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Steven Kelly
Yale School of Management

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United States: Municipal Liquidity Facility[1]

Steven Kelly[2]

Yale Program on Financial Stability Case Study
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Abstract

In March 2020, the COVID-19 pandemic caused severe financial stress for state and local municipalities. Municipalities' public health responses led to material increases in expenditures. At the same time, many municipalities faced revenue delays and declines due to extended tax deadlines and disruptions in taxable economic activity. Institutional investors also put heavy selling pressure on municipal bonds. In response to stresses in the municipal financing market, the Federal Reserve invoked its Section 13(3) emergency lending authority and created the Municipal Liquidity Facility (MLF). The Fed created the facility to backstop municipal entities' access to capital markets to help them manage cash flow disruptions and higher borrowing needs. The MLF was available to purchase up to $500 billion of notes directly from large municipal issuers. These Fed credit extensions came with maturities up to three years and at fixed, rating-dependent spreads above the comparable overnight indexed swap rates. The Treasury secretary committed $35 billion allocated by the Coronavirus Aid, Relief, and Economic Security (CARES) Act as an equity layer for the MLF; this provided the Fed with first-loss protection. The Fed received extensive feedback from legislators and municipalities, and it eased the MLF's eligibility criteria, maturity, and interest rates between April and August 2020. The facility ultimately had low utilization compared to its capacity, purchasing just $6.6 billion of bonds across four issues. However, the Fed argues that the announcement of the facility as a market backstop improved market conditions. Liquidity and credit conditions in the municipal market staged a rapid recovery after the announcement of the MLF; in 2020 as a whole, municipal issuance volume reached a record $474 billion. However, municipal spreads remained elevated throughout 2020 relative to pre-pandemic spreads, especially among lower-rated issues.

Keywords: CARES Act, COVID-19 crisis, Federal Reserve, market liquidity, municipal debt, Section 13(3)

[1] This case study is part of the Yale Program on Financial Stability (YPFS) selection of New Bagehot Project modules considering market support programs in response to COVID-19. Cases are available from the *Journal of Financial Crises* at https://elischolar.library.yale.edu/journal-of-financial-crises/.

[2] Research Associate, YPFS, Yale School of Management.

Overview

In March 2020, the COVID-19 pandemic caused severe dislocations in many areas of the US economy and financial markets. This created material stress for the finances of state and local municipalities (Gillers 2020a; 2020b; Zuckerman, Gillers, and Verlaine 2020).

In 2019, the state and local sector contributed 8.5% of US gross domestic product—more than twice as much as the federal government. The outstanding market of municipal bonds exceeded $3.5 trillion, and state and local governments employed 20 million workers (Haughwout, Hyman, and Lieber 2020).

Municipalities played a substantial role in the public health response to the pandemic, leading to material increases in expenditures (FRB 2020m). At the same time, many municipalities faced revenue delays and declines as they extended their tax deadlines (following the federal tax-filing extension) and as the pandemic disrupted economic activity (FRB 2020m; Harrison and Gillers 2020).

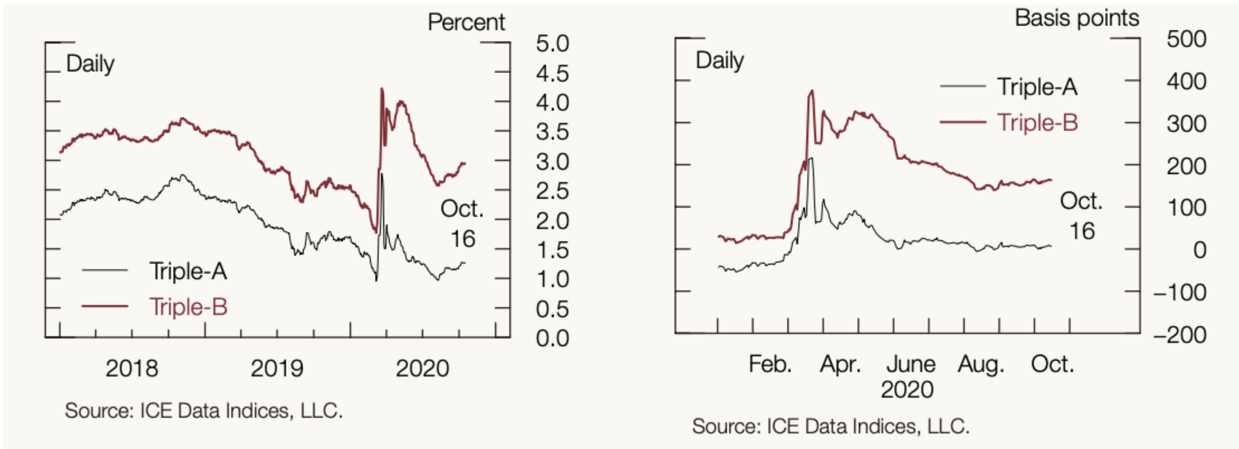
Institutional investors also put heavy selling pressure on municipal bonds (GAO 2020, 36). While municipal debt mutual funds had been experiencing steady inflows—$90 billion in 2019 and $22 billion in the first two months of 2020—the funds experienced outflows of $43 billion in March 2020 (Cipriani et al. 2020). Municipal bond spreads, which had been slightly negative before the pandemic, rose to a high of 276 basis points (bps) on March 23, 2020 (GAO 2020, 36); see Figure 1. This selling pressure left limited demand for new issues (Cipriani et al. 2020); see Figure 2.

Key Terms

Purpose: To "help state and local governments manage cash flow stresses caused by the coronavirus pandemic" and ensure the "smooth functioning of the municipal securities market"

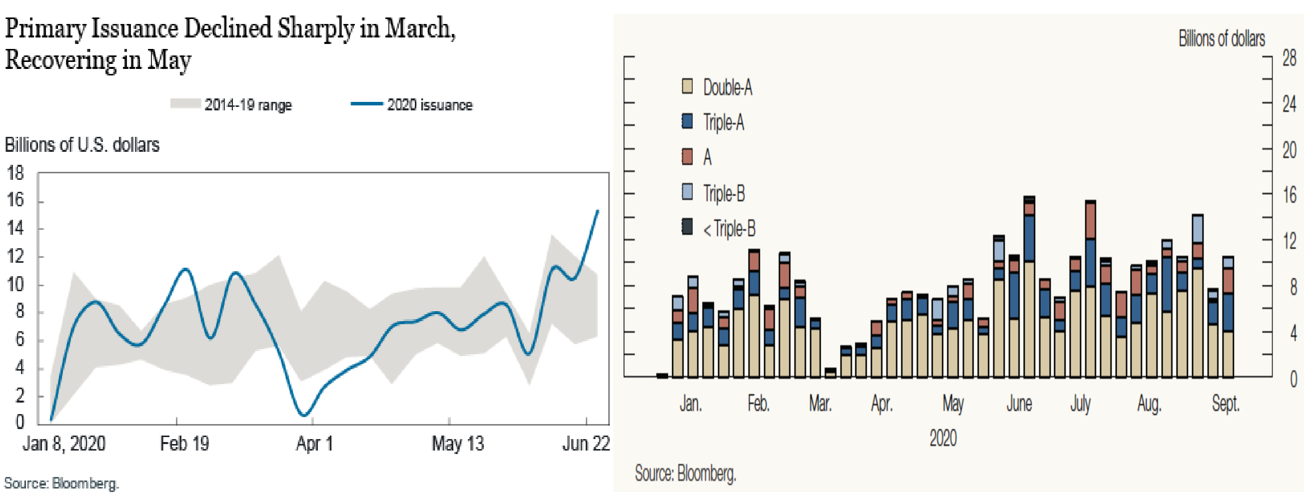
Launch Dates	Authorized: April 8, 2020 Announced: April 9, 2020
Operational Date	May 26, 2020
End Date	December 31, 2020
Legal Authority	Section 13(3) of the Federal Reserve Act
Sources of Funding	Federal Reserve Bank of New York US Treasury
Administrator	Federal Reserve Bank of New York
Overall Size	$500 billion
Purchased Assets	Short-term US municipal bonds of states, multistate entities, large or designated cities and counties, and designated revenue bond issuers
Peak Utilization	$6.4 billion outstanding

Figure 1: Municipal Security Yields (Left) and Spreads to Treasuries (Right), by Credit Rating



Source: FRB 2020o, 10.

Figure 2: Weekly Issuance of Municipal Debt, Relative to Prior Years (Left) and by Credit Rating (Right)



Sources: Cipriani et al. 2020; FRB 2020o, 11.

Against this backdrop, the Federal Reserve invoked its Section 13(3) emergency lending authority on April 8, 2020, with the approval of the Treasury secretary, and announced the Municipal Liquidity Facility (MLF) on April 9 (FRB 2020e; FRB 2020h). The Fed created the facility to backstop access to capital market financing for municipal entities and help them manage cash flow disruptions and higher borrowing needs amid a period of economic stress (FRB 2020h; Powell 2021). The facility was allowed to hold up to an aggregate $500 billion of notes from the largest municipal note issuers. The MLF was available to purchase notes with maturities up to three years at a fixed, rating-dependent spread above market expectations for the Fed's policy rate (FRB 2020d). The Treasury secretary committed

$35 billion to the MLF from funds appropriated to the Exchange Stabilization Fund under Section 4027 of the Coronavirus Aid, Relief, and Economic Security (CARES) Act. The injection of CARES Act funds took the form of an equity injection and provided the Fed with first-loss protection (FRB 2020m).

The MLF made four purchases, two each from the State of Illinois and the Metropolitan Transit Authority of New York (FRB 2021a; Labonte 2021, 6). The facility also participated as a backstop for an unnamed county government in two competitive sales, but other investors ultimately purchased the county's notes. Three additional entities—a state, a county government, and a transit entity—explored usage of the MLF, with the latter two filing notices of intent to participate (GAO 2021, 31). MLF officials confirmed to YPFS that because credit was not extended, the Fed will not disclose the identities of these parties.

The facility peaked at $6.4 billion outstanding and made a total $6.6 billion of purchases (Clarida, Duygan-Bump, and Scotti 2021, 12; FRBNY 2021c, 31). As of February 28, 2022, the facility had reported revenue of approximately $161 million, and the Federal Reserve continued to expect to experience no losses (FRB 2022a). Upon the ultimate wind-down of the facility, the MLF will distribute 90% of any net profits to the Treasury and the remaining 10% to the Federal Reserve Bank of New York (FRBNY) (FRBNY 2021a).

Summary Evaluation

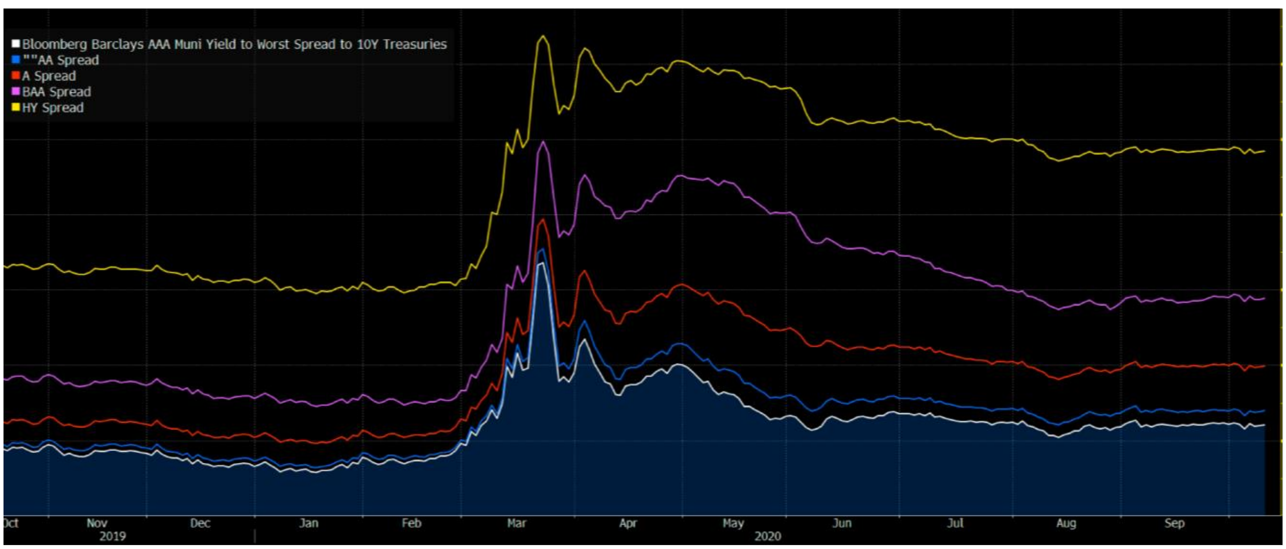
While the facility had low direct utilization relative to its capacity, conditions in the municipal market rapidly improved after the announcement of the MLF (Clarida, Duygan-Bump, and Scotti 2021, 16–17; Powell 2020). Municipal securities not directly eligible for the facility also experienced improved market conditions, as the Fed intended (GAO 2020, 36–37; Powell 2020). Fed officials argue that these developments showed that the facility was effective in delivering a backstop to the municipal market (Clarida, Duygan-Bump, and Scotti 2021, 17; Powell 2021). While the MLF was active, municipal issuers borrowed $380 billion in the private markets; in 2020 as a whole, municipal bond issuance reached a record $474 billion (FRBNY 2021c, 31; Powell 2021).

Others argue that liquidity for municipal issuers remained constrained, noting that municipal spreads remained elevated relative to pre-pandemic spreads, especially among lower-rated issues (FRB 2020o, 10); see Figures 1 and 3. They suggest that the Fed should have offered more generous interest rate and maturity terms to the municipal bond market, as they argue the Fed had done for corporate bonds (COC 2020c, 29–39; CPC 2020; GAO 2021, 32–33; Tlaib 2020).

Several studies from various Fed reserve banks point to improvements in municipal market pricing resulting from the announcements of the MLF and related Fed programs (Bernhardt, D'Amico, and Sordo Palacios 2020; Fritsch, Bagley, and Nee 2021; Haughwout, Hyman, and Shachar 2021). Staff at the Federal Reserve Bank of Cleveland use event studies to show that the two entities that issued debt to the MLF also saw improvement in the secondary market pricing of their bonds (Fritsch, Bagley, and Nee 2021). Researchers at the Federal Reserve Bank of Kansas find that the MLF reduced investors' assessment of credit risk among short-maturity municipal bonds (Bi and Marsh 2021). Similarly, FRBNY staff find a reduction of perceived credit risk of lower-rated eligible issuers; this paper also finds improved employment responses from local governments, particularly highly rated ones (Haughwout, Hyman, and Shachar 2021).

A separate FRBNY note shows that municipal bond mutual funds experienced only slight outflows in April 2020 and returned to inflows in May (Cipriani et al. 2020). Another paper coauthored by Fed economists shows that dealers were unwilling to increase their inventories of municipal bonds held by mutual funds—those most exposed to sell-offs; this raised those securities' yields even after the market volatility had passed (Li, O'Hara, and Zhou 2022). The authors argue it was "likely" that dealers' reluctance to finance municipal bonds, especially those most exposed to sell-offs, reflected the Fed's choice not to stand up a secondary market facility for municipal bonds. More than 40 members of Congress, two of the four members of the Congressional Oversight Commission (COC), and other stakeholders called for the Fed to further target municipal credit spreads by creating a secondary market facility akin to its facility for corporate bonds (COC 2020c, 44–46; Kelly 2021). A Fed official testified that, while the Fed had that capability, the intelligence it was sourcing from market participants suggested a secondary market facility was not necessary (COC 2020c, 124).

Figure 3: Municipal Spreads to 10-Year Treasuries, by Credit Rating



Source: COC 2020c, 99; "HY" stands for high-yield: sub-investment-grade bonds.

Context: United States 2019–2020	
GDP (SAAR, nominal GDP in LCU converted to USD)	\$21.694 trillion in 2019 \$21.477 trillion in 2020
GDP per capita (SAAR, nominal GDP in LCU converted to USD)	\$65,280 in 2019 \$63,414 in 2020
Sovereign credit rating (five-year senior debt)	Data for 2019: Moody's: Aaa S&P: AA+u Fitch: AAA Data for 2020: Moody's: Aaa S&P: AA+u Fitch: AAA
Size of banking system	\$13.825 trillion in 2019 \$15.882 trillion in 2020
Size of banking system as a percentage of GDP	63.73% in 2019 73.95% in 2020
Size of banking system as a percentage of financial system	27.14% in 2019 27.30% in 2020
Five-bank concentration of banking system	45.74% in 2019 46.24% in 2020
Foreign involvement in banking system	Data not available for 2019 Data not available for 2020
Government ownership of banking system	Data not available for 2019 Data not available for 2020
Existence of deposit insurance	Yes, in 2019 Yes, in 2020
Sources: Bloomberg; World Bank Global Financial Development Database; World Bank Deposit Insurance Dataset.	

Key Design Decisions

1. **Purpose: The Fed created the MLF to support municipal funding markets by providing reasonable access to liquidity and credit for municipal entities amid pandemic-induced market stresses.**

The MLF sought to ensure "smooth functioning of the municipal securities market" to provide "credit that [would] support families, businesses, and jobs in communities, large and small, across the nation" (FRBNY 2020b).

In its first report to Congress explaining the facility's creation and terms, the Fed says it created the MLF "to help facilitate access to credit and liquidity so that state, city, and county governments are better able to manage the period of dislocations related to the pandemic." The Fed notes that pandemic-related disruptions to state and local government income, as well as increased expenses to combat the pandemic, led to a need for municipalities to issue short-term debt in an amount "expected to exceed the capacity of investors to absorb such debt at reasonable yield levels for issuers" (FRB 2020m). In its frequently asked questions released on April 27, 2020, the FRBNY notes that in addition to strong demand from issuers, the municipal market had experienced a sharp increase in sales from institutional investors (FRBNY 2020b).

2. **Part of Package: The Fed introduced the MLF on April 9, 2020, alongside the rollout of several other emergency lending measures in response to the pandemic.**

The Fed introduced the MLF on April 9, 2020, alongside several other emergency facilities in response to the volatile financial and economic conditions resulting from the pandemic. These parallel measures responded to disruptions in other pockets of financial markets—those for corporate bonds, small and medium-sized enterprise lending, and structured finance (FRB 2020h). Moreover, the Fed included short-term, money market municipal securities as eligible collateral in its Commercial Paper Funding Facility (CPFF) and Money Market Mutual Fund Liquidity Facility (MMLF) (FRB 2020f; FRB 2020g).

3. **Legal Authority: The Federal Reserve used its authority under Section 13(3) of the Federal Reserve Act to establish the MLF.**

The Federal Reserve Board authorized the MLF by invoking its authority under Section 13(3) of the Federal Reserve Act (FRB 2020a). Section 13(3) permits the Fed, "in unusual and exigent circumstances," to "discount for any participant in any program or facility with broad-based eligibility" (FRA n.d.c). The invocation of Section 13(3) allows the Fed to provide liquidity more broadly than its monetary policy and discount window authorities allow. This authority also required the approval of the secretary of the Treasury (FRA n.d.c, sec. 13(3)). Extension of the facility required a board vote and approval from the secretary of the Treasury (FRB 2020e); see Key Design Decision No. 23, Duration.

Absent the invocation of its Section 13(3) authority, the Fed could only purchase municipal obligations up to six months in maturity (FRA n.d.d, sec. 14(2)(b)). The Fed designed the MLF to purchase securities with longer terms; see Key Design Decision No. 19, Term/Repayment.

As noted in an internal Fed legal memo from 2008, the Fed Board "consistently has viewed the term 'discount' under section 13(3) as including a Reserve Bank extension of credit . . . as well as a purchase by a Reserve Bank of third-party notes" (FRB 2008). In the case of the MLF, the Fed was effecting the latter function.

Using funds provided by Section 4027 of the CARES Act, the Treasury secretary provided first-loss equity protection for the facility (FRB 2020m).

4. Use of SPV: The FRBNY established a special purpose vehicle (SPV) to operate the MLF.

The FRBNY established a special purpose vehicle, Municipal Liquidity Facility LLC, to purchase eligible notes. The Department of the Treasury committed to a $35 billion equity investment in the SPV (FRB 2020d). The FRBNY funded the SPV on a recourse basis, charging the interest rate on reserves and secured by all the assets of the SPV (FRB 2020a; FRBNY 2020f, 12).

The Fed has viewed use of the SPV structure as providing management, accounting, and legal advantages to an intervention—especially when the Fed operates multiple 13(3) programs in parallel. (See also Geithner, Bernanke, and Paulson 2020, 156–158.) Use of an SPV allows the Fed to better tailor a 13(3) program to the goals of the intervention (Baxter 2009, 12–13). Each intervention has its own specific terms, timeline, capital structure, and management team. The management teams may also be in geographically separate reserve banks, depending on which one(s) is administering a given intervention.

The SPV structure simplifies the reporting of income and the management of any sales of assets discounted by the facility. As noted in Key Design Decision No. 8, Disclosure, the Fed provided separate annual financial statements for the MLF that were independently audited by an outside accounting firm. These statements provided greater detail and transparency than existed for Fed facilities that did not utilize the SPV structure (Bernanke, Geithner, and Paulson 2020, 157; FRB 2022b). Moreover, the degree of corporate separation from both the Fed and other 13(3) interventions provided by an SPV structure may provide those other entities some protection in the event a 13(3) program is sued.

SPVs are also typically easy and inexpensive to set up. The Fed has viewed its creation of the structures as falling under the "incidental powers as shall be necessary to carry on the business of banking within the limitations" of the Federal Reserve Act (FRA n.d.a; Bernanke, Geithner, and Paulson 2020, 156).

5. Administration: The Federal Reserve Bank of New York established and operated the MLF special purpose vehicle, and it enlisted several vendors to help with the facility's operational capabilities.

The FRBNY established and operated the MLF (FRBNY 2020f). To assist with the rollout and administration of the facility, the FRBNY also hired four law firms to provide legal services and enlisted several vendors to help with the facility's operational capabilities (FRBNY n.d.).

The FRBNY hired PFM Financial Advisors (PFM) through a request-for-proposal (RFP) process on April 22, 2020, to advise the FRBNY "with respect to program design for administration" and work with the FRBNY and other vendors "to help ensure operational readiness of the MLF," for which the FRBNY was targeting "mid-May 2020." The Fed picked PFM based on its experience and expertise, as well as PFM's assurances that it could "effectively advise the [FRBNY] within the short timeframe outlined" in the RFP (FRBNY 2020a; FRBNY 2020e).

The FRBNY hired BLX Group LLC (BLX) as its administrative agent. In this role, BLX received potential issuers' notices of interest and applications. BLX reviewed the notices and applications based on the Fed's criteria and was available to answer questions. Decisions to purchase remained the purview of the MLF, and all purchase eligibility was subject to review by the Fed (FRB 2020d; FRBNY 2020g).

The FRBNY retained the Bank of New York Mellon (BNYM) and one of its affiliates through an RFP process to serve as the custodian, administrator, and investment manager of the MLF, as well as to provide other ancillary services not covered in the RFP. The FRBNY chose BNYM and its affiliate primarily for their "operational capabilities and favorable pricing." The Fed retained a second BNYM affiliate on a short-term basis to provide settlement and competitive bidding–related services for the MLF. The FRBNY chose this affiliate primarily to hasten the rollout of the MLF given the affiliate's "experience in the municipal securities market, its operational capabilities, and synergies with the other BNYM affiliates" (FRBNY 2020a).

The FRBNY also hired Eaton Vance Management (EVM) through an RFP process to provide credit risk services to the MLF. EVM was responsible for monitoring the credit risk of issuers to the MLF and providing the MLF with "credit opinions, regular portfolio risk and analytics reporting, and updates on current conditions and trends in the municipal securities market" (FRBNY 2020a).

6. Governance: The MLF was subject to oversight and audit from committees in both houses of Congress, the Congressional Oversight Commission, the Government Accountability Office, and the Fed's inspector general.

As the MLF was authorized under Section 13(3) of the Federal Reserve Act, the Fed was required to submit a report to the Committee on Banking, Housing, and Urban Affairs of the Senate and the Committee on Financial Services of the House of Representatives within seven days of authorizing the facility. The report needed to describe "the justification for the exercise of authority to provide such assistance; the identity of the recipients of such assistance; the date and amount of the assistance, and form in which the assistance was provided; and the material terms of the assistance" (FRA n.d.c).

Furthermore, the Section 13(3) statute required the Fed submit an updated report every 30 days on the details of any outstanding credit under 13(3) lending facilities. The law calls for such reports to contain updates on "the value of collateral; the amount of interest, fees, and other revenue or items of value received in exchange for the assistance; and the expected or final cost to the taxpayers of such assistance" (FRA n.d.c). The reports that the Fed submitted for the MLF program disclose "the names and details of participants . . .; amounts borrowed and interest rate charged . . .; and overall costs, revenues, and fees" of MLF credit extension (FRB 2020i).

As a recipient of the funds allocated under the CARES Act's Section 4027, the MLF was also subject to oversight from the Congressional Oversight Commission. A congressionally appointed oversight panel created under the CARES Act, the COC conducted ongoing oversight of the use, implementation, and effectiveness of these funds, and it was to submit regular reports to Congress (COC 2020a). The COC inquired into the Fed and Treasury's design of the MLF and the facility's effectiveness (COC 2020b; COC 2020c; UST 2020). This oversight included holding a hearing specifically on the MLF, during which the COC called several stakeholders as witnesses, including a staff member of the Fed (COC 2020c).

In addition to congressional oversight, the MLF was subject to review by the Special Inspector General for Pandemic Recovery (created by Section 4018 of the CARES Act), the Fed board's Office of Inspector General and the Government Accountability Office (GAO 2020; GAO 2021; OIG 2020; SIGPR 2020).

7. **Communication: The Fed provided regular press releases announcing the introduction of, and changes to, the MLF.**

The Fed made regular press releases accompanying decisions on the terms and regulatory rules surrounding the MLF (FRB 2020h; FRB 2020j; FRB 2020k; FRB 2020l). The Fed consistently communicated the MLF as backstopping capital markets access for municipal borrowers.

8. **Disclosure: Section 13(3) of the Federal Reserve Act required the Fed Board to provide congressional committees with regular reports regarding outstanding MLF credit, and the CARES Act required these reports be published.**

The CARES Act stipulated that the Fed make its monthly reports to the congressional committees available on its website within seven days of submitting them (CARES Act 2020, sec. 4026(b)(2)(B)).

The Fed reported aggregate MLF lending data on a weekly basis as part of the usual publication of its overall balance sheet (FRBNY 2020c). It also published annual, audited financial statements specific to the SPV, Municipal Liquidity Facility LLC; as of this writing, two have been published (FRBNY 2021b; 2022).

The Fed chair could elect to keep identifying details of individual liquidity recipients confidential in its reports to the congressional committees[3] and only release them publicly up to one year after the closure of the lending facility—the maximum delay permissible under Section 11(s) of the Federal Reserve Act (FRA n.d.b, sec. 11(s)(2)(A); FRA n.d.c, sec. 13(3)(D)). However, the Fed elected not to take this option in the case of the MLF. This contrasted with some of its other COVID-19 Section 13(3) facilities, where the Fed thought disclosing participant identities in real time would increase financial stress for the intended beneficiaries (GAO 2020, 19–20; Guida 2020). MLF officials told YPFS that the Fed assessed disclosure-induced stigma for borrowers to be a nonissue given that municipal issuers regularly disclose such borrowings publicly or need to get legislative or board approval, which is also a public process.

9. Size: The Fed designed the MLF to hold a maximum of $500 billion outstanding.

The Fed designed the MLF to reach up to $500 billion outstanding (FRB 2020d). The facility peaked at $6.4 billion outstanding on December 16, 2020, and made a total $6.6 billion of purchases (Clarida, Duygan-Bump, and Scotti 2021, 12; FRB 2020p; FRBNY 2021c, 31)

10. Source of Funding: Authorities funded the SPV with $35 billion equity from the Treasury secretary and a loan from FRBNY.

The Department of the Treasury committed to a $35 billion equity investment in the MLF SPV (FRB 2020d). Authorities designed the equity investment to release in two tranches of $17.5 billion, with the second tranche to be injected when the MLF SPV fell below its designed 500-to-35 gearing ratio (or at policymakers' discretion) (FRBNY 2021a). In light of the low facility utilization, officials never injected the second tranche; see Kelly 2020a and Kelly 2020b for a discussion of the unused funds (FRBNY 2021a; Kelly 2020a; Kelly 2020b).

The FRBNY funded the SPV on a recourse basis, secured by all the assets of the SPV (FRB 2020a; FRBNY 2020f, 12). The Fed used the creation of central bank reserves to fund the SPV, and the SPV on-lent the reserves (FRB 2020a; FRBNY 2021c, 42). As the facility matured and repaid its loan from the FRBNY, the Fed extinguished the reserves created by the initial extension of credit (FRB 2020p).

On January 5, 2021, the Fed transferred $11.2 billion back to the Treasury, leaving Treasury's investment at $6.3 billion, just covering the entire amount of MLF purchases, and thus still effectively protecting the Fed from any losses. As the SPV's audited financial statements for 2020 said, "this interim distribution reduced the Treasury's preferred equity to approximately the maximum risk to FRBNY" (FRBNY 2021b, 14). On November 17, 2021, the Fed and Treasury agreed to execute similar transfers of excess equity on a semiannual basis (FRBNY 2021a). The Fed then transferred $2.1 billion to the Treasury on November 19, 2021 (FRBNY 2022, 16).

[3] If the Fed chair elects to keep borrowers' identifying details confidential, Section 13(3) stipulates that "such information shall be made available only to the Chairpersons or Ranking Members of the" Senate Banking Committee and House Financial Services Committee.

11. Eligible Institutions: The MLF was initially open to all US states and the most populous cities and counties, later lowering population thresholds and adding eligibility for some additional governor-designated municipal entities.

As announced on April 9, 2020, the MLF was limited to states (including the District of Columbia), cities with greater than one million residents, and counties with greater than two million residents (FRB 2020a). On April 27, the Fed lowered the population thresholds and added multistate entity eligibility (FRB 2020j). On June 3, the Fed further eased population constraints by allowing governors to designate additional municipalities for eligibility, as described below (FRB 2020k).

To be eligible to borrow from the MLF, a municipality had to be one of the following (FRB 2020d):

- A US state, inclusive of the District of Columbia;
- A US city with more than 250,000 residents, or a designation as described below;
- A US county with a population exceeding 500,000 residents, or a designation as described below;
- A multistate entity; or
- A designated revenue bond issuer (RBI).

The MLF allowed only one issuer for a given municipality, absent approval by the Fed (FRB 2020d).

Eligibility conditions were originally narrower because the Fed was aiming to provide "access to credit through the facility to as many municipalities as possible in the shortest timeframe possible." The Fed noted that because of the size of the municipal bond market, "it would not be logistically feasible for the MLF to stand ready to quickly undertake the diligence reviews and otherwise work with borrowers in order to directly purchase notes from all municipal issuers." Moreover, in response to Congressional Oversight Commission questions, the Fed and Treasury noted (and provided some preliminary evidence supporting) that directly helping large municipal borrowers would increase the availability of private market credit for smaller borrowers (COC 2020b, 55–56).

Some state governors—those with less populous cities and counties—could designate additional cities and counties located in their states for eligibility. The total number of city/county designations granted to a governor was based on ensuring that each state had at least two cities and counties, in total, that were MLF-eligible. Whether governors chose to designate cities, counties, or both, they were to select from each group in order of population (FRB 2020d).

Each governor could also designate up to two revenue bond issuers, while the District of Columbia mayor could designate one (FRB 2020d). The Fed added the designation-based eligibility options after early feedback from potential issuers "identifying legal barriers that would frustrate indirect participation by previously ineligible entities" (COC 2020b, 56). It also progressively lowered the population thresholds to allow the facility to be more inclusive (COC 2020b, 56; GAO 2020, 13–14; Kelly 2021). For instance, the original terms for the MLF as announced on April 9 would have left the MLF available to only 10 cities and 15 counties and would have disproportionately excluded cities with large Black populations (Klein and Busette 2020).

The original, April 9, announcement did not list any credit-rating-based criteria for the MLF's purchases (FRB 2020a). The Fed added credit rating criteria in the April 27, 2020, update to the term sheet; these ratings-based criteria were unchanged for the life of the facility (FRB 2020d; FRB 2020j). For states, cities, and counties, eligibility also required a credit rating of at least BBB-/Baa3 as of April 8, 2020, by two or more major nationally recognized statistical rating organizations (NRSROs). If the entity was downgraded after that date, it needed to be rated at least BB-/Ba3 by two or more major NRSROs to still be eligible (FRB 2020d).

For multistate entities and designated RBIs, which became eligible on April 27, eligibility also required a credit rating of at least A-/A3 as of April 8, 2020, by two or more major NRSROs. If the entity was downgraded after that date, it needed to be rated at least BBB-/Baa3 by two or more major NRSROs to still be eligible (FRB 2020d).

If any of the above was rated by only one NRSRO, the post-downgrade eligibility was voided (FRB 2020b; FRB 2020d).

12. Loan or Purchase: The MLF SPV purchased eligible notes from issuers directly.

The MLF's credit extensions took the form of primary market securities purchases at the issuer's election (FRBNY 2020c). On their choice to acquire securities as the MLF's method of credit extension, the Fed and Treasury noted the MLF was able "to acquire bonds from issuers and market participants directly, relying significantly on external credit ratings in the evaluation of credit quality." They made use of standard market practices of credit extension to "maximize the effectiveness of the facilities in achieving policy aims" (COC 2020b, 67).

13. Auction or Standing Facility: The MLF was a standing facility, accessible at the issuer's election.

The MLF was a standing facility, accessible at the issuer's election (FRBNY 2020g). The issuer could sell notes directly to the MLF without undertaking a competitive sale process. Moreover, the MLF could provide a commitment to purchase any notes not awarded to other bidders in a competitive sale. The method of sale did not have any bearing on the interest rate charged by the MLF (FRBNY 2020c).

The MLF was generally unavailable to bid in a competitive sale process, instead providing a backstop for any eligible notes unallocated to other bidders. The MLF would submit a bid "only in cases where an Eligible Issuer (i) [was] required by law to sell Eligible Notes through a competitive sale process and (ii) [did] not have the authority to sell Eligible Notes directly to the SPV,[4] even following a competitive sale process in which fewer than all of the Eligible Notes are sold" (FRBNY 2020c). The MLF did participate as a backstop in two competitive sale processes for one unnamed county government; the four instances of MLF credit extension were direct sales (GAO 2021, 31).

14. Eligible Assets: Subject to the other restrictions of the facility, the MLF would purchase a wide range of notes typically issued by municipal issuers.

The MLF had the authority to purchase municipal notes structured as tax anticipation notes (TANs), tax and revenue anticipation notes (TRANs), bond anticipation notes (BANs), revenue anticipation notes (RANs), and other similar short-term notes (FRB 2020d). These notes are used to smooth municipal spending and are typically secured by expected future fiscal inflows (Haughwout, Hyman, and Lieber 2020).

TANs, TRANs, and RANs are generally supported by anticipated revenues "over the course of a fiscal year or longer, in amounts sufficient to pay off the notes by maturity"; BANs are supported by the long-term credit rating of the issuer and issued in anticipation of future bond issuance proceeds (FRBNY 2020c).

Issuers were subject to the standard initial and ongoing disclosure requirements associated with municipal security issuance. The Fed also required issuers to provide it with relevant financial information and details on the expected source of the funds intended to repay the notes (FRBNY 2020c).

15. Purchase Price: The pricing of notes issued to the MLF was determined by the interest rate schedule. A municipal issuer could issue notes to the MLF up to a total of 20% of its recent annual revenues.

The pricing of notes issued to the MLF was determined by the interest rate schedule; see Key Design Decision No. 17, Interest Rates. The method of sale did not have any bearing on the MLF's pricing (FRBNY 2020c).

A state, city, or county issuer could issue notes to the MLF up to a total of 20% of the entity's general revenue from own sources and utility revenue for fiscal year 2017. A multistate entity or designated revenue bond issuer could issue up to an aggregate amount of 20% of its gross revenue in fiscal year 2019. States could request an increase in their individual limit "in order to assist political subdivisions and other governmental entities" that were ineligible for the MLF (FRB 2020d).

16. Haircuts: The MLF purchased unsecured notes from eligible issuers. No haircut applied.

The MLF purchased unsecured notes from eligible issuers. No haircut applied.

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[4] MLF officials informed YPFS that this issue might have arisen in jurisdictions with prohibitions on selling bonds directly to the federal government.

17. Interest Rates: The Fed purchased notes at a fixed, credit-rating-adjusted spread over the going overnight index swap (OIS) rate for a comparable maturity determined on the pricing date.

The Fed hewed to the Board of Governor's Regulation A in choosing the interest rates for its facilities that intervened in primary markets, including the MLF (COC 2020c, 43; GAO 2020, 12). Regulation A details the Fed's prescribed rules for emergency lending and calls for the Fed to charge a "penalty rate" on all Section 13(3) lending. The regulation calls for the Fed to set a rate that "(A) Is a premium to the market rate in normal circumstances; (B) Affords liquidity in unusual and exigent circumstances; and (C) Encourages repayment of the credit and discourages use of the program or facility as the unusual and exigent circumstances that motivated the program or facility recede and economic conditions normalize" (Availability and Terms of Credit n.d., sec. 201.4(d)(7)). Fed officials told the Government Accountability Office that, therefore, "the facilities would experience limited participation when credit is available in the marketplace and increased participation when markets declined and there was a shortage of credit" (GAO 2020, 12).

The Fed charged issuers a fixed spread over the going overnight index swap rate for a comparable maturity (FRB 2020d). The OIS rate represents the market expectation of the Fed's short-term policy rate into the future (FRBNY 2020c). The Fed used larger spreads for issuers with lower credit ratings (FRB 2020d). The spread ranged from 100 bps to 540 bps for tax-exempt eligible notes; see Figure 4.

Figure 4: Spread over OIS Charged to Issuers for Tax-Exempt Notes

Rating*	Spread (bps)
AAA/Aaa	100
AA+/Aa1	120
AA/Aa2	125
AA-/Aa3	140
A+/A1	190
A/A2	200
A-/A3	215
BBB+/Baa1	275
BBB/Baa2	290
BBB-/Baa3	330
Below Investment Grade	540

Source: FRB 2020d.

This pricing reflected the 50-bp reduction on all MLF spreads the Fed implemented on August 11, 2020, to “ensure the MLF continues to provide an effective backstop” (FRB 2020l). This change was available retroactively to the outstanding MLF note purchase from the State of Illinois (FRB 2020n).

If interest on the note was not tax-exempt, the Fed initially arrived at the rate charged by adding the assigned credit spread for tax-exempt notes to the OIS rate and dividing by 0.65 (FRB 2020c). The Fed also made this pricing more favorable on August 11 by changing the factor to 0.70 (FRB 2020d).

18. Fees: The Fed required MLF issuers to pay an up-front free of 10 basis points of the principal borrowed.

The Fed required MLF issuers to pay an up-front fee of 10 bps of the principal borrowed. This fee could be paid out of the issuance proceeds (FRB 2020d). Origination fees, by contributing to the MLF’s earnings, were one of several measures intended to reduce the risk of the MLF to the Federal Reserve and taxpayers (FRB 2020m).

19. Term/Repayment: Notes issued to the MLF could have a maturity up to 36 months, up from 24 months in the original announcement of the facility.

As initially announced on April 9, 2020, notes issued to the MLF could have a maturity of up to 24 months (FRB 2020a). On April 27, prior to the facility becoming operational, the Fed extended the maturity limit to 36 months after feedback from potential issuers (COC 2020b, 73; FRB 2020j; GAO 2020, 14). Borrowers had the option to prepay MLF debt at no additional cost (FRB 2020d).

Many stakeholders pushed for longer terms, with several noting the discrepancy between the MLF and the corporate credit facilities, which had maturities up to five years (COC 2020c, 31–32; Kelly 2021). The extension to 36 months was "intended to provide more flexibility for issuers to manage their cash flow and liquidity challenges through the COVID-19 pandemic and uncertain economic recovery and provide more time for fiscal recovery and repayment or refinancing of the notes" (COC 2020b, 15). The Fed offered several reasons for its decision not to extend term maximums beyond three years, noting (COC 2020b, 73):

- "The MLF was not designed to provide long-term financing for capital infrastructure projects because the long-term municipal capital markets appear to have been disrupted for only a relatively short period."
- Short repayment terms are consistent with the Regulation A call for the Fed to minimize its level of intervention as unusual and exigent circumstances recede.
- Short repayment terms allow the portfolio to mature shortly after the passage of the crisis, allowing the Fed to exit the intervention passively and avoid the risk of disruptive sales.

20. Other Restrictions on Eligible Participants: MLF issuers had to certify that they were not insolvent and that they lacked adequate credit accommodations from other banking institutions. The issuers also could use the proceeds from the sale of notes for only limited purposes.

Section 13(3) of the Federal Reserve Act stipulates that recipients of liquidity under such programs cannot be insolvent (FRA n.d.c, sec. 13(3)(B)(ii)). The Fed required issuers to the MLF to attest to such, and said the issuer could comply with the solvency requirement by certifying that it was not (1) "in bankruptcy, resolution under Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act, or any other Federal or State insolvency proceeding" (as required by Section 13(3)), and that it was not (2) "generally failing to pay undisputed debts as they become due during the 90 days preceding the date of issuance" to the MLF (as prescribed by Regulation A) (FRA n.d.c, sec. 13(3)(B)(ii); FRBNY 2020d, 46).

Prior to extending credit under Section 13(3), the Fed must also "obtain evidence" that a recipient "is unable to secure adequate credit accommodations from other banking institutions" (FRA n.d.c, sec. 13(3)(A)). The Fed required each MLF issuer to certify that it lacked such credit. As the Fed noted, the issuer did not need to lack credit access altogether, but instead had to establish that credit was only available "at prices or on conditions that are inconsistent with a normal, well-functioning market" (FRBNY 2020d, 45-46).

The Fed also mandated that an MLF issuer use the loan proceeds for one of the following:

- "To help manage the cash flow impact" of higher expenses and delayed or reduced tax revenues due to the pandemic;

- To pay interest or principal on outstanding debt, or that of the issuer's political subdivisions or other governmental entities; or

- In the case of an issuer that was not a multistate entity or revenue bond issuer, to "purchase similar notes issued by, or otherwise to assist, political subdivisions and other governmental entities" for the two purposes mentioned above (FRB 2020d).

The FRBNY's frequently asked questions page for the MLF says that the Fed continued "to encourage eligible issuers to make funding from the [MLF] available to their political subdivisions and other governmental entities that are in need of such funding" (FRBNY 2020c). The Fed and Treasury have said the reasoning for this encouragement was that it was "logistically infeasible for the Federal Reserve to purchase notes directly from all U.S. municipalities" (COC 2020b, 56).

21. Regulatory Relief: The Fed and Treasury did not issue any regulatory relief with respect to the MLF.

The Fed and Treasury did not issue any regulatory relief with respect to the MLF.

22. International Coordination: The Fed and Treasury did not appear to engage in any international coordination with respect to the MLF.

The Fed and Treasury did not appear to engage in any international coordination with respect to the MLF.

23. Duration: In the Consolidated Appropriations Act, 2021, Congress mandated the MLF close on December 31, 2020.

As announced on April 9, 2020, the MLF was to be open until September 30, 2020, absent an extension from the Fed and Treasury (FRB 2020a). On April 27, 2020, the Fed announced that it extended the termination date to December 31, 2020, "to provide eligible issuers more time and flexibility" (FRB 2020j).

The Consolidated Appropriations Act, 2021, effective December 27, 2020, stipulated the MLF could not be extended or reinstated (Consolidated Appropriations Act 2020, sec. 1005). The mandated MLF closure, alongside that of the other Section 13(3) facilities that had also received CARES Act funding, was contrary to the preference of the Fed, which, in November 2020, expressed that it "would prefer that the full suite of emergency facilities established during the coronavirus pandemic continue to serve their important role as a backstop for our still-strained and vulnerable economy" (Smialek and Rappeport 2020; Kelly 2020b).

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