank, during such periods as the said board may determine, at rates established in accordance with the provisions of section 14, subdivision (d), of this Act, to discount for any individual, partnership, or corporation, notes, drafts, and bills of exchange of the kinds and maturities made eligible for discount for member banks under other provisions of this Act when such notes, drafts, and bills of exchange are indorsed and otherwise secured to the satisfaction of the Federal Reserve Bank: Provided, that before discounting any such note, draft, or bill of exchange for an individual or a partnership or corporation the Federal Reserve Bank shall obtain evidence that such individual, partnership, or corporation is unable to secure adequate credit accommodations from other banking institutions. All such discounts for individuals, partnerships, or corporations shall be subject to such limitations, restrictions, and regulations as the Federal Reserve Board may prescribe. [16]

The essential difference between 13(2) and 13(3) is that 13(2) describes the discount window as available to member banks. Section 13(3) provides for direct lending to individuals, partnerships and corporations, (usually intermediated through a member bank), based on the same types of collateral required under Section 13(2), and requiring the same indorsement and security.

3. Past as Prologue

The companion paper provided with this letter[17] chronicles the Fed's journey over the 110 years since its inception – with particular reference to the discount window and emergency lending:

- Rather than encourage its use as the framers of the FRA had hoped, the Fed came to view the discount window as the route taken by weak banks; and typically subjected banks to examination on their need for window loans and the use of loan proceeds. This had the effect of stigmatizing the window throughout the 20th century – and even today as the Fed has sought to course correct and restore its use in financial crises.[18]

---

[14] Federal Reserve Board minutes, July 12, 1932, p. 10. See Parinitha Sastry, *The Political Origins of Section 13(3) of the Federal Reserve Act* (Sept. 2018) at 20 *available at* https://www.newyorkfed.org/medialibrary/media/research/epr/2018/epr_2018_political-origins_sastry.pdf

[15] *Ibid.* Sastry chronicles the detailed legislative history of the FRA Section 13(3) cited in this paragraph.

[16] Congressional Record, 72nd Congress, 1st session, p. 15492, 15621, July 15-16, 1932. *Supra* note 14 at 23.

[17] Granito, M. (July 2023), *Liquidity Crises and the Fed: The Need for Standing Facilities as a First Line of Defense Against Market Liquidity Events*, Available from Federated Hermes, Inc. This paper is a revised version of the paper dated April 1, 2023 previously submitted with Supplemental Comment Letter II of Federated Hermes, Inc. dated April 18, 2023, *available at* https://www.sec.gov/comments/s7-22-21/s72221-20164400-334257.pdf

[18] While this has been the general stance of the Fed, there have been occasions where the Fed encouraged use of the discount window to relieve stress in the short term markets. A notable example was in 1970 when the Fed encouraged use of the discount window to alleviate the freezing of the commercial paper market in the aftermath of the Penn Central bankruptcy. The Fed prepared the use of emergency lending under Section 13(3), but this was not

- Emergency lending was used sparingly from 1932 to 1936 [19], [20], and not again until 2008 and 2020. The Fed has apparently disliked the use of emergency facilities as well, but for different reasons: (1) without today's requirements of broadly based facilities to support markets, during the post-WWII period the Fed was increasingly reluctant to engage in lending to the private sector for, among other reasons, it could have the effect of picking winners and losers [21]; (2) over her decades in policy-making roles, Secretary Yellen has strengthened the presumption that macroprudential regulation of entities is necessary to enable them to withstand shocks without requiring any special assistance [22] ; (3) the Fed was rebuked for certain emergency lending programs used in 2008[23], and Congress curtailed FRA 13(3) powers with Sections 1101 – 1103 of the Dodd – Frank Act ("DFA"); and (4), the Fed's concern that emergency facilities may be less timely than standing facilities, which was clearly demonstrated by the delay of Fed action to arrest the panic in February and March 2020, and is evidenced in the FOMC's April 2021 discussion of the standing repo facility that was established in July 2021[24]:

  > Many participants noted that a standing facility could provide a timely and automatic response to incipient market pressures; they remarked that such pressures can be difficult to anticipate and, as a result, might not be as promptly addressed with discretionary operations. [25]

In 1932, President Hoover sought an alternative lending mechanism because the country's banks were capital constrained; and as a result could not expand credit in a manner that the FRA of 1913 anticipated using the discount window. Today, the Fed is taking financial crises as opportunities to reinstate the

---

required. The Fed also went to considerable lengths to assure banks that they would not incur additional scrutiny or stigma if they used the discount window. See Nygaard, Kaleb B. (2020) "1970 Commercial Paper Market Liquidity Crisis (U.S. Historical)," Journal of Financial Crises: Vol. 2 : Iss. 3, 101-115 *available at* https://elischolar.library.yale.edu/journal-of-financial-crises/vol2/iss3/3

[19] President Hoover had hoped the Fed would freely use its new powers, but over this period, the Fed made 123 loans totaling approximately $1.5 million. See Tim Sablik, *The Fed's Emergency Lending Evolves* (2020), *available at* https://www.richmondfed.org/publications/research/econ_focus/2020/q2-3/federal_reserve

[20] At a November 8, 2002 conference to honor Milton Friedman, Ben Bernanke (then a newly installed member of the Federal Reserve Board of Governors) summarizes the seminal work of Milton Friedman and Anna Schwartz with a particular focus on the failings of the Fed during the great depression years. He concludes with the apology: "Regarding the Great Depression. You're right, we did it. We're very sorry. But thanks to you, we won't do it again." See https://www.federalreserve.gov/boarddocs/speeches/2002/20021108/

[21] *Supra* note 19. Also, an alternate form of direct lending, Section 13(b), was added to the Federal Reserve Act by the Industrial Advances Act of June 19, 1934. It authorized Federal Reserve Banks to "make loans to, or purchase obligations of" an "established industrial or commercial business" for "the purpose of providing it with working capital" when such business was otherwise unable to obtain funds from private markets. The authority was limited to "exceptional circumstances." Section 13(b) was utilized fairly extensively by the Federal Reserve System between 1934 and 1956; and loans between June of 1934 and May of 1935 totaled approximately $44 million dollars to 961 entities. However, "In the postwar period, Fed leaders began to question whether the central bank should be involved in making loans to businesses and individuals. In 1957, then-Fed Chair William McChesney Martin told Congress during testimony that while there might be a role for the government to address gaps in private sector lending, it was not one that the Fed should play. Rather, he said it was the preference of the Board of Governors for the Fed to "devote itself primarily to the objectives set for it by the Congress, namely, guiding monetary and credit policy so as to exert its influence toward maintaining the value of the dollar and fostering orderly economic progress." Section 13(b) was later repealed by the Small Business Investment Act of August 21, 1958.

[22] For example, in 2014, while Chair of the Federal Reserve Board, Janet Yellen acknowledged that monetary policy can have an adverse effect on financial stability, as we witnessed in the bank failures in March and April 2023, but concluded that monetary policy should be largely unconstrained; and that "macroprudential" regulation of entities in the system should be employed to ensure that financial institutions can withstand macro shocks, such as those created by policy. See https://www.federalreserve.gov/newsevents/speech/yellen20140702a.htm

[23] *Supra* note 17 at 6 – 7.

[24] This facility is established under Section 14 of the FRA and only applies to instruments guaranteed by the U.S. Government. See *Statement Regarding Repurchase Agreements* (July 28, 2021), *available at* https://www.newyorkfed.org/markets/opolicy/operating_policy_210728

[25] April 27-28 2021 FOMC minutes referring to the benefits of a standing repo facility, *available at* https://www.federalreserve.gov/monetarypolicy/files/fomcminutes20210428.pdf at 4.

discount window as a first line of defense standing facility, as was done in March 2020 and more recently with the banking crisis of March – April 2023.

But then as now, bank capital constraints limit use of the discount window.[26] Today, the post – financial crisis capital, liquidity and leverage requirements deter balance sheet expansion, and that makes it difficult for banks to expand their lending to distressed markets, including by use of discount window or emergency lending, without additional regulatory relief. In March 2020, such relief was granted simultaneously with the creation of the MMLF, which was a Section 13(3) facility. In particular, the companion paper to this letter points out that the MMLF was announced on March 18th, 2020 and became effective on March 23rd ; but only after Fed, FDIC and OCC published an interim final rule (also on March 23rd) temporarily waiving capital and leverage constraints that would have impeded bank balance sheet expansion associated with participating in the MMLF:

> To provide liquidity to the money market sector to help stabilize the financial system, the Board of Governors of the Federal Reserve System authorized the Federal Reserve Bank of Boston to establish the Money Market Mutual Fund Liquidity Facility (MMLF), pursuant to section 13(3) of the Federal Reserve Act. Under the MMLF, the Federal Reserve Bank of Boston will extend non-recourse loans to eligible financial institutions to purchase certain types of assets from money market mutual funds (MMFs). To facilitate this Federal Reserve lending program, the Board, OCC and FDIC (together, the agencies) are adopting this interim final rule to allow banking organizations to neutralize the regulatory capital effects of participating in the program. [27]

On March 16th, the Fed also announced changes to the rate charged to banks for discount window borrowing to facilitate a similar flow of credit to the economy:

> Federal Reserve lending to depository institutions (the "discount window") plays an important role in supporting the liquidity and stability of the banking system and the effective implementation of monetary policy. By providing ready access to a backup source of funding, the discount window helps depository institutions manage their liquidity risks efficiently and avoid actions that have negative consequences for their customers, such as withdrawing credit during times of market stress. Thus, the discount window supports the smooth flow of credit to households and businesses. **Providing liquidity in this way is one of the original purposes of the Federal Reserve System and other central banks around the world** [emphasis added].
>
> The Board, the Federal Deposit Insurance Corporation, and the Office of the Comptroller of the Currency encourage depository institutions to use the discount window to meet demands for credit from households and businesses at this time. [28]

However, given the various targeted emergency facilities created in March (that is, not just for money market funds), there was not a perceived need to temporarily waive capital requirements for expanded use of the discount window. Our central thesis in the companion paper is that instead of targeted emergency facilities such as the MMLF, federal banking regulators (the Fed, FDIC and OCC) could better use the discount window, which is a standing facility that avoids the concerns that the FOMC

---

[26] *Supra* note 18. In the aftermath of the Penn Central bankruptcy, and the Fed's encouragement of banks to use the discount window to provide loans to corporations locked out of the commercial paper market, a limiting factor then was the reserve requirement banks had to maintain at the Fed. This required a related intervention to alleviate banks' balance sheet requirements. "The expected sharp increase in demand for reserves moved the Federal Reserve to ensure banks would be able to borrow money from the Fed to satisfy the reserve requirement to make loans to "borrowers previously dependent on the issuance of commercial paper." (Burns 1970) *Supra* note 18 and Burns, Arthur F. (1970). Statement to Congress' Joint Economic Committee, July 23, 1970. Federal Reserve Bulletin 8, no. 56 (August): 619–26.
https://ypfsresourcelibrary.blob.core.windows.net/fcic/YPFS/frb_081970_0.pdf

[27] https://www.federalregister.gov/documents/2020/03/23/2020-06156/regulatory-capital-rule-money-market-mutual-fund-liquidity-facility

[28] https://www.federalreserve.gov/newsevents/pressreleases/monetary20200315b.htm

identified in its April 2021 meeting.[29] In particular, effective use of the discount window, as envisioned in the FRA of 1913, could address root causes related to market illiquidity and thereby reduce or eliminate the need for Section 13(3) programs targeting specific sectors of the market.[30]

To enable this, we argue that banking regulators should adopt a triggering mechanism, such as the declaration of a "Liquidity Event" as defined in DFA Section 1105.[31] When a Liquidity Event is declared (say by the Fed Board in coordination with the FDIC and OCC, or by FSOC) with respect to designated illiquid markets, bank capital requirements would be automatically waived [32] as they were in March 2020. Had this framework for the discount window been in place then, the MMLF, for instance, would not have been necessary. Market conditions clearly met the definition of a Liquidity Event. Upon such designation for the money markets, banks could have been encouraged to purchase high quality short term paper in the open market to be posted as collateral with the Fed to support discount window loans that provide funding for such purchases.

To be effective, this waiver of capital requirements (upon declaration of a Liquidity Event for designated markets) should be hard – coded into regulation, so that time delays are minimized. This action is fully consistent with the purpose of the Fed and the FRA. And it would enable the discount window to more fully achieve its original objective of preventing "panics" (which today we recognize and liquidity crises) – an objective that has been stymied both in 1932 and today by bank capital constraints.

* * * * *

We hope that the Commission finds these comments constructive and useful. We are happy to answer any questions that you have.

Very truly yours,

Michael R. Granito
Chief Risk Officer

---

[29] The use of the discount window to support the commercial paper market in 1970 is an illustration of what could be done. *Supra* note 18.
[30] Also see Jeffery M. Lacker,(August 29, 2013), "A Look Back at the History of the Federal Reserve" at 7-8 for comments relating to the discounting of commercial paper, *available at* https://www.richmondfed.org/-/media/RichmondFedOrg/press_room/speeches/president_jeff_lacker/2013/pdf/lacker_speech_20130829.pdf
[31] DFA Section 1105 (g)(3) "LIQUIDITY EVENT. – the term "liquidity event" means – (A) an exceptional and broad reduction in the general ability of financial market participants— (i) to sell financial assets without an unusual and significant discount; or (ii) to borrow using financial assets as collateral without an unusual and significant increase in margin; or (B) an unusual and significant reduction in the ability of financial market participants to obtain unsecured credit."
[32] With respect to balance sheet expansion involving the affected illiquid securities and markets designated in the Liquidity Event.

Liquidity Crises and the Fed:
The Need for Standing Facilities as a First Line of Defense Against Market Liquidity Events

Michael R. Granito

April 1, 2023

Revised July 1, 2023

Abstract

We examine the lending facilities available to the Federal Reserve (Fed) to stem market liquidity crises: emergency lending, the discount window and the standing repo facility. Emergency lending can take time to implement, may require a Treasury backstop and can appear to be a "bailout". The discount window is a standing facility that has historically been underutilized because of the associated stigma that the Fed itself created during the 20th century. The standing repo facility is hoped to have less stigma, but it can only be used to dampen illiquidity in the U.S. Treasury and Agency market because it is administered under Section 14 of the Federal Reserve Act that restricts activities to securities guaranteed by the U.S. Government. Legislation would be required to allow corporate securities, which is unlikely to be granted by a skeptical Congress.

When used to calm market liquidity stress, banks and broker-dealers could be encouraged to perform their historic role in intermediation that was sharply restricted by the imposition of increased capital and liquidity requirements in the wake of the Dodd–Frank Act (DFA) after the financial crisis of 2008. This would entail an expansion of bank balance sheets. However, post-DFA capital and leverage ratio requirements make it near impossible for banks to engage in such activities without a waiver of these restrictions to allow increased intermediation, as was done in March 2020.

We argue that the discount window is the most realistic standing facility for providing funding to enable the banking system to perform its historic role in intermediation. This can be effective provided that federal banking regulators have a trigger by which liquidity crises are timely identified, a "Liquidity Event" is designated, and post-DFA capital and leverage ratios are temporarily suspended, which should be hard–coded in regulation upon Liquidity Event designation. These steps would enable bank balance sheet expansion pursuant to discount window lending to support market-making in stressed liquidity conditions – an original objective of the Federal Reserve Act.

I. The Origins of Declining Liquidity in the U.S. Capital Markets

The actions taken by the Fed after the financial crisis of 2008 are credited with ameliorating the depth of the ensuing Great Recession. The subsequent regulatory agenda was designed to impose new regulations on the banking sector with the goal of increasing resilience and reducing "too big to fail" risk. These included tougher capital and liquidity requirements as well as limits on the use of leverage.[1]

However, there was overwhelming awareness among the Fed and other regulatory bodies that these regulations would impair the market-making ability of bank broker/dealers. Janet Yellen commented:

> Large dealers appear to devote less of their balance sheets to holding inventories of securities to facilitate trades and instead increasingly facilitate trades by directly matching buyers and sellers. In addition, algorithmic traders and institutional investors are a larger presence in various markets than previously, and the willingness of these institutions to support liquidity in stressful conditions is uncertain. While no single factor appears to be the predominant cause of the evolution of market liquidity, some regulations may be affecting market liquidity somewhat. There may be benefits to simplifying aspects of the Volcker rule, which limits proprietary trading by banking firms, and to reviewing the interaction of the enhanced supplementary leverage ratio with risk-based capital requirements.[2]

Stanley Fischer, a former Fed vice chair, observed that:

> Market participants have cited a decline in dealers' inventories as a possible source of decreased liquidity. … The recent decline might be due in part to regulations, such as the Volcker rule and the Supplementary Leverage Ratio, aimed at making the financial system safer and sounder, as well as

---

[1] Janet Yellen summarized these as follows:

> To strengthen banks' resilience, the Federal Reserve and the other banking agencies have substantially increased capital requirements. Regulatory minimums for capital relative to risk-weighted assets are significantly higher, and capital requirements now focus on the highest-quality capital, such as common equity. In addition to risk-based standards, bank holding companies and depositories face a leverage ratio requirement. Also, significantly higher capital standards--both risk-weighted and leverage ratios--are being applied to the most systemically important banking organizations. ….. We are also employing annual stress tests to gauge large institutions' ability to weather a very severe downturn and distress of counterparties and, importantly, continue lending to households and businesses. Firms that do not meet these standards face restrictions on dividends and share buybacks. As a result of these changes, for the largest banks, Tier 1 common equity--the highest-quality form of capital--has more than doubled since the financial crisis.
>
> Recently implemented regulations aim to strengthen liquidity. For example, a new liquidity coverage ratio requires internationally active banking organizations to hold sufficient high-quality liquid assets to meet their projected net cash outflows during a 30-day stress period. A new process--the Comprehensive Liquidity Analysis and Review--sets supervisory expectations for liquidity-risk management and evaluates institutions' practices against these benchmarks. A proposal for a net stable funding ratio would require better liquidity management at horizons beyond that covered by the liquidity coverage ratio. A proposed capital surcharge for the largest firms would discourage overreliance on short-term wholesale funding.

Janet L. Yellen, *Finance and Society* (May 6, 2015), *available at* https://www.federalreserve.gov/newsevents/speech/yellen20150506a.htm

[2] Janet L. Yellen, *Financial Stability a Decade after the Onset of the Crisis* (Aug. 25, 2017), *available at* https://www.federalreserve.gov/newsevents/speech/yellen20170825a.htm

> to changes firms may have made on their own, perhaps in reaction to the experience of the financial crisis. Regardless of the causes of the change, market participants have expressed a concern that the decline in inventories reflects in part a reduced willingness or capacity of the primary dealers to make markets -- which may in turn lead to lower liquidity.[3]

In the ensuing years, various organizations have observed the adverse impact on market liquidity resulting from banking reform. For instance, the Bank for International Settlements (BIS) found that:

> Dealers have continued to lower their market-making capacity and willingness in many jurisdictions, focusing on activities that require less capital. Demand for market-making services, in turn, continues to grow given the expansion of primary bond markets and increased bond holdings by market participants who rely on dealers' immediacy services (eg asset managers).. …. For other markets, such as those for off-the-run sovereign bonds and corporate bonds, there is evidence of bifurcation, with liquidity deteriorating most in those market segments that have historically been less deep than others. In these segments, the reduction in dealers' market-making capacity seems to have had a greater impact on liquidity, given the limited availability of substitutes to their services.[4]

In December 2015, Congress directed the SEC's Division of Economic and Risk Analysis to report on the impacts of the Dodd – Frank Act, the Volcker Rule and other financial regulations on market liquidity in U.S. Treasury and corporate debt markets.

> While there is little consensus in existing work concerning the direction, causal attribution, and mechanisms behind observed changes, evidence suggests that in recent years dealers have been less likely to engage in risky principal transactions. In addition, dealers generally decrease liquidity provision in times of severe market stress, such as during the financial crisis.
>
> Evidence from the crisis [of 2008] suggests that during times of severe market stress, dealers may not lean into the wind, but instead make larger cuts in inventory of bonds that are aggressively sold by their customers. Such evidence supports a finding that dealers decrease liquidity provision in times of severe market stress.[5]

In 2020 Randal Quarles, then Fed vice chair for supervision and chair of the FSB, commented:

> It may be that there is a simple macro fact that the Treasury market being … much larger than it was a decade ago and now really much larger than it was even a few years ago, that the sheer volume there may have outpaced the ability of the private market infrastructure to support stress of any sort there [6]

More recently, in a 2022 paper prepared for and presented at the Fed's 2022 Jackson Hole meetings, Acharya et. al. study the longer-term effect of quantitative easing and find that the eventual quantitative tightening will place still larger liquidity strains on the market.

---

[3] Stanley Fischer, *Is There a Liquidity Problem Post-Crisis?* (Nov. 16, 2016), *available at* https://www.federalreserve.gov/newsevents/speech/fischer20161115a.htm

[4] Committee on the Global Financial System, *Fixed income market liquidity*, CGFS Papers No. 55 (Jan. 2016), *available at* https://www.bis.org/publ/cgfs55.pdf.

[5] SEC, *Access to Capital and Market Liquidity* (Aug. 2017) *available at* https://www.sec.gov/files/access-to-capital-and-market-liquidity-study-2017.pdf, at 9.

[6] Benjamin Purvis and Catarina Saraiva, *The Treasury Market May Be So Big That the Fed Can't Step Away*, (Oct. 14, 2020 5:03 PM), *available at* https://www.bloomberg.com/news/articles/2020-10-14/the-treasury-market-may-be-so-big-that-the-fed-can-t-step-away?sref=enGs3N51.

> We document that banking deposits increase, and become more demandable when QE expands reserves. … Banks also originate more corporate lines of credit. We observe little reversal of all this during quantitative tightening.
>
> We argue that this asymmetric behavior makes the banking system dependent on the central bank for ever larger liquidity infusions during stress and can explain tightening liquidity conditions and occasional stress episodes when quantitative tightening is underway, despite the central bank balance-sheet being large relative to historical standards.[7]

II. The March 2020 Market Failure and other Recent Liquidity Events in the U.S. Capital Markets

It should be apparent to any neutral observer that the root cause of the March 2020 market failure was not the activities of financial firms. Rather, the root cause was a global economic shock to the system and orchestrated government action to stem the pandemic which sharply reduced investor confidence, price discovery and liquidity across all markets. Predictably, as governments around the world shut down their economies to prevent spread of the virus, a contagion then ensued as the prospect of the worst pandemic in 100 years shut-down economies across the globe. In these conditions, there was a dramatic increase in the VIX, a market indicator of fear, to a record high of 83%. Credit spreads for investment grade and high yield bonds had already increased by approximately 150% from mid-February to March 18th.

Amid the growing crisis there was a general flight to safety. Large time deposits at banks, those without FDIC insurance, dropped sharply while smaller insured deposits surged. In the first weeks of March 2020, many corporations (often with high quality, but due to the crisis, temporarily illiquid direct commercial paper holdings), tapped bank credit lines. This placed liquidity strains on the banking system. The various new banking regulations limited the ability of bank broker/dealers to take securities into inventory. As a result, dealers had less flexibility in intermediating fixed-income trades in any reasonable size irrespective of their credit quality.[8] Thus, the pandemic conditions further eroded the market-making ability of bank broker/dealers, beyond the limitations created by the post-2008 crisis banking reforms.

But even before the Pandemic, declining liquidity began to be apparent even in the U.S. Treasury market. Like tremors before a severe earthquake, cracks in the system began to emerge:

> On October 15, 2014 ("October 15"), the market for U.S. Treasury securities, futures, and other closely related financial markets experienced an unusually high level of volatility and a very rapid round-trip in prices. Although trading volumes were high and the market continued to function, liquidity conditions became significantly strained. The yield on the benchmark 10-year Treasury security, a useful gauge for the price moves in other, related instruments that day, experienced a 37-basis-point trading range, only to close 6 basis points below its opening level. Intraday changes of greater magnitude have been seen on only three occasions since 1998 and, unlike October 15, all were driven by significant policy announcements. Moreover, in the narrow window between 9:33 and 9:45 a.m. ET, yields exhibited a significant round-trip without a clear cause, with the 10-year

---

[7] Acharya,V., Chauhan,R., Rajan,R. and Steffen,S. (2022) *Liquidity Dependence: Why Shrinking Central Bank Balance Sheets is an Uphill Task*, Prepared for and presented at the Symposium of the Federal Reserve Bank of Kansas City on "Reassessing Constraints on the Economy and Policy", August 25-27, 2022, a*vailable at* https://www.kansascityfed.org/Jackson%20Hole/documents/9040/JH_Paper_Acharya.pdf

[8] Investment Company Institute, *Experiences of US Money Market Funds During the COVID-19 Crisis* (Nov. 2020) *available at* https://www.sec.gov/comments/credit-market-interconnectedness/cll10-8026117-225527.pdf.

> Treasury yield experiencing a 16-basis-point drop and then rebound. ***For such significant volatility and a large round-trip in prices to occur in so short a time with no obvious catalyst is unprecedented in the recent history of the Treasury market.*** [emphasis added] [9]

A similar event took place in September 2019, as summarized in a federal joint agency report:

> In September 2019, a confluence of factors disrupted the repo market and demonstrated that repo demand and supply can be very inelastic in the short run, creating the potential for repo interest rates to rise very rapidly and to very high levels in response to relatively small shocks.
>
> Overnight repo rates began to rise on September 16, 2019, and accelerated on September 17. The Secured Overnight Financing Rate (SOFR), a broad measure of the cost of overnight Treasury repo borrowing, spiked to 5.25 percent, an increase of more than 300 basis points from the level two business days earlier. Overnight repo rates also became notably more dispersed. Some transactions on September 17 occurred at rates as high as 9 percent, and the spread between the 1st and 99th percentiles of rates on transactions used to compute SOFR was 675 basis points. By contrast, earlier in 2019, the daily spread between the 1st and 99th percentiles had averaged around 25 basis points. Other funding markets also experienced pressures, and the effective federal funds rate (EFFR) on September 17 printed at 2.30 percent, above the FOMC's target range of 2 to 2.25 percent at the time.[10]

And subsequent to March 2020,

> … on February 25, 2021, a large shift in investor sentiment triggered very high trading volumes that temporarily overwhelmed the intermediation capacity of the Treasury market. Yields jumped, market liquidity deteriorated, and trading volumes rose to record levels leading up to the Treasury Department's auction of a 7-year note. After the yield realized in the auction exceeded market expectations by 4 basis points, with the lowest bid-to-cover ratio on record since the 7-year note was reintroduced in 2009, trading conditions deteriorated abruptly. The most notable decline in market liquidity occurred in on-the run securities in the interdealer market, especially longer-dated securities. [11]

Moreover, a continuing general decline in market liquidity is chronicled by the Fed.

> The bid-ask spread—the difference between the lowest ask price and the highest bid price for a security — is one of the most popular liquidity measures. … bid-ask spreads have widened out in 2022… . Measures of the price impact of trades also suggest a notable deterioration of liquidity.
>
> The market's capacity to smoothly handle large flows has been of ongoing concern since March 2020 …as Treasury debt outstanding continues to grow. Moreover, lower-than-usual liquidity implies that a liquidity shock will have larger-than-usual effects on prices and perhaps be more likely to precipitate a negative feedback loop between security sales, volatility, and illiquidity. Close monitoring of Treasury market liquidity — and continued efforts to improve the market's resilience — remain important.[12]

---

[9] U.S. Department of the Treasury, Board of Governors of the Federal Reserve System, Federal Reserve Bank of New York, U.S. Securities and Exchange Commission, and U.S. Commodity Futures Trading Commission, 2015, "Joint Staff Report: The U.S. Treasury Market on October 15, 2014," *available at* https://home.treasury.gov/system/files/276/joint-staff-report-the-us-treasury-market-on-10-15-2014.pdf

[10] Recent Disruptions and Potential Reforms in the U.S. Treasury Market: A Staff Progress Report (Nov. 8, 2021), *available at* https://home.treasury.gov/system/files/136/IAWG-Treasury-Report.pdf [hereinafter Treasury Report].

[11] *Ibid*.

[12] Michael Fleming and Claire Nelson, *How Liquid Has the Treasury Market Been in 2022?* (Nov. 15, 2022), *available at* https://libertystreeteconomics.newyorkfed.org/2022/11/how-liquid-has-the-treasury-market-been-in-2022/

III. The Fed's Stressed Market Lending Facilities

To respond to crisis conditions such as March 2020, and the continuing risk of illiquidity in the U.S. Treasury market, the Fed has three primary lending tools: (i) emergency lending under Sections 13(3) and 13(13) of the Federal Reserve Act (FRA) [13]; (ii) use of the Discount Window conducted under sections 10B and 13(2) of the FRA; and (iii) a Standing Repo facility for banks conducted under Section 14 of the FRA.

1. Emergency Lending Programs

Established in 1932 by the Emergency Relief and Reconstruction Act, and liberalized by various by acts including the 1935 Banking Act and the FDIC Improvement Act of 1991, FRA Section 13(3) defines the Fed's primary mechanism for emergency lending to the non-bank private sector.[14] It was used sparingly from 1932 through 1936, making only 123 loans totaling approximately $1.5 million.[15] Section 13(3) was not again employed until the financial crisis of 2008 when a series of Fed emergency programs were put into place. These actions are well known and do not require further elaboration. However, it is noteworthy that the Fed was rebuked in its use of 13(3) powers.

> By April 2008, these developments provoked former Fed Chairman Paul Volcker to comment that the Federal Reserve had "taken actions that extend to the very edge of its lawful and implied powers, transcending certain long-embedded central banking principles and practices." [16]

Other legal scholars have taken a more direct view. In a detailed review of the Fed's actions, legal scholar Alexander Mehra writes:

> In unusual and exigent circumstances, § 13(3) of the Federal Reserve Act empowers the Fed to provide an uncapped amount of liquidity to the financial system. It may, with the approval of the U.S. Treasury, establish programs of broad-based eligibility and lend freely against sufficient collateral. Before its amendment by the Dodd – Frank Wall Street Reform and Consumer Protection Act, § 13(3) also allowed the Fed, acting alone, to extend credit to particular individuals, partnerships, and corporations. From 2008 to 2009, the Fed invoked this authority repeatedly to

---

[13] Tim Sablik, *The Fed's Emergency Lending Evolves* (2020), *available at* https://www.richmondfed.org/publications/research/econ_focus/2020/q2-3/federal_reserve

[14] Parinitha Sastry, *The Political Origins of Section 13(3) of the Federal Reserve Act* (Sept. 2018) provides a detailed account the legislative history of the FRA Section 13(3)., *available at* https://www.newyorkfed.org/medialibrary/media/research/epr/2018/epr_2018_political-origins_sastry.pdf
.

[15] *Supra* note 13. An alternate form of direct lending, Section 13(b), was added to the Federal Reserve Act by the Industrial Advances Act of June 19, 1934. It authorized Federal Reserve Banks to "make loans to, or purchase obligations of" an "established industrial or commercial business" for "the purpose of providing it with working capital" when such business was otherwise unable to obtain funds from private markets. The authority was limited to "exceptional circumstances." Section 13(b) was utilized fairly extensively by the Federal Reserve System between 1934 and 1956; and loans between June of 1934 and May of 1935 totaled approximately $44 million dollars to 961 entities. However, "In the postwar period, Fed leaders began to question whether the central bank should be involved in making loans to businesses and individuals. In 1957, then-Fed Chair William McChesney Martin told Congress during testimony that while there might be a role for the government to address gaps in private sector lending, it was not one that the Fed should play. Rather, he said it was the preference of the Board of Governors for the Fed to "devote itself primarily to the objectives set for it by the Congress, namely, guiding monetary and credit policy so as to exert its influence toward maintaining the value of the dollar and fostering orderly economic progress." Section 13(b) was later repealed by the Small Business Investment Act of August 21, 1958.

[16] Frederic S. Mishkin and Eugene N .White, *Unprecedented Actions: The Federal Reserve's Response to the Global Financial Crisis In the Historical Perspective*, NBER, Working Paper 20737 (Dec. 2014), *available at* https://www.nber.org/system/files/working_papers/w20737/w20737.pdf

> purchase assets, lend money, and establish schemes that sought to restore market stability. However, [we] argue that § 13(3) was and remains a loan-making power of narrowly defined scope. On this view, the Fed's asset purchases and certain of its lending activities raise great concerns. … [We] argue that many of the Fed's responses to the crisis exceeded the bounds of its statutory authority.[17]

Section 13(3) was definitive in that the Fed may make loans against sound collateral, but not purchase assets. The legal issues particularly relate to the creation of various special purpose vehicles (SPVs, in particular, Maiden Lane I, II, and III, LLC), controlled by the Fed, that purchased assets from the balance sheets of selected entities. This was facilitated through Fed loans to the SPVs, thus doing indirectly what 13(3) prohibited directly.[18] Moreover, the secrecy behind these transactions and the lack of oversight prompted a congressional backlash in the form of Sections 1101–3 of the Dodd – Frank Act (DFA).

DFA curtailed the Fed's emergency lending authority by amending Section 13(3) with: (i) prohibitions against removing impaired assets from, or otherwise bailing out, an individual company; (ii) requiring that future lending be directed to providing liquidity to the market in programs with broad based eligibility; (iii) requiring that any such lending receive the prior permission from the Secretary of the Treasury; (iv) requiring formal and continuing reporting to Congress specifying details of any such program and the potential risks to taxpayers; (v) submitting to program audits by the Comptroller General; and (vi) public disclosure of audit findings. Lending programs that could entail losses to taxpayers would require capital allocated by the Treasury.[19] Guaranteeing the obligations of depositories is administered under Section 1105 of DFA. That section requires the determination by the Board of Governors of the Federal Reserve System and the FDIC that a "Liquidity Event" [20] has occurred; upon which the FDIC may then create a widely available program that guarantees the obligations of solvent insured depository institutions upon approval of Congress and President, subject to the further requirements of Sections 1104–5.

During March and April 2020, the Fed again used its now-restricted emergency lending powers to create nine separately approved and funded facilities.[21] However, these programs were initiated after market turmoil and contagion had been building for at least a month and significant damage to the economy had already been done. This fact brings us to a fundamental point: after witnessing the devastation caused by the panics of 1893 and 1907, the authors of the Federal Reserve Act of 1913 saw its objective as: (1) increasing the supply of money to support a growing economy; and (2) to prevent panics from occurring. As summarized by Senator Robert Owen, co-author of the Act:

---

[17]Alexander Mehra, *Legal Authority in Unusual and Exigent Circumstances: The Federal Reserve and the Financial Crisis*, 13 J. Bus. L. 221 (2010), *available at* https://scholarship.law.upenn.edu/cgi/viewcontent.cgi?article=1375&context=jbl

[18] Congressional Research Service, *Federal Reserve: Emergency Lending* (Mar. 27, 2020), *available at* https://fas.org/sgp/crs/misc/R44185.pdf

[19] This provision was specific to the CARES Act COVID facilities lending. Capital could be allocated even if the Fed's required report to congress (iv above) indicated that no loss to taxpayers was expected. For instance, the report accompanying the MMLF facility stated "..,. the Board does not expect at this time that advances under the MMLF will result in any losses to the Federal Reserve or the taxpayer." a*vailable at* https://www.federalreserve.gov/publications/files/money-market-mutual-fund-liquidity-facility-3-25-20.pdf

[20]DFA Section 1105 (g)(3): "LIQUIDITY EVENT. – the term "liquidity event" means – (A) an exceptional and broad reduction in the general ability of financial market participants— (i) to sell financial assets without an unusual and significant discount; or (ii) to borrow using financial assets as collateral without an unusual and significant increase in margin; or (B) an unusual and significant reduction in the ability of financial market participants to obtain unsecured credit."

[21] *Supra* note 13.

> It should always be kept in mind that it is not the welfare of the bank, nor the welfare of the depositor which is the main object to be attained, but it is the ***prevention*** of panic [emphasis added], the protection of our commerce, the stability of business conditions, and the maintenance in active operation of the productive energies of the nation which is the question of vital importance.[22]

The Fed's emergency facilities in 2020 had the effect of abating the crisis, not preventing it.[23] As we will discuss further in consideration of a "standing repo" facility, the April 2021 FOMC minutes reveal the Fed's awareness of the benefits of standing facilities in a crisis:

> Many participants noted that a standing facility could provide a timely and automatic response to incipient market pressures; they remarked that such pressures can be difficult to anticipate and, as a result, might not be as promptly addressed with discretionary operations. [24, 25]

As a further illustration of the delays involved in implementing emergency facilities, in the case of the MMLF program announced on March 18th, and possibly other facilities administered through banks, the program could not become effective until the Fed, OCC, and FDIC jointly implemented and published in the Federal Register an interim final rule that neutralized the effect on the capital and leverage ratios of banks participating in the MMLF program on behalf of MMFs. This occurred on March 23rd, when the MMLF also became effective.

2. The Discount Window

The discount window, provided in Section 13(2) of the FRA of 1913 and in Sections 10B and 13(2) today, was the mechanism that the authors of the Act intended to serve as the means of expanding the supply of money and credit for a growing economy; and for providing liquidity to avert panics.[26] It was envisioned that member banks could obtain loans from the discount window, based on sound collateral presented by commercial businesses, but not financial firms.[27] With the exception of U.S. Treasury securities, instruments that were the liabilities of financial companies, such as investment banks, could not be discounted so as not to promote the interests of Wall Street.[28] Precise definitions of the allowed paper would be determined through regulation by the Federal Reserve Board (the "Fed") within the meaning of the Act.[29] Eligible paper could be issued by individuals, corporations, etc. with a maturity not greater than 90 days.

---

[22] Robert L. Owen, *The Federal Reserve Act* (1919) at 43, *available at* https://fraser.stlouisfed.org/files/docs/publications/books/fra_owen_1919.pdf.

[23] For instance, between 2/17/2020 and 3/23/2020 (when the MMLF became effective), the high yield bond spreads increased from 3.56% to 10.87% (See https://fred.stlouisfed.org/series/BAMLH0A0HYM2) and the S&P500 declined from 3,386 to 2,237, losing about a third of its value (See https://fred.stlouisfed.org/series/SP500). The stock and bond markets began their recovery immediately after 3/23/2020, which was the date of their respective troughs.

[24] April 27-28 2021 FOMC minutes referring to the benefits of a standing repo facility, a*vailable at* https://www.federalreserve.gov/monetarypolicy/files/fomcminutes20210428.pdf at 4.

[25] The Fed also understood that the presence of a standing facility could also preemptively reduce strains in the market. For instance, the MMLF facility announced on March 18th, 2020 began to have effect even before it became effective on March 23rd.

[26] Today, the Discount Window is described primarily in Section 10B while retaining original Section 13(2).

[27] "Discounting" refers to providing a loan in an amount less than the fair market value of the collateral, the difference being the discount or "haircut".

[28] This was a likely outcome of the fact that the "call loan" market, which was short term financing for security holdings, was a flash point for the panic of 1907. Accepting only collateral that arose from businesses engaged in commerce was the Real Bills Doctrine.

[29] Regulation A, which has been frequently amended, provides the mechanism and terms for discount window borrowing.

The essential difference between 13(2) and 13(3) is that 13(2) describes the discount window available to banks.[30] Section 13(3) provides for direct lending to individuals, partnerships and corporations (often intermediated through a member bank) based on the same types of collateral required under Section 13(2) and requiring the same security. This limited availability of the Act to many because, for instance, individuals would typically not have the type of necessary collateral. The Banking Act of 1935 relaxed this requirement. However, loans against financial assets were still excluded. Section 473 of the FDIC Improvement Act of 1991 ("FDICIA") struck the language "of the kinds and maturities made eligible for discount for member banks under other provisions of this Act." Thus, the Fed could now lend to financial companies based on financial asset collateral. These amendments enabled the Fed to be a lender of last resort for both commercial and financial enterprises. Critically, all lending would be made against sound collateral.[31] Thus, the statutory mandate was still limited to providing liquidity and not taking credit risk. Also of note, the language "unusual and exigent circumstances" was not defined in the Emergency Relief and Reconstruction Act, but it was presumed to imply emergency circumstances.

While 13(2) or 10B were not expressly worded as a means of lending directly to business, in concept, business customers of a member bank could present eligible collateral for a loan from that bank. If the bank was not able to fund the loan, it could take it to the discount window, indorse the collateral[32], and receive a loan from the district Reserve bank, which it would then use to fund the customer's loan. This would correspond to Owen's concept of an elastic currency that could expand for the needs of business. Thus, the member bank could effectively serve as an intermediary between the customer and the Fed; and could determine the nature and type of customer for which such intermediation would be performed.[33]

There was considerable use of the discount window in the early years after passage up to 1935, although it began to decline in the 1920s when the Fed began the use of open market operations to supply credit to the economy. At the same time, the Fed became concerned that some banks could become overly reliant on the window, eventually weakening them. Consequently, the Fed began discouraging discount window borrowing, implying that it attracted troubled banks, and a stigma developed around its use.[34] Notwithstanding this perception, the Fed maintained the borrowing rate below the market rate under the view that there should not be a penalty for banks in true need of the

---

[30] Originally, only bank members of the Federal Reserve System were allowed access to the discount window. Non-member banks (e.g. state chartered banks, thrifts, etc.) were given access to the discount window in 1980 by the Monetary Control Act if they voluntarily held reserves against deposits.

[31] Federal Reserve, Collateral Valuation, *available at* https://www.frbdiscountwindow.org/pages/collateral/discount%20window%20margins%20and%20collateral%20guidelines Discounts to high quality short term paper are typically 2% for discount window borrowing. Loans or asset purchases made under FRA 13(3) can have varying provisions determined by the circumstances.

[32] UCC § 3-204(a) "Indorsement" means a signature, other than that of a signer as maker, drawer, or acceptor, that alone or accompanied by other words is made on an instrument for the purpose of (i) negotiating the instrument, (ii) restricting payment of the instrument, or (iii) incurring indorser's liability on the instrument, but regardless of the intent of the signer, a signature and its accompanying words is an indorsement unless the accompanying words, terms of the instrument, place of the signature, or other circumstances unambiguously indicate that the signature was made for a purpose other than indorsement. For the purpose of determining whether a signature is made on an instrument, a paper affixed to the instrument is a part of the instrument.

[33] For an historical account of Fed lending during the Great Depression years see Tim Sablik, *Fed Credit Policy during the Great Depression* (Mar. 2013), *available at* https://fraser.stlouisfed.org/files/docs/historical/frbrich/econbrief/frbrich_eb_13-03.pdf

[34] Olivier Armantier et al., *History of Discount Window Stigma* (Aug. 10, 2015), *available at* https://libertystreeteconomics.newyorkfed.org/2015/08/history-of-discount-window-stigma.html

facility. However, the Fed did not want banks to take advantage of this rate and increasingly discouraged discount window use. Among other restrictions added over time on "appropriate" vs "inappropriate" uses, the Fed eventually added a surcharge for frequent borrowing and in 1973 added the requirement that the bank exhaust all other sources of funding before resorting to the window. The cumulative effect of these actions further entrenched the stigma of the discount window as the resort of troubled institutions.[35]

This stance with respect to discount window borrowing remained until 2003 at which point the Fed introduced the concept of the Primary Credit Facility, which is the rate available to banks in strong financial condition; and the Secondary Credit Facility for banks not meeting that criteria. Now the borrowing rates are at or above the top of the fed funds target range, with the excess over the top of the range representing a penalty rate. Loans for the Primary Credit Facility are advanced on a "no questions asked" basis. These steps were intended to eliminate the stigma for banks in strong financial condition, while aligning discount window policies with Walter Bagehot's famous dictum: lending freely against sound collateral but at a penalty to assure that lower cost alternatives are tapped first. Sadly, these steps did not eliminate the stigma and there was relatively little discount window borrowing during the financial crisis of 2008. Anticipating this limitation, in December 2007, the Fed introduced a temporary program, Term Auction Facility, which did see considerable use.[36] In a further effort to stimulate use, in March 2020 the Fed again encouraged banks to access the window and set the Primary Credit rate equal to the top of the fed funds range set by the FOMC, which is where it stands today.[37]

3. The Fed Standing Repo Facility

Interest in a standing repo facility emerged as a way to address the dislocations or liquidity disruptions in the U.S. Treasury market seen in recent years. In the event of an aberration in Treasury yields, a bank could purchase securities with abnormally high yields, while simultaneously posting them as collateral for repos with (loans received from) the System Open Market Account (SOMA) that are used to purchase the securities. (In this way, the transactions represent repo from the standpoint of the SOMA, but reverse repo from the standpoint of the bank engaged in the transaction.)

In concept, such a facility performs a similar function as traditional discount window loans, but with a key difference. Repo operations are conducted under Section 14 of the FRA which governs open market operations. They are therefore subject to the same limitations with respect to the types of securities that can be transacted. In particular, open market transactions are only authorized for securities guaranteed by the U.S. Government; and standing repo transactions are similarly limited. However, the Fed anticipates that such transactions will have less stigma attached and will therefore more likely be used to support liquidity in the Treasury market without the need for emergency

---

[35] Notwithstanding this evolution, the Fed did not abandon use of the discount window as a means of injecting liquidity into stressed markets. For instance, in the aftermath of the Penn Central bankruptcy, the commercial paper market froze and was essentially closed for new issuance. In response, the Fed waived what it saw as nonpecuniary impediments to using the discount window (such as worrisome examiner scrutiny) and encouraged banks to tap the window for funding loans to corporations unable to issue commercial paper. The Fed also assisted in funding the reserve requirements associated with the loans. It prepared a Section 13(3) facility, but this turned out to be unnecessary. See Nygaard, Kaleb B. (2020) "1970 Commercial Paper Market Liquidity Crisis (U.S. Historical)," Journal of Financial Crises: Vol. 2 : Iss. 3, 101-115, *available at* https://elischolar.library.yale.edu/journal-of-financial-crises/vol2/iss3/3.

[36] See Olivier Armantier et al., *Discount Window Stigma during the 2007-2008 Financial Crisis*, Federal Reserve Bank of New York Staff Reports, No. 483 (Aug. 2015), *available at* https://www.newyorkfed.org/medialibrary/media/research/staff_reports/sr483.pdf

[37] https://www.federalreserve.gov/newsevents/pressreleases/monetary20200315b.htm

facilities under Section 13(3). On July 28th, 2021 the Fed announced the creation of this facility for U.S. Treasury securities[38], [39] based in significant part on reasoning outlined in April 2021:

> Many participants noted that a standing facility could provide a timely and automatic response to incipient market pressures; they remarked that such pressures can be difficult to anticipate and, as a result, might not be as promptly addressed with discretionary operations. [40]

The most recent notable development in the use of repo facilities for more general emergencies occurred when the Bank of England calmed market disruption in the Fall of 2022 by temporary expansion of its repo line to include corporate securities as collateral.[41] It is widely believed that if such a facility was available in the U.S. in March of 2020, the disruption to financial markets would have been much less severe and the Fed would not have had to create the MMLF and other facilities under Section 13(3). One distinction in considering this alternative is that the Fed cannot make this amendment to accept non-Treasury collateral under Section 14 of the FRA through regulation. Legislation would be required to amend the scope of open market operations and the powers of the SOMA.

IV. Conforming Amendments to Capital and Leverage Ratios During Liquidity Events

One feature that is common to any of the stressed market facilities – emergency lending, the discount window or a standing repo facility – is the fact that, even as they may be intended to provide liquidity to markets, they are often facilitated through a member bank that directly accesses the Fed. In this way, the balance sheet of the member bank is the conduit through which liquidity flows to the end markets. To stem crises such as the March 2020 freeze in the money market , large broker/dealers and banks could be encouraged to perform their historic role as market makers and take high quality short term but illiquid securities onto their balance sheets. They would then profit from the higher yields that these securities could provide during such market conditions compared with their funding costs through borrowing from the Fed.

However, this poses a challenge to banks and broker-dealers that are part of bank holding companies because the regulatory capital and leverage rules continue to apply to any balance sheet expansion resulting from use of the facility. Therefore, even if the facility would work to calm the markets and assist end market participants in obtaining access to liquidity, the entity may be unwilling to engage as a lending conduit because of the adverse impact on regulatory capital requirements or leverage ratios. For the MMLF and PPPLF programs, the Fed, FDIC, and OCC enacted interim final rules on March 23rd, April 13th, and May 6th of 2020 to neutralize the balance sheet impact of member banks participating in these programs.[42] Similarly, use of the discount window or standing repo facility

---

[38] "These facilities will serve as backstops in money markets to support the effective implementation of monetary policy and smooth market functioning." See *Statement Regarding Repurchase Agreements* (July 28, 2021), *available at* https://www.newyorkfed.org/markets/opolicy/operating_policy_210728

[39] Gara Afonso et al., *The Fed's Latest Tool: A Standing Repo Facility* (Jan. 13, 2022), *available at* https://libertystreeteconomics.newyorkfed.org/2022/01/the-feds-latest-tool-a-standing-repo-facility/

[40] *Supra* note 24.

[41] Temporary Expanded Collateral Repo Facility – Market Notice (Oct. 10, 2022), *available at* https://www.bankofengland.co.uk/markets/market-notices/2022/october/temporary-expanded-collateral-repo-facility-market-notice-10-october-2022.

[42] "The Office of the Comptroller of the Currency, the Board of Governors of the Federal Reserve System, and the Federal Deposit Insurance Corporation are adopting as final the revisions to the regulatory capital rule and the liquidity coverage ratio (LCR) rule made under three interim final rules published in the Federal Register on March 23, April 13, and May 6, 2020. The agencies are adopting these interim final rules as final with no changes. Under

(expanded to non-Treasury collateral or not) would also require relief from regulatory capital and leverage rules in order to enable member bank participation.

In order to justify and trigger such regulatory relief, the Fed, OCC, and FDIC would likely require an event, such as the distressed market conditions that led to the creation of the specific programs in March – April 2020. In the case of a standing facility such as the discount window or repo, a new program is not being created – in fact, that is a key objective of using standing facilities. In this circumstance, we recommend that federal banking regulators borrow the concept of a "Liquidity Event" from Section 1105 of DFA.[43] This term fits the circumstances in February and March of 2020 and, we believe, other potential future stressed market conditions warranting Fed intervention. Designation of a Liquidity Event for specified markets could represent the condition that would warrant a similar temporary relief from regulatory capital and leverage ratio requirements as were implemented in March of 2020; and would enable eligible entities, including banks and broker dealers within bank holding companies, to use the standing facilities available to them under Sections 10B and 14 of the FRA, as well as any emergency facilities created under Section 13(3) to provide liquidity to the specified markets through intermediation and balance sheet expansion. Specifically then, the regulatory agencies should hard – code into regulation a similar concept to provide for standing capital relief when a similar market conditions obtain.

V. Conclusions

The Fed has various means at its disposal to address liquidity crises, which if not timely addressed can also lead to insolvencies and a full-blown financial crisis.[44] However, each of the tools available to the Fed – emergency lending under FRA 13(3), the discount window under FRA 10B and 13(2), and standing bank repo facilities under FRA 14 – have limitations that hamper their effectiveness. In part, the limitations of emergency lending and the discount window derive from the Fed's own management of these facilities – with a degree of either a political or financial stigma associated with their use. And the standing repo facility cannot be employed for private market securities without further legislation, which Congress may be in no mood to approve.

The only broadly available standby facility that federal banking regulators can freely use by regulation (Regulation A) is the discount window. It enables a wide range of borrowers and a wide range of collateral (security types).[45] By establishing the extent of "discount" for differing collateral and the term of the loan, the Fed can assure that it is not taking credit risk that, under our regulatory regime, would require a Treasury backstop. The practical limitation of the discount window is the ability of banks and bank holding companies to satisfy the stringent capital and leverage requirements associated with a significant expansion of bank balance sheets, as may occur if major banks were encouraged to provide liquidity to the system in a crisis. However, this can be addressed using something along the lines of the interim final rule such as the Fed, the OCC and the FDIC employed in March 2020 to temporarily waive these requirements. The remaining challenge is to have a clearly

---

this final rule, banking organizations may continue to neutralize the regulatory capital effects of participating in the Money Market Mutual Fund Liquidity Facility (MMLF) and the Paycheck Protection Program Liquidity Facility (PPPLF), and are required to continue to neutralize the LCR effects of participating in the MMLF and the PPPLF. In addition, Paycheck Protection Program loans will receive a zero percent risk weight under the agencies' regulatory capital rules." *Treatment of Certain Emergency Facilities in the Regulatory Capital Rule and the Liquidity Coverage Ratio Rule*, 85 Fed. Reg. 68243 (Oct. 28, 2020). Federal Register at 68243.

[43] *Supra* note 22.

[44] The banking crisis of March – April 2023 was not a Liquidity Event. Consequently, the conclusions drawn here are not intended to apply to that circumstance.

[45] *Supra* note 30.

defined trigger to set this programmatic strategy in motion. It is our recommendation that the Fed and other applicable agencies hard-code the concept of a "Liquidity Event", such as defined in Section 1105 of the Dodd – Frank Act, into capital and leverage requirements. If for instance, relying on input from the open market desk of the Federal Reserve Bank of NY, the Board and other applicable agencies declared such an event with respect to designated markets, then pre-established rulemaking and discount window directives could be timely set in motion to respond to emerging liquidity crises. This would enable a modern-day solution to Owen's original problem – preventing panics. The problem of stigma can be overcome in these circumstances when, at the urging of the Fed, multiple bank broker/dealers are enlisted to participate.