Yale University
EliScholar – A Digital Platform for Scholarly Publishing at Yale

YPFS Documents (Series 1) Browse by Media Type

10-1-2021

Federal Reserve Lending Programs: Credit Markets Served by the Programs Have Stabilized, but Vulnerabilities Remain

United States: Government Accountability Office (GAO)

Follow this and additional works at: https://elischolar.library.yale.edu/ypfs-documents

Recommended Citation
United States: Government Accountability Office (GAO), "Federal Reserve Lending Programs: Credit Markets Served by the Programs Have Stabilized, but Vulnerabilities Remain" (2021). *YPFS Documents (Series 1)*. 11848.
https://elischolar.library.yale.edu/ypfs-documents/11848

This Document is brought to you for free and open access by the Browse by Media Type at EliScholar – A Digital Platform for Scholarly Publishing at Yale. It has been accepted for inclusion in YPFS Documents (Series 1) by an authorized administrator of EliScholar – A Digital Platform for Scholarly Publishing at Yale. For more information, please contact elischolar@yale.edu.

United States Government Accountability Office

Report to Congressional Committees

October 2021

FEDERAL RESERVE LENDING PROGRAMS

Credit Markets Served by the Programs Have Stabilized, but Vulnerabilities Remain

GAO-22-104640

GAO@100
Highlights

Highlights of GAO-22-104640, a report to congressional committees

October 2021

FEDERAL RESERVE LENDING PROGRAMS

Credit Markets Served by the Programs Have Stabilized, but Vulnerabilities Remain

Why GAO Did This Study

On July 30, 2021, the last of the 13 Federal Reserve lending facilities stopped purchasing assets or extending credit. However, some of these facilities, including facilities that were supported through Department of the Treasury funding appropriated under section 4003(b)(4) of the CARES Act, continue to hold outstanding assets and loans. The Federal Reserve will continue to monitor and manage the facilities until these assets and loans are no longer outstanding.

The CARES Act included a provision for GAO to periodically report on section 4003 loans, loan guarantees, and investments. This report examines the Federal Reserve's continued oversight and monitoring of the CARES Act facilities; what available evidence suggests about the facilities' effects on corporate credit markets, states and municipalities, and small businesses; and the characteristics of Main Street Lending Program participants, among other things.

GAO reviewed applicable laws and agency and Federal Reserve Bank documentation; analyzed agency and other data on the facilities and credit markets; interviewed Federal Reserve and Treasury officials and representatives of state and local governments; and conducted a generalizable survey of for-profit Main Street borrowers.

View GAO-22-104640. For more information, contact Michael E. Clements at (202) 512-8678 or clementsm@gao.gov.

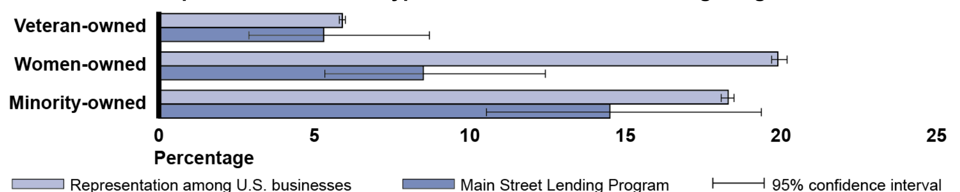
What GAO Found

The Board of Governors of the Federal Reserve System (Federal Reserve) authorized 13 lending programs—known as facilities—to ensure the flow of credit to various parts of the economy affected by the COVID-19 pandemic. The last of the nine facilities supported through CARES Act funding ceased purchasing assets, such as corporate bonds, or extending credit by January 8, 2021. As of September 1, 2021, the CARES Act facilities held about $19 billion in assets. The Federal Reserve oversight reviews completed in December 2020 identified opportunities to enhance certain areas, including internal process and controls. These reviews also identified areas for continued monitoring, such as cybersecurity and conflicts of interest. GAO found that Federal Reserve's plans for ongoing monitoring of the facilities align with federal internal control standards for ongoing monitoring of an entity's internal control system.

Available indicators suggest the facilities helped improve access to credit and liquidity in the corporate and municipal credit markets. For example, corporate bond spreads (which reflect borrowing costs) have remained low, and municipal spreads have decreased to prepandemic levels. Also, officials from state and local entities that participated in the Municipal Liquidity Facility (which targeted the municipal bond market) generally said the facility was beneficial and helped restore investor confidence in the municipal bond market. However, corporate and municipal credit markets remain vulnerable. For corporate credit markets, corporate bonds outstanding remain elevated and the high level of debt leaves businesses vulnerable to distress. Municipal credit markets also remain vulnerable because of the pandemic's extended duration, which may adversely affect local economies. According to surveys of small and independent businesses and lenders, access to credit has improved, but recovery remains slow, including for businesses in the services sector.

Loans made under the Main Street facilities (which targeted small and mid-sized businesses and nonprofits) were concentrated among small for-profit businesses in certain economic sectors, such as restaurants. According to GAO's generalizable survey of Main Street borrowers, an estimated 88 percent said that the program was "very important" in helping them maintain operations. Women-owned businesses participated at lower rates compared to their representation among U.S. businesses. Although estimates of veteran- and minority-owned business participation were somewhat lower compared to their representation among U.S. businesses, the differences were not statistically significant (see figure).

Estimated Participation of Business Types in the Main Street Lending Program



Source: GAO survey of program participants; U.S. Census Bureau's 2019 Annual Business Survey. | GAO-22-104640

Contents

Letter		1
	Background	4
	CARES Act Facilities Ceased Extending Credit and Purchasing Assets Based on Legal Requirements	9
	The Federal Reserve's Oversight of Facilities Identified Improvement Opportunities and Focus Areas for Ongoing Monitoring	11
	Corporate Credit Market Risks Have Remained Low since Mid-2020, but Longer-Term Uncertainties Remain	16
	Municipal Credit Market Outlook Remains Uncertain, and Participants Found the Municipal Liquidity Facility Beneficial	28
	Small Businesses' Access to Credit Has Improved, and the Main Street Loans Were Concentrated in Certain Sectors	33
	Agency Comments	45
Appendix I	Objectives, Scope, and Methodology	48
Appendix II	Selected Indicators of Credit Markets for Corporations, State and Local Governments, and Small Businesses	53
Appendix III	Results of GAO's Survey of Main Street Lending Program Borrowers	60
Appendix IV	GAO Contact and Staff Acknowledgments	63
Tables		
	Table 1: Summary of Phase Three Oversight Focus Areas Identified by the Federal Reserve's Division of Reserve Bank Operations and Payment Systems	13
	Table 2: Total Amount Loaned through the Main Street Lending Program and Amount Loaned Relative to Gross Industry Output, by Economic Sector	40
	Table 3: Survey Population, Sample Size, and Percentage of Valid Survey Responses	60

Table 4: Is your business minority-owned? (A business is minority-owned if it is at least 51 percent owned and controlled by individuals who identify as members of one of the following groups: Black Americans, Hispanic Americans, Native Americans, Asian Pacific Americans, and Subcontinent Asian Americans.) 60
Table 5: Is your business women-owned? (A business is women-owned if it is at least 51 percent owned and controlled by individuals who identify as women.) 60
Table 6: Is your business veteran-owned? (A business is veteran-owned if it is at least 51 percent owned and controlled by one or more veterans.) 61
Table 7: How important was a Main Street loan in helping your business maintain ongoing operations? 61
Table 8: How would you rate the process of finding a lender that offered Main Street loans? 61
Table 9: Approximately how many full-time equivalent employees does your business currently have? 62

Figures

Figure 1: Activity Dates of Federal Reserve Lending Facilities Implemented during the COVID-19 Pandemic 8
Figure 2: Current and Forward Measures of Spreads on Short-Term Credit, January 2019–July 2021 18
Figure 3: Year-Over-Year Commercial Paper Outstanding for Large Nonfinancial Businesses, January 2019–July 2021 19
Figure 4: Spreads on Corporate Bonds, January 2019–July 2021 21
Figure 5: Annual Cumulative Issuances of Corporate Bonds, January 2019–July 2021 22
Figure 6: Nonfinancial Corporate Bonds Outstanding, First Quarter 2019–Second Quarter 2021 23
Figure 7: Year-Over-Year Corporate Bankruptcy Filings with Liabilities Exceeding $50 Million, January 2019–July 2021 24
Figure 8: The Secondary Market Corporate Credit Facility's Methodology for Purchasing Corporate Bonds 26
Figure 9: Corporate Bonds Purchased by the Secondary Market Corporate Credit Facility, by Sector, as of May 31, 2021 27
Figure 10: Spreads on Municipal Bonds, January 2019–July 2021 29
Figure 11: Annual Cumulative Issuances of Municipal Bonds, January 2019–July 2021 30

Figure 12: Small Businesses' Views on Credit Conditions, January 2019–July 2021 34
Figure 13: Banks' Lending Conditions for Small Business Loans, First Quarter 2019–Third Quarter 2021 36
Figure 14: Loans Made Through the Main Street Lending Program, by Loan Size 39
Figure 15: Total Dollar Amount Loaned through the Main Street Lending Program, by Metropolitan Area 42
Figure 16: Estimated Participation of Business Types in the Main Street Lending Program, Compared to Their Representation among U.S. Businesses 44
Figure 17: Annual Cumulative Triparty Repurchase Agreements of Corporate Securities, January 2019–June 2021 54
Figure 18: Spreads on 90-day Commercial Paper for Large Nonfinancial Businesses, January 2019–July 2021 55
Figure 19: Year-Over-Year Prime Money Market Funds Outstanding, January 2019–June 2021 56
Figure 20: Annual Cumulative Issuances of Asset-Backed Securities, January 2019–July 2021 57
Figure 21: State and Local Government Bonds Outstanding, First Quarter 2019–Second Quarter 2021 58
Figure 22: Small Business Loans Outstanding, First Quarter 2019–First Quarter 2021 59

Abbreviations

COVID-19	Coronavirus Disease 2019
Federal Reserve	Board of Governors of the Federal Reserve System
FRA	forward rate agreement
LIBOR	London Interbank Offered Rate
NAICS	North American Industry Classification System
NFIB	National Federation of Independent Business
OIS	overnight indexed swap
RBOPS	Division of Reserve Bank Operations and Payment Systems
VRDN	variable rate demand note

This is a work of the U.S. government and is not subject to copyright protection in the United States. The published product may be reproduced and distributed in its entirety without further permission from GAO. However, because this work may contain copyrighted images or other material, permission from the copyright holder may be necessary if you wish to reproduce this material separately.

441 G St. N.W.
Washington, DC 20548

October 19, 2021

Congressional Committees

The Coronavirus Disease 2019 (COVID-19) pandemic resulted in substantial damage to the global economy and affected the stability and functioning of credit markets. In response, from March to September 2020, the Board of Governors of the Federal Reserve System (Federal Reserve) authorized 13 emergency lending programs—known as facilities—to ensure the flow of credit to various parts of the economy affected by the pandemic.[1]

Nine of the facilities received CARES Act-appropriated funds that were intended to support the flow of credit to employers, consumers, small and mid-sized businesses, state and local governments, and nonprofit organizations.[2] We refer to these nine facilities as CARES Act facilities. Additionally, the Federal Reserve established four emergency lending facilities that were not supported through CARES Act-appropriated funds (we refer to these as non-CARES Act facilities), which were intended to serve various markets and credit needs. The CARES Act facilities ceased purchasing assets or extending credit by January 8, 2021. On July 30, 2021, the last of the non-CARES Act facilities stopped purchasing assets or extending credit.

Although the Federal Reserve's facilities have stopped purchasing assets or extending credit, some of these facilities continue to hold large amounts of outstanding assets and loans. As of September 1, 2021, the CARES Act-supported facilities had about $19.3 billion in outstanding asset purchases, of which about $13.5 billion were held by the Main Street Lending Program (which targeted small and mid-sized businesses

[1]The facilities are authorized under section 13(3) of the Federal Reserve Act and approved by the Secretary of the Treasury. Section 13(3) of the Federal Reserve Act permits the Federal Reserve to provide emergency lending.

[2]In response to the national public health and economic threats caused by COVID-19, several relief laws have been enacted, including the CARES Act in March 2020. To provide economic relief, section 4003(b)(4) of the act made available at least $454 billion for the Department of the Treasury to support the Federal Reserve in establishing facilities. Pub. L. No. 116-136, § 4003(b)(4), 134 Stat. 281, 470 (2020).

and nonprofit organizations).[3] For the non-CARES Act facilities, as of August 31, 2021, the Paycheck Protection Program Liquidity Facility—the facility established to encourage use of the Paycheck Protection Program—held about $74.8 billion in outstanding loans; the other three non-CARES Act facilities had repaid all of their loans to the Federal Reserve Banks.[4] The Federal Reserve will continue monitoring and managing the facilities until no more assets or loans are outstanding.

Section 4026(f) of the CARES Act contains a provision for us to review the loans, loan guarantees, and other investments provided under section 4003 of the CARES Act and report annually until 1 year after no investments made under section 4003 remain outstanding.[5] We expanded our review to include the Federal Reserve's facilities not supported by CARES Act section 4003 because they complete the Federal Reserve's full response to the pandemic using its section 13(3) authority.[6]

This report examines (1) why the CARES Act facilities ceased extending credit and purchasing assets by January 8, 2021; (2) the Federal Reserve's oversight and monitoring of the CARES Act facilities; (3) what available evidence suggests regarding the facilities' effects on corporate credit and related markets; (4) what available evidence suggests regarding the facilities' effects on states and municipalities, and entities' experiences in accessing the Municipal Liquidity Facility; and (5) what

[3]The Main Street Lending Program comprised five facilities: Main Street New Loan Facility, Main Street Priority Loan Facility, Main Street Expanded Loan Facility, Nonprofit Organization New Loan Facility, and Nonprofit Organization Expanded Loan Facility.

[4]Since March 2020, Congress has provided commitment authority of about $814 billion for the Paycheck Protection Program under the Small Business Administration's largest guaranteed loan program—its 7(a) small business lending program. The Paycheck Protection Program loans, made by lenders but guaranteed 100 percent by the Small Business Administration, are low interest (1 percent) and fully forgivable if certain conditions are met, such as using a minimum percentage of the loan forgiveness amount for payroll costs.

[5]See GAO, *Federal Reserve Lending Programs: Use of CARES Act-Supported Programs Has Been Limited and Flow of Credit Has Generally Improved*, GAO-21-180 (Washington, D.C.: Dec. 10, 2020).

[6]We also regularly issue government-wide reports on the federal response to COVID-19. For the latest report, see GAO, *COVID-19: Continued Attention Needed to Enhance Federal Preparedness, Response, Service Delivery, and Program Integrity*, GAO-21-551 (Washington, D.C.: July 19, 2021). Our next government-wide report will be issued in October 2021, and will be available on GAO's website at https://www.gao.gov/coronavirus.

available evidence suggests about trends in small businesses' access to credit, and the characteristics of Main Street Lending Program participants.

To address the first objective, we reviewed Department of the Treasury and Federal Reserve documentation, including correspondence from the Treasury Secretary regarding the facilities. We also interviewed Treasury and Federal Reserve officials.

To address the second objective, we analyzed documentation from the Federal Reserve's Division of Reserve Bank Operations and Payment Systems (RBOPS) and relevant Federal Reserve Banks. This included their policies and procedures for the monitoring and controls of the CARES Act facilities and summaries of their completed reviews of the facilities. We also compared agency controls against selected federal internal control standards.[7] Additionally, we reviewed the Federal Reserve's periodic reports and financial statements for updates on potential and actual losses incurred by the Federal Reserve facilities.

To address the third, fourth, and fifth objectives, we analyzed the most recently available data on indicators of credit markets affected by the facilities. To identify and select potential indicators, we reviewed prior GAO work, reports and data from the Federal Reserve Board and Federal Reserve Banks, and reports and data from Bloomberg and the Securities Industry and Financial Markets Association. For our fourth objective, we interviewed the three entities (state or local governments or authorities) that participated in the Municipal Liquidity Facility. We also interviewed the three additional entities that either filed a notice of intent or communicated significant interest in accessing the facility but did not participate in the facility.

For our fifth objective, we analyzed the most recently available survey data on small business owners and lenders from the National Federation of Independent Business, the Federal Reserve Board, and the Federal Reserve Banks. Additionally, we obtained and analyzed relevant Federal Reserve data to determine characteristics of the Main Street Lending Program's participants, their geographic dispersion, the distribution of loan amounts, and their industry sector. We interviewed associations representing women- or minority-owned businesses to obtain their

[7]GAO, *Standards for Internal Control in the Federal Government*, GAO-14-704G (Washington, D.C.: September 2014).

perspectives on the Main Street Lending Program. We administered a web-based survey to a sample of for-profit Main Street borrowers. We obtained 266 responses and a survey response rate of 42 percent, and we determined these results to be generalizable to the population of businesses that participated in the Main Street Lending Program.[8]

For all objectives, where relevant, we also reviewed relevant federal laws and regulations, facilities' term sheets, and press releases announcing updates to the facilities' terms.

To assess the reliability of the data sources and indicators for the third, fourth, and fifth objectives, we reviewed documentation on data collection methodology and reviewed prior GAO work. We also reviewed the data dictionary for Main Street loan data and performed electronic testing of certain key data fields. We found that, collectively, the indicators were sufficiently reliable for the purposes of providing a general sense of how credit markets have performed and for reporting on Main Street loan data. See appendix I for more information on our scope and methodology, including our survey methodology. See appendix II for data on credit market indicators and appendix III for results of our web-based survey.

We conducted this performance audit from November 2020 to October 2021 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

Overview of the Federal Reserve System and Emergency Lending Authority

The Federal Reserve Act established the Federal Reserve System as the country's central bank.[9] The Federal Reserve System consists of three parts: the Board of Governors of the Federal Reserve System, the

[8]See app. I for more information on our survey methodology.

[9]Federal Reserve Act, Pub. L. No. 63-43, 38 Stat. 251 (1913).

Federal Reserve Banks, and the Federal Open Market Committee.[10] The Federal Reserve Board is a federal agency located in Washington, D.C., that oversees the operations of the Reserve Banks and shares with them the responsibility for supervising and regulating certain financial institutions and activities. The Federal Reserve System is divided into 12 districts, and each district is served by a regional Reserve Bank.

The Federal Reserve Board has the authority to authorize the Reserve Banks to extend credit more broadly than usual during emergencies.[11] Specifically, under section 13(3) of the Federal Reserve Act, during unusual and exigent circumstances the Federal Reserve can authorize Reserve Banks to extend credit to a broader range of borrowers.[12]

In 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act added restrictions to the Federal Reserve's section 13(3) authority.[13] The act required the Federal Reserve Board to, among other things, implement any future emergency lending through facilities with broad-based eligibility; required that emergency lending assistance be for the purpose of providing liquidity to the financial system and not to aid a failing financial company; and required the approval of the Secretary of the Treasury prior to establishing a facility. Additionally, the act required the Federal Reserve Board to promulgate a rule governing the use of section 13(3) emergency lending authority—which it did on December 18, 2015, by amending Regulation A.[14]

[10]The Federal Open Market Committee consists of the seven members of the Board of Governors, the President of the Federal Reserve Bank of New York, and four other Reserve Bank presidents who serve on a rotating basis. The committee is responsible for directing open market operations to influence the total amount of money and credit available in the economy.

[11]Reserve Banks typically lend to banks through discount window programs based on established statutory criteria. 12 U.S.C. § 347b(a). The discount window is a Federal Reserve lending program that allows eligible institutions to borrow money, usually on a short-term basis, at an above-market rate to meet temporary liquidity shortages.

[12]12 U.S.C. § 343(3). During the 2007–2009 financial crisis, the Federal Reserve invoked its section 13(3) authority to create emergency programs to stabilize financial markets and avert the failures of a few individual institutions.

[13]Pub. L. No. 111-203, § 1101, 121 Stat. 1376, 2113 (2010).

[14]80 Fed. Reg. 78959, amending 12 C.F.R. Part 201 (Regulation A). Regulation A governs extensions of credit by Federal Reserve Banks.

Federal Reserve Emergency Lending Facilities in Response to the COVID-19 Pandemic

In response to the economic disruptions caused by the COVID-19 pandemic, the CARES Act authorized at least $454 billion for Treasury to support the Federal Reserve in establishing facilities to provide liquidity to the financial system. With the Secretary of the Treasury's approval, the Federal Reserve used its authority under section 13(3) to authorize 13 emergency lending facilities. The Federal Reserve cited a number of factors in determining that unusual and exigent circumstances existed, including disruption in the financial markets, reduced availability of credit, a heightened need for credit, and an increase in business expenditures.

Nine of the 13 facilities received support from CARES Act funds:

- **Primary Market Corporate Credit Facility and Secondary Market Corporate Credit Facility.** These two facilities were designed to support large businesses by purchasing qualifying corporate bonds and other eligible assets, including corporate bond exchange-traded funds.
- **Main Street Lending Program.** Under this program, five facilities were designed to support small and mid-sized for-profit businesses and nonprofit organizations by purchasing participations in eligible loans.[15]
- **Municipal Liquidity Facility.** This facility was designed to support states, certain counties, municipalities, multistate entities, and revenue bond issuers by purchasing eligible notes that these entities issued.
- **Term Asset-Backed Securities Loan Facility.** This facility was designed to support the flow of credit consumers and businesses by providing nonrecourse loans to U.S. companies secured by qualifying asset-backed securities generally backed by recently originated consumer and business loans.[16]

To implement the CARES Act-supported facilities, the Federal Reserve used legal entities known as special purpose vehicles to purchase qualifying assets from, or initiate lending to, eligible entities. In this report,

[15]The Main Street Lending Program comprised five facilities: Main Street New Loan Facility, Main Street Priority Loan Facility, Main Street Expanded Loan Facility, Nonprofit Organization New Loan Facility, and Nonprofit Organization Expanded Loan Facility.

[16]A nonrecourse loan does not allow the lender to pursue anything other than the borrower's collateral, should the borrower default on a loan. The Term Asset-Backed Securities Loan Facility was previously used during the 2007–2009 financial crisis.

we refer to assets purchased and loans extended by special purpose vehicles generally as transactions by the CARES Act facilities.[17] The CARES Act required that the CARES Act facilities purchase obligations from and make loans to only businesses created or organized in the United States, and that had significant operations and a majority of employees in the United States.[18]

The five Main Street facilities required borrowers to comply with additional CARES Act requirements, including limitations on executive compensation, dividends, and equity buybacks.[19] Overall, the CARES Act facilities could support up to $1.95 trillion in transaction volume, and Treasury disbursed $102.5 billion in CARES Act funds to support the facilities. Over the life of the CARES Act facilities, they conducted about $41 billion in transactions.

The Federal Reserve, with the Treasury Secretary's approval, also established four facilities that did not receive CARES Act-appropriated funds.[20] These facilities were designed to provide liquidity to the financial sector and businesses. All four facilities stopped purchasing assets or extending credit by July 30, 2021 (see fig. 1). The non-CARES Act facilities include the following:

- **Commercial Paper Funding Facility.** This facility served as a funding backstop—an alternative funding source for borrowers unable to readily obtain credit during economic downturns—to provide liquidity for eligible U.S. issuers by purchasing their commercial paper.

[17]Federal Reserve Banks lent money on a recourse basis to special purpose vehicles that, in turn, made purchases and loans, as detailed in this report. A recourse loan allows the lender to pursue the borrower's assets in the event of a default. Treasury used CARES Act funds in making equity investments in the special purpose vehicles.

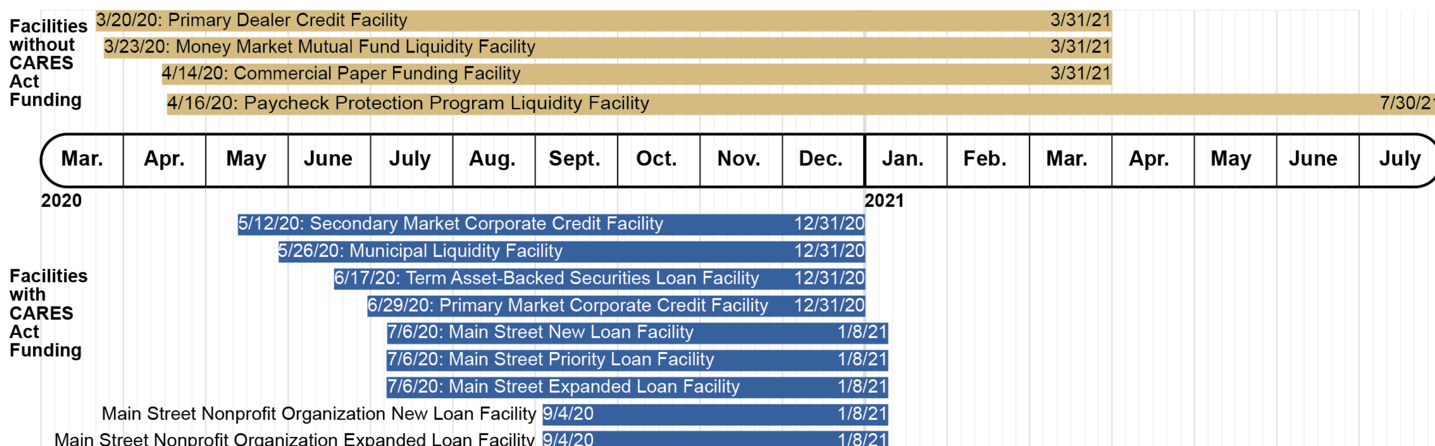
[18]Pub. L. No. 116-136, § 4003(c)(3)(C), 134 Stat. 281, 473 (2020).

[19]Pub. L. No. 116-136, §§ 4003, 4004, 134 Stat. 281, 472, 476 (2020).

[20]The Federal Reserve reinstated three emergency lending facilities that had previously been used during the 2007–2009 financial crisis: the Commercial Paper Funding Facility, the Money Market Mutual Fund Liquidity Facility, and the Primary Dealer Credit Facility.

- **Money Market Mutual Fund Liquidity Facility.** This facility assisted money market funds in meeting redemption demands by making nonrecourse loans available to eligible financial institutions.[21]
- **Paycheck Protection Program Liquidity Facility.** This facility supported institutions' lending to small businesses under the Paycheck Protection Program by making loans to eligible institutions and taking Paycheck Protection Program loans that institutions made to small businesses as collateral.
- **Primary Dealer Credit Facility.** This facility provided support to primary dealers by making loans in exchange for collateral.[22]

Figure 1: Activity Dates of Federal Reserve Lending Facilities Implemented during the COVID-19 Pandemic



Source: GAO analysis of the Board of Governors of the Federal Reserve System (Federal Reserve) documents and data. | GAO-22-104640

The Federal Reserve Banks administered the Federal Reserve's 13 facilities. The Federal Reserve's Division of Reserve Bank Operations and Payment Systems (RBOPS), which oversees the policies and operations of the Reserve Banks, is primarily responsible for the oversight of the Federal Reserve's facilities. To fulfill its responsibilities for

[21]The Money Market Mutual Fund Liquidity Facility was very similar in structure to the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility used during the 2007–2009 financial crisis, but it accepted a broader range of assets.

[22]The Primary Dealer Credit Facility differed from the facility used during the 2007–2009 financial crisis, most notably in that it allowed loans up to 90 days, while the earlier version of the facility offered only overnight loans.

overseeing the facilities on behalf of the Federal Reserve System, RBOPS developed and documented a general framework and approach to oversight, consisting of three phases:

- **Phase one.** During its initial phase of oversight, RBOPS, through communication with Reserve Bank staff, focused on providing assistance in setting up the various facilities quickly.
- **Phase two.** As the facilities became operational, RBOPS reviewed the facilities' established governance structures, process workflows, and internal control design. Its objectives were to help the Reserve Banks identify any enhancements early and obtain reasonable assurance that the design of controls and processes was adequate to ensure the facilities' effective operation.
- **Phase three.** Following the completion of phase two reviews, RBOPS plans to maintain ongoing monitoring activities. These include continued communication with Reserve Banks and periodic reviews of facility operations and controls to obtain reasonable assurance that controls are present and are functioning in a manner that addresses identified risks.

CARES Act Facilities Ceased Extending Credit and Purchasing Assets Based on Legal Requirements

In the Treasury Secretary's November 19, 2020, letter to the Federal Reserve Chair, the Secretary, citing his understanding of the CARES Act, determined that facilities supported through CARES Act funding could not be extended beyond December 31, 2020. Specifically, the Secretary referred to his understanding of the congressional intent outlined in Section 4029 of the CARES Act, which specified that the authority provided to the Federal Reserve in the CARES Act to make new loans, loan guarantees, and other investments would generally terminate on December 31, 2020.[23] According to Treasury officials, the Treasury Office of the General Counsel at that time examined whether the CARES Act-appropriated funds could support new loans or purchase new assets beyond December 31, 2020, and determined that they could not.

In his letter, the Secretary also stated that, in his view, the CARES Act facilities had achieved their objective. As examples, he cited improved financial conditions, including that investment-grade bonds, municipal bonds, and other securities' spreads (which reflect the premium

[23]Section 4029 of the CARES Act does allow for loans, loan guarantees, and other investments outstanding on December 31, 2020, to be modified, restructured, or otherwise amended after that date, provided that loans or loan guarantees are not extended beyond 5 years from their initial origination date.

borrowers pay investors for the risk of loss) had decreased; that bond issuance volumes had reached or exceeded prepandemic levels; and that banks had the lending capacity to meet borrowing needs.

Regulation A—which governs emergency lending by the Federal Reserve and requires the Treasury Secretary's approval for a facility to be renewed—does not require that the Federal Reserve consider extending facilities beyond their current end dates. Instead, Regulation A requires that the Federal Reserve terminate lending by a facility promptly upon finding that a facility's continuation is no longer warranted by market conditions, which the Federal Reserve is required to review at least every 6 months.[24] In the case of the CARES Act facilities, the Treasury Secretary's November 19, 2020, determination meant that the facilities were set to end on their existing end date of December 31, 2020. Because Regulation A does not require the Federal Reserve to consider extending facilities beyond their current end dates, and because the Secretary's determination meant he would not approve any extensions, the Federal Reserve did not need to take any specific action to consider extending or terminating lending by the facilities. Additionally, because the Federal Reserve's prior review of market conditions was within 6 months of the facilities' end date of December 31, 2020, the Federal Reserve was not required to perform another periodic review of market conditions.

The Consolidated Appropriations Act, 2021, which was enacted on December 27, 2020, codified the December 31, 2020, deadline for the CARES Act facilities, with the exception of the Main Street facilities, which it extended until January 8, 2021. According to Federal Reserve officials, the extension of the Main Street facilities allowed for the processing of previously submitted applications. The Consolidated Appropriations Act, 2021 also rescinded most of Treasury's funding for the CARES Act facilities. In accordance with the act, of the $102.5 billion that Treasury

[24]Market conditions the Federal Reserve reviews include the existence of unusual and exigent circumstances, the extent of usage of a facility, the extent to which the continuing authorization of the program or facility facilitates restoring or sustaining confidence in relevant financial markets, and the ongoing need for the liquidity support provided by a facility. If the Federal Reserve's review finds that a facility should be extended, Regulation A requires a vote by at least five members of the Federal Reserve Board that unusual and exigent circumstances exist and that conditions warrant the facility's continuation, along with the Treasury Secretary's approval. For example, in July 2020, the Board determined that unusual and exigent circumstances continued to exist and that the need for facilities remained. As a result, the Board, with the Treasury Secretary's approval, extended all of the CARES Act facilities set to end in September 2020 through December 31, 2020.

had disbursed to support the facilities, the Federal Reserve returned a little more than $62 billion to Treasury, leaving a little over $40 billion in equity to cover any potential losses the facilities incur. According to Treasury officials, Treasury used returned funds to repay borrowings under the Federal Credit Reform Act, and those funds were deposited in the General Fund.[25]

The Federal Reserve's Oversight of Facilities Identified Improvement Opportunities and Focus Areas for Ongoing Monitoring

Federal Reserve's Reviews of Facilities Identified Opportunities to Enhance Processes and Controls

As of December 2020, RBOPS had completed the second phase of its three-phase reviews for all facilities. RBOPS's phase two reviews broadly focused on the facilities' governance structures and processes and covered a range of areas related to governance and risk, collateral and credit management, processes and controls, and accounting and reporting.

RBOPS noted opportunities for enhancements in processes and controls for both CARES Act and non-CARES Act facilities and communicated these opportunities to facility management teams at relevant Reserve Banks and the Federal Reserve Board. According to RBOPS's summary documents, although the reviews identified opportunities for enhancements in certain facilities, the overall finding was that the design of controls and processes was sufficient to provide reasonable assurance that operations are being conducted effectively for each of the facilities.

[25]The Federal Credit Reform Act of 1990 requires agencies to estimate the cost to the government of extending or guaranteeing credit. This cost, referred to as subsidy cost, equals the net present value of estimated cash flows from the government (e.g., loan disbursements and claim payments to lenders) minus estimated cash flows to the government (e.g., loan repayments, interest payments, fees, and recoveries on defaulted loans) over the life of the loan, excluding administrative costs. Treasury borrowed under the Federal Credit Reform Act to support the CARES Act facilities.

RBOPS identified several enhancement opportunities in the compliance and governance, internal process and controls, and credit and collateral focus areas. These enhancement opportunities focused primarily on the need to more fully document processes and procedures. RBOPS also noted opportunities to improve a facility's credit evaluation model and to document facilities' comprehensive risk assessments. Some of these processes and documentation were not finalized or formalized early on because, according to some Federal Reserve Bank officials, the initial focus was on setting up the facilities expeditiously to provide timely assistance to struggling businesses during the pandemic. The officials said they have begun addressing RBOPS's opportunities for enhancements. RBOPS plans to follow up on the status of these enhancement opportunities as part of its phase three oversight reviews.

Federal Reserve Identified Focus Areas for Ongoing Monitoring and Plans to Apply a Risk-Based Approach Tailored to Each Facility

As part of RBOPS's third phase of its oversight framework, it has identified internal control focus areas for ongoing monitoring. According to RBOPS's documentation, the primary purpose of the ongoing monitoring is to obtain reasonable assurance that controls are present and functioning in a manner that addresses identified risks at the facilities. In planning phase three's oversight activities, RBOPS considered the results of previous oversight activities, updated risk assessments, the strategic goals of each facility, and analysis of each facility's past risk events to identify and tailor particular focus areas for each facility. Additionally, RBOPS plans to periodically reassess operational and risk factors to calibrate facilities' oversight, as needed.

In preparing for its phase three reviews, RBOPS developed a planning document that identifies internal control focus areas for continued monitoring. According to this document, RBOPS will develop detailed work plans for each focus area and will periodically review and update them as necessary. RBOPS identified the focus areas through a combination of top-down and bottom-up approaches, such as using information obtained from prior conversations and interactions with stakeholders (as an example of top-down) and using the results of phase one and phase two activities (as an example of bottom-up). In its planning document, RBOPS identifies nine focus areas for ongoing oversight attention during its phase three reviews (see table 1).

Table 1: Summary of Phase Three Oversight Focus Areas Identified by the Federal Reserve's Division of Reserve Bank Operations and Payment Systems

Focus area	Reason for inclusion
Collateral and asset management	Management of the underlying collateral, which includes decision-making on matters such as asset dispositions, loan modifications, and valuations, will remain important.
Certifications	The certifications Reserve Banks receive from program participants are a key element of the banks' accountability for determining program eligibility and controlling the risk of fraud. The Reserve Banks' procedures for maintaining, monitoring, and validating certifications received from program participants should be sufficient to reasonably demonstrate accountability.
Conflicts of interest	The Reserve Banks' policies and controls to prevent and monitor conflicts of interest among those charged with managing the programs, including third parties, serve as an important element of the Reserve Banks' accountability by controlling the risk of fraud and protecting the public interest that programs be managed for the benefit of taxpayers.
Risk management	The Reserve Banks' overall risk management program for the facilities is important to understanding and responding to risks throughout the life of the programs.
Vendor management	Because many of the programs use third parties to assist in significant aspects of facility operations, effective vendor management programs are important to managing the relationships over their life cycle from planning through off-boarding.
Cybersecurity, resiliency, and data management	Well-controlled information security and data management are important to mitigating strategic and reputational risk.
Accounting and reporting	Accounting policies and data should be appropriately considered and designed in a manner that ensures compliance with accounting principles and facilitates financial reporting.
Information systems, process, and resources	Phase two review observations for the information systems, processes, and resources focus area are consistent with risks and objectives associated with the cybersecurity, resiliency, and data management focus area for phase three.
Internal controls	Internal control design and effectiveness are subject to ongoing audit attention from the relevant Reserve Banks' internal audit functions and external auditor.

Source: GAO analysis of documentation from the Board of Governors of the Federal Reserve System (Federal Reserve). | GAO-22-104640

RBOPS has documented work plans for six of the nine focus areas listed above, detailing the methodology for continuous monitoring of each area. The three focus areas that RBOPS has not prepared work plans for are accounting and reporting; information systems, process, and resources; and internal controls. RBOPS has stated that the procedures for these three focus areas are either included in other focus areas' work plan procedures or will be carried out by other entities, such as the relevant Reserve Banks' internal and external auditors.

According to RBOPS's phase three planning documentation, because of limited oversight resources, the work plans will employ a differentiated and risk-based approach tailored to risks stemming from each facility. Additionally, the approach may include coordinating with a Reserve Bank's internal audit functions and external auditors, and possibly engaging third-party expertise.

Our review of each work plan found that the approach was generally consistent with the phase three planning documentation. Moreover, we found that facilities with the same focus area risks often had a similar monitoring approach. For example, the work plan for the collateral and asset management focus area noted that RBOPS will use the same approach to oversee third parties that provide collateral services for the Term Asset-Backed Securities Loan Facility and the Main Street facilities. Additionally, the work plans also described a general approach to perform oversight activities that applied to all facilities with similar risk areas identified in the Phase 2 review. According to the planning documents, RBOPS will consider the following criteria when determining how to allocate resources to the focus areas:

- **Direct interest.** Consider and prioritize facilities where the Federal Reserve Board or RBOPS has a direct role. This includes cases where RBOPS has a direct role, such as policy determination, credit risk, accounting policy, or financial statement preparation, in contrast to an oversight role, such as oversight of vendor management activity or information security.
- **Risk level.** Consider the residual risk of each possible oversight focus area and its impact to the overall program effort to determine appropriate RBOPS oversight and participation.
- **Subject-matter expertise.** Consider tasks where RBOPS has a high level of subject-matter expertise.
- **Commonality.** Consider tasks and matters that are common across several or all facilities, allowing RBOPS to be in a position to better identify and influence the direction of the common issues, as compared to entities focused on oversight activities at individual facilities.
- **Development.** Consider areas where active participation will be useful from the perspective of long-term RBOPS staff development.

Throughout the phase three monitoring, RBOPS plans to issue an interim report every 6 months summarizing the scope of its oversight activities and findings. The plan also states that RBOPS may periodically change the timing of the interim report, as approved by internal oversight groups and advisors. According to RBOPS, any findings or issues identified in the interim report will be communicated to the relevant facility's management team in a timely manner.

Generally, we found that RBOPS's phase three review plans for ongoing monitoring of the facilities align with federal internal control standards for

ongoing monitoring of an entity's internal control system.[26] According to the standards, management should establish and operate monitoring activities to monitor the internal control system and evaluate the results. This includes ongoing monitoring of the design and operating effectiveness of the internal control system as part of the normal course of operations. Further, management should remediate identified internal control deficiencies on a timely basis. To this end, RBOPS's plans for ongoing monitoring of the facilities include periodic reviews of program operations and controls to obtain reasonable assurance that controls are in place and functioning in a manner that sufficiently addresses identified risks. According to RBOPS officials, plans also include tracking the relevant facilities' progress in addressing the identified enhancements from RBOPS's phase two reviews. RBOPS plans to conduct ongoing follow-up on and periodic reporting of facilities' progress in incorporating the enhancements as part of its phase three reviews.

Main Street Lending Program Has Experienced and Continues to Expect Some Losses, but These Are Offset by CARES Act Funds

As of June 30, 2021, the Main Street facilities were the only facilities that had experienced losses. According to Federal Reserve officials, this is because a small number of Main Street borrowers experienced a credit event, such as a bankruptcy. These credit events have resulted in a recognized loss of about $4 million to the Main Street facilities.

Regulations governing the Federal Reserve's emergency lending authority require that loans be secured to the satisfaction of the Federal Reserve Bank making the loan. Losses in the Main Street Lending Program are covered first by fees charged and interest earned in the facility, and then by about $16.6 billion in funds that Treasury made available under the CARES Act to support the Main Street facilities. In its periodic reports to Congress, the Federal Reserve continues to state that losses in the Main Street Lending Program will not result in any losses to the Federal Reserve.

In addition to current losses, the Federal Reserve has also recorded a loss allowance in anticipation of future losses from the Main Street Lending Program. As of June 30, 2021, the Federal Reserve had recorded a loan loss allowance of about $2.5 billion, which comprises $1.27 billion in specific loss allowance and $1.26 billion in general loss

[26]GAO-14-704G.

Specific loss allowance. To generate the specific loan loss allowance, the Federal Reserve Bank of Boston evaluates loans with an outstanding balance of $15 million or greater that fail to meet certain criteria related to loan performance or credit rating to determine if it is likely the borrower will not repay all of the principal and interest.

If it is determined that a loss is likely, the Main Street facilities recognize a specific loan loss allowance for that loan. As of June 30, 2021, according to Federal Reserve officials, the total amount of the specific loan loss allowance for all such loans amounted to $1.27 billion.

General loss allowance. A loan may be subject to the general allowance either because the borrower is expected to repay all of the principal and interest, or because the balance of the loan is below the threshold for the specific loan loss allowance. The general loan loss allowance takes into account the probability that some portion of a pool of loans will default and the losses that would be incurred if loans were to default, applied to the outstanding principal of the pool of loans. As of June 30, 2021, according to Federal Reserve officials, the general loan loss allowance amounted to $1.26 billion.

Source: Board of Governors of the Federal Reserve System (Federal Reserve) documents. | GAO-22-104640

allowance, according to Federal Reserve officials (see sidebar). Borrowers under the Main Street Lending Program are required to report certain financial data to their lender quarterly, and additional information annually.[27] The Federal Reserve also analyzes all of the CARES Act facilities quarterly to determine if it is necessary to set aside an allowance for potential loan losses in accordance with generally accepted accounting principles.[28] As of March 31, 2021, only the Main Street Lending Program anticipated probable losses.

Corporate Credit Market Risks Have Remained Low since Mid-2020, but Longer-Term Uncertainties Remain

The Federal Reserve implemented emergency lending facilities to mitigate disruptions in corporate credit markets as a result of the COVID-19 pandemic.[29] We found that since mid-2020, credit risks in short-term corporate credit markets have declined and remain low relative to prepandemic levels, corporate bond issuances have increased, and

[27]For instance, borrowers are required to report total assets, total liabilities, and total revenue both annually and quarterly.

[28]The loan loss allowance does not represent incurred losses in the program—instead, it is an estimate of probable losses.

[29]The Federal Reserve established the following facilities to primarily support large businesses: Primary Dealer Credit Facility; Money Market Mutual Fund Liquidity Facility; Commercial Paper Funding Facility; Secondary Market Corporate Credit Facility; Term Asset-Backed Securities Loan Facility; and Primary Market Corporate Credit Facility.

outstanding bond balances have grown.[30] In addition, sectors hard hit by the pandemic have experienced lower bankruptcy filings in 2021 relative to 2020, but vulnerabilities remain in the corporate bond market. Although it is difficult to completely isolate the impact of the corporate credit facilities, they likely have contributed to restoring confidence among market participants through the announcement of the facilities, purchases of securities, and provision of a funding backstop.[31]

Short-Term Corporate Credit Risks Have Remained Low since Mid-2020, but Outstanding Balances Are Lower Than Prepandemic Levels

Short-term market functioning—targeted by the Commercial Paper Funding Facility, the Money Market Mutual Fund Liquidity Facility, and the Primary Dealer Credit Facility—allow companies to borrow to meet their immediate costs, such as making payroll, without the need to keep cash on hand at any given moment.[32] Since our prior report in December 2020, credit risks in short-term corporate credit markets have continued to remain low. Specifically, market metrics, including widely used measures of the level of stress in the banking system, suggest that short-term credit risks have decreased to prepandemic levels since June 2020. For example, the forward rate agreement-overnight indexed swap (FRA-OIS) spread and the TED spread—which provide a snapshot of how the market views short-term credit conditions—suggest that credit risks have

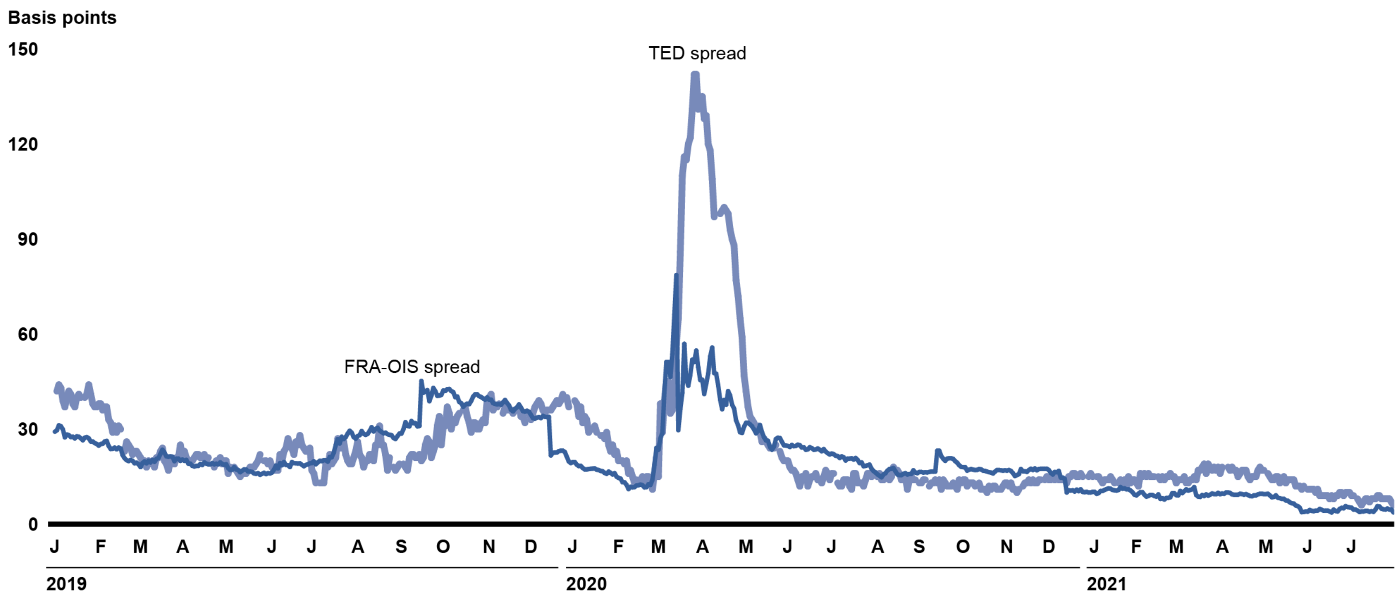
[30]This report analyzed data that were available through July 2021. Our prior Federal Reserve facilities report, which was issued in December 2020, analyzed data that were available through September 2020. See GAO-21-180.

[31]See, for example, Nina Boyarchenko, Anna Kovner, and Or Shachar, *It's What You Say and What You Buy: A Holistic Evaluation of the Corporate Credit Facilities*, Federal Reserve Bank of New York Staff Reports, no. 935 (July 2020). See also Simon Gilchrist et al., "The Fed Takes on Corporate Credit Risk: An Analysis of the Efficacy of the SMCCF," working paper no. 27809 (National Bureau of Economic Research, September 2020), accessed August 4, 2021, http://www.nber.org/papers/w27809. It is difficult to isolate the impact of the facilities because the Federal Reserve also took a number of other actions in response to market disruptions resulting from the COVID-19 pandemic, which included regulatory and monetary policy actions that supported the flow of credit to households, businesses, and the U.S. economy. See GAO-21-180.

[32]Short-term market functioning includes credit risks, liquidity risks, and market intermediation.

eased because the narrower the spreads, the lower the stress in financial markets (see fig. 2).[33]

Figure 2: Current and Forward Measures of Spreads on Short-Term Credit, January 2019–July 2021



Source: GAO analysis of Bloomberg and Federal Reserve Bank of St. Louis data. | GAO-22-104640

Note: The FRA-OIS spread is the difference between a 3-month forward rate agreement (FRA) and a 3-month overnight indexed swap (OIS). The TED spread is the difference between the 3-month London Interbank Offered Rate (LIBOR) based on U.S. dollars and the 3-month Treasury bill. A basis point is 1/100th of a percentage point.

[33]Spreads are the difference in yields between a security (such as a commercial paper) and a safer asset (such as a Treasury security) with similar timing of interest and principal payments. Spreads measure the premium investors require to hold assets that are relatively riskier than safe assets. The FRA-OIS spread is the difference between a 3-month forward rate agreement (FRA) and a 3-month overnight indexed swap (OIS). The TED spread is the difference between the 3-month London Interbank Offered Rate (LIBOR) based on U.S. dollars and the 3-month Treasury bill.

Commercial Paper

Commercial paper is short-term debt issued primarily by corporations. The commercial paper market is an important source of short-term credit for a range of financial and nonfinancial businesses that may rely on it to make payroll or for other short-term funding needs. Municipalities can also issue commercial paper for short-term funding needs, and asset-backed commercial paper finances certain consumer loans, such as auto loans. Because commercial paper involves short maturities, many businesses must frequently issue new commercial paper to pay off expiring commercial paper.

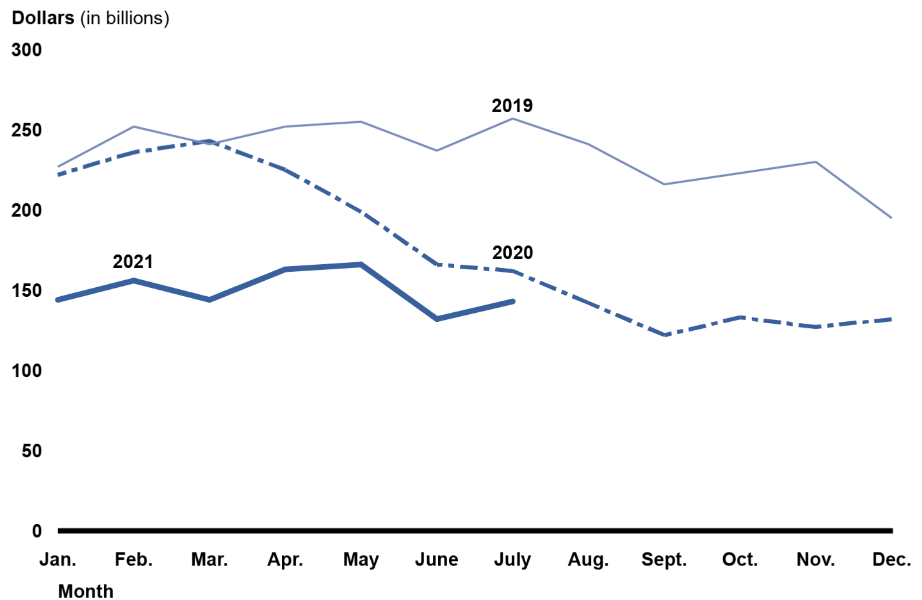
Prime Money Market Funds

A money market fund is a type of mutual fund that is required by law to invest in low-risk securities. Money market funds act as intermediaries between investors seeking highly liquid, safe investments and corporate and government entities that issue short-term debt to fund operations. Prime money market funds, one category of money market funds, primarily invest in short-term corporate and bank debt such as commercial paper, though they may also hold U.S. government-backed securities such as U.S. Treasury securities.

Source: GAO. | GAO-22-104640

However, trends of issuances and outstanding balances among commercial paper and money market funds have not recovered to prepandemic levels (see sidebar for an explanation of commercial paper and prime money market mutual funds).[34] For example, issuances and outstanding balances of commercial paper have decreased and are still lower than prepandemic levels (see fig. 3). Outstanding balances of prime money market funds have also decreased and were below prepandemic levels as of June 2021.

Figure 3: Year-Over-Year Commercial Paper Outstanding for Large Nonfinancial Businesses, January 2019–July 2021



Source: GAO analysis of Board of Governors of the Federal Reserve System data. | GAO-22-104640

Note: The data in this figure are for domestic nonfinancial commercial paper.

The reduced issuances and outstanding balances in the short-term credit markets may indicate that businesses have shifted away from short-term financing in favor of longer-term financing in the corporate bond market. In particular, debt has grown in the corporate bond market as companies increased their borrowing and refinanced their debt at low interest rates

[34]See app. II for information on the commercial paper market, prime money market, and repurchase agreement market.

and at longer maturities (as discussed later in this report).[35] This trend could adversely affect the sustainability of short-term corporate credit markets over time if the market becomes less liquid because a less liquid market is likely to be more volatile.

Corporate Bond Market Debt Remains Elevated, but Bankruptcy Filings Have Declined from 2020 Levels

The corporate bond market—which allows companies to issue debt instruments to raise money to support continuing operations, including employment and other activities such as investment and growth plans—was targeted by the Primary Market Corporate Credit Facility and the Secondary Market Corporate Credit Facility.

Spreads on Corporate Bonds

Corporate Bonds

In the corporate bond market, large companies issue and sell bonds to investors in exchange for cash. Bond investors function as lenders that generally receive payments of principal plus interest over a period of time. The borrowing cost and liquidity for companies that issue corporate bonds are largely determined by credit ratings, which are assigned by credit rating agencies and are intended to indicate the companies' investment risks and payment capabilities. Bonds rated above a certain threshold are called investment grade bonds.

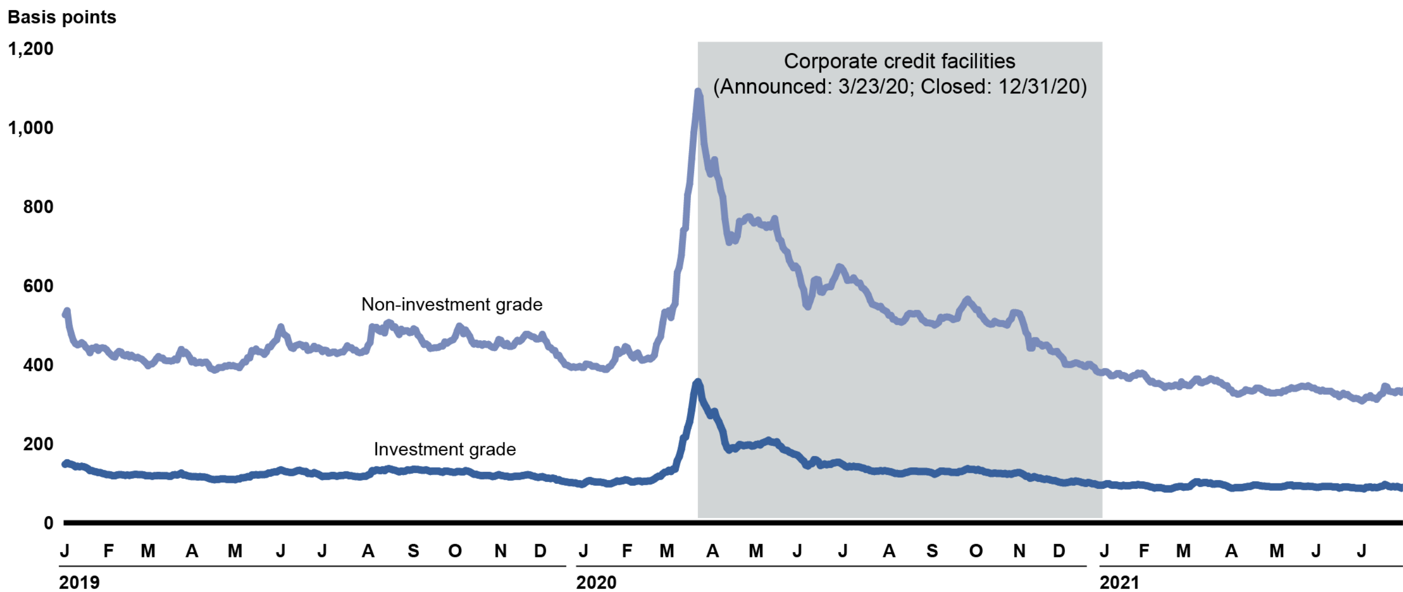
Source: GAO. | GAO-22-104640

Since our prior report in December 2020, credit risks in the corporate bond market have remained low (see sidebar for an explanation of corporate bonds). Specifically, spreads on both investment grade and non-investment-grade corporate bonds have remained low since the second half of 2020 (see fig. 4).[36] The facilities likely lowered corporate credit spreads through various means. Specifically, the announcements of the facilities may have improved confidence in the corporate bond market, thereby reducing the credit risk and the premium investors require for taking on that risk. Also, the facilities' presence served as a backstop and may have increased dealers' willingness to trade the eligible securities. Lastly, the facilities' transactions purchasing eligible debt securities may have helped increase liquidity in the markets, thereby benefitting market participants.

[35]See app. II for more information on short-term funding and credit risk, including spreads on the 90-day commercial paper market and outstanding balances of prime money market funds.

[36]The Primary Market Corporate Credit Facility and the Secondary Market Corporate Credit Facility expired on December 31, 2020. The Primary Market Corporate Credit Facility did not conduct any transactions.

Figure 4: Spreads on Corporate Bonds, January 2019–July 2021



Source: GAO analysis of Bloomberg Fixed Income Credit Monitor data. | GAO-22-104640

Note: Data represent option-adjusted spreads on dollar-denominated investment-grade and non-investment-grade bonds. A basis point is 1/100th of a percentage point.

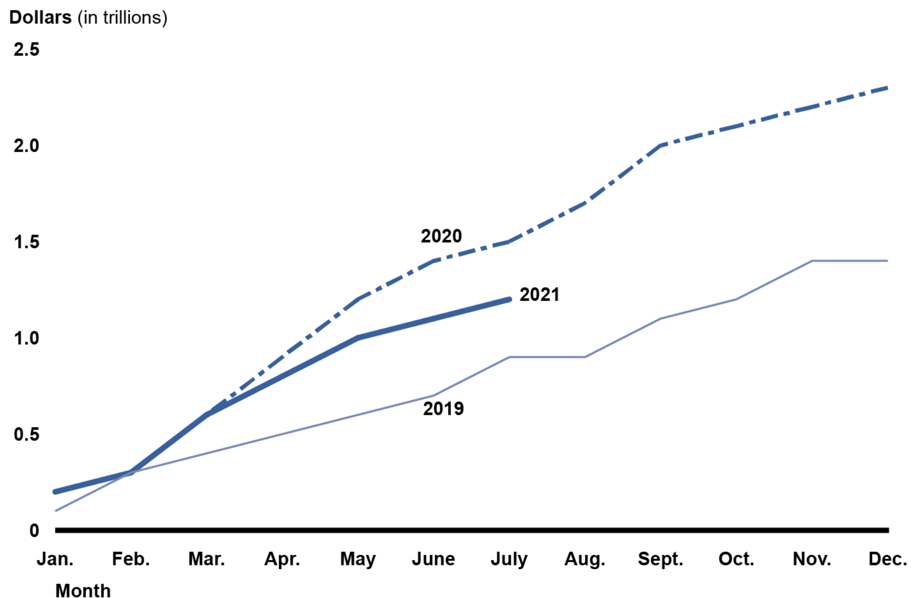
On June 2, 2021, the Federal Reserve Bank of New York announced that the Secondary Market Corporate Credit Facility would begin sales of its holdings of corporate bond exchange-traded funds on June 7, 2021. On July 8, 2021, the Reserve Bank announced that the facility also would begin sales of its corporate bond holdings on July 12, 2021. The announcements had little impact on the corporate bond market, possibly because the amount of the facility's purchases was a small portion of the overall volume of the corporate bond market.[37] As of September 1, 2021, all of the facility's holdings in exchange-traded funds and corporate bonds had either matured or been sold.

Corporate Bond Issuances and Outstanding Debt

Bond issuances are increasing and remain higher than prepandemic levels, especially issuances of non-investment-grade bonds, which may also reflect that businesses have shifted from short-term debt in favor of long-term debt, as previously discussed (see fig. 5).

[37]As of June 30, 2021, the outstanding asset purchases under the corporate credit facilities were $10.2 billion, while the outstanding balances in the corporate bond market were $6.6 trillion.

Figure 5: Annual Cumulative Issuances of Corporate Bonds, January 2019–July 2021



Source: GAO analysis of Securities Industry and Financial Markets Association data. | GAO-22-104640

Note: The issuances in this figure are for investment grade and non-investment-grade bonds. The figure excludes all issuances with maturities of 1 year or less and certificates of deposit.

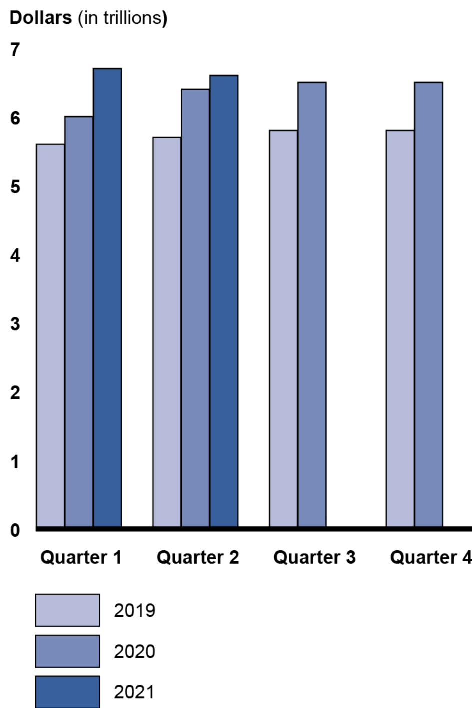
The large increase in the issuances of corporate bonds has occurred as companies have built large cash positions to take advantage of low interest rates and longer maturities, a situation that has been especially advantageous for companies with lower-quality ratings. Issuances of both investment grade and non-investment-grade bonds have increased as these securities have been issued at lower interest rates, meaning it has been cheaper for companies to borrow.[38]

Corporate bonds outstanding remain elevated partly because of the record issuances, and bankruptcy filings were higher in 2020 since the onset of the pandemic compared to 2019 levels, but generally were lower in 2021 compared to 2020 levels, especially in the service sector and other sectors hard-hit by the pandemic (see figs. 6 and 7). Sectors with

[38]In addition, the number of “rising stars” (companies promoted to investment grade from non-investment grade) outpacing the number of “fallen angels” (companies downgraded from investment grade to non-investment grade) may have also increased issuances. App. II provides information on issuances of asset-backed securities—a long-term debt instrument intended to support provision of credit to households and businesses.

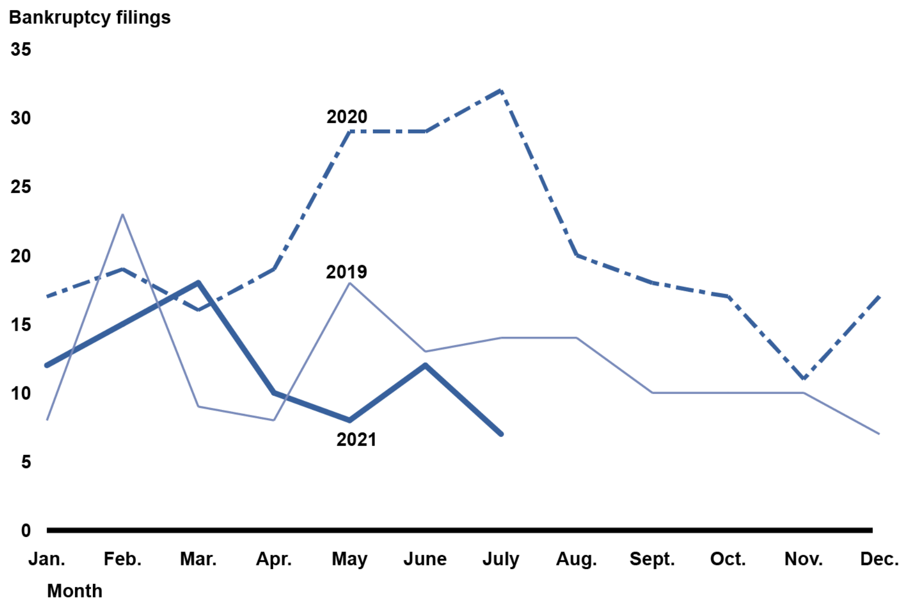
the most bankruptcies as of May 2021 were consumer discretionary (including restaurants), energy (including exploration and production), and real estate (including real estate services). Economic activity in these sectors was adversely affected by the repercussions of policies to mitigate the pandemic. The bankruptcy filings reflect defaults by companies that probably could not refinance their corporate bond debt as their revenues declined or the assets they own fell in value. The high level of outstanding debt leaves businesses vulnerable to distress if it becomes difficult to make repayments on their debt.

Figure 6: Nonfinancial Corporate Bonds Outstanding, First Quarter 2019–Second Quarter 2021



Source: GAO analysis of data from the Board of Governors of the Federal Reserve System. | GAO-22-104640

Figure 7: Year-Over-Year Corporate Bankruptcy Filings with Liabilities Exceeding $50 Million, January 2019–July 2021



Source: GAO analysis of Bloomberg data. | GAO-22-104640

Note: Bloomberg's bankruptcy coverage is limited to public companies or private companies with liabilities at the time of the bankruptcy filing greater than $50 million. The filings are for Chapter 7 or Chapter 11 bankruptcies. Data were accessed on August 11, 2021.

Secondary Market Corporate Credit Facility Held a Diverse Mix of Corporate Bonds That Tracked a Broad Market Index

The Federal Reserve established the Secondary Market Corporate Credit Facility to support the availability of credit to large employers during the COVID-19 pandemic. The facility purchased a percentage of average daily volumes in the markets for corporate bonds, exchange-traded funds, or both based on an assessment of credit markets. Specifically, according to Federal Reserve documentation, the Federal Reserve Bank of New York assessed indicators of the health of credit markets daily to determine how much in corporate bonds and exchange-traded funds the facility should purchase.[39] For exchange-traded funds, the Federal Reserve Bank of New York also used indicators specific to that market, such as premium or discount to net asset value—that is, the difference between the net value of the assets in the fund and the assets' current market price. The facility purchased a lower percentage if the indicators showed that credit markets were improving, and purchased a higher

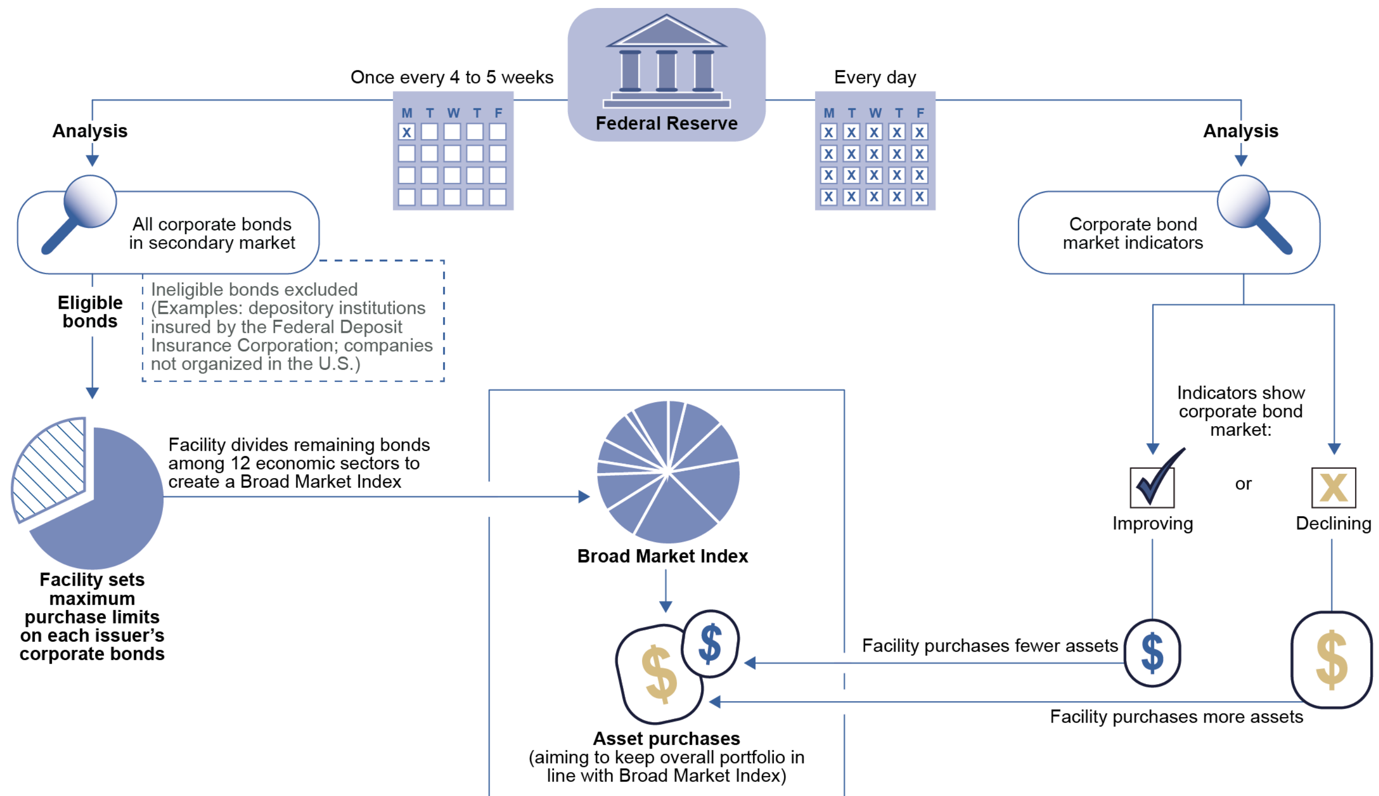
[39]Indicators used by the Federal Reserve Bank of New York, but were not limited to, transaction cost estimates, bid-ask spreads, credit curve shape, credit curve shape, spread levels and volatility, trading volumes, and dealer inventories.

percentage if the indicators showed the markets were deteriorating compared to prepandemic levels.

When the facility began purchasing assets on May 12, 2020, it purchased exchange-traded funds that provided broad exposure to the U.S. corporate bond market. According to Federal Reserve officials, it did so to achieve its goals as quickly as possible. On June 16, 2020, the facility began purchasing individual corporate bonds, and it gradually tapered its purchases of exchange-traded funds to zero.

According to Federal Reserve documentation, for its individual corporate bond purchases, the facility did not choose which specific bonds to purchase. Instead, the Federal Reserve Bank of New York created a Broad Market Index—which tracked the economic sectors of all corporate bonds eligible for purchase by the facility—and purchased eligible bonds in the secondary market in proportions that roughly mirrored the makeup of the index. The Broad Market Index was recalculated every 4 to 5 weeks, and bond purchases by the facility were designed so that the weight of each economic sector in the facility's portfolio tracked as closely as possible to the index's economic sector weights (see fig. 8).

Figure 8: The Secondary Market Corporate Credit Facility's Methodology for Purchasing Corporate Bonds



Source: GAO presentation of information from the Federal Reserve Bank of New York. | GAO-22-104640

Note: Not all corporate bonds were eligible for purchase by the facility, including bonds issued by companies not organized or created in the United States; bonds issued by banks, credit unions, or other institutions insured under the Federal Deposit Insurance Act; and bonds with a remaining maturity of more than 5 years.

In addition, the facilities imposed maximum purchase limits on each company's bonds. The combined holdings of the Primary Market Corporate Credit Facility and the Secondary Market Corporate Credit Facility could not exceed the lesser of

- 10 percent of the issuer's maximum outstanding bonds on any day from March 22, 2019, to March 22, 2020, or
- $11.25 billion, which is 1.5 percent of the combined potential $750 billion size of the Primary Market Corporate Credit Facility and Secondary Market Corporate Credit Facility collectively.

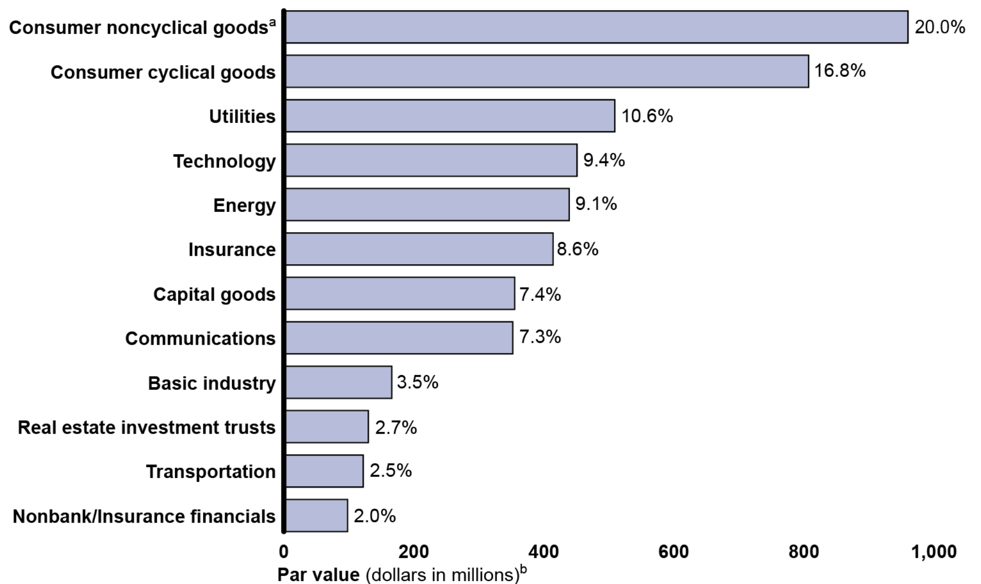
Over time, as markets improved, the Federal Reserve Bank of New York reduced the facility's purchases. Of the $14.3 billion in asset purchases

made by the facility, over $10 billion were made over a 2-month period, from mid-May to mid-July 2020.

As of December 31, 2020, when the Secondary Market Corporate Credit Facility ceased purchasing assets, it held exchange-traded funds with a market value of about $8.8 billion and corporate bonds with a par value of about $5.2 billion.[40] As previously mentioned, as of September 1, 2021, all of the facility's holdings in exchange-traded funds and corporate bonds had either matured or been sold.

Our review of Federal Reserve Bank of New York documents and data showed that Secondary Market Corporate Credit Facility corporate bond purchases represented a broad, diversified market index of U.S. corporate bonds (see fig. 9).

Figure 9: Corporate Bonds Purchased by the Secondary Market Corporate Credit Facility, by Sector, as of May 31, 2021



Source: GAO presentation of data from the Federal Reserve Bank of New York. | GAO-22-104640

Note: Positions reflect bonds purchased through December 31, 2020, and redemptions, exchanges, or maturities for which proceeds were received on or prior to May 31, 2021. The Secondary Market Corporate Credit Facility began selling its corporate bond holdings on July 12, 2021.

[40]Par value, or face value, generally indicates the principal value of the bond which is paid to the holder at maturity. Market value is the amount that a security can be sold for to another willing buyer.

[a]Noncyclical consumer goods are those associated with food production or other goods for which consumer demand continues regardless of the overall economy.

[b]Par value, or face value, generally indicates the principal value of the bond which is paid to the holder at maturity.

Municipal Credit Market Outlook Remains Uncertain, and Participants Found the Municipal Liquidity Facility Beneficial

The Federal Reserve established the Municipal Liquidity Facility to specifically address deteriorating conditions in municipal credit markets. We found that since mid-2020, spreads on municipal bonds have decreased to prepandemic levels and issuances have increased slightly.[41] Although it is difficult to isolate the impact of the municipal credit facility, it likely has contributed to restoring confidence among market participants through the announcement of intent to provide credit and through the provision of a backstop in the municipal credit markets.[42]

Municipal Credit Borrowing Costs Have Decreased to Prepandemic Levels, but Market Outlook Is Uncertain

Since our last report in December 2020, spreads on municipal bonds have decreased considerably, reaching prepandemic levels in January 2021 and falling further since then (see fig. 10).[43] This trend suggests that perceived risk among municipal issuers has continued to fall, and that state and local governments' access to credit has continued to increase. Rates for variable rate demand notes—an asset in municipal money market funds—have also decreased, but their outstanding balances have declined compared to prepandemic levels. See appendix II for more information on variable rate demand notes.

[41]This report analyzed data that were available through July 2021. Our prior Federal Reserve facilities report, which was issued in December 2020, analyzed data that were available through September 2020. See GAO-21-180.

[42]See, for example, Nicholas Fritsch, John Bagley, and Shawn Nee, "Municipal Markets and the Municipal Liquidity Facility," Federal Reserve Bank of Cleveland, working paper no. 21-07 (March 2021), accessed August 4, 2021, https://doi.org/10.26509/frbc-wp-202107.

[43]Municipal bonds can be classified as either general obligation bonds or revenue bonds. General obligation bonds are backed by general revenues of the issuing municipality, while revenue bonds are repaid from the revenue generated by the specific project the bonds paid for, such as income from a toll road.

Figure 10: Spreads on Municipal Bonds, January 2019–July 2021

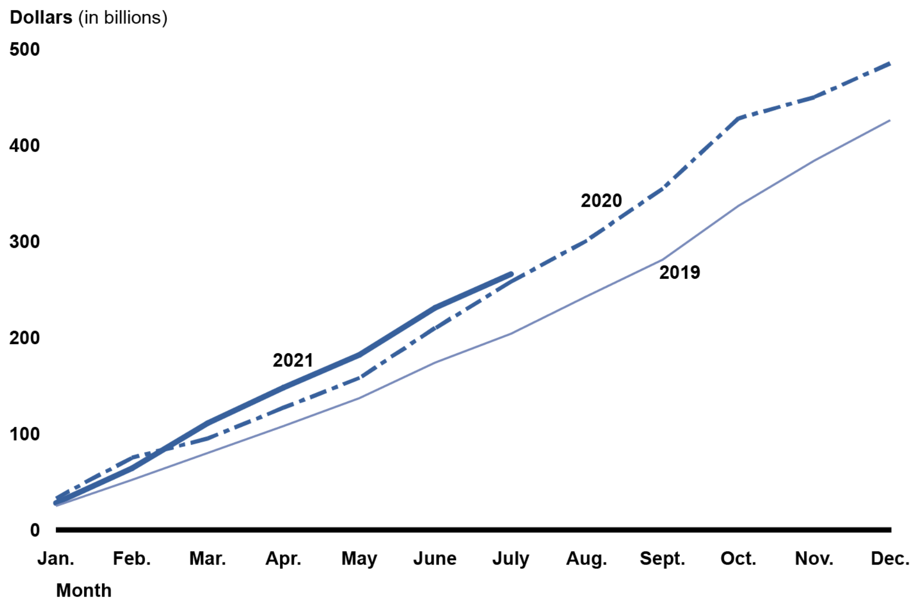
Source: GAO analysis of Bloomberg data. | GAO-22-104640

Note: Spreads on municipal bonds are calculated relative to interest rates on Treasury 10-year yield based on the Bloomberg-Barclays Municipal Bond Index and are measured in basis points or 1/100th of a percentage point.

Municipal bond issuances have increased to slightly higher than prepandemic levels (see fig. 11).[44] For example, issuances in 2021 have been slightly higher than 2020 levels, which were higher than prepandemic levels. (See app. II for information on state and local municipal bonds outstanding.) The increase in issuances, combined with the reduced spreads on municipal bonds, suggests credit risk concerns about issuers' ability to service their bonds have eased. However, the longer-term outlook for the municipal bond market is uncertain, partly because of concerns that the slowing rate of vaccinations and the spread of new virus variants could result in the reinstatement of pandemic-related restrictions. Such restrictions could adversely affect local economic conditions, raising concerns about the ability of municipal bond issuers to service their debt. Further, the potential for additional federal support to help state and local governments manage loss of tax revenues and increased expenditures remains unknown.

[44]The Municipal Liquidity Facility ceased purchasing eligible notes on December 31, 2020, and as of September 1, 2021, the outstanding amount of assets was $4.4 billion.

Figure 11: Annual Cumulative Issuances of Municipal Bonds, January 2019–July 2021



Source: GAO analysis of Securities Industry and Financial Markets Association data. | GAO-22-104640

Note: The issuances in this figure include private placements—transactions where a broker-dealer sells the entire municipal bond placement to one of its clients. All issuance figures are based on deals with a maturity of 13 months or greater. The average final maturity at issuance was 18.2 years, 17.4 years, and 17.3 years in 2019, 2020, and 2021, respectively.

Entities That Explored or Participated in the Municipal Liquidity Facility Found It Beneficial as a Municipal Credit Market Backstop

Even though the Municipal Liquidity Facility had limited usage, the six state and local entities that used or explored using the facility said it was beneficial as a backstop to the municipal credit market.[45] Officials from these six entities—of which three used the facility and three explored using it—told us the facility helped stabilize and restore investor confidence in the municipal bond market, which made it less costly to issue municipal bonds and, in turn, reduced the need for states and localities to access the facility. Officials from five of the six entities said the municipal credit market has recovered since the onset of the pandemic. However, officials from four of the six entities stated that a backstop would continue to help ensure the functioning of the municipal bond market.

[45]We refer to state governments, county governments, and transit authorities as "state and local entities."

According to officials from the state and local entities that participated or explored participating in the Municipal Liquidity Facility, they generally did so to mitigate budget shortfalls caused by the COVID-19 pandemic. For example, officials from three of the entities said that the pandemic caused temporary closures of shops, restaurants, and other businesses, reducing revenues from sales tax, fees, and mass transit fares. In addition, officials from two states told us that the extension of the 2019 federal tax-filing deadline from April 15 to July 15, 2020, delayed state-tax revenue receipts for states that also changed their state-tax filing deadline to match the federal deadline.

The Municipal Liquidity Facility offered two options for participation: borrowing directly from the facility (by selling bonds to it) or using the facility as a backstop when issuing bonds.[46]

- In total, the facility conducted four transactions with two entities that borrowed directly, totaling almost $6.6 billion, with each entity selling bonds to the facility twice.[47]
- The facility served as a backstop for one entity (a county government). Officials from the county told us they issued notes twice in the municipal bond market and the notes were purchased by investors other than the Municipal Liquidity Facility.

We also identified three other state and local entities that explored participating in the facility but that ultimately did not do so. Specifically, of the three entities, Federal Reserve officials told us that one county government and one mass transit entity each filed a notice of intent to participate in the facility, and the third entity—a state—did not file a notice of intent.

Officials from the three state and local entities that participated in the Municipal Liquidity Facility cited various reasons for choosing the facility over other borrowing options. For example, one entity chose to participate in the facility because short-term borrowing costs in the municipal bond market were too high, and the entity rejected private bids to purchase its bond issuances. Another entity was uncertain of its ability to sell its bonds, which it needed to do to avoid insolvency, and the facility provided a guaranteed source of borrowing. Officials from the third entity told us

[46]When serving as a backstop, the facility agreed to purchase eligible bonds that were not purchased by other buyers in a competitive sale.

[47]The two participants that participated in the Municipal Liquidity Facility are the State of Illinois and the New York Metropolitan Transportation Authority.

the facility helped it maintain its investment-grade credit rating. Officials from one entity also cited as a benefit the ability to prepay debt borrowed through the facility (which would reduce interest payments). Officials from two entities also told us that Federal Reserve staff were collaborative and helpful in facilitating their participation in the facility.

Officials from the three entities that explored but did not participate in the Municipal Liquidity Facility cited several reasons for choosing other financing options.[48] Officials from one entity told us they did not participate because they were able to obtain lower rates in the municipal bond market. Officials from the other two entities told us their states' legal requirements and restrictions made participation in the facility challenging. For example, officials from a transit agency told us that their state generally limited loans to a term of 1 year. This was a relatively short time frame for loan repayment given the pandemic's uncertainty.

Overall, the six entities that participated or explored participating in the facility cited three enhancements they believe would have encouraged greater access and participation in the Municipal Liquidity Facility:

- **Lower interest rates.** Regulation A requires a facility to charge a premium interest rate (under normal circumstances) to discourage borrowing from the facility as economic conditions normalize, but it also requires the rate to be set at a level that affords liquidity in unusual and exigent market conditions.[49] Officials from four of the six entities said the facility's interest rates discouraged participation.
- **Longer term limits.** The facility's term sheet set a bond maturity term of 3 years. Officials from four of the six entities said the 3-year term discouraged borrowing. According to two of these entities, that time frame was not long enough for states and municipalities to be certain of their ability to repay the debt.

[48]Officials from the three entities that explored but did not participate in the Municipal Liquidity Facility said other financing options included borrowing in the municipal bond market, sale and leaseback of equipment, assistance from local and regional governments, and creating a consolidated revenue credit.

[49]Regulation A specifically requires that facilities set interest rates that are at a premium to the market rate available under normal circumstances; afford liquidity in unusual and exigent circumstances; and encourage repayment of the credit and discourage use of the program or facility as the unusual and exigent circumstances that motivated the program or facility recede and economic conditions normalize.

- **Expanded participation eligibility.** Entities eligible to participate in the facility included cities and counties that met a population threshold (at least 250,000 and 500,000 residents, respectively), states, and multistate entities. Other entities, such as certain mass transit agencies or certain cities and counties below the population threshold, could participate, but only by obtaining a designation from their state's governor allowing them to do so.[50] Officials from three of the six entities we spoke with said the population thresholds and the requirement and associated steps to obtain a governor's designation made the facility more difficult to use.

Small Businesses' Access to Credit Has Improved, and the Main Street Loans Were Concentrated in Certain Sectors

The Federal Reserve took measures to support the flow of credit to small businesses that were vulnerable to large and sustained loss of revenue due to the COVID-19 pandemic.[51] We found that starting from the third quarter of 2020, small businesses' access to credit generally improved, but recovery of small businesses remains slow, especially for businesses owned by Asian, Black, or Hispanic people and businesses in the services sector.[52] According to our generalizable survey, about 88 percent of borrowers in the Main Street Lending Program reported that the program was "very important" in helping them maintain operations. According to Federal Reserve Bank of Boston data, borrowers in the Main Street Lending Program were concentrated in certain economic sectors, such as the food services and drinking places sector, and Main Street loans were concentrated in certain metropolitan areas, such as Miami, Dallas, and Los Angeles. According to our generalizable survey, women-owned businesses were underrepresented in the Main Street Lending

[50]The Municipal Liquidity Facility was designed to support lending to U.S. states (including the District of Columbia), U.S. counties with a population of at least 500,000 residents, U.S. cities with a population of at least 250,000 residents, and certain multistate entities. The facility's terms provided states' governors flexibilities to designate additional entities for participation, such as mass transit agencies that issue revenue bonds and certain smaller cities and counties, for states specified in the facility's term sheet.

[51]The Federal Reserve established the following facilities to support primarily small for-profit businesses: the Paycheck Protection Program Liquidity Facility and the Main Street New Loan Facility, Main Street Priority Loan Facility, and Main Street Expanded Loan Facility. As of September 1, 2021, the total outstanding amount of all advances under the Paycheck Protection Program Liquidity Facility was $74.4 billion. The Main Street Lending facilities ceased purchasing participations in eligible loans on January 8, 2021, and the total value of the assets held by the facility was $13.5 billion as of September 1, 2021. This amount is net of the $2.5 billion allowance for loan losses previously discussed.

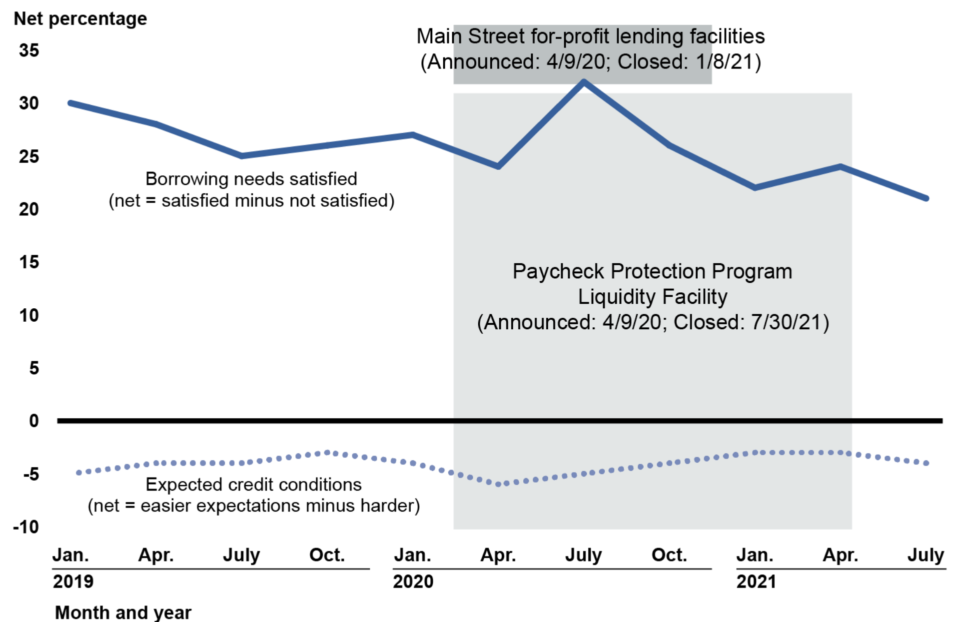
[52]This report analyzed data that were available through July 2021. Our prior Federal Reserve facilities report, which was issued in December 2020, analyzed data that were available through September 2020. See GAO-21-180.

Program, compared to their representation among U.S. businesses as a whole.

Small Businesses' Access to Credit Generally Started to Improve in the Third Quarter of 2020, but Recovery Remains Slow

Based on recent survey results, business owners' views of lending conditions for small businesses suggest that credit terms generally started to improve in the third quarter of 2020. For example, according to surveys of the small and independent business owner membership of the National Federation of Independent Business, small businesses' views on credit conditions started to improve in outlook in the third quarter of 2020. However, the survey results also indicated that the views of small business owners regarding their borrowing needs have generally remained the same (see fig. 12).

Figure 12: Small Businesses' Views on Credit Conditions, January 2019–July 2021



Source: GAO analysis of National Federation of Independent Business data. | GAO-22-104640

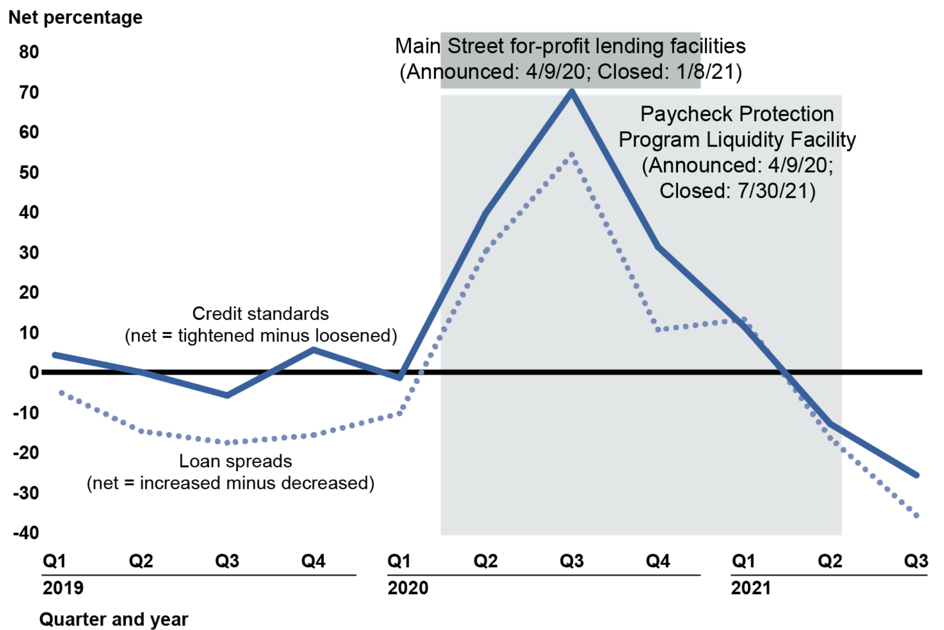
Note: Data are based on quarterly surveys of a sample of the membership of the National Federation of Independent Business. Borrowing needs satisfied reflects the net percentage ("satisfied" minus "not satisfied") of borrowers in the last 3 months. Expected credit conditions reflects the net percentage ("easier" minus "harder") of borrowers during the next 3 months. The data are copyright of the National Federation of Independent Business (NFIB) Research Center. © NFIB Research Center. ISBS#0940791-24-2, NFIB Small Business Economic Trends, William C. Dunkelberg and Holly Wade, July 2021. The Main Street for-profit lending facilities consist of the Main Street New Loan Facility, the Main Street Expanded Loan Facility, and the Main Street Priority Loan Facility (which was announced on April 30, 2020).

According to the Federal Reserve's Senior Loan Officer Opinion Survey, survey responses on banks' lending conditions for small business loans suggest that credit terms have continued to improve since the third quarter of 2020. Specifically, survey responses reflect that banks' underwriting standards have loosened. Underwriting standards on small business loans measure the selectivity of lenders in determining to which small business borrowers they should extend credit. Changes in these underwriting standards over time can provide a general indication of changes in credit conditions facing small business borrowers. Underwriting standards tighten as perceived economic risk increases—that is, lenders focus on high-quality borrowers as the economy weakens and loosen as perceived economic risk falls.

For example, based on responses to the Senior Loan Officer Opinion Survey, banks have continued to loosen their credit standards and terms on commercial and industrial loans to small businesses since the third quarter of 2020 (see fig. 13).[53] Data from the survey also indicated that banks have lowered spreads of loan rates over their costs of funds. Decreased loan spreads indicate that banks are instituting a smaller difference between the interest rates they charge on loans and the interest rate paid to depositors on financial products, such as savings accounts. This generally indicates perceived lower risk, which in turn makes credit more available for small businesses. See appendix II for information on small business loans outstanding.

[53]The survey reporting panel consists of up to 80 large domestically chartered commercial banks and up to 24 large U.S. branches and agencies of foreign banks, and the respondent bank's senior loan officers complete the survey. In the survey, small businesses are defined as those with annual sales of less than $50 million. Based on the timing of survey completion, each quarter of the survey generally corresponds to the previous quarter. The latest survey covers the previous 3 months, which generally corresponds to the second quarter of 2021. Respondent banks received the survey on June 21, 2021, and responses were due by July 1, 2021.

Figure 13: Banks' Lending Conditions for Small Business Loans, First Quarter 2019–Third Quarter 2021



GAO analysis of Board of Governors of the Federal Reserve System data. | GAO-22-104640

Note: We report results from the Federal Reserve's Senior Loan Officer Opinion Survey on credit standards and loan spreads on commercial and industrial loans. A positive number for credit standards indicates that more banks are tightening rather than loosening standards. Similarly, a positive number for loan spreads indicates that more banks are increasing rather than decreasing loan spreads. Based on the timing of survey completion, each quarter of the survey generally corresponds to the previous quarter. For more information, see https://www.federalreserve.gov/data/sloos/sloos-202007.htm, accessed August 2, 2021. The Main Street for-profit lending facilities consist of the Main Street New Loan Facility and the Main Street Expanded Loan Facility (which were announced on April 9, 2020), and the Main Street Priority Loan Facility (which was announced on April 30, 2020).

However, according to a 2020 small business credit survey by the Federal Reserve Banks, recovery for small businesses remains slow, especially for businesses owned by minorities. Among all businesses, about 80 percent reported experiencing financial challenges, up from

about 66 percent in 2019.[54] Minority business owners reported experiencing continued financial challenges. Specifically, about 92 percent of Black-owned firms reported experiencing financial challenges in 2020 (up from 85 percent in 2019), followed by about 89 percent of Asian-owned firms (up from 70 percent in 2019) and about 85 percent of Hispanic-owned firms (up from 78 percent in 2019). Additionally, firms owned by people of color were more likely than White-owned firms to report that they reduced their operations in response to the pandemic. Also, Asian-owned businesses were more likely than others to have temporarily closed.

Small businesses in the services sector were also affected by the COVID-19 pandemic. According to an analysis by the Federal Reserve Bank of New York using data from the tracking tool Homebase, about one-third of small businesses in the services sector that were active before the pandemic remained closed as of February 2021, with most of these businesses having been inactive for 20 weeks or longer.[55] As of February 2021, these closures had not been offset by the entry of new businesses.

Main Street Lending Program Generally Helped Small For-Profit Businesses Maintain Operations

According to our generalizable survey of Main Street borrowers, about 50 percent of loans made through the program went to small businesses with between 11 and 99 employees.[56] Additionally, about 88 percent of the borrowers reported that Main Street loans were “very important” in

[54]Federal Reserve Banks of Atlanta, Boston, Chicago, Cleveland, Dallas, Kansas City, Minneapolis, New York, Philadelphia, Richmond, St. Louis, San Francisco, *Small Business Credit Survey: 2021 Report on Employer Firms* (2021). This survey was conducted in September and October 2020, with 9,693 responses from small employer businesses with fewer than 500 full- or part-time employees in the 50 states and the District of Columbia and with 4,531 responses from nonemployer firms. This survey used a nonprobability convenience sampling method to gather data, and as such the results are not generalizable to the population of U.S. small businesses. While the agency post-weighted the data to known Census population data, the survey results suffer from selection bias to an unknown extent.

[55]Homebase is a scheduling and tracking tool used by around 100,000 businesses, mostly small firms, in the leisure and hospitality and retail industries.

[56]In our survey, 35 percent of respondents said their company had 11 to 49 employees (95 percent confidence interval: 31 to 40 percent). A further 16 percent of respondents said their company had 50 to 99 employees (95 percent confidence level: 12 to 21 percent).

helping them maintain business operations.[57] See appendix III for complete survey results.[58]

According to Federal Reserve data, from July 6, 2020, to January 8, 2021, when the Main Street Lending Program was operational, the Main Street facilities purchased a participation in 1,830 loans, with almost all loans supporting for-profit businesses.[59] The Main Street Lending Program did not lend directly to borrowers; it purchased a 95 percent participation in eligible loans, and the issuing lender retained the other 5 percent. Because one Main Street loan could support more than one business, a total of 2,482 businesses participated in the program.

Almost two-thirds of Main Street loans were made after November 15, 2020, in the last 2 months of the program. According to Federal Reserve officials, the increased activity in the Main Street Lending Program was largely due to the Treasury Secretary's announcement in mid-November 2020 that the program would cease purchasing loan participations by December 31, 2020.[60]

The Main Street Lending Program purchased about $16.6 billion in loan participations, and the average Main Street loan was about $9.5 million. In addition to the Main Street Lending Program, small businesses had access to other federal aid programs, such as the Paycheck Protection Program. For comparison, as of May 31, 2021, the Paycheck Protection Program had authorized almost $800 billion in loans, and the average Paycheck Protection Program loan was about $68,000. However, Paycheck Protection Program loans could be fully forgiven and Main Street loans could not, which likely made the Paycheck Protection Program more appealing.

[57]The 95 percent confidence interval for this estimate ranges from 84 to 92 percent.

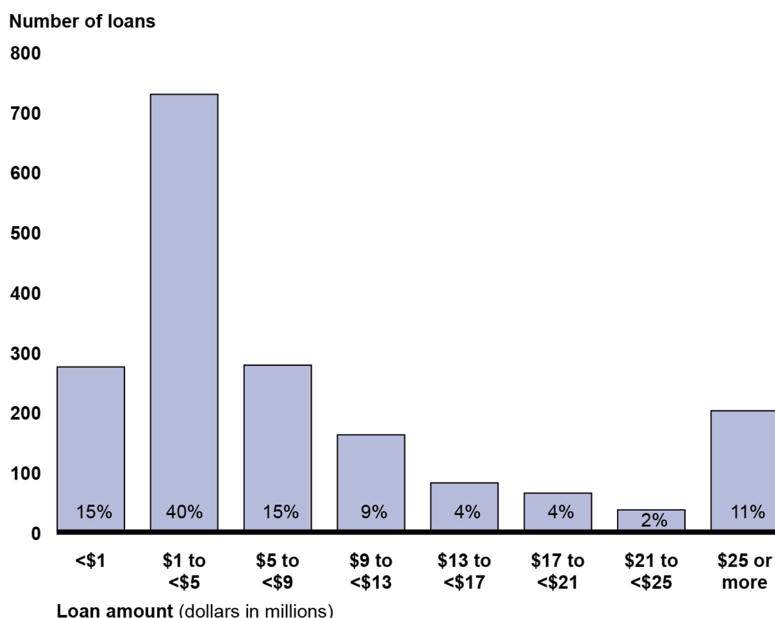
[58]We surveyed contacts for 636 loans made under the Main Street Lending Program and received 266 responses, for a response rate of 42 percent. We refer to each of these contacts as a "borrower," although one borrower may have borrowed money on behalf of multiple businesses.

[59]Of the 1,830 loans made through the Main Street Lending Program, 15 loans supported nonprofit organizations.

[60]The Consolidated Appropriations Act, 2021 extended the Main Street facilities to January 8, 2021.

Of the 1,830 Main Street loans, about 55 percent were for less than $5 million, and 15 percent were for less than $1 million (see fig. 14).

Figure 14: Loans Made Through the Main Street Lending Program, by Loan Size



Source: GAO analysis of Federal Reserve Bank of Boston data. | GAO-22-104640

The Federal Reserve lowered the threshold for a Main Street loan from $250,000 to $100,000 on October 31, 2020, and it waived transaction fees on loans under $250,000, but these changes did not result in a notable increase in loans to small businesses.[61] In a press release, the Federal Reserve stated it had made these adjustments to encourage participation by smaller businesses. However, according to Federal Reserve data, the percentage of loans made before and after November 1, 2020, for less than $1 million (15.4 percent and 14.9 percent, respectively) did not change significantly. Over the life of the program, the Main Street facilities purchased only 12 loan participations for less than $250,000. According to Federal Reserve officials, there may have been a

[61]The Federal Reserve originally established the minimum loan threshold at $1 million, and then lowered it to $500,000 in April 2020 and to $250,000 in June 2020. However, these reductions took place before the Main Street facilities began purchasing loan participations.

couple of reasons the Main Street program made so few loans for less than $250,000:

- Companies that needed smaller loans may have had their needs met through the Paycheck Protection Program.
- Main Street loans required a full underwriting process, and lenders may have been reluctant to invest the time and resources to originate smaller loans.

Main Street Lending Program Was Concentrated in Certain Sectors and Regions

Overall, Main Street loans were concentrated in certain economic sectors, in terms of total dollars loaned, according to Federal Reserve Bank of Boston data. The five North American Industry Classification System (NAICS) codes with the greatest loan volume accounted for slightly over 30 percent of total Main Street loan volume, and the 10 codes with the greatest loan volume accounted for almost half of total Main Street loan volume. The food services and drinking places sector accounted for the largest share of the amount of loans made through the program—over $1.5 billion in loans—followed by the professional, scientific, and technical services sector and the amusement, gambling, and recreation sector. However, some economic sectors have historically produced more goods and services than others. For instance, in 2019, the food services and drinking places sector produced just under $900 billion in goods and services. In comparison, the professional, scientific and technical services sector produced about $2.4 trillion. Sectors varied in the amount of assistance they received from the Main Street Lending Program relative to their gross economic output (see table 2).

Table 2: Total Amount Loaned through the Main Street Lending Program and Amount Loaned Relative to Gross Industry Output, by Economic Sector

Economic sector[a]	Total amount loaned ($)	Total amount loaned per million dollars of 2019 gross industry output ($)
Food services and drinking places	1,579,271,777	1,759
Professional, scientific, and technical services	1,158,558,342	475
Amusement, gambling, and recreation industries	957,977,195	5,712
Real estate	851,694,514	227
Rental and leasing services	776,133,279	2,002
Oil and gas extraction	723,871,678	1,929
Administrative and support services	675,030,167	642
Support activities for mining	624,463,866	6,736

Economic sector[a]	Total amount loaned ($)	Total amount loaned per million dollars of 2019 gross industry output ($)
Accommodation	603,157,419	2,042
Construction of buildings	515,647,158	n/a[b]

Legend: n/a = not applicable

Source: GAO analysis of Federal Reserve Bank of Boston and Bureau of Economic Analysis data. | GAO-22-104640

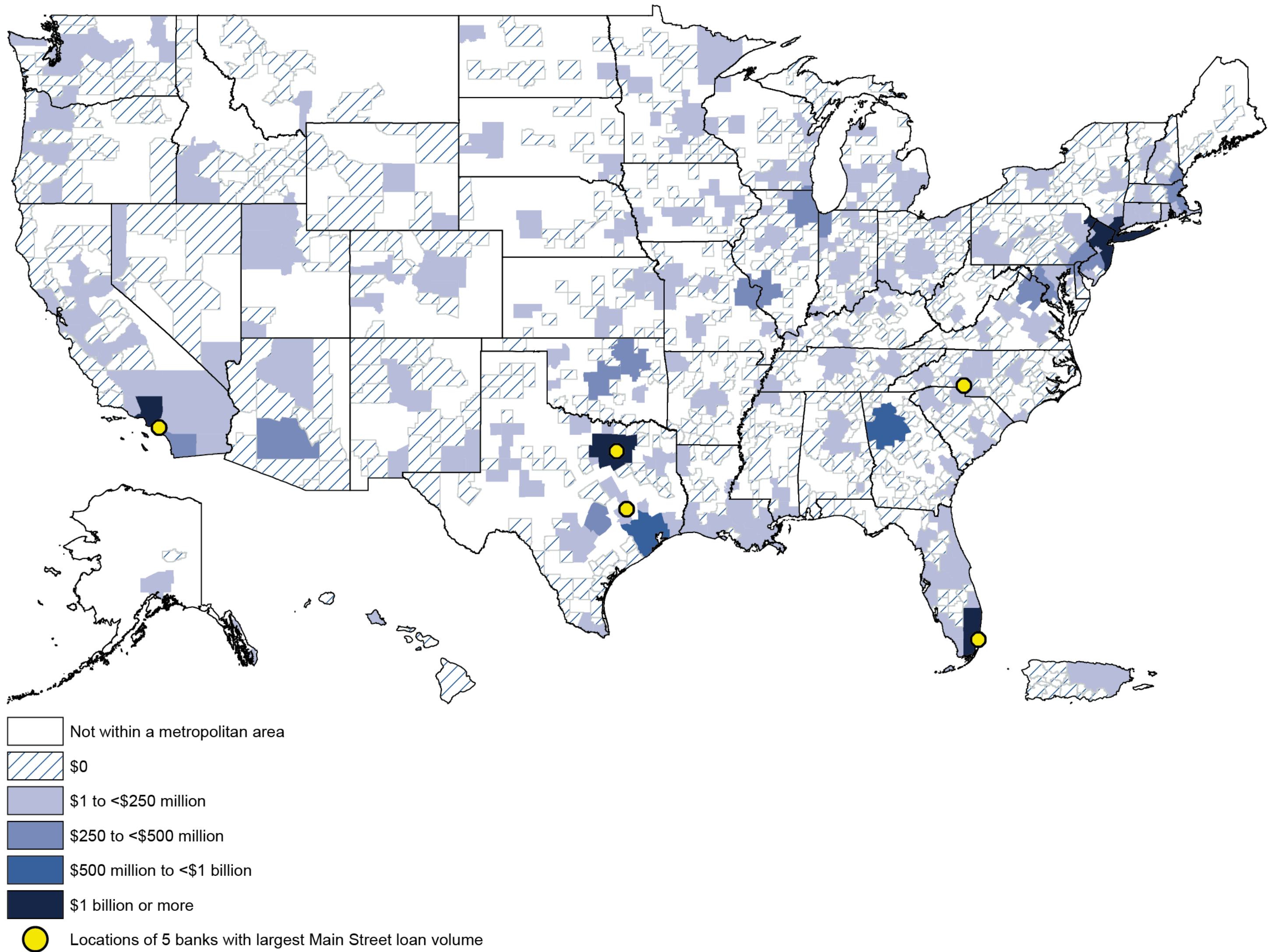
[a]"Economic sector" refers to North American Industry Classification System (NAICS) codes. Gross industry output is a measure of the goods and services produced by an industry, valued at producers' prices (the prices received by the industry).

[b]Gross industry output figures from the Bureau of Economic Analysis do not have a category that corresponds precisely to construction of buildings.

Main Street loans also were concentrated in certain metropolitan areas, as were the banks that provided the loans. The top five metropolitan areas, by total amount borrowed, accounted for just over 32 percent of total Main Street loan volume (see fig. 15). These five metropolitan areas were

- Miami-Fort Lauderdale-Pompano Beach, Florida;
- Dallas-Fort Worth-Arlington, Texas;
- Los Angeles-Long Beach-Anaheim, California;
- New York-Newark-Jersey City, New York-New Jersey-Pennsylvania; and
- Houston-The Woodlands-Sugar Land, Texas.

Figure 15: Total Dollar Amount Loaned through the Main Street Lending Program, by Metropolitan Area



Source: GAO analysis of Federal Reserve Bank of Boston data. | GAO-22-14640

Note: Metropolitan areas represent Core-Based Statistical Areas.

Five banks were responsible for almost 25 percent of total Main Street loan volume, three of them headquartered in one of the top five metropolitan areas listed above (Miami, Dallas, and Los Angeles). Overall, 319 lenders made loans through the Main Street Lending

Program.[62] For comparison, as of May 31, 2021, 5,467 lenders had participated in the Paycheck Protection Program.

According to a Federal Reserve survey of bank senior loan officers conducted in the second half of August 2020, banks had a variety of reasons for choosing to not participate in the Main Street Lending Program.[63] A majority of banks that did not participate stated they were able to extend credit to potential Main Street borrowers without the program. Other reasons they stated for not participating in the program included unattractive key loan terms to the lender and burdensome registration requirements. According to our survey, for about 40 percent of Main Street loans, borrowers found it "somewhat difficult" or "very difficult" to find a lender that offered loans through the Main Street Lending Program.[64]

Women-Owned Businesses Were Underrepresented Among Main Street Borrowers

Women-owned businesses were underrepresented among Main Street borrowers, compared to representation among U.S. businesses as a whole, according to our generalizable survey of Main Street borrowers.[65] In contrast, the percentages of minority-owned businesses and veteran-owned businesses in the Main Street Lending Program were not statistically different from the percentages of these businesses in the

[62]Banks were not required to participate in the Main Street Lending Program. The following institutions were eligible to make loans under the program: U.S. federally insured depository institutions, U.S. Branches or agencies of foreign banks, U.S. bank holding companies, U.S. savings and loan holding companies, U.S. intermediate holding companies of a foreign banking organization, and U.S. subsidiaries of the foregoing. Eligible lenders retained 5 percent of each eligible loan.

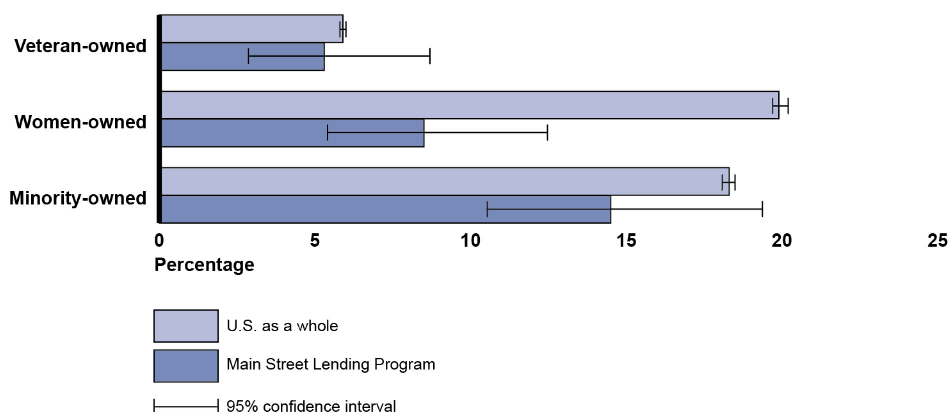
[63]Eighty-six domestically chartered banks responded to the Federal Reserve survey, including 33 banks with assets above $50 billion and 53 banks with assets below $50 billion.

[64]In our survey, 24 percent said it was "somewhat difficult" (95 percent confidence interval: 19 to 28 percent), and 17 percent said it was "very difficult" (95 percent confidence interval: 12 to 22 percent).

[65]According to Federal Reserve officials, Federal Reserve staff contacted more than 70 diverse business associations and organizations with strong connections to minority communities, as well as tribal governments, to ensure they were aware of the Main Street Lending Program. Federal Reserve staff also gave presentations at webinars sponsored by outside entities targeted at potential borrowers and lenders, including minority depository institutions and minority- and women-owned businesses.

population as a whole.[66] According to our generalizable survey of Main Street borrowers, minority-, women-, and veteran-owned businesses made up about 14.5 percent, 8.5 percent, and 5.3 percent of participants, respectively (see fig. 16).[67] In comparison, according to the Census Bureau's 2019 Annual Business Survey, minority-, women-, and veteran-owned businesses made up about 18.3 percent, 19.9 percent, and 5.9 percent of all American businesses with paid employees, respectively.[68]

Figure 16: Estimated Participation of Business Types in the Main Street Lending Program, Compared to Their Representation among U.S. Businesses



Source: GAO survey of Main Street Lending Program participants and the U.S. Census Bureau's 2019 Annual Business Survey. | GAO-22-104640

Note: Women-owned businesses were the only business type whose participation in the Main Street Lending Program was statistically different from their overall representation among U.S. businesses.

Officials from an organization representing women-owned businesses told us they may have participated in the Main Street Lending Program at

[66]Because one lender issued slightly more than 20 percent of Main Street loans, and therefore may have had a disproportionate influence on the characteristics of borrowers as a whole, we also analyzed all loans with the exception of loans made by this lender. According to this analysis, the percentage of minority-owned Main Street borrowers is 9.5 percent. This number is statistically different from the percentage of minority-owned businesses in the United States as a whole.

[67]In addition, according to Federal Reserve data, three tribal-owned businesses received loans through the Main Street program. For complete survey results, see app. III. For the complete survey methodology, see app. I.

[68]The Census Bureau's 2019 Annual Business Survey sampled approximately 300,000 U.S. employer businesses (businesses with paid employees). Businesses sampled are required to complete the survey. The difference between our survey results and the results from the 2019 Annual Business Survey were within the margin of error for minority-owned and veteran-owned businesses.

lower rates because some women-owned businesses do not have established banking relationships, and therefore they may have been less likely to hear about the program from a banker, among other factors.

Agency Comments

We provided a draft of this report to the Federal Reserve and Treasury for review and comment. The agencies provided technical comments, which we incorporated as appropriate.

We are sending copies of this report to the appropriate congressional committees, the Chair of the Board of Governors of the Federal Reserve System, and the Secretary of the Treasury. This report will also be available at no charge on our website at http://www.gao.gov.

Should you or your staff have questions concerning this report, please contact me at (202) 512-8678 or clementsm@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report are listed in appendix IV.

Michael E. Clements
Director, Financial Markets and Community Investment

List of Committees

The Honorable Patrick Leahy
Chairman
The Honorable Richard Shelby
Vice Chairman
Committee on Appropriations
United States Senate

The Honorable Sherrod Brown
Chairman
The Honorable Patrick J. Toomey
Ranking Member
Committee on Banking, Housing, and Urban Affairs
United States Senate

The Honorable Bernie Sanders
Chairman
The Honorable Lindsey Graham
Ranking Member
Committee on the Budget
United States Senate

The Honorable Maria Cantwell
Chair
The Honorable Roger Wicker
Ranking Member
Committee on Commerce, Science, and Transportation
United States Senate

The Honorable Kyrsten Sinema
Chair
The Honorable James Lankford
Ranking Member
Subcommittee on Government Operations and Border Management
Committee on Homeland Security and Governmental Affairs
United States Senate

The Honorable Rosa L. DeLauro
Chairwoman
The Honorable Kay Granger
Ranking Member
Committee on Appropriations
House of Representatives

The Honorable John Yarmuth
Chairman
The Honorable Jason Smith
Ranking Member
Committee on the Budget
House of Representatives

The Honorable Maxine Waters
Chairwoman
The Honorable Patrick McHenry
Ranking Member
Committee on Financial Services
House of Representatives

The Honorable Peter A. DeFazio
Chairman
The Honorable Sam Graves
Ranking Member
Committee on Transportation and Infrastructure
House of Representatives

Appendix I: Objectives, Scope, and Methodology

Our objectives in this report were to examine (1) why the CARES Act facilities ceased extending credit and purchasing assets by January 8, 2021; (2) the Board of Governors of the Federal Reserve System's (Federal Reserve) oversight and monitoring of the CARES Act facilities; (3) what available evidence suggests regarding the facilities' effects on corporate credit and related markets; (4) what available evidence suggests regarding the facilities' effects on states and municipalities, and entities' experiences in accessing the Municipal Liquidity Facility; and (5) what available evidence suggests about trends in small businesses' access to credit, and the characteristics of Main Street Lending Program participants.

To address the first objective, we reviewed documentation from the Department of the Treasury and the Federal Reserve, including the Treasury Secretary's letter setting out his determination to not extend the CARES Act facilities beyond December 31, 2020. We also reviewed Federal Reserve and Treasury documentation related to the rescission of unused CARES Act funds (as required under the Consolidated Appropriations Act, 2021). We interviewed Treasury and Federal Reserve officials to understand the circumstances surrounding the Treasury Secretary's determination not to extend the CARES Act facilities and the process for returning the unused funds.

To address the second objective, we analyzed documentation from the Federal Reserve's Division of Reserve Bank Operations and Payment Systems (RBOPS) and relevant Federal Reserve Banks. This included their policies and procedures pertaining to the monitoring and controls of the CARES Act facilities. We reviewed planning documents and summaries of completed reviews of the facilities, and we interviewed Federal Reserve officials on RBOPS's framework and approach for continual monitoring of the facilities and results of RBOPS's oversight reviews to date. We compared agency controls against selected federal internal control standards, including the principles that management should establish and operate monitoring activities to monitor the internal control system and evaluate the results, and that management should remediate identified internal control deficiencies on a timely basis.[1] Additionally, we reviewed the Federal Reserve's periodic reports and

[1]See GAO, *Standards for Internal Control in the Federal Government*, GAO-14-704G (Washington, D.C.: September 2014).

financial statements for updates on potential and actual losses incurred by the Federal Reserve facilities.

To address the third, fourth, and fifth objectives, we analyzed indicators of credit markets affected by the facilities. We reviewed research from academics, the Federal Reserve, and industry experts, and analyzed the most recently available data through July 2021 on indicators of credit markets affected by the facilities. To identify and select potential indicators, we reviewed several sources, including prior GAO work, reports and data from the Federal Reserve Board and Federal Reserve Banks, and reports and data from private organizations, including Bloomberg and Securities Industry and Financial Markets Association.

For the third objective, the data on credit market indicators we analyzed included credit spreads, issuances, and outstanding balances on short-term and long-term corporate credit from the Federal Reserve, Federal Reserve Bank of St. Louis's Federal Reserve Economic Data database, Bloomberg Terminal, and the Securities Industry and Financial Markets Association. We also analyzed publicly available transaction data from the Secondary Market Corporate Credit Facility to determine the distribution of the facility's holdings across broad industry sectors, and we interviewed Federal Reserve officials to clarify the process for purchasing exchange-traded funds and individual corporate bonds.

For the fourth objective, the data on credit market indicators we analyzed included credit spreads, issuances, and outstanding balances of municipal securities from the Federal Reserve, Bloomberg Terminal, and the Securities Industry and Financial Markets Association.

For the third and fourth objectives, we also documented changes in the conditions of credit markets and areas targeted by the facilities by assessing indicators of the price (such as credit spreads) and availability of credit (such as issuances and outstanding balances of securities).

In addition, we interviewed representatives of the three entities (state and local governments) that participated in the Municipal Liquidity Facility. We also interviewed representatives of the three entities that did not participate in the facility but had explored doing so.[2]

[2]For the entities that explored the Municipal Liquidity Facility, we interviewed entities that either filed a notice of intent or communicated interest in accessing the facility.

For the fifth objective, the data on credit market indicators we analyzed included the most recently available survey data on credit market conditions experienced by small business owners and lenders from the National Federation of Independent Business and the Federal Reserve Board and Federal Reserve Banks. This included some analysis from the Federal Reserve Bank of New York that had been derived from the Homebase scheduling and tracking tool, which is used by about 100,000 businesses (mostly small firms in the leisure and hospitality and retail industries) and the Federal Reserve's Senior Loan Officer Opinion Survey.

We obtained data from the Federal Reserve Bank of Boston on all 1,830 loans made under the Main Street Lending Program to determine characteristics of the program's participants, their geographic dispersion, the distribution of loan amounts, and their industry sector. We used data on gross economic output by economic sector from the Bureau of Economic Analysis to calculate the amount loaned through the Main Street Lending Program per million dollars of gross economic output. We also interviewed representatives of five associations that represent minority and women business owners to obtain their perspectives on the program.

For all objectives, we reviewed relevant federal laws and regulations, facilities' term sheets, and press releases announcing updates to the facilities' terms.

Survey of Main Street Lending Program Borrowers

To determine certain characteristics of Main Street Lending Program borrowers for our fifth objective, we administered a web-based survey to a representative sample of for-profit Main Street Lending program borrowers to obtain otherwise unavailable demographic data about them and learn about their experience with the program. In the survey, we asked borrowers about the ownership and size of their business, their satisfaction with the program, and the ease or difficulty of finding a lender. We administered the survey from May 2021 to July 2021.

To identify the universe of Main Street borrowers, we used data provided by the Federal Reserve Bank of Boston on February 12, 2021, which contained information on all 1,830 loans conducted under the program, and we excluded the 15 loans to nonprofit organizations. We stratified our sample using the median of the loan size and sorted the loans by geographic region prior to selecting a systematic random sample within each stratum.

Our sample size was designed to achieve a stratum-level margin of error of no greater than plus or minus 5 percentage points for an attribute level at the 95 percent level of confidence. We assumed a response rate of 50 percent to determine the sample size for each stratum. Our resulting sample size was 636, and we received 266 survey responses. We obtained a response rate of 42 percent. We used logistic regression models on our survey data to look for correlation with the propensity to respond among available administrative variables. We did not find anything and used the standard nonresponse weight adjustment for a stratified random sample.

Because we followed a probability procedure based on random selections, our sample is only one of a large number of samples that we might have drawn. Since each sample could have provided different estimates, we express our confidence in the precision of our particular sample's results as a 95 percent confidence interval (for example, plus or minus 7 percentage points). This is the interval that would contain the actual population value for 95 percent of the samples we could have drawn. Confidence intervals are provided with each sample estimate in the report. All survey results presented in the body of this report are generalizable to the population of 1,815 for-profit Main Street borrowers, except where otherwise noted.

Data Reliability

We took a number of steps to assess the reliability of the data sources and indicators of credit markets for businesses and state and local governments, including reviewing relevant documentation on data collection methodology and reviewing prior GAO work. We found that, collectively, the indicators were sufficiently reliable for the purposes of providing a general sense of how credit markets are performing.

To assess the reliability of Main Street loan data, we reviewed the data dictionary and interviewed Federal Reserve officials about access to and definitions of the data. In addition, we performed electronic testing of certain key data fields. To assess the reliability of data on the national prevalence of minority-owned, women-owned, and veteran-owned businesses from the Census Bureau's American Business Survey, we reviewed the survey's methodology. To assess the reliability of gross economic output data from the Bureau of Economic Analysis, we reviewed the bureau's guide to the data. We found the data from all three sources to be reliable for our purposes.

We conducted this performance audit from November 2020 to October 2021 in accordance with generally accepted government auditing

standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix II: Selected Indicators of Credit Markets for Corporations, State and Local Governments, and Small Businesses

This appendix provides more detail on indicators of credit markets for large and small businesses and state and local governments supported by the Board of Governors of the Federal Reserve System (Federal Reserve) lending facilities. The market indicators include corporate credit markets for short-term funding (such as triparty repurchase agreements and commercial paper), credit markets that were primarily for financial businesses (such as asset-backed securities), other sources of debt securities of state and local governments (such as variable rate demand notes), and outstanding balances of debt of state and local governments and small businesses.

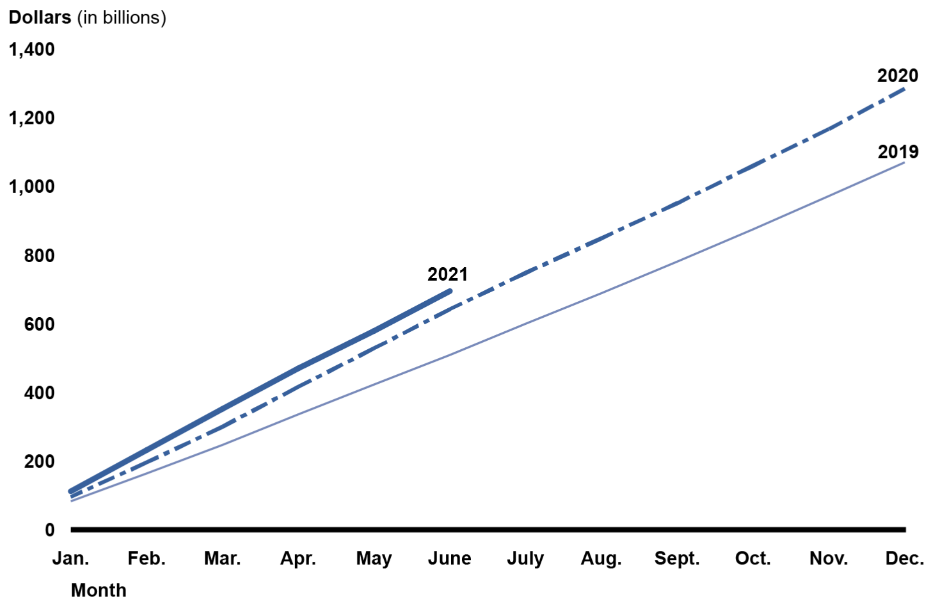
Corporate Credit Markets

We provide details below on other indicators of corporate credit markets for short-term funding and credit markets that supported primarily financial businesses.

Repurchase agreement market. The Primary Dealer Credit Facility was established by the Federal Reserve to provide support to primary dealers to facilitate the availability of credit to businesses and households using the triparty repurchase agreement market.[1] While a broad array of assets may be financed in the repurchase agreement market, the most commonly used instruments include U.S. Treasuries, federal agency securities, high quality mortgage-backed securities, corporate bonds, and money market instruments. Triparty repurchase agreements of corporate securities increased in 2020 and 2021, above the prepandemic levels in 2019 (see fig. 17). When the facility stopped extending credit on March 31, 2021, the total amount of outstanding loans held by the facility was $25 million.

[1]Primary dealers are a group of banks and broker-dealers designated by the Federal Reserve Bank of New York to serve as trading counterparts in the implementation of monetary policy. A repurchase agreement is a financial transaction in which one party sells an asset to another party with a promise to repurchase the asset at a prespecified later date. A reverse repurchase agreement is the same transaction, but from the perspective of the security buyer. In a triparty repurchase agreement, market clearing banks facilitate the settlement, unlike bilateral repurchase agreement markets, where the parties directly exchange money and securities.

Figure 17: Annual Cumulative Triparty Repurchase Agreements of Corporate Securities, January 2019–June 2021



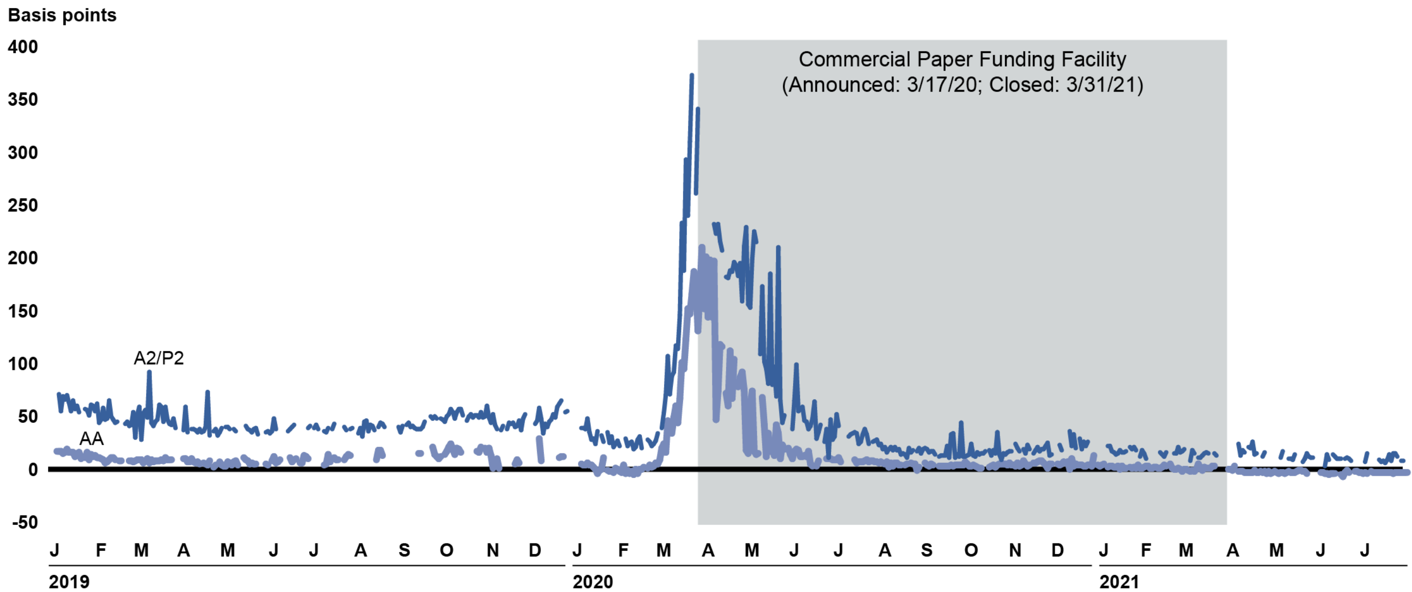
Source: GAO analysis of Securities Industry and Financial Markets Association data. | GAO-22-104640

Note: The values in this figure are collateral values of Fedwire-eligible and Fedwire non-eligible triparty repurchase agreements and reverse repurchase agreements of investment grade and non-investment grade corporate securities. A repurchase agreement is a financial transaction in which one party sells an asset to another party with a promise to repurchase the asset at a prespecified later date. A reverse repurchase agreement is the same transaction, but from the perspective of the security buyer. In a triparty repurchase agreement, market clearing banks facilitate the settlement, unlike bilateral repurchase agreement markets, where the parties directly exchange money and securities.

Commercial paper. Since mid-2020, spreads on 90-day commercial paper have declined to prepandemic levels (see fig. 18).[2] When the Commercial Paper Funding Facility stopped purchasing assets on March 31, 2021, the facility had not made any purchases of commercial paper in several months.

[2]This report analyzed data that were available through July 2021. Our prior Federal Reserve facilities report, which was issued in December 2020, analyzed data that were available through September 2020. See GAO, *Federal Reserve Lending Programs: Use of CARES Act-Supported Programs Has Been Limited and Flow of Credit Has Generally Improved*, GAO-21-180 (Washington, D.C.: Dec. 10, 2020).

Figure 18: Spreads on 90-day Commercial Paper for Large Nonfinancial Businesses, January 2019–July 2021

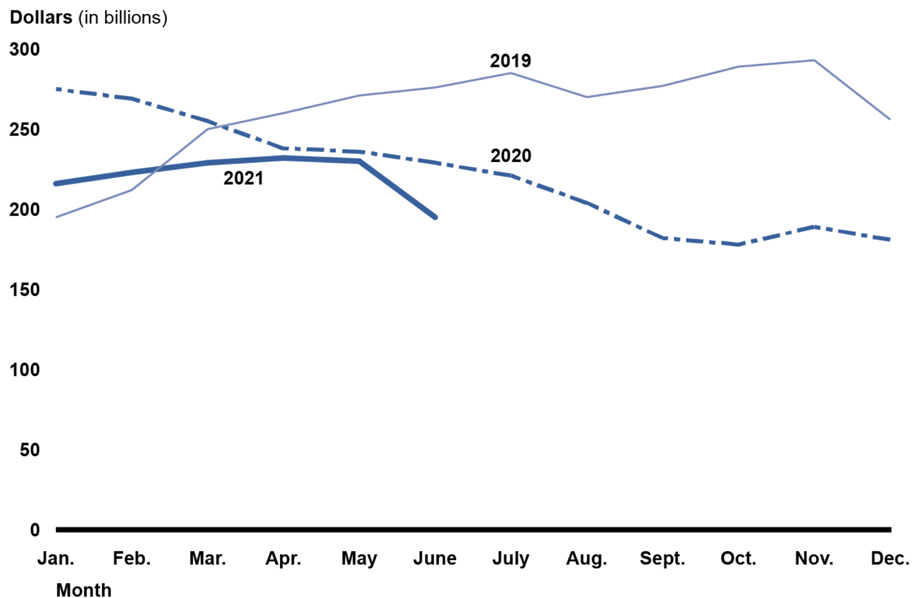


Source: GAO analysis of Bloomberg and Board of Governors of the Federal Reserve System data. | GAO-22-104640

Note: A rating of AA is for issuers with at least one "1" or "1+" rating, but no ratings other than "1," according to the rating agencies Moody's or Standard & Poor's. An A2/P2 rating is for issuers with at least one "2" rating, but no ratings other than "2." Maturities are 270 days or less. A line is broken if there are no data for the category on that date. A basis point is 1/100th of a percentage point. The spread is the difference between the commercial paper rate and the overnight indexed swap of the same maturity.

Prime money market funds. Prime money market funds experienced large net outflows—that is, investors withdrew more money overall from the funds than they added—beginning in April 2020 and as of June 2021 were below prepandemic levels (see fig. 19). When the Money Market Mutual Fund Liquidity Facility stopped extending credit on March 31, 2021, the total amount of outstanding assets held by the facility was $202.5 million.

Figure 19: Year-Over-Year Prime Money Market Funds Outstanding, January 2019–June 2021



Source: GAO analysis of Board of Governors of the Federal Reserve System data. | GAO-22-104640

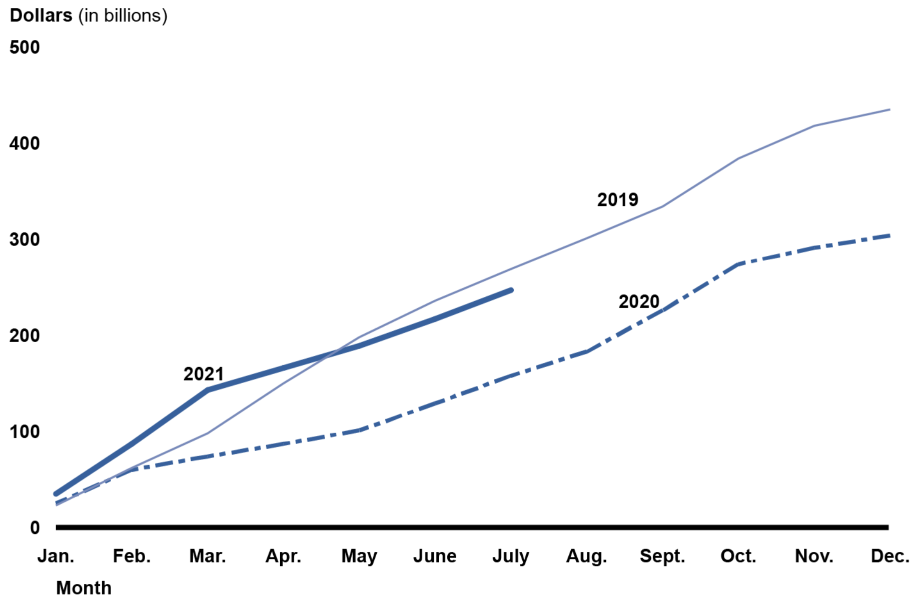
Note: The prime money market funds reported are investment holdings of unsecured commercial paper. Investment holdings of prime money market funds could include asset-backed commercial paper, certificates of deposit, and government security repurchase agreements.

Asset-backed securities. In 2020, issuances of asset-backed securities declined in almost all segments (except for student loans), especially for credit cards, compared to prepandemic levels.[3] As of July 2021, issuances were slightly below prepandemic levels (see fig. 20). The Term Asset-Backed Securities Loan Facility, which supported financial institutions and also benefited households, ceased extending credit on

[3]Asset-backed securities are tradable securities backed by pools of assets, such as loans, leases, or other cash-flow producing assets. The holders of asset-backed securities are entitled to payments that are distributed by the underlying assets. Common underlying assets for asset-backed securities include auto loans and leases, credit card loans, student loans, insurance premiums, commercial mortgages, and small business loans guaranteed by the Small Business Administration. Well-functioning markets for asset-backed securities benefit borrowers, who may gain access to funds with more favorable terms, and lenders, who may better manage their capital and diversify their income streams.

December 31, 2020. As of September 1, 2021, the total amount of outstanding assets held by the facility was $1.5 billion.

Figure 20: Annual Cumulative Issuances of Asset-Backed Securities, January 2019–July 2021



Source: GAO analysis of Securities Industry and Financial Markets Association data. | GAO-22-104640

Note: Total asset-backed securities include autos, collateralized debt obligations and collateralized loan obligations, credit cards, equipment, student loans, and other securities, such as Small Business Administration pools and servicing advances.

State and Local Government Credit Markets

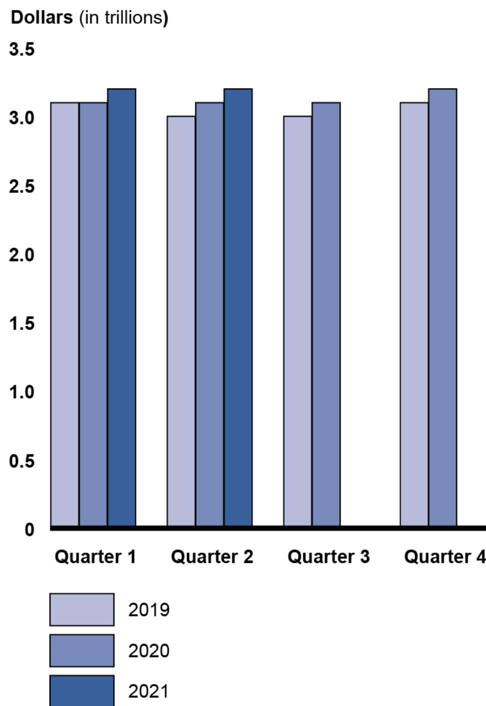
We provide details below on additional indicators of municipal credit and outstanding balances of municipal bonds. Municipal bonds are debt instruments that state and local governments issue to finance transportation, housing, hospitals, education, and other diverse projects.

Variable rate demand notes. Variable rate demand notes (VRDN) are long-term municipal securities that are payable on demand and accrue interest based on the prevailing money market rate—effectively making VRDNs short-term duration assets. These notes also are the most commonly held type of asset in municipal money market funds. The Securities Industry and Financial Markets Association municipal swap index of rates—a commonly used benchmark rate for VRDNs—has stabilized since the market disruptions in March 2020. The Federal Reserve announced it was adding VRDNs to the list of eligible collateral for the Money Market Mutual Fund Liquidity Facility on March 23, 2020.

However, outstanding balances of VRDNs have declined compared to prepandemic levels.

State and local government bonds. Municipal bonds outstanding have remained largely unchanged since the onset of the pandemic (see fig. 21).

Figure 21: State and Local Government Bonds Outstanding, First Quarter 2019–Second Quarter 2021



Source: GAO analysis of data from the Board of Governors of the Federal Reserve System. | GAO-22-104640

Note: The bonds outstanding consist mostly of long-term securities—those with maturities of more than 13 months.

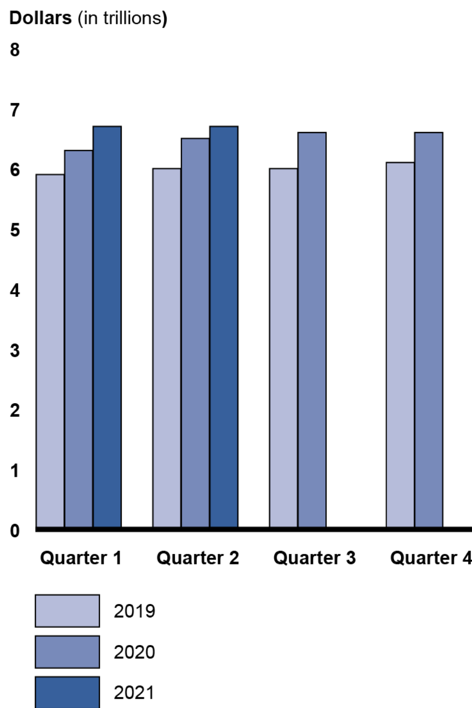
Small Business Credit Markets

We provide details below on outstanding balances of loans to small businesses. Small businesses in particular are generally dependent on bank lending for credit because they are too small to raise capital in bond markets directly.

Small business loans. Small business loans outstanding have increased since the second quarter of 2020 (see fig. 22). This increase may have been driven in part by Paycheck Protection Program loans. As such,

outstanding loan balances may be overstated because Paycheck Protection Program loans could be forgivable.

Figure 22: Small Business Loans Outstanding, First Quarter 2019–First Quarter 2021



Source: GAO analysis of data from the Board of Governors of the Federal Reserve System. | GAO-22-104640

Note: The loans shown in this figure include mortgages, depository institution loans, and other loans and advances.

Appendix III: Results of GAO's Survey of Main Street Lending Program Borrowers

From May through July 2021, we administered a web-based survey to a generalizable sample of for-profit borrowers in the Main Street Lending Program.

As shown in table 3, we received valid responses from 42 percent of our total sample. All survey results presented in this appendix are generalizable to for-profit borrowers in the Main Street Lending Program. We express our confidence in the precision of our estimates as a 95 percent confidence interval.[1] For a more detailed discussion of our survey methodology, see appendix I.

Table 3: Survey Population, Sample Size, and Percentage of Valid Survey Responses

Population size	Sample size	Response rate (%)
1,830	636	42

Source: GAO survey of Main Street Lending Program participants. | GAO-22-104640

Table 4: Is your business minority-owned? (A business is minority-owned if it is at least 51 percent owned and controlled by individuals who identify as members of one of the following groups: Black Americans, Hispanic Americans, Native Americans, Asian Pacific Americans, and Subcontinent Asian Americans.)

Responses	Estimated percentage	95 percent confidence interval—lower bound (percentage)	95 percent confidence interval—upper bound (percentage)
Yes	14.5	10.5	19.4
No	83.6	78.6	87.8
Don't know	1.9	0.6	4.3

Source: GAO survey of Main Street Lending Program participants. | GAO-22-104640

Table 5: Is your business women-owned? (A business is women-owned if it is at least 51 percent owned and controlled by individuals who identify as women.)

Responses	Estimated percentage	95 percent confidence interval—lower bound (percentage)	95 percent confidence interval—upper bound (percentage)
Yes	8.5	5.4	12.5
No	90.5	86.4	93.8
Don't know	1.0	0.2	3.0

Source: GAO survey of Main Street Lending Program participants. | GAO-22-104640

[1]Because we followed a probability procedure based on random selections, our sample is only one of a large number of samples that we might have drawn. Since each could have provided different estimates, we express our confidence in the precision of our particular sample's results as a 95 percent confidence interval. This is the interval that would contain the actual population value for 95 percent of the samples we could have drawn.

Table 6: Is your business veteran-owned? (A business is veteran-owned if it is at least 51 percent owned and controlled by one or more veterans.)

Responses	Estimated percentage	95 percent confidence interval—lower bound (percentage)	95 percent confidence interval—upper bound (percentage)
Yes	5.3	2.9	8.7
No	93.3	89.5	96.0
Don't know	1.4	0.4	3.7

Source: GAO survey of Main Street Lending Program participants. | GAO-22-104640

Table 7: How important was a Main Street loan in helping your business maintain ongoing operations?

Responses	Estimated percentage	95 percent confidence interval—lower bound (percentage)	95 percent confidence interval—upper bound (percentage)
Very important	88.0	83.5	91.7
Somewhat important	11.3	7.8	15.7
Not too important	0.7	0.1	2.5
Not important at all	0.0	0.0	1.1
My business has closed permanently	0.0	0.0	1.1
Don't know	0.0	0.0	1.1

Source: GAO survey of Main Street Lending Program participants. | GAO-22-104640

Table 8: How would you rate the process of finding a lender that offered Main Street loans?

Responses	Estimated percentage	95 percent confidence interval—lower bound (percentage)	95 percent confidence interval—upper bound (percentage)
Very easy	29.7	25.2	34.2
Somewhat easy	29.0	24.5	33.5
Somewhat difficult	23.6	19.4	27.8
Very difficult	16.5	12.3	21.5
Don't know	1.2	0.3	3.4

Source: GAO survey of Main Street Lending Program participants. | GAO-22-104640

Table 9: Approximately how many full-time equivalent employees does your business currently have?

Responses	Estimated percentage	95 percent confidence interval—lower bound (percentage)	95 percent confidence interval—upper bound (percentage)
10 or fewer	11.8	8.2	16.3
11–49	35.3	30.7	40.0
50–99	16.1	11.9	21.1
100–499	27.4	23.2	31.7
500 or more	7.3	4.5	11.1
Don't know	2.0	0.7	4.5

Source: GAO survey of Main Street Lending Program participants. | GAO-22-104640

Appendix IV: GAO Contact and Staff Acknowledgments

GAO Contact

Michael E. Clements, clementsm@gao.gov, (202) 512-8678

Staff Acknowledgments

In addition to the contact named above, Tarek Mahmassani (Assistant Director), Kun-Fang Lee (Analyst in Charge), Carl Barden, Daniel Flavin, John Karikari, Christopher Klemmer, Matthew Levie, Joshua Marcus, Jesse Mitchell, Marc Molino, Bryan Prince, Jessica Sandler, Jennifer Schwartz, and Farrah Stone made key contributions to this report.

GAO's Mission

The Government Accountability Office, the audit, evaluation, and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.

Obtaining Copies of GAO Reports and Testimony

The fastest and easiest way to obtain copies of GAO documents at no cost is through our website. Each weekday afternoon, GAO posts on its website newly released reports, testimony, and correspondence. You can also subscribe to GAO's email updates to receive notification of newly posted products.

Order by Phone

The price of each GAO publication reflects GAO's actual cost of production and distribution and depends on the number of pages in the publication and whether the publication is printed in color or black and white. Pricing and ordering information is posted on GAO's website, https://www.gao.gov/ordering.htm.

Place orders by calling (202) 512-6000, toll free (866) 801-7077, or TDD (202) 512-2537.

Orders may be paid for using American Express, Discover Card, MasterCard, Visa, check, or money order. Call for additional information.

Connect with GAO

Connect with GAO on Facebook, Flickr, Twitter, and YouTube.
Subscribe to our RSS Feeds or Email Updates. Listen to our Podcasts.
Visit GAO on the web at https://www.gao.gov.

To Report Fraud, Waste, and Abuse in Federal Programs

Contact FraudNet:

Website: https://www.gao.gov/about/what-gao-does/fraudnet

Automated answering system: (800) 424-5454 or (202) 512-7700

Congressional Relations

A. Nicole Clowers, Managing Director, ClowersA@gao.gov, (202) 512-4400, U.S. Government Accountability Office, 441 G Street NW, Room 7125, Washington, DC 20548

Public Affairs

Chuck Young, Managing Director, youngc1@gao.gov, (202) 512-4800
U.S. Government Accountability Office, 441 G Street NW, Room 7149
Washington, DC 20548

Strategic Planning and External Liaison

Stephen J. Sanford, Managing Director, spel@gao.gov, (202) 512-4707
U.S. Government Accountability Office, 441 G Street NW, Room 7814,
Washington, DC 20548

Please Print on Recycled Paper.