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Report to Congressional Committees

December 2023

FEDERAL RESERVE LENDING PROGRAMS

Status of Monitoring and Main Street Lending Program

GAO-24-106482

GAO Highlights

Highlights of GAO-24-106482, a report to congressional committees

December 2023

FEDERAL RESERVE LENDING PROGRAMS

Status of Monitoring and Main Street Lending Program

Why GAO Did This Study

As of September 2023, several of the Federal Reserve's 13 lending facilities continued to hold large amounts of outstanding assets and loans. Nine of the 13 facilities received funds appropriated through the CARES Act (section 4003). Of these nine, six had a total of about $12 billion in outstanding assets and loans. About 72 percent of this amount—about $8.6 billion—was held by facilities under the Main Street Lending Program, which supported loans to small and midsize businesses and nonprofits. The Federal Reserve is required to monitor and report on the facilities until they no longer hold outstanding assets or loans.

The CARES Act includes a provision for GAO to periodically report on section 4003 loans, loan guarantees, and investments. This report examines (1) the Federal Reserve's oversight and monitoring of the CARES Act facilities, (2) trends in the credit markets that the facilities targeted, and (3) the status and performance of Main Street Lending Program loans.

GAO reviewed Federal Reserve Bank documentation and analyzed agency and other data on the facilities and credit markets, including data on short- and long-term corporate credit market indicators. GAO also conducted loan-level analysis of Main Street Lending Program loans and interviewed Federal Reserve officials.

View GAO-24-106482. For more information, contact Michael E. Clements at (202) 512-8678 or clementsm@gao.gov.

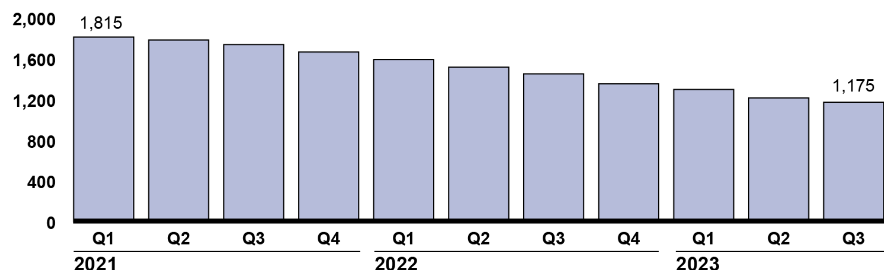
What GAO Found

In response to the COVID-19 pandemic, the Board of Governors of the Federal Reserve System authorized 13 emergency lending programs—known as facilities—to ensure the flow of credit to various parts of the economy. To improve oversight, the Federal Reserve issued five internal reports from December 2020 through June 2023 that identified opportunities to enhance internal processes and controls, including for collateral and asset management. GAO found that Federal Reserve Banks, which manage the facilities, addressed almost all of these opportunities. As of September 2023, no new enhancement opportunities had been identified. GAO also found the Federal Reserve's plans for ongoing monitoring of the facilities generally aligned with federal internal control standards for ongoing monitoring of an entity's internal control system.

GAO analysis shows that while uncertainties exist in the credit markets targeted by the facilities, vulnerabilities remain low. Corporate bond issuances are higher than prepandemic levels, and credit spreads (which reflect borrowing costs) generally remain low. These factors indicate that corporations have relatively easy access to credit. However, according to GAO analysis of available data and survey results, small businesses' access to credit has decreased since 2022, as banks have tightened credit standards in response to a less positive economic outlook and industry-specific problems. Also, municipal bond issuances have decreased since mid-2022 and are at prepandemic levels. This trend reflects challenges for raising new debt or refinancing existing debt, especially given that interest rates have increased. However, debt levels carried in sectors the facilities targeted appear sustainable.

Of the 1,830 loans made through the Main Street Lending Program,1,175 (or 64 percent) remained outstanding as of the end of August 2023, the most recent data available (see figure). Since required interest payments began in August 2021, most borrowers have been making them on time. However, delinquent payments increased to about 7.6 percent in August 2023, which may reflect the effects of increased interest payments as variable rates on Main Street loans have risen. GAO found that 610 loans (or about 33 percent) had been fully repaid, and 45 loans (or about 2.5 percent) had recorded losses.

Main Street Lending Program Outstanding Loans, First Quarter 2021–Third Quarter 2023



Source: GAO analysis of Federal Reserve Bank of Boston data. | GAO-24-106482

Note: Third quarter 2023 reflects data as of the end of August 2023.

Contents

Letter 1

Background 3
Federal Reserve Oversight Continues, and Reserve Banks Generally Implemented Previously Identified Enhancements 8
Uncertainties Exist in the Credit Markets Targeted by the Lending Facilities, but Vulnerabilities Remain Low 11
Most Main Street Borrowers Continue to Make Regular Payments, but Delinquencies Are Slowly Increasing 24
Agency Comments 39

Appendix I Objectives, Scope, and Methodology 43

Appendix II Facilities Not Funded by the CARES Act That Supported Short-Term Credit Markets 48

Appendix III Main Street Loan Performance by Loan Size and Business Size for Fully Repaid and Charged-Off Loans 56

Appendix IV GAO Contacts and Staff Acknowledgments 59

Tables

Table 1: Federal Reserve Facilities Established with CARES Act Funding 5
Table 2: Examples of Potential Main Street Loan Interest Payments by Varying Interest Rates 34

Figures

Figure 1: Outstanding Assets of Federal Reserve Lending Facilities Supported by CARES Act Funding, June 2020–September 2023 6
Figure 2: Corporate Bond Market Distress Index, January 2019–September 2023 13
Figure 3: Spreads on Corporate Bonds, January 2019–September 2023 14

Figure 4: Annual Cumulative Issuances of Corporate Bonds, January 2019–September 2023 15
Figure 5: Annual Cumulative Issuances of Asset-Backed Securities, January 2019–September 2023 16
Figure 6: Small Business Health Index, January 2019–September 2023 17
Figure 7: Banks' Lending Conditions for Small Business Loans, First Quarter 2019–Third Quarter 2023 18
Figure 8: Spreads on Municipal Bonds, January 2019–September 2023 19
Figure 9: Annual Cumulative Issuances of Municipal Bonds, January 2019–September 2023 20
Figure 10: Ratio of Nonfinancial Corporate Bonds Outstanding to Gross Domestic Product, First Quarter 2019–Third Quarter 2023 21
Figure 11: Ratio of Small Business Loans Outstanding to Gross Domestic Product, First Quarter 2019–Third Quarter 2023 22
Figure 12: Ratio of State and Local Government Bonds Outstanding to Gross Domestic Product, First Quarter 2019–Third Quarter 2023 23
Figure 13: Main Street Lending Program Outstanding Loans, First Quarter 2021–Third Quarter 2023 25
Figure 14: Main Street Lending Program Loan Payments Due and Amounts Paid by Borrowers, First Quarter 2021–Third Quarter 2023 26
Figure 15: Outstanding Main Street Loans, by Census Region, as of August 2023 27
Figure 16: Number and Dollar Amount of Main Street Loans Made and Outstanding by Sector, as of August 2023 29
Figure 17: Distribution of Outstanding Main Street Loans, by Loan Size, First Quarter 2021–Third Quarter 2023 30
Figure 18: Distribution of Outstanding Main Street Loans by Business Size, First Quarter 2021–Third Quarter 2023 31
Figure 19: Main Street Lending Program Interest Rates and Rate of Delinquent Loan Payments, July 2020–August 2023 33
Figure 20: Fully Repaid Main Street Loans, First Quarter 2021–Third Quarter 2023 35
Figure 21: Fully Repaid Main Street Loans, by Census Region, as of August 2023 36
Figure 22: Number and Dollar Amount of Fully Repaid Main Street Loans, by Sector, as of August 2023 37

Figure 23: Number of Main Street Loans with Losses, Second Quarter 2021–Third Quarter 2023 38
Figure 24: Financial Stress Index, January 2019–September 2023 49
Figure 25: Spreads on 90-Day Commercial Paper for Large Nonfinancial Businesses, January 2019–September 2023 50
Figure 26: Commercial Paper Outstanding for Large Nonfinancial Businesses, January 2019–September 2023 51
Figure 27: Annual Cumulative Triparty Repurchase Agreements of Corporate Securities, January 2019–September 2023 52
Figure 28: Prime Money Market Fund Investments, January 2019–September 2023 53
Figure 29: Municipal Swap Index of Rates on Tax-Exempt Variable Rate Demand Notes, January 2019–September 2023 54
Figure 30: Variable Rate Demand Notes Outstanding, January 2019–July 2023 55
Figure 31: Distribution of Main Street Loans Made, Loans Fully Repaid, and Loans with Losses, by Loan Size, as of August 2023 57
Figure 32: Distribution of Main Street Loans Made, Loans Fully Repaid, and Loans with Losses, by Business Size, as of August 2023 58

Abbreviations

CECL	Current Expected Credit Losses
GDP	gross domestic product
LIBOR	London Interbank Offered Rate
NAICS	North American Industry Classification System
RBOPS	Division of Reserve Bank Operations and Payment Systems
SOFR	Secured Overnight Financing Rate

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U.S. GOVERNMENT ACCOUNTABILITY OFFICE

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

December 22, 2023

Congressional Committees

In response to the economic effects of the COVID-19 pandemic, in 2020 the Board of Governors of the Federal Reserve System authorized 13 emergency lending programs, known as facilities. These facilities were intended to support the flow of credit to employers, consumers, small and midsize businesses, state and local governments, and nonprofit organizations.[1] Nine of the 13 facilities received funds appropriated by the CARES Act.[2] The CARES Act facilities ceased purchasing assets or extending credit by January 8, 2021, but several continue to hold large amounts of outstanding assets and loans.[3]

As of September 30, 2023, the CARES Act facilities had about $12 billion in outstanding assets and loans. Approximately $8.6 billion (or about 72 percent) of this amount was held by the Main Street Lending Program facilities, which targeted small and midsize businesses and nonprofits.[4] Main Street loans have a 5-year maturity, and thus any currently outstanding loans will not mature until July 2025 or later.

Section 4026(f) of the CARES Act contains a provision for us to report annually on the loans, loan guarantees, and other investments provided

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[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]To provide economic relief, section 4003(b)(4) of the CARES Act made available at least $454 billion for the Department of the Treasury to support the Board of Governors of the Federal Reserve System in establishing facilities. Pub. L. No. 116-136, § 4003(b)(4), 134 Stat. 281, 470 (2020). We refer to these facilities as CARES Act facilities.

[3]The Federal Reserve also established four emergency lending facilities that did not receive CARES Act appropriations (we refer these to as non–CARES Act facilities). These facilities were intended to serve various markets and credit needs. On July 30, 2021, the last of the non–CARES Act facilities stopped purchasing assets or extending credit.

[4]This amount includes Main Street loan participations at face value, net of an allowance for loan losses updated as of June 30, 2023.

under section 4003 of the CARES Act.[5] This report examines (1) the Federal Reserve's oversight and monitoring of the CARES Act facilities, (2) what available evidence suggests about trends in credit markets that CARES Act facilities targeted, and (3) the status of Main Street loans and their characteristics and trends in loan performance.

To address the first objective, we analyzed documentation from the Federal Reserve's Division of Reserve Bank Operations and Payment Systems (RBOPS). This included its procedures for CARES Act facilities, planning documents, and summaries of completed reviews. We compared RBOPS's monitoring plans against selected federal internal control standards.[6] Additionally, we reviewed the Federal Reserve's periodic reports and financial statements for updates on potential and actual losses incurred by the facilities. We also interviewed RBOPS officials.

To address the second objective, we analyzed indicators of the performance of credit markets affected by the facilities and the near-term vulnerabilities of these markets. To identify indicators, we reviewed prior GAO work and reports and data from Federal Reserve entities, Bloomberg, the Securities Industry and Financial Markets Association, and Dun & Bradstreet. We analyzed data from January 2019 through September 2023 (the most recent available) on indicators of the performance of credit markets affected by the facilities. The reports we reviewed included research on economic conditions that could adversely affect the credit markets. To assess the reliability of the data for our second objective, we reviewed documentation on the data collection methodologies and reviewed prior GAO work. We found that, collectively,

[5]Specifically, we are to report no later than 9 months after the date of enactment of the act, and annually thereafter through the year succeeding the last year for which loans, loan guarantees, or other investments made under section 4003 are outstanding. Our previous reports were GAO*, Federal Reserve Lending Programs: Risks Remain Low in Related Credit Markets, and Main Street Loans Have Generally Performed Well*, GAO-23-105629 (Washington, D.C.: Dec. 19, 2022); *Federal Reserve Lending Programs: Credit Markets Served by the Programs Have Stabilized, but Vulnerabilities Remain,* GAO-22-104640 (Washington, D.C.: Oct. 19, 2021); and *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). Additionally, we regularly issue government-wide reports on the federal response to COVID-19, available at https://www.gao.gov/coronavirus.

[6]See GAO, *Standards for Internal Control in the Federal Government*, GAO-14-704G (Washington, D.C.: Sept. 10 2014).

the indicators were sufficiently reliable for the purpose of providing a general sense of how credit markets are performing.

For the third objective, we conducted loan-level analysis of Main Street Lending Program data as of the end of August 2023, the most recent data available from the Federal Reserve Bank of Boston. To assess the reliability of the data for our third objective, we reviewed documentation, including the data dictionary, for Main Street loan data, and we performed electronic testing on-site for outliers, missing data, and erroneous values. We also gathered information from Federal Reserve Bank of Boston officials about the collection methodology. We determined the data were sufficiently reliable for the purpose of describing the status and characteristics of Main Street loans and their performance. A more detailed description of our objectives, scope, and methodology can be found in appendix I.

We conducted this performance audit from December 2022 to December 2023 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

The Federal Reserve System and Emergency Lending Authority

The Federal Reserve Act established the Federal Reserve System as the country's central bank.[7] The Federal Reserve System consists of three parts: the Federal Reserve Board, Reserve Banks, and the Federal Open Market Committee.[8] 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.

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

[8]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.

The Federal Reserve Board has the authority to authorize the Reserve Banks to extend credit more broadly than usual during emergencies.[9] 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.[10]

Emergency Lending Facilities in Response to COVID-19

In response to the economic disruptions caused by the COVID-19 pandemic, the CARES Act authorized at least $454 billion for the Department of the 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 nine facilities using funds appropriated by the CARES Act.[11] The Federal Reserve cited a number of factors in determining that unusual and exigent circumstances existed. These factors included disruption in the financial markets, reduced availability of credit, a heightened need for credit, and an increase in business expenditures.

In general, the CARES Act facilities were designed to address broad sectors of the economy, such as large corporations, small and midsize businesses, and state and local governments. 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. Of this total, as of September 30, 2023, the Federal Reserve had returned about $89.1 billion to Treasury, leaving about $13 billion available to cover any potential losses the facilities incur. In accordance with the Consolidated Appropriations Act, 2021, all nine facilities stopped

[9]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 Board 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.

[10]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.

[11]The Federal Reserve established 13 emergency lending facilities in response to the COVID-19 pandemic. Four emergency lending facilities—the Commercial Paper Funding Facility, Money Market Mutual Fund Liquidity Facility, Paycheck Protection Program Liquidity Facility, and Primary Dealer Credit Facility—were non–CARES Act facilities. All four stopped purchasing assets or extending credit by July 30, 2021. In March 2023, the Federal Reserve established another emergency lending facility to boost operating banks' liquidity and minimize contagion after Silicon Valley Bank and Signature Bank failed. The Bank Term Funding Program was established on March 12, 2023, and is to remain active until at least March 11, 2024.

purchasing assets or extending credit by January 2021. They conducted a total of about $41 billion in transactions (see table 1).[12]

Table 1: Federal Reserve Facilities Established with CARES Act Funding

CARES Act–supported facilities	Number of facilities	Facility activity	Termination date	Transaction amount (in billions of dollars)
Primary Market Corporate Credit Facility and Secondary Market Corporate Credit Facility	2	Support large businesses by purchasing qualifying corporate bonds and other eligible assets	Dec. 31, 2020	14.3[a]
Main Street Lending Program	5[b]	Support small and midsize for-profit businesses and nonprofit organizations by purchasing participations in eligible loans	Jan. 8, 2021	16.5[c]
Municipal Liquidity Facility	1	Support states, certain counties, municipalities, multistate entities, and revenue bond issuers by purchasing eligible notes that these entities issued	Dec. 31, 2020	6.4
Term Asset-Backed Securities Loan Facility	1	Support the flow of credit to 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	Dec. 31, 2020	3.7

Source: GAO analysis of Federal Reserve Board documents and data. | GAO-24-106482

[a]The Primary Market Corporate Credit Facility did not conduct any transactions.

[b]The Main Street Lending Program comprised five facilities: the 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.

[c]The transaction amount refers to the Federal Reserve's participation in Main Street Lending Program loans, which is the purchase of 95 percent of lenders' authorized loan amount to eligible borrowers. The Nonprofit Organization Expanded Loan Facility did not conduct any transactions.

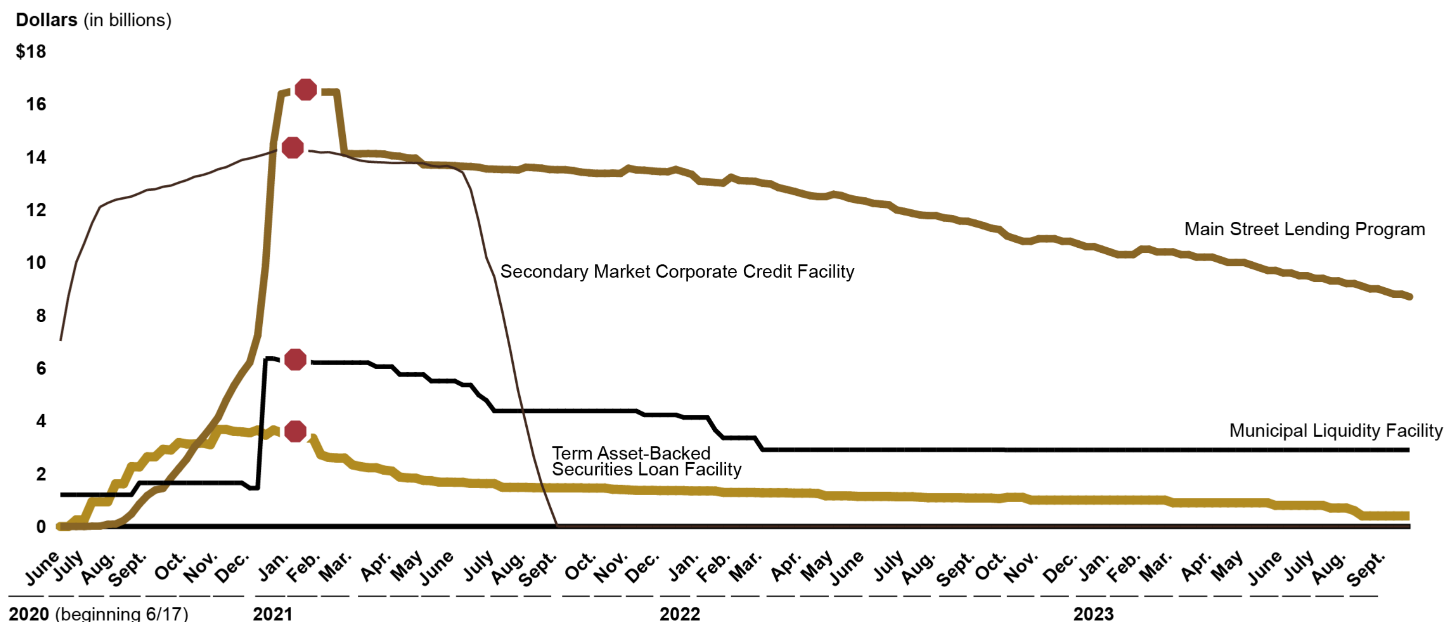
For the facilities that received CARES Act funds, outstanding assets peaked between November 2020 and January 2021 (see fig. 1).[13] As of September 2023, the facilities that continued to hold assets were the

[12]For the Main Street Lending Program, the transaction amount refers to the Federal Reserve's participation in the Main Street loans, which is the purchase of 95 percent of lenders' authorized loan amount to eligible borrowers.

[13]Outstanding assets refers to assets, such as corporate and municipal bonds, that the facilities purchased and had not disposed of through sale or other means. One of the two entities that borrowed from (sold eligible notes to) the Municipal Liquidity Facility has repaid all of its borrowings. Rather than purchasing loans, the Term Asset-Backed Securities Loan Facility provided loans in exchange for eligible asset-backed securities.

Municipal Liquidity Facility, the Term Asset-Backed Securities Loan Facility, and four facilities under the Main Street Lending Program.[14] All of the Secondary Market Corporate Credit Facility's holdings in exchange-traded funds and corporate bond assets had either matured or been sold as of August 31, 2021.

Figure 1: Outstanding Assets of Federal Reserve Lending Facilities Supported by CARES Act Funding, June 2020–September 2023



Source: GAO analysis of Federal Reserve System documents and data. | GAO-24-106482

Note: Since February 24, 2021, the Main Street Lending Program's outstanding assets have been reported net of an allowance for loan losses, which is updated quarterly. The Main Street lending facilities purchased a participation interest in newly issued eligible loans that eligible lenders made to eligible small and midsize for-profit borrowers and nonprofit organizations.

Federal Reserve Oversight of the 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 facilities. RBOPS's general framework for oversight consists of three phases:

[14]The Main Street Lending Program's Nonprofit Organization Expanded Loan Facility did not conduct any transactions.

- **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. RBOPS conducted these reviews to assist Reserve Banks in identifying any enhancements at an early point in the life of the facilities and to obtain reasonable assurance that the design of controls and processes was adequate to ensure the facilities' effective operation. RBOPS completed phase two reviews for all facilities by December 2020.
- **Phase three.** The third phase consists of ongoing monitoring activities. These include continued communication with Reserve Bank management 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. According to RBOPS documentation, phase three oversight activities will continue throughout the life of the facilities, until they no longer hold outstanding assets or loans.

As part of phase three, RBOPS prepares interim reports at 6-month intervals, unless a change in timing is approved by the credit facilities' oversight steering group and advisors.[15] These reports summarize the scope of oversight activities and any enhancement opportunities related to facility processes and controls. As of September 2023, RBOPS had issued five interim reports to Reserve Bank management communicating the results of phase three reviews, cumulatively covering December 2020–June 2023.

As we previously reported, RBOPS has a process for determining if enhancement opportunities have been addressed.[16] RBOPS officials said Reserve Bank staff notify RBOPS when they have completed steps to address an enhancement opportunity. RBOPS then analyzes the actions taken by Reserve Bank staff and determines whether the enhancement opportunity has been addressed. According to RBOPS officials, this analysis may include discussions with a Reserve Bank's internal audit team and management, walk-throughs with Reserve Bank staff to

[15]RBOPS's organizational structure for phase three credit facility oversight consists of a steering group and an advisor group that oversee the teams responsible for phase three focus areas.

[16]See GAO-23-105629.

understand new or updated processes, and reviews of documentation such as process flows and procedures.

As we also previously reported, two of the remaining CARES Act facilities—the Term Asset-Backed Securities Loan Facility and the Municipal Liquidity Facility—are managing basic operations, such as winding down the facility. The Main Street Lending Program continues to have more robust operations related to the management of its remaining loans.

Federal Reserve Oversight Continues, and Reserve Banks Generally Implemented Previously Identified Enhancements

Federal Reserve Has Not Identified Additional Opportunities to Enhance Controls

RBOPS's interim reports issued to the applicable Reserve Banks for the two most recent 6-month periods, covering July 2022–June 2023, identified no new opportunities to enhance facilities' processes and controls. In line with our previous reporting, we found that RBOPS's ongoing monitoring of the facilities generally aligns with federal internal control standards for monitoring of an entity's internal control system.[17] 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.

RBOPS's activities were generally consistent with internal control standards. RBOPS tracked the relevant facilities' progress in addressing previously identified enhancements. RBOPS communicated the results of its ongoing monitoring to facility management teams at relevant Reserve Banks and the Federal Reserve Board. RBOPS conducts ongoing follow-

[17]See GAO-14-704G and GAO-23-105629.

up and periodic reporting on facilities' progress in incorporating the enhancements as part of its phase three reviews.

In early 2023, RBOPS reassessed operation and risk factors to calibrate its oversight activities for the year. RBOPS identified three overall focus areas for 2023: (1) collateral and asset management; (2) operations and controls; and (3) cybersecurity, resiliency, and data management. RBOPS further divided the operations and controls area into four subfocus areas: risk management; vendor management; internal controls; and resources, roles, and responsibilities.

RBOPS noted the following for each focus area:

- **Collateral and asset management.** RBOPS will continue to monitor underlying collateral, such as by overseeing decisions on asset valuation and disposition.
- **Operations and controls.** RBOPS will use the components of the operations and controls function to obtain reasonable assurance that controls are present and are functioning in a manner that addresses evolving risks.
- **Cybersecurity, resiliency, and data management.** To strengthen risk-management practices, reduce cyber risks, and maintain resiliency for the facilities, RBOPS will continue to oversee ongoing operations and improvements to the cybersecurity programs through various oversight activities, such as regular reviews.

According to RBOPS's 2023 planning documentation, phase three oversight will continue to take an adaptive approach, given the differing nature of the facilities and the maturity of the underlying assets and investments. Board staff will consult with and coordinate ongoing oversight activities with Reserve Bank control functions, such as risk management and internal audit, and with external auditors.

Reserve Banks Implemented Almost All Enhancements to Processes and Controls

Reserve Banks have implemented processes to address all 20 opportunities to enhance processes and controls that RBOPS has identified in its phase two and three oversight reviews.[18] Of the 20 identified enhancement opportunities, RBOPS has completed its review of 19. RBOPS is currently reviewing materials for the remaining opportunity, which relates to the validation of one facility's credit

[18]The 20 opportunities identified include the Paycheck Protection Program Liquidity Facility, which is a non–CARES Act facility.

evaluation model. During 2023, RBOPS took measures to balance ongoing oversight of the CARES Act facilities with efforts to support other activities, including the Federal Reserve's response to 2023 banking stress and the announcement and implementation of the Bank Term Funding Program.

Actual and Expected Losses Are Limited to the Main Street Lending Program

As of September 30, 2023, the Main Street Lending Program facilities were the only ones that had experienced losses. The Main Street facilities had recognized approximately $257 million in actual loan losses, net of subsequent recoveries, as of that date. This accounts for about 1.6 percent of the total transaction amount the program conducted.

Effective January 1, 2023, the Federal Reserve adopted the Current Expected Credit Losses (CECL) methodology for the Main Street Lending Program facilities, in accordance with updated standards issued by the Financial Accounting Standards Board.[19] While the Federal Reserve recorded an amount to increase credit losses under the CECL methodology, the amount recorded was immaterial, meaning it had no effect on reported losses.

The Federal Reserve analyzes all of the CARES Act facilities on a quarterly basis to determine if it is necessary to set aside an allowance for potential losses. The evaluation of loan participations purchased by the Main Street Lending Program, including those in nonaccrual status, resulted in recording a loan loss allowance of $820 million as of September 30, 2023.

[19]The Federal Reserve estimates allowances for credit losses in alignment with U.S. generally accepted accounting principles set by the Financial Accounting Standards Board. In June 2016, the board introduced a new methodology for estimating allowances for credit losses, known as the Current Expected Credit Losses methodology. As described in the Financial Accounting Standards Board's Accounting Standards Update 2016-13, the new methodology for estimating allowances aims to provide more timely recognition of credit losses. During 2022, Reserve Bank stakeholders, in conjunction with input from RBOPS, formed a working group whose goal was to assist Reserve Banks in their CECL adoption efforts. The working group developed a survey that included a set of questions to tailor its approach to adoption and to solicit feedback from key members of the financial reporting functional areas across the Federal Reserve System.

Individually assessed loss allowance. According to Federal Reserve officials, to generate the individually assessed loss allowance for Main Street Lending Program facilities, the Federal Reserve Bank of Boston evaluates loans with an outstanding balance of $10 million or greater that fail to meet certain criteria related to loan performance or credit rating. The Reserve Bank does this to determine if it is likely that the borrower will not repay all of the principal and interest. If the Reserve Bank determines that a loss is likely, the Main Street Lending Program facilities recognize a loan loss allowance for that loan.

Collectively assessed loss allowance. The collectively assessed loss allowance takes into account the probability that some portion of a pool of borrowers will default and the losses that would be incurred if loans were to default, applied to the outstanding principal of loans. A loan may be subject to the collectively assessed 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 individually assessed allowance.

Source: Board of Governors of the Federal Reserve System. | GAO-24-106482

According to Federal Reserve officials, the Main Street Lending Program facilities' allowance for loan losses consists of the individually assessed loss allowance for impaired loan participations and the collectively assessed loss allowance for all other loan participations (see sidebar). Taken together, these allowances reflect management's estimate of expected credit losses inherent in the loan portfolio.

Uncertainties Exist in the Credit Markets Targeted by the Lending Facilities, but Vulnerabilities Remain Low

The Federal Reserve implemented the emergency lending facilities to mitigate disruptions in credit markets for large and small businesses, as well as state and local governments, as a result of the COVID-19 pandemic.[20] We found that since the termination of the facilities, while uncertainties exist in credit markets, near-term default risks in the markets

[20]In our December 2022 report, we discussed trends in these credit markets up to the third quarter of 2022; see GAO-23-105629. Available indicators suggested at that time that risks in the credit markets targeted by the lending facilities appeared to be low, but that vulnerabilities existed. Risks in corporate credit markets had remained low, but vulnerabilities existed in certain short-term funding markets. Additionally, according to surveys of small businesses and lenders, access to credit had generally been favorable since the facilities stopped providing loans. Borrowing costs in municipal markets had generally remained low since the Municipal Liquidity Facility ceased activity.

the facilities operated in appear to be low, as vulnerabilities also remain low.[21]

Uncertainties Exist in Corporate Credit Markets, but Risks Remain Low

The Federal Reserve established three facilities in May and June 2020 primarily to support longer-term credit markets for large businesses, and these facilities were terminated on December 31, 2020.[22] Since then, risks in these markets have remained low.[23]

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. Credit rating agencies assign these ratings to indicate the companies' investment risks and payment capabilities. Bonds rated above a certain threshold are called investment-grade bonds.

Source: GAO. | GAO-24-106482

The corporate bond market distress index, which incorporates a wide range of indicators, including pricing in primary and secondary markets, suggests market functioning risks have generally continued to remain near prepandemic levels since early 2021. As shown in figure 2, the market index, which combines indexes for investment grade and non-investment-grade bonds, has generally remained low, although the index for investment-grade bonds has been relatively high since February 2022.[24]

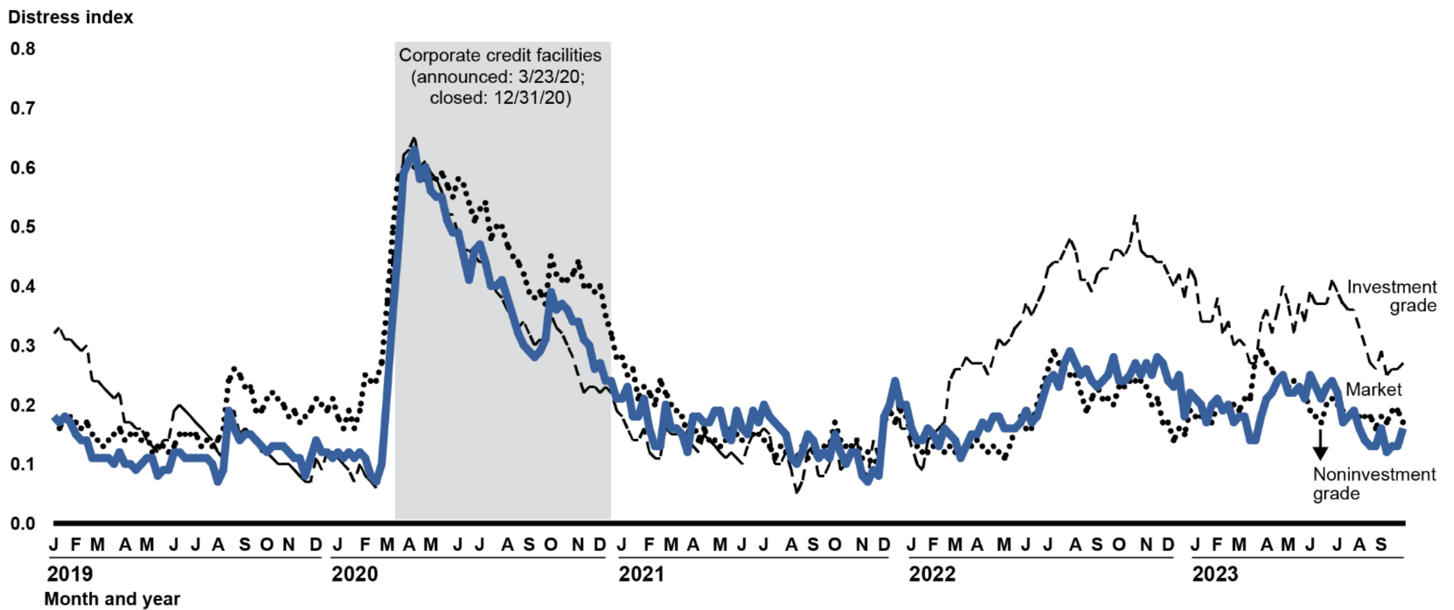
[21]Risks in credit markets involve risks to both the issuer and counterparty, such as default risk. Other risks include liquidity risk, which is the risk that a given security or asset cannot be traded promptly in the market (for example, to prevent a loss). In general, vulnerability is the weakness in the credit markets that could create the risk of a potential loss.

[22]These were the Secondary Market Corporate Credit Facility, Term Asset-Backed Securities Loan Facility, and Primary Market Corporate Credit Facility.

[23]The Federal Reserve also established four non–CARES Act facilities to support the functioning of short-term credit markets. See app. II for more information on these facilities.

[24]The corporate bond market distress index identifies distressed periods as those during which a large number of individual measures of market functioning indicate deteriorating conditions in both the primary and the secondary markets for corporate bonds. The reason for the relatively high index for investment-grade bonds is unclear. According to Federal Reserve officials, there have been prior episodes when the index for investment-grade bonds increased more than the index for non-investment-grade bonds, such as in early 2016 and in December 2016, when financial conditions tightened.

Figure 2: Corporate Bond Market Distress Index, January 2019–September 2023

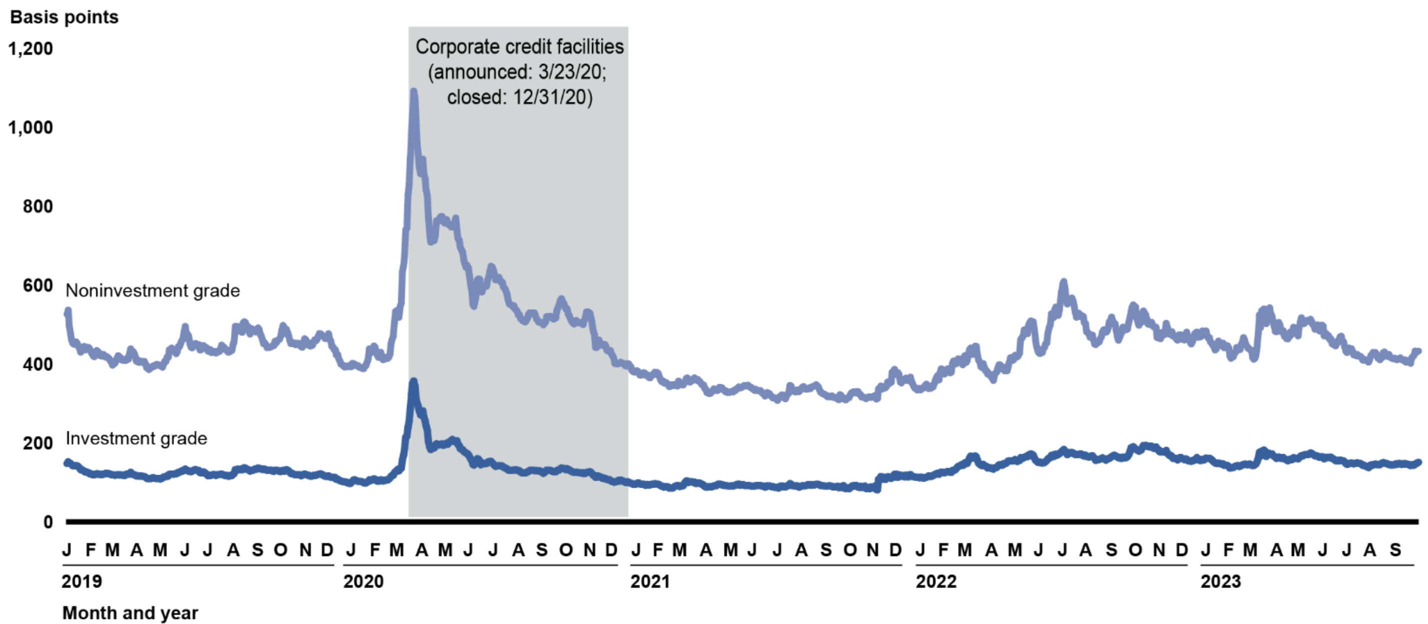


Source: GAO analysis of Federal Reserve Bank of New York data. | GAO-24-106482

Note: The sources of the index are FINRA Trade Reporting and Compliance Engine (TRACE), Mergent Fixed Income Securities Database, Bank of America ICE, and calculations by N. Boyarchenko et al., "Measuring Corporate Bond Market Dislocations," Federal Reserve Bank of New York Staff Reports, no. 957 (January 2021, revised June 2022). The index incorporates a wide range of indicators, including measures of primary market issuance and pricing, secondary market pricing and liquidity conditions, and the relative pricing between traded and nontraded bonds. The index identifies distressed periods as those during which a large number of individual measures of market functioning indicate deteriorating conditions in both the primary and the secondary markets for corporate bonds.

Additionally, although spreads on corporate bonds generally have increased since December 2020 for both investment-grade and non-investment-grade bonds, they remain close to prepandemic levels (see fig. 3). This indicates healthier economic conditions in this credit market compared to the pandemic period.

Figure 3: Spreads on Corporate Bonds, January 2019–September 2023

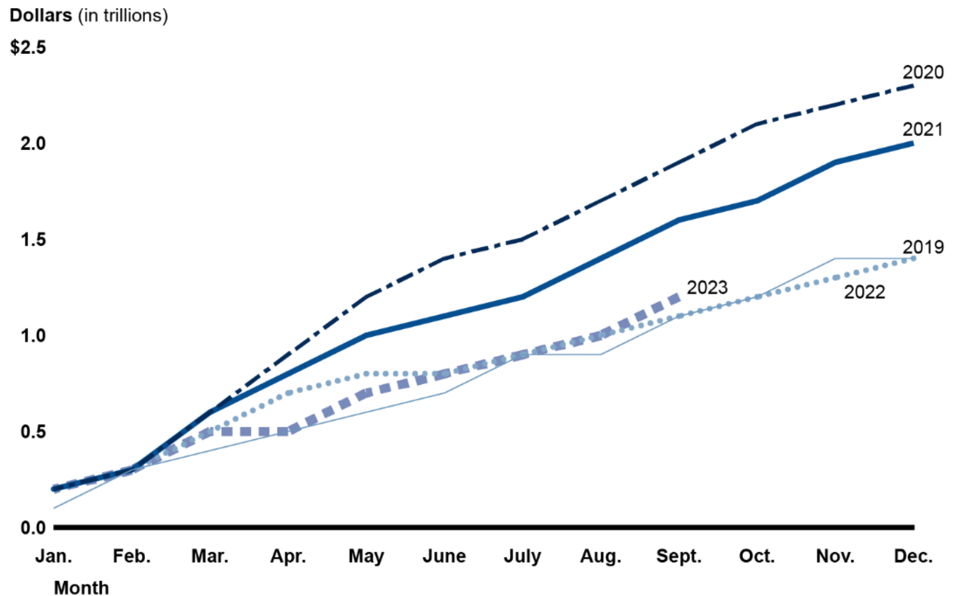


Source: GAO analysis of Bloomberg Fixed Income Credit Monitor data. | GAO-24-106482

Note: The spreads in this figure are option-adjusted spreads on dollar-denominated investment-grade and non-investment-grade bonds. A basis point is 1/100th of a percentage point.

Although corporate bond issuances have decreased from 2020 levels, they are still above the 2019 prepandemic levels, indicating that corporations have relatively easy access to longer-term credit markets (see fig. 4). The increase in the issuances of corporate bonds in 2020 and 2021 occurred as companies took advantage of low interest rates that prevailed to refinance their debt out to longer maturities.

Figure 4: Annual Cumulative Issuances of Corporate Bonds, January 2019–September 2023



Source: GAO analysis of Securities Industry and Financial Markets Association data. | GAO-24-106482

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.

Asset-Backed Securities

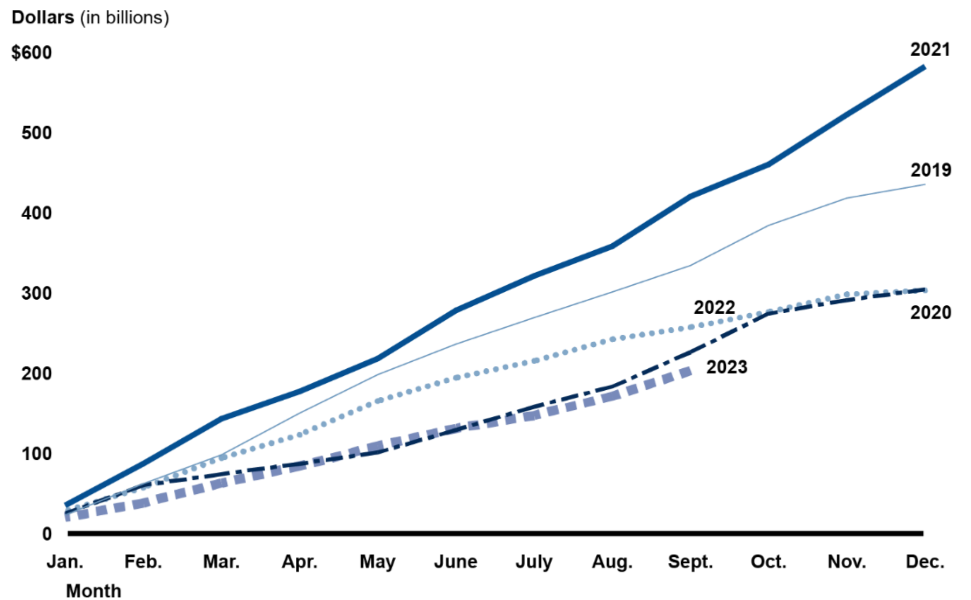
Asset-backed securities are tradable securities backed by pools of assets, such as loans, leases, or other cash-flow-producing assets. The holders of asset-backed securities are entitled to payments that are distributed by the underlying assets. Common underlying assets for asset-backed securities include 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.

Source: GAO. | GAO-24-106482

The recent increases in interest rates have not resulted in significant spillovers to corporate credit market functioning, and corporate credit spreads remain close to prepandemic levels. Additionally, many corporations extended the maturity of their debt as of July 2022, which should mitigate near-term refinancing risks.

However, businesses' ability to manage their capital and diversify their income streams could be limited. For example, issuances of asset-backed securities—long-term debt instruments intended to support the provision of credit to businesses and consumers—have decreased since 2021. Issuances were above pandemic 2020 levels in 2021 but have decreased since then and were generally below 2020 pandemic levels in 2023 (see fig. 5). The decrease in issuances is partly due to uncertainty in overall economic activity, which could hamper businesses' and consumers' abilities to repay their loans.

Figure 5: Annual Cumulative Issuances of Asset-Backed Securities, January 2019–September 2023



Source: GAO analysis of Securities Industry and Financial Markets Association data. | GAO-24-106482

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

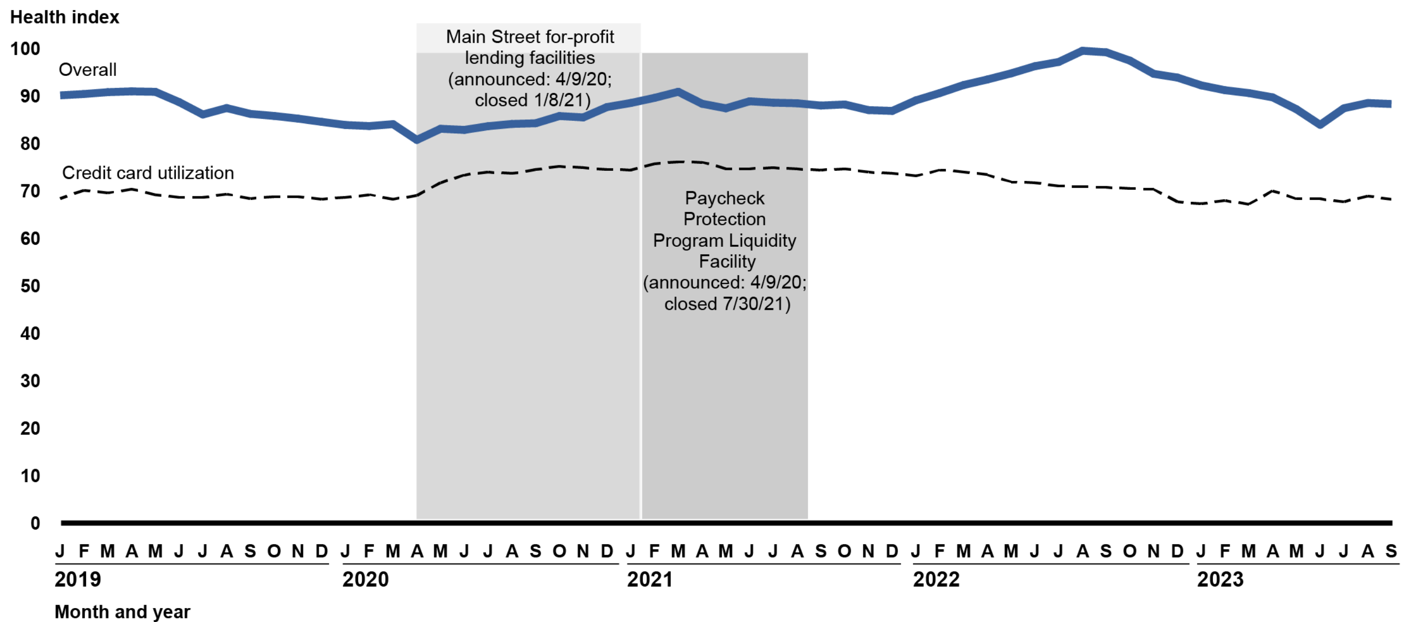
Small Businesses' Access to Credit Has Decreased since the Second Quarter 2022

The Federal Reserve announced the Main Street Lending Program in April 2020 to support the flow of credit to small and midsize businesses vulnerable to loss of revenue from the COVID-19 pandemic.[25] The Main Street for-profit lending facilities ceased providing loans to small businesses on January 8, 2021.

According to available data and survey results, small businesses' access to credit has decreased since the second quarter of 2022. For example, credit card utilization, an indicator of the ease of credit availability, decreased between May 2022 and July 2023, and is close to prepandemic levels (see fig. 6).

[25]The Federal Reserve also established the Paycheck Protection Program Liquidity Facility, a non–CARES Act facility, to facilitate lending by eligible institutions that provided loans to small businesses under the Paycheck Protection Program. It stopped providing loans on July 30, 2021.

Figure 6: Small Business Health Index, January 2019–September 2023



Source: GAO analysis of Dun & Bradstreet data. | GAO-24-106482

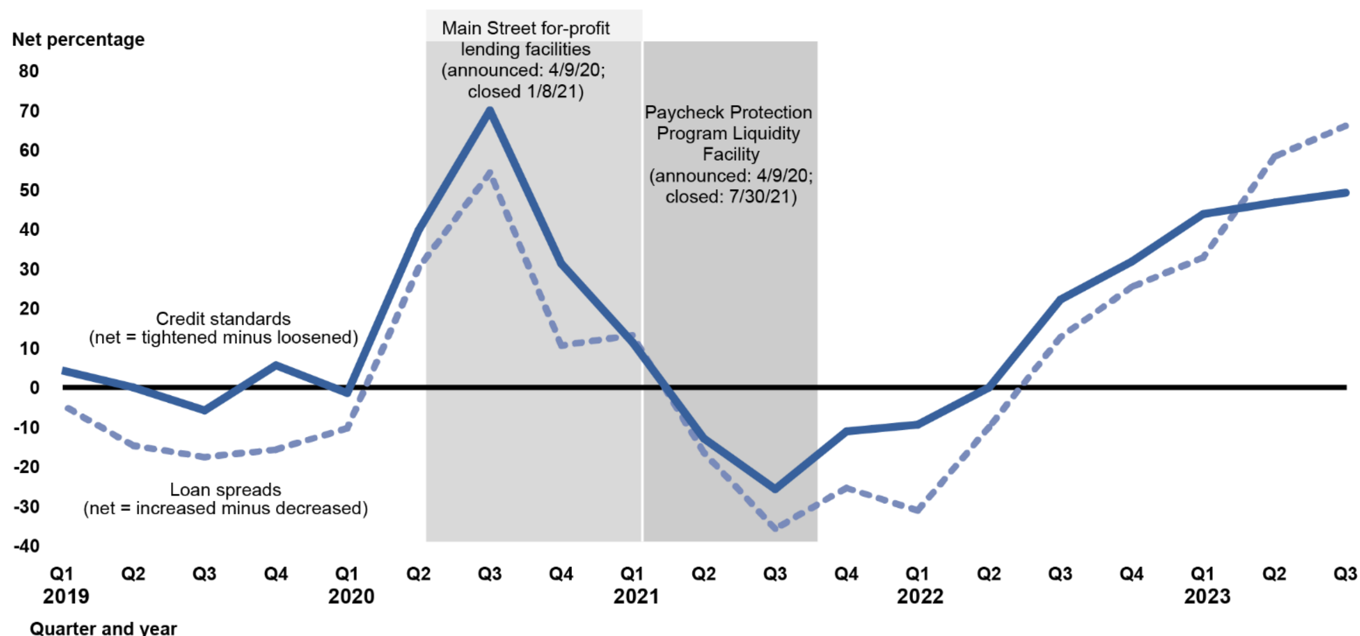
Note: The overall Small Business Health Index combines four data elements into a composite number that tracks the health of small businesses. These elements are the credit card utilization index, business failure index, credit card delinquency index (accounts at 61 or more days past due), and trade credit dollar delinquency index (the percentage of delinquent dollars—those at 91 days or more past due—out of all outstanding balances). The Small Business Health Index uses a sample of small active businesses in the Dun & Bradstreet U.S. database, which includes both employer and nonemployer businesses. It is based on a sample of 10 million businesses with fewer than 100 employees out of a population of approximately 30 million businesses. The indexes are relative to December 2004, which is the base period. An increase or decrease in the indexes reflects an improvement or deterioration, respectively, in small business performance.

The overall health of small businesses improved after January 2022, but has deteriorated since October 2022. Specifically, the health of small businesses in some sectors—especially real estate, business services, financial services, and transportation—generally declined from July 2022 to July 2023.

Additionally, access to credit has been unfavorable since the first quarter of 2022, as banks appear to have tightened their credit standards and increased their loan spreads (see fig. 7), according to a Federal Reserve

survey.[26] Reasons cited by the banks included a less favorable or more uncertain economic outlook, reduced tolerance for risk, worsening of industry-specific problems, and concerns about legislative changes or supervisory actions.

Figure 7: Banks' Lending Conditions for Small Business Loans, First Quarter 2019–Third Quarter 2023



Source: GAO analysis of Board of Governors of the Federal Reserve System data. | GAO-24-106482

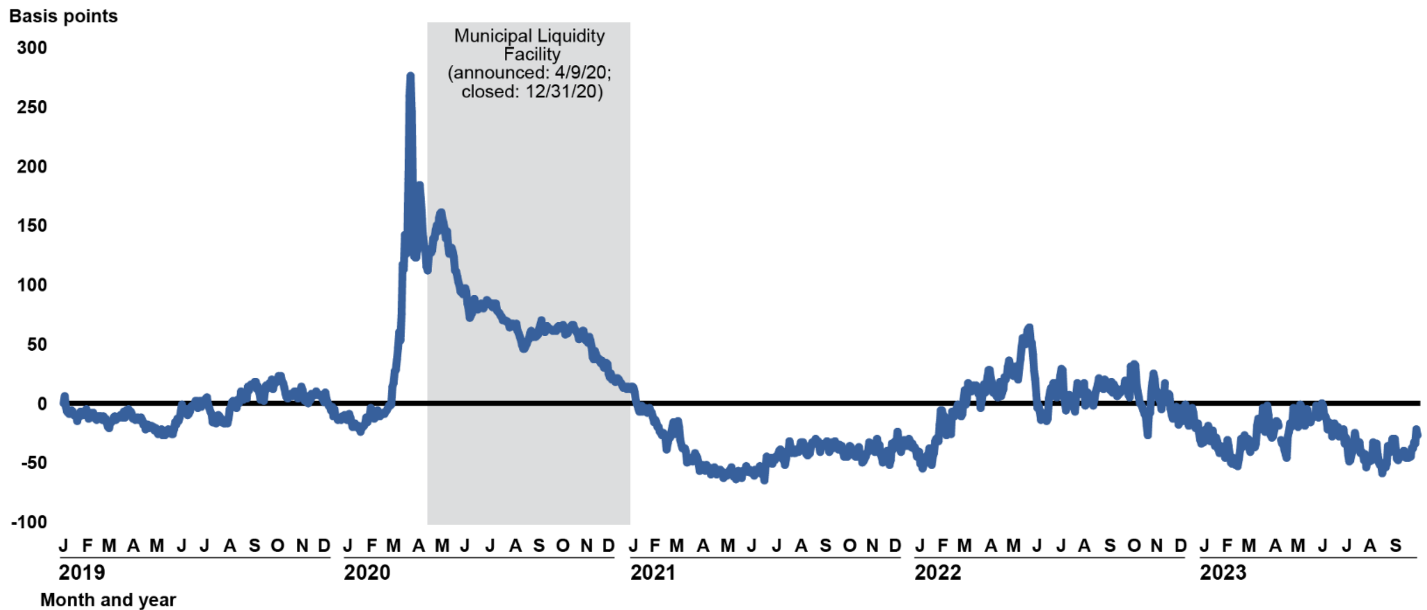
Note: We report results from the Federal Reserve's Senior Loan Officer Opinion Survey on credit standards and loan spreads for commercial and industrial loans. A positive number for credit standards indicates that more banks are tightening rather than loosening standards. A positive number for loan spreads indicates that more banks are increasing rather than decreasing loan spreads. Because of 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-202307.htm, accessed Oct. 10, 2023.

[26]The July 2023 *Federal Reserve Senior Loan Officer Opinion Survey on Bank Lending Practices* includes banks' lending conditions for small businesses (those with annual sales of less than $50 million); see https://www.federalreserve.gov/data/sloos/sloos-202307.htm, accessed Oct. 10, 2023.

Municipal Credit Borrowing Costs Have Generally Remained Low, but Bond Issuances Have Decreased

The Federal Reserve established the Municipal Liquidity Facility in May 2020 to address deteriorating conditions in municipal credit markets; the facility stopped extending credit on December 31, 2020. Spreads on municipal bonds have generally remained low and have been generally at or below 2019 (prepandemic) levels since 2021 (see fig. 8). This trend suggests that investor confidence in the municipal credit market remains stable.

Figure 8: Spreads on Municipal Bonds, January 2019–September 2023

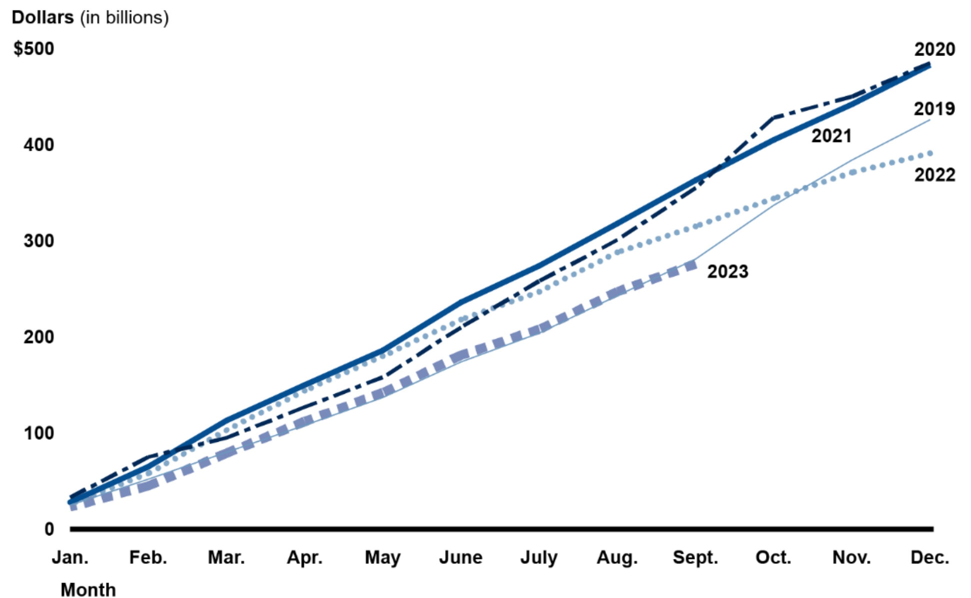


Source: GAO analysis of Bloomberg data. | GAO-24-106482

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

However, municipal bond issuances have generally decreased since mid-2022 and are consistent with prepandemic levels (see fig. 9). This suggests that higher interest rates may have created significant challenges for raising new debt or refinancing existing debt.

Figure 9: Annual Cumulative Issuances of Municipal Bonds, January 2019–September 2023



Source: GAO analysis of Securities Industry and Financial Markets Association data. | GAO-24-106482

Note: Issuances include private placements. All issuance figures are based on deals with maturity of 13 months or greater. The average final maturity at issuance was 18.2 years in 2019, 17.4 years in 2020, 17.8 years in 2021, 18.9 years in 2022, and 19 years in 2023.

Near-Term Vulnerabilities of Sectors Targeted by the Facilities Remain Low

The debt levels carried by businesses and state and local governments targeted by the facilities appear sustainable. However, this debt could leave these entities vulnerable to distress if their incomes or revenues decline, or the assets they own fall in value. Key indicators of vulnerabilities arising from debts of businesses and state and local governments appear to have remained stable since 2022. However, the effects of persistent inflation, further interest rate increases, and climate-related financial risks could make these entities more vulnerable in the near future if they lead to a broader contraction in credit.[27]

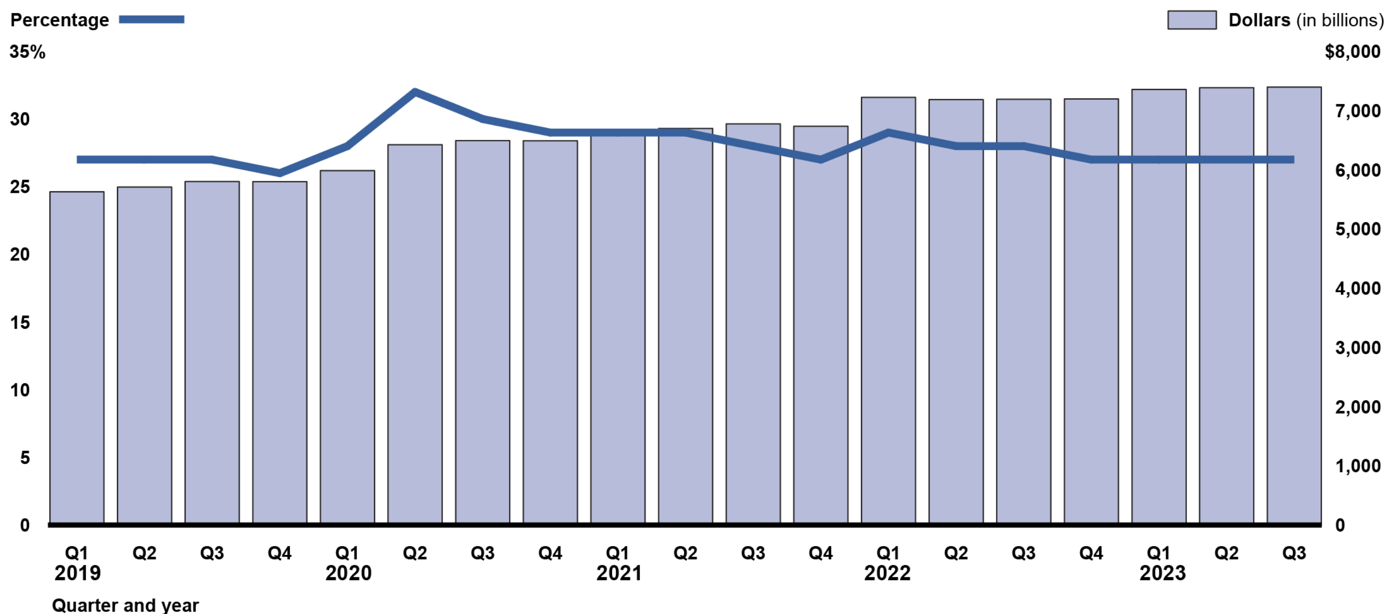
Large businesses. Corporate bonds outstanding have remained elevated since 2021, but they appear to be sustainable. The ratio of bonds to gross domestic product (GDP), which reflects sustainability of the debt, has continued to decline since 2021. This decline has resulted

[27]Climate-related financial risks concern the risk of financial losses due to rising global temperatures and accompanying environmental shifts, such as rising sea levels and more severe weather events.

from the rapid increase in GDP, and the ratio is consistent with prepandemic levels (see fig. 10). A lower ratio suggests lower chances of default, as economic conditions create favorable conditions for debt payments.

Additionally, while bankruptcy filings have risen since February 2022, they are generally at prepandemic levels. Most of the bankruptcy filings are in the consumer discretionary sector, including industries that were adversely affected by the pandemic and higher inflation or interest rates—such as travel, restaurants, and apparel and clothing. If inflationary pressures prove to be more stubborn than anticipated by the Federal Reserve, additional interest rate increases could lead to widespread debt-servicing problems, increased defaults, and credit contraction.

Figure 10: Ratio of Nonfinancial Corporate Bonds Outstanding to Gross Domestic Product, First Quarter 2019–Third Quarter 2023



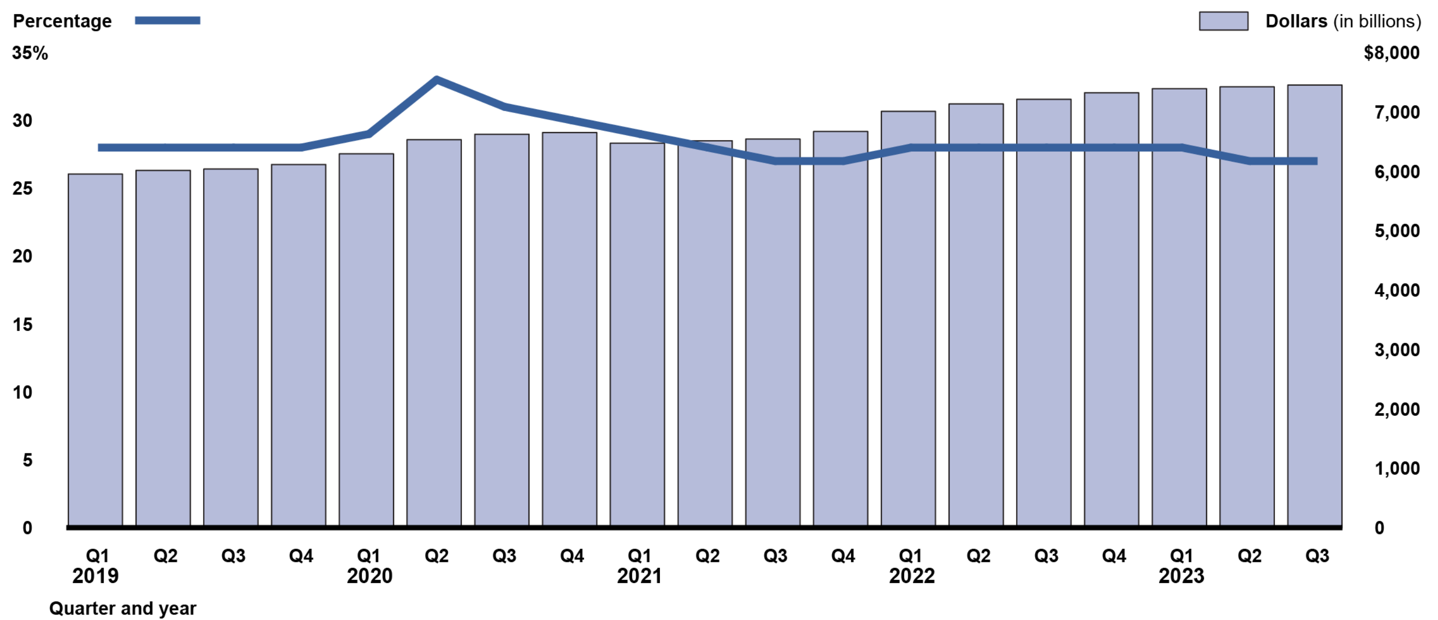
Source: GAO analysis of data from Board of Governors of the Federal Reserve System and Bureau of Economic Analysis. | GAO-24-106482

Note: The gross domestic product is seasonally adjusted.

Small businesses. Small business loans outstanding have increased since 2020. However, the sustainability of small business debt, as indicated by the ratio of loans to GDP, appears to be unchanged since the fourth quarter of 2021 and is consistent with prepandemic levels (see fig. 11). Data from Dun & Bradstreet indicate that while credit card

delinquencies and trade credit delinquencies have remained stable or improved slightly, small business failures have worsened since September 2022.[28] Increased costs for labor, materials, and transportation could reduce small businesses' ability to repay loans, dampening the credit market for small businesses.

Figure 11: Ratio of Small Business Loans Outstanding to Gross Domestic Product, First Quarter 2019–Third Quarter 2023



Source: GAO analysis of data from Board of Governors of the Federal Reserve System and Bureau of Economic Analysis. | GAO-24-106482

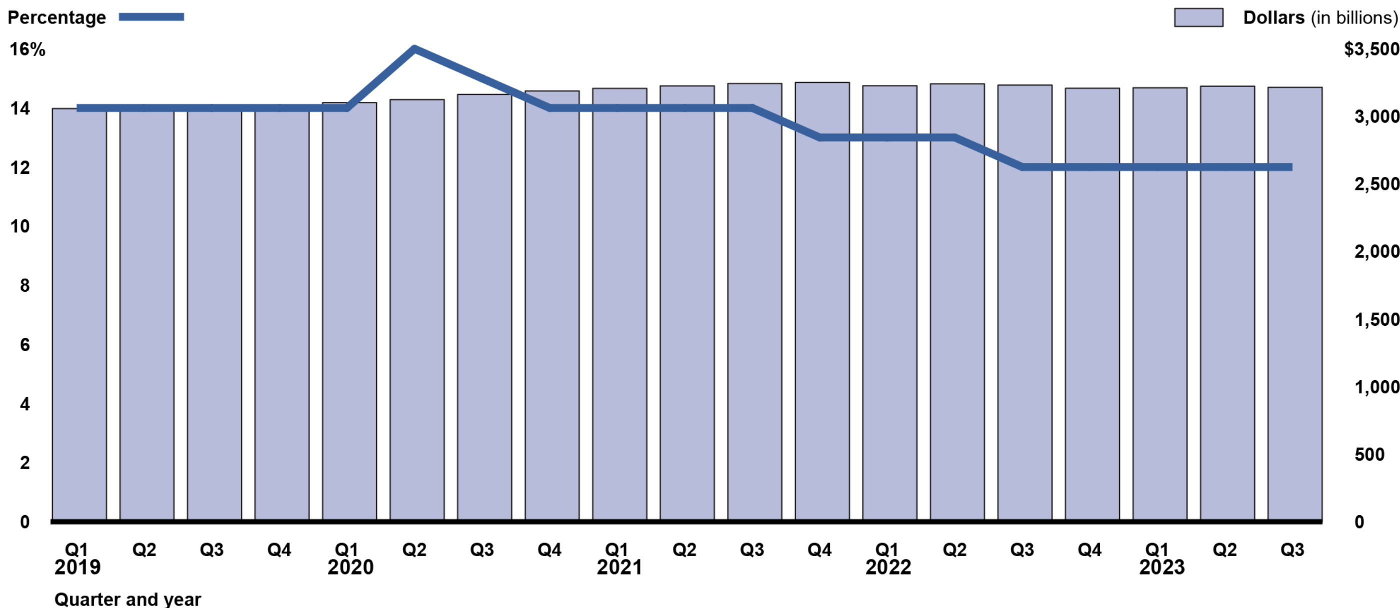
Note: Loans include mortgages, depository institution loans, and other loans and advances. The gross domestic product is seasonally adjusted.

State and local governments. Municipal bonds outstanding have increased since the first quarter of 2021. However, the level of state and local government bonds outstanding appears to be sustainable, as indicated by the ratio of bonds to GDP, which has been below 2019 prepandemic levels since the fourth quarter of 2021 (see fig. 12). State and local governments' ability to repay their debt remains unchanged, as revenues have generally remained steady since 2022. Property tax and

[28]Dun & Bradstreet, "Small Business Health Index," September 2023. According to Dun & Bradstreet, a business is considered to have failed when it declares bankruptcy or goes out of business with a certain level of outstanding debt relative to its size. Credit card delinquencies are accounts at 61 days or more past due, and trade credit delinquencies are the percentage of delinquent dollars—those at 91 days or more past due—out of all outstanding balances.

sales tax revenues have increased, while individual income and corporate income taxes have decreased or remained unchanged. However, climate-related financial risk can pose physical risk, which is the destruction of or damage to physical assets, the impact on economic activity, and other losses from extreme weather events.[29] These events can reduce future long-term local and state tax revenues or increase expenditures, potentially making the debt unsustainable.

Figure 12: Ratio of State and Local Government Bonds Outstanding to Gross Domestic Product, First Quarter 2019–Third Quarter 2023



Source: GAO analysis of data from Board of Governors of the Federal Reserve System and Bureau of Economic Analysis. | GAO-24-106482

Note: Bonds outstanding consist mostly of long-term securities—those with maturities of more than 13 months. The gross domestic product is seasonally adjusted.

[29]See Office of Financial Research, *Annual Report To Congress* (2022).

Most Main Street Borrowers Continue to Make Regular Payments, but Delinquencies Are Slowly Increasing

Main Street borrowers are making regular payments and, in many cases, repaying their loans earlier than expected. As of the end of August 2023, about 33 percent of the 1,830 Main Street loans had been fully repaid, and about 2.5 percent had resulted in losses. Despite the regularity of these payments, loan delinquencies have increased since August 2021, and could remain elevated due to economic uncertainties (such as fluctuations in variable interest rates).

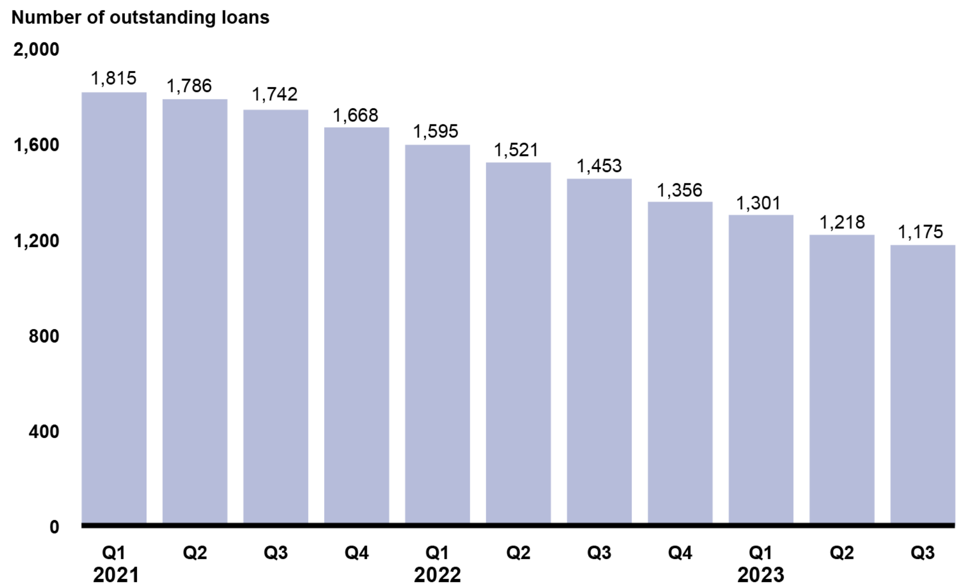
Borrowers Are Making Regular Payments and, in Many Cases, Paying More Than What Is Due

Since the Main Street Lending Program terminated in January 2021, Main Street borrowers generally have made regular and early (unscheduled) payments, resulting in fewer outstanding loans than expected at this point in the repayment process.[30] As of the end of August 2023, 1,175 (or about 64 percent) of the 1,830 Main Street Lending Program loans remained outstanding (see fig. 13). This accounted for about $11.3 billion (or about 65 percent) of the total authorized loan amount.[31]

[30]Loans issued under the Main Street Lending Program are recourse loans and have a 5-year maturity, meaning they are expected to be fully repaid in mid-to-late 2025. A recourse loan allows the lender to pursue the borrower's assets in the event of a default.

[31]The total authorized amount is defined as the total amount eligible lenders have extended to eligible borrowers.

Figure 13: Main Street Lending Program Outstanding Loans, First Quarter 2021–Third Quarter 2023



Source: GAO analysis of Federal Reserve Bank of Boston data. | GAO-24-106482

Note: This figure reflects data through the end of August 2023, which only partially represents the third quarter of 2023. In addition, these counts reflect the final count of outstanding Main Street loans at the end of a given quarter.

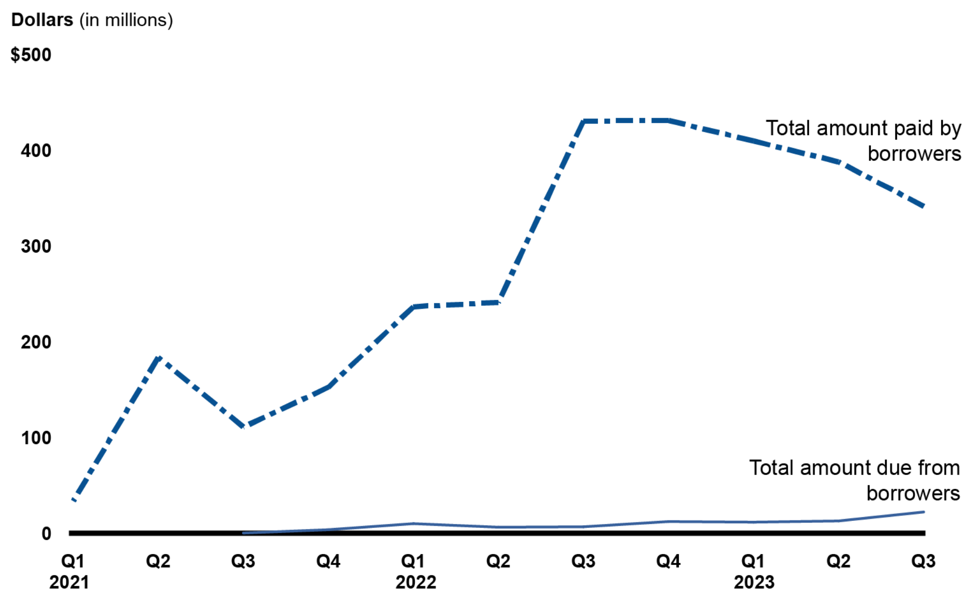
Most borrowers have made timely regular interest payments, which began in August 2021, as we previously reported.[32] Borrowers made early payments that totaled over $200 million combined in the first and second quarters of 2021. Since scheduled repayments began, borrowers have consistently paid more than the amount due per quarter, with the amount paid peaking in the second half of 2022 (see fig. 14). However, the dollar amount of payments made fell in 2023, which may be due to the effects of continued economic pressures on borrowers.[33] As discussed previously, persistent inflation and further interest rate

[32]See GAO-23-105629.

[33]We did not calculate the total amount of interest borrowers paid or overall Main Street loan revenue as a measure of program performance when analyzing the performance of Main Street loans as of August 2023. Since the majority of borrowers' first principal payments are due in the fourth quarter of 2023, the performance of loans could fluctuate. We will continue to analyze Main Street loan performance, including borrower interest paid relative to recorded losses, in subsequent reviews of the program.

increases could make businesses more vulnerable, especially if they lead to reduced business earnings.

Figure 14: Main Street Lending Program Loan Payments Due and Amounts Paid by Borrowers, First Quarter 2021–Third Quarter 2023

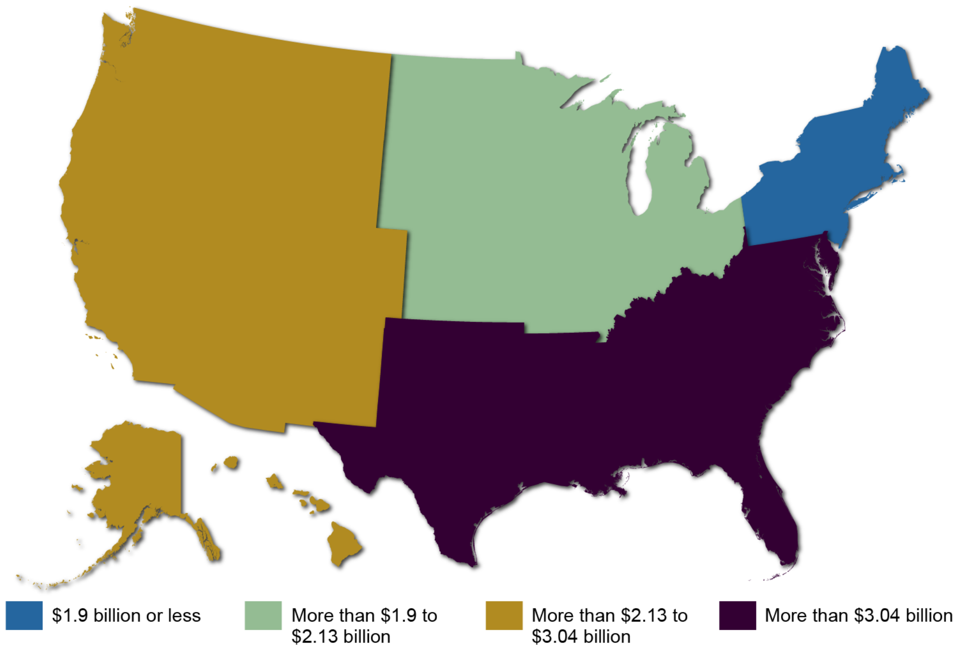


Source: GAO analysis of Federal Reserve Bank of Boston data. | GAO-24-106482

Note: This figure reflects data through the end of August 2023, which only partially represents the third quarter of 2023.

Regional distribution of outstanding loans. The regional distribution of outstanding loans generally aligned with the regional distribution of Main Street loans overall. As of the end of August 2023, most of the program's outstanding loans were in Census Region 3, followed by Census Region 4 (see fig. 15).

Figure 15: Outstanding Main Street Loans, by Census Region, as of August 2023



Census region and top states with outstanding Main Street loans	Number of outstanding loans	Dollar amount of outstanding loans (in millions)	Percent of outstanding loans	Percent of outstanding loan amount
Region 1 (Northeast)	**150**	**$1,390**	**13%**	**12%**
New York	41	$516	3%	5%
Pennsylvania	35	$194	3%	2%
New Jersey	34	$370	3%	3%
Region 2 (Midwest)	**193**	**$2,074**	**16%**	**18%**
Minnesota	32	$182	3%	2%
Missouri	30	$461	3%	4%
Illinois	28	$396	2%	4%
Region 3 (South)	**611**	**$5,600**	**52%**	**50%**
Florida	253	$1,305	22%	12%
Texas	157	$2,091	13%	19%
Oklahoma	50	$410	4%	4%
Region 4 (West)	**219**	**$2,186**	**19%**	**19%**
California	118	$1,060	10%	9%
Washington	22	$176	2%	2%
Colorado	18	$265	2%	2%

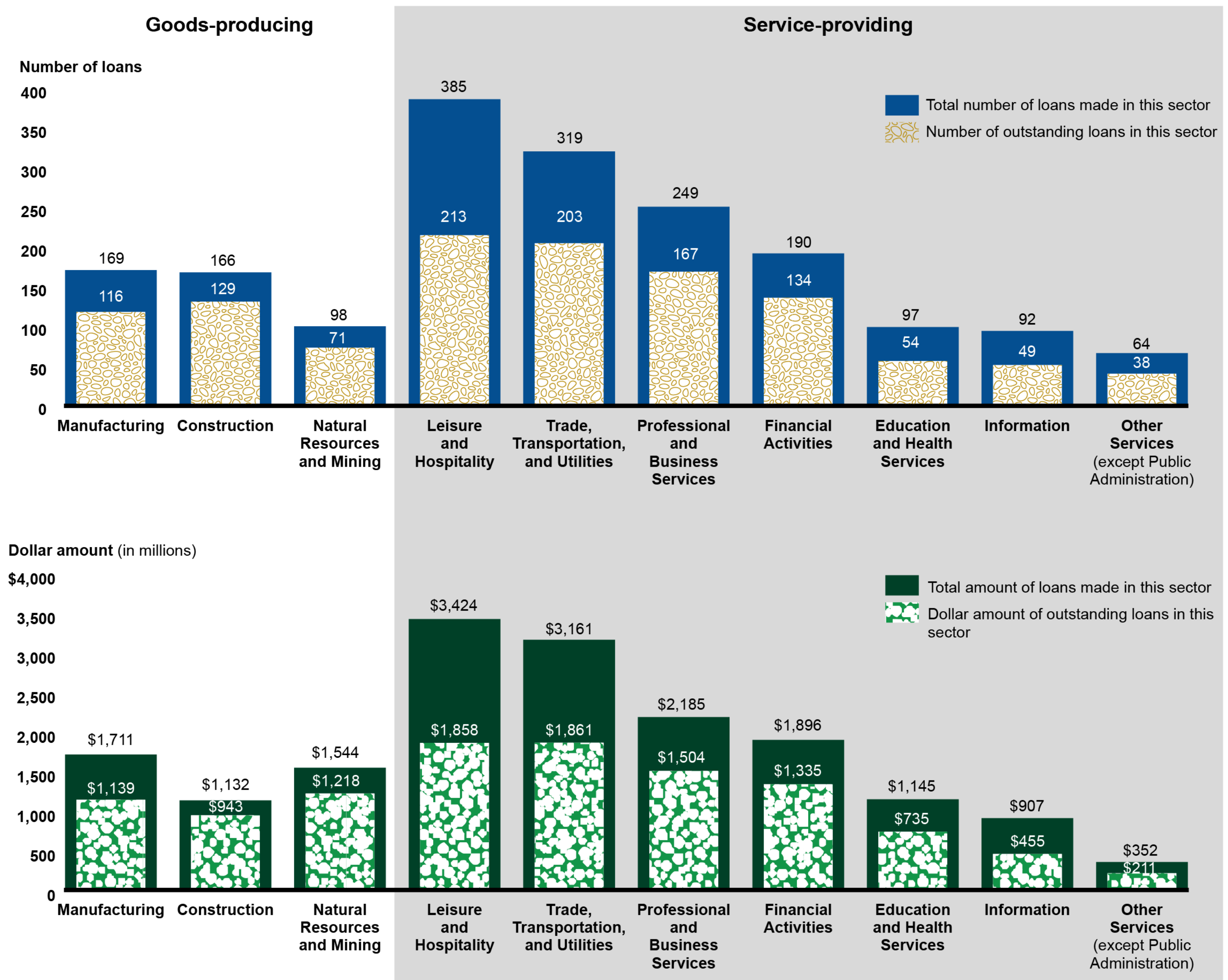
Source: GAO analysis of Federal Reserve Bank of Boston data; Map Resources (map). | GAO-24-106482

Sectoral distribution of outstanding loans. The sectoral distribution of outstanding loans also generally aligned with the sectoral distribution of Main Street loans overall. As of the end of August 2023, 858 outstanding Main Street loans (or 73 percent) were in service-providing sectors (see

fig. 16).[34] The top two service-providing sectors were (1) leisure and hospitality and (2) trade, transportation and utilities. The remainder of the outstanding loans, 316 (or about 27 percent), were in goods-producing sectors, which include construction, manufacturing, and natural resources and mining.

[34]According to the Bureau of Labor Statistics, North American Industry Classification System codes can be grouped into 10 sectors (construction; education and health services; financial activities; information; leisure and hospitality; manufacturing; natural resources and mining; professional and business services; trade, transportation, and utilities; and other services) and two super-sectors (goods-producing and service-providing). We use these aggregations to describe general trends for Main Street Lending Program loans and repayments.

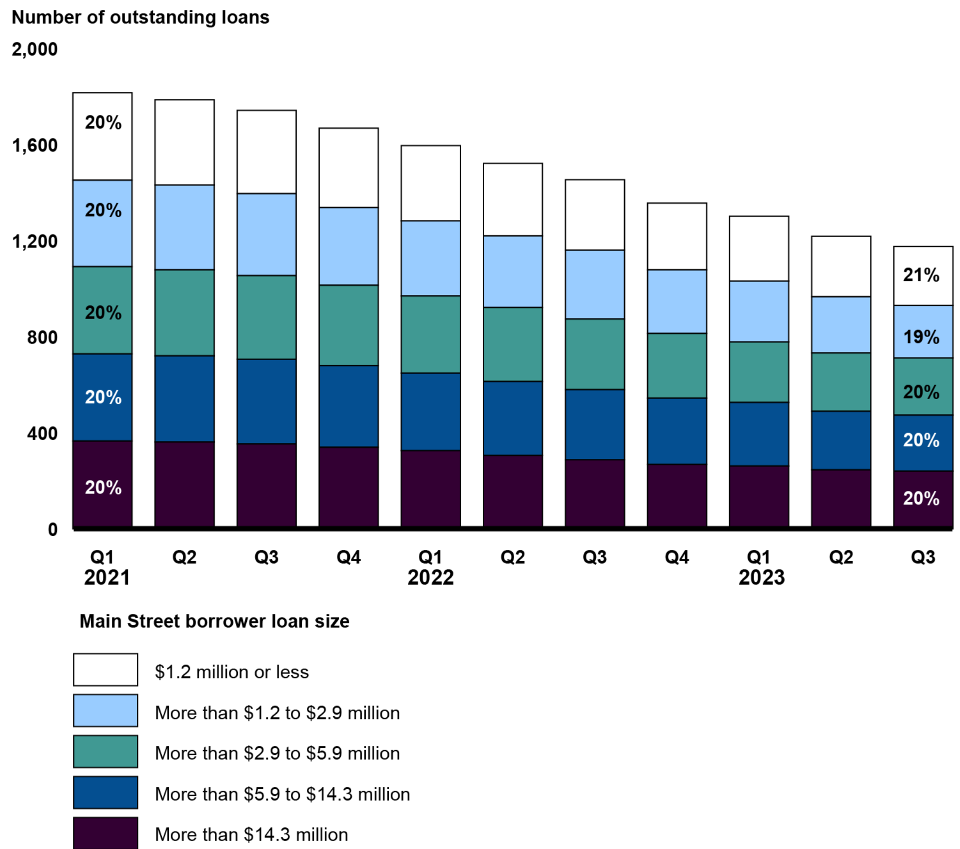
Figure 16: Number and Dollar Amount of Main Street Loans Made and Outstanding by Sector, as of August 2023



Source: GAO analysis of Federal Reserve Bank of Boston data. | GAO-24-106482

Distribution of outstanding loans by loan size. As of the end of August 2023, the distribution of outstanding loans by loan size continued to generally align with the distribution of loans made, according to our analysis (see fig. 17). This distribution is similar to that of fully repaid loans but not for loans with recorded losses. (See app. III for more detail on loan-size characteristics for fully repaid loans and losses.)

Figure 17: Distribution of Outstanding Main Street Loans, by Loan Size, First Quarter 2021–Third Quarter 2023

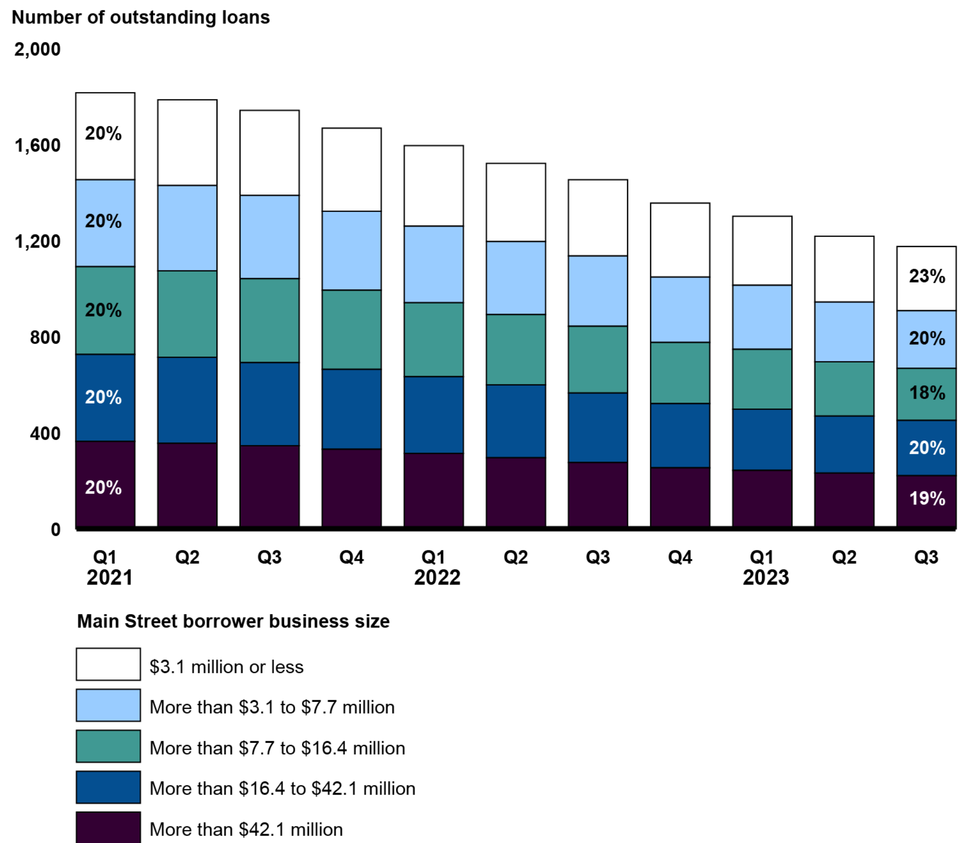


Source: GAO analysis of Federal Reserve Bank of Boston data. | GAO-24-106482

Note: This figure reflects data through the end of August 2023, which only partially represents the third quarter of 2023. The percentages represent the share of outstanding loans by loan-size categories in that quarter.

Distribution of outstanding loans by business size. As of the end of August 2023, the distribution of outstanding loans had shifted slightly toward smaller businesses, compared with the distribution of loans made overall (see fig. 18). The share of loans to businesses with $7.7 million or less in 2019 gross revenue rose from 40 percent to 43 percent of outstanding loans since the program terminated in January 2021. (See app. III for information about the distribution for prepayments and losses by business size.)

Figure 18: Distribution of Outstanding Main Street Loans by Business Size, First Quarter 2021–Third Quarter 2023



Source: GAO analysis of Federal Reserve Bank of Boston data. | GAO-24-106482

Note: This figure reflects data through the end of August 2023, which only partially represents the third quarter of 2023. The percentages represent the share of outstanding loans by business size categories, measured in 2019 gross revenue, in that quarter.

Delinquencies Have Increased as Interest Rates and Inflation Have Risen

Delinquencies have increased since regular, scheduled interest payments began in August 2021.[35] The rate of delinquent payments was about 7.6 percent of outstanding loans in August 2023 (the most recent data available to GAO), as compared with an average of 2.6 percent for August 2021–August 2023. During the second quarter of 2023, the

[35]The Federal Reserve Bank of Boston defines delinquent payments as any interest or principal payment that is 30 or more days late.

average delinquency rate for Main Street loans (about 5.5 percent) was higher than that for commercial bank business loans (about 1 percent).[36]

Regionally, most of the program's delinquent loans were in the South (Census Region 3), as of the end of August 2023. Among states overall, Florida had the most delinquent loans (about 25 percent of the total), followed by California (about 14 percent).

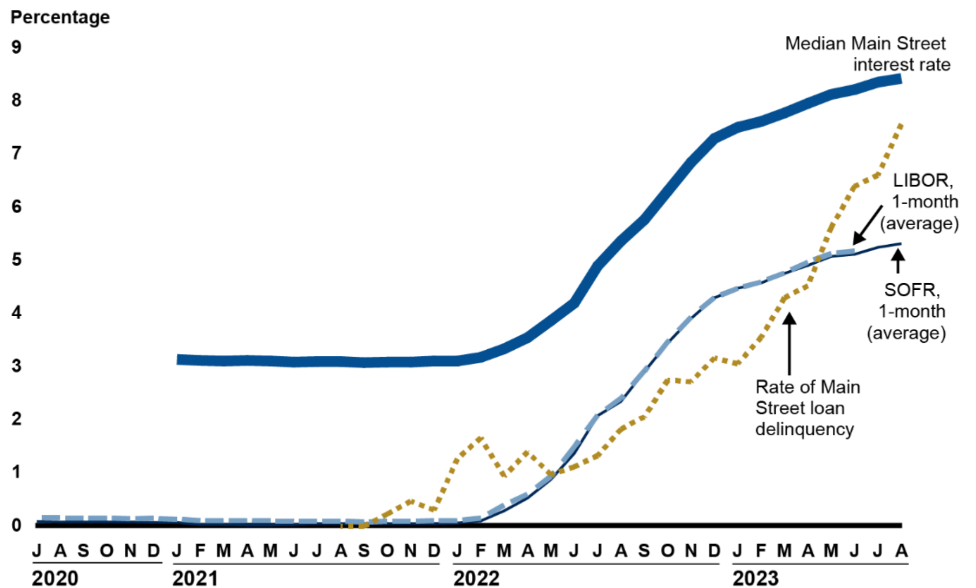
Delinquency rates could remain elevated as borrowers face increased variable interest rates on their loans. When the Main Street Lending Program made loans from July 2020 through January 2021, the 1-month London Interbank Offered Rate (LIBOR) ranged from 0.12 to 0.19 percent (see fig. 19).[37] As of August 2023, the 1-month Secured Overnight Financing Rate (SOFR)—which the program began using in place of LIBOR—was about 5.33 percent.[38]

[36]While we obtained Main Street data on delinquencies through August 2023, the most recent Federal Reserve data available for commercial bank loan delinquencies were as of the second quarter of 2023. Because of this, we chose to compare delinquency rates for the second quarter of 2023.

[37]The program originally used LIBOR to set interest rates. Borrowers agreed to take on an adjustable interest rate, calculated by adding 300 basis points (or 3 percent) to the adjustable 1-month or 3-month LIBOR, depending on a loan's terms.

[38]LIBOR was decommissioned on June 30, 2023. Main Street lenders were required to file a Core Rights Request form to change from a LIBOR-pegged rate to a comparable rate—generally, 1-month or 3-month SOFR. According to Federal Reserve Bank of Boston officials, 96 percent of Main Street loans have transitioned from LIBOR to SOFR. The remaining 4 percent transitioned to other comparable rates (for example, the prime rate).

Figure 19: Main Street Lending Program Interest Rates and Rate of Delinquent Loan Payments, July 2020–August 2023



Acronyms

LIBOR - London Interbank Offered Rate
SOFR - Secured Overnight Financing Rate

Source: GAO analysis of Federal Reserve Bank of Boston and Bloomberg data. | GAO-24-106482

Higher interest rates have increased borrowers' interest payments. As shown in table 2, the projected annual interest for a loan of $5 million would have increased from $157,500 to $418,000 between December 2020 and July 2023.[39] The higher interest payments, coupled with required principal payments beginning in 2023, could pose financial burdens for businesses. In addition, these higher payments could increase the risk of delinquent payments over time.

[39]We chose hypothetical loan amounts that are examples of small, medium, and large Main Street loans. For illustrative purposes, the annual interest payment calculation does not take into consideration any principal payments or adjustments (e.g., changing monthly variable rate).

Table 2: Examples of Potential Main Street Loan Interest Payments by Varying Interest Rates

Example loan amount	Base rate	Interest rate[a]	Projected annual interest payment[b]
$1,000,000	0.15% in December 2020[c]	3.15%	$31,500
	5.25% in July 2023[d]	8.36%	$83,600
$5,000,000	0.15% in December 2020	3.15%	$157,500
	5.25% in July 2023	8.36%	$418,000
$50,000,000	0.15% in December 2020	3.15%	$1,575,000
	5.25% in July 2023	8.36%	$4,180,000

Source: GAO. | GAO-24-106482

[a]At program inception, borrowers agreed to take on an adjustable interest rate, calculated by adding 300 basis points (or 3 percent) to the adjustable 1-month or 3-month London Interbank Overnight Rate (LIBOR), depending on a loan's terms. When loans transitioned to the Secure Overnight Financing Rate (SOFR) after the LIBOR was decommissioned, loans were expected to add 311.448 basis points for those loans pegged to the 1-month SOFR and 326.161 basis points for those loans pegged to the 3-month SOFR.

[b]The projected annual interest payment is based on the example loan amount for illustrative purposes.

[c]We selected December 2020 as an example because most Main Street loans were made in this month. At that time, the LIBOR was the base rate used by the Main Street Lending Program. As such, we selected the 1-month LIBOR as our base rate.

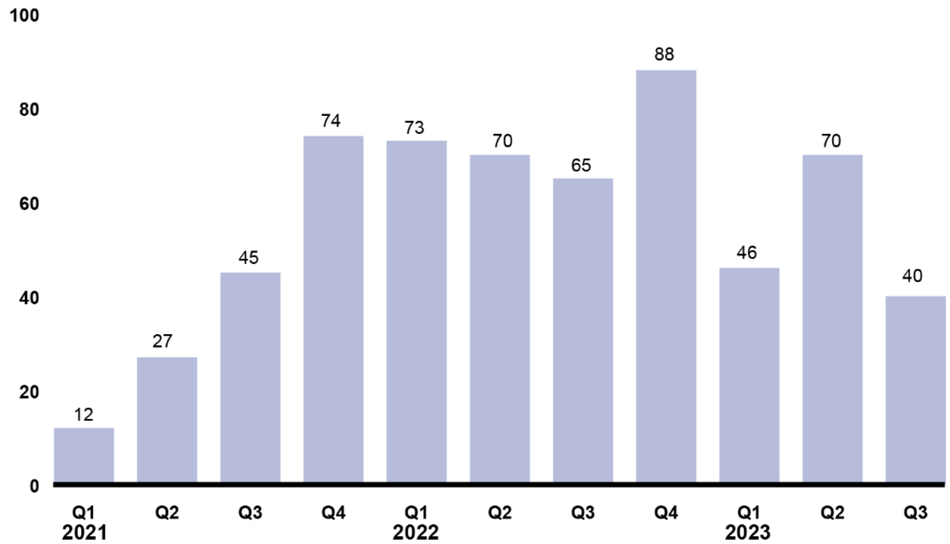
[d]We selected July 2023 as an example because this was the month when first principal payments were due for initial borrowers. Since LIBOR decommissioned on June 30, 2023, and 96 percent of Main Street loans have transitioned to a comparable term SOFR, we used the 1-month SOFR as the base rate.

Inflation may also affect borrowers' ability to pay and result in more delinquent payments over time. As previously mentioned, increased costs could reduce the earnings of small and midsize businesses, which may dampen their ability to repay their loans. In particular, service-providing businesses face reduced earnings and higher input costs. Main Street borrowers in those sectors have experienced more delinquencies, and the number could continue to rise.

About One-Third of Loans Have Been Fully Repaid, Mostly in the Service-Providing Sectors

As of the end of August 2023, 610 Main Street loans (about 33 percent) had been fully repaid. This represented about $6 billion (or about 34 percent) of the total authorized loan amount. The number of full repayments has varied over time and reached a high of 88 in the fourth quarter of 2022 (see fig. 20).

Figure 20: Fully Repaid Main Street Loans, First Quarter 2021–Third Quarter 2023

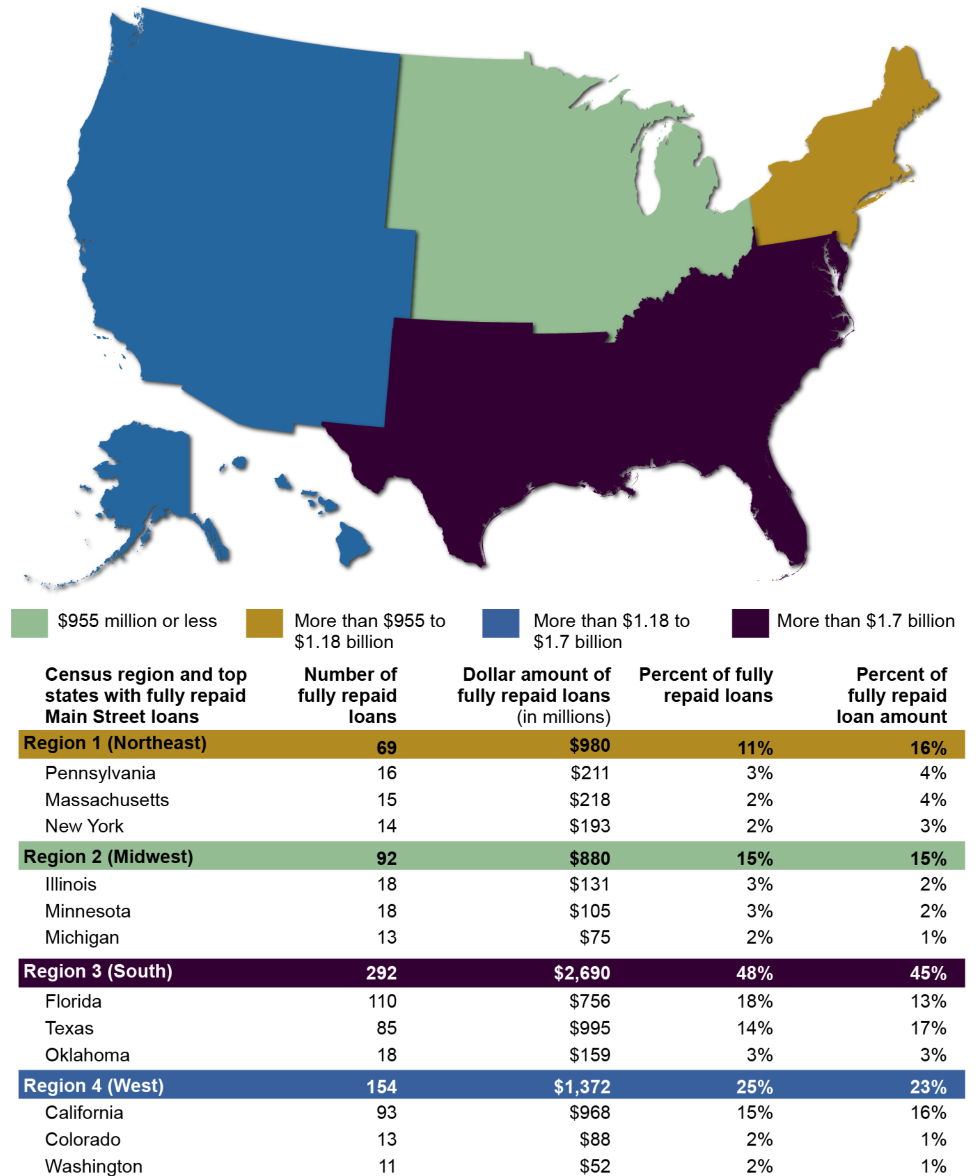


Source: GAO analysis of Federal Reserve Bank of Boston data. | GAO-24-106482

Note: This figure reflects data through the end of August 2023, which only partially represents the third quarter of 2023.

Regional distribution of fully repaid loans. As of the end of August 2023, fully repaid loans were concentrated in Census Regions 3 and 4, which aligns with the regional distribution of Main Street loans in general (see fig. 21). The state with the highest number of repayments was Florida, followed by California.

Figure 21: Fully Repaid Main Street Loans, by Census Region, as of August 2023



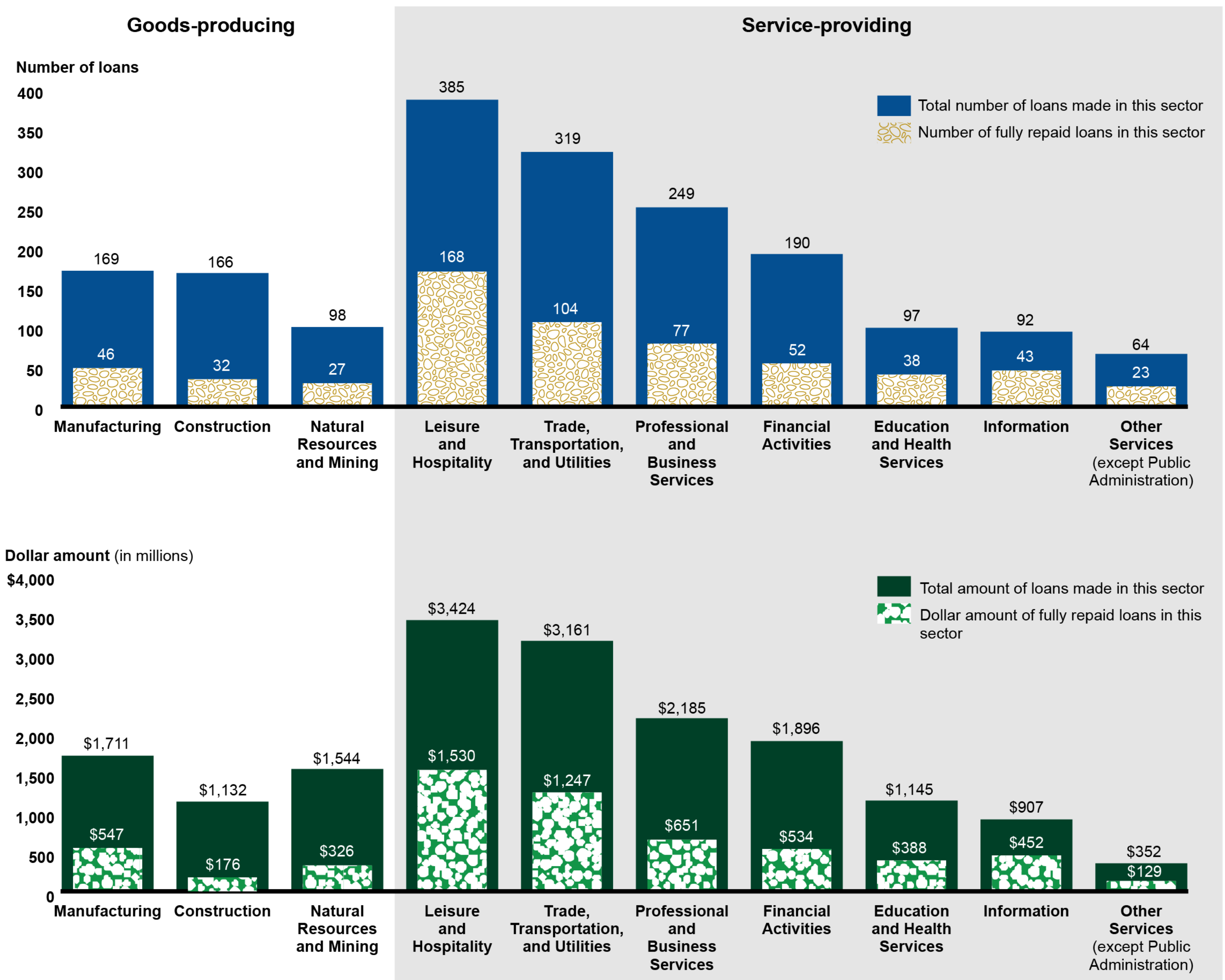
Census region and top states with fully repaid Main Street loans	Number of fully repaid loans	Dollar amount of fully repaid loans (in millions)	Percent of fully repaid loans	Percent of fully repaid loan amount
Region 1 (Northeast)	**69**	**$980**	**11%**	**16%**
Pennsylvania	16	$211	3%	4%
Massachusetts	15	$218	2%	4%
New York	14	$193	2%	3%
Region 2 (Midwest)	**92**	**$880**	**15%**	**15%**
Illinois	18	$131	3%	2%
Minnesota	18	$105	3%	2%
Michigan	13	$75	2%	1%
Region 3 (South)	**292**	**$2,690**	**48%**	**45%**
Florida	110	$756	18%	13%
Texas	85	$995	14%	17%
Oklahoma	18	$159	3%	3%
Region 4 (West)	**154**	**$1,372**	**25%**	**23%**
California	93	$968	15%	16%
Colorado	13	$88	2%	1%
Washington	11	$52	2%	1%

Source: GAO analysis of Federal Reserve Bank of Boston data; Map Resources (map). | GAO-24-106482

Sectoral distribution of fully repaid loans. Fully repaid loans were more prevalent in service-providing sectors than in goods-producing sectors when compared to the distribution of Main Street loans in general (see fig. 22). As of the end of August 2023, about 83 percent of fully repaid loans were in service-providing sectors, and the remaining 17

percent were in goods-producing sectors. Two service-providing sectors—(1) leisure and hospitality and (2) trade, transportation, and utilities—together accounted for about $2.8 billion (or about 45 percent) of all fully repaid loans.

Figure 22: Number and Dollar Amount of Fully Repaid Main Street Loans, by Sector, as of August 2023

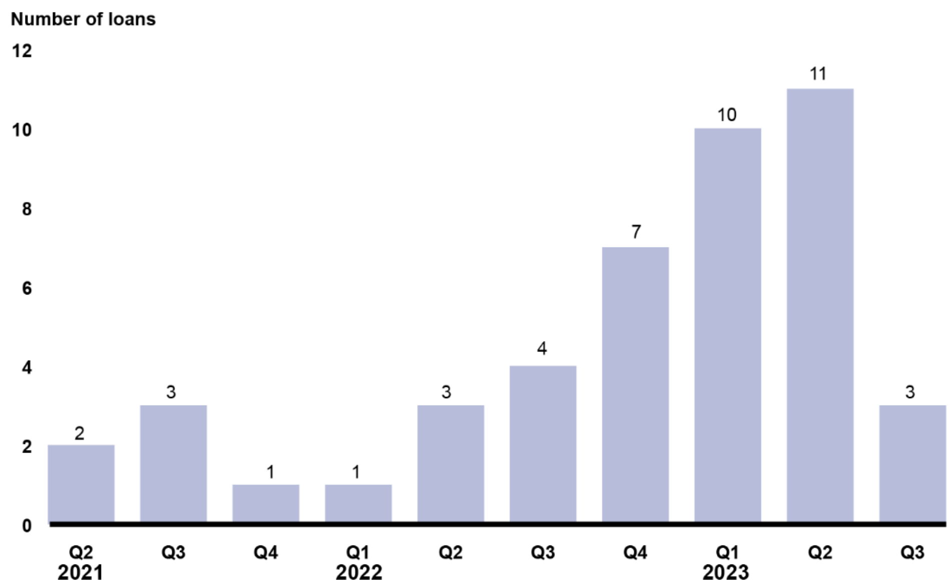


Source: GAO analysis of Federal Reserve Bank of Boston data. | GAO-24-106482

About 2.5 Percent of Main Street Loans Have Resulted in Losses

As of the end of August 2023, 45 loans (or 2.5 percent of all Main Street loans) had been partially or fully charged off, totaling about $188 million in recorded losses.[40] Loan losses spiked during the first and second quarter of 2023, but have remained relatively low since the program's inception (see fig. 23). The largest number of charged-off loans occurred in the second quarter of 2023 and resulted in about $38 million in recorded losses. In its periodic reports to Congress, the Federal Reserve has stated that it continues to expect it will not incur any losses from the Main Street Lending Program. Any loan losses experienced by the program are covered by Treasury's equity investments.[41]

Figure 23: Number of Main Street Loans with Losses, Second Quarter 2021–Third Quarter 2023



Source: GAO analysis of Federal Reserve Bank of Boston data. | GAO-24-106482

Note: This figure reflects data through the end of August 2023, which only partially represents the third quarter of 2023. The figure includes both partial and full charge-offs experienced by Main Street Lending Program loans.

[40]Federal Reserve Bank of Boston data recorded 46 transactions, as one loan was counted twice—once when it was partially charged off and again when it was fully charged off.

[41]When the CARES Act was enacted, it made available at least $454 billion to Treasury to support the Federal Reserve in establishing emergency lending facilities. Thus, any losses incurred by the emergency lending programs are covered by taxpayer dollars.

The rate of Main Street loan losses has generally been higher than that of business loans provided by commercial banks. During the second quarter of 2023, for example, the charge-off rate for business loans across all commercial lenders was about 0.3 percent, compared with about 0.9 percent for Main Street loans.

Main Street loan losses have mostly occurred in Census Region 3 and have been concentrated in service-related industries. As of the end of August 2023, Census Region 3 had 25 loans that experienced losses; Florida accounted for the most loan losses both within this region and overall. Other regions of the United States had fewer than 10 loans with losses per region. This trend generally aligns with the distribution of Main Street loans made, as Region 3 had the most loans authorized at program termination.

Loan losses were concentrated in service-providing sectors, which represented about 69 percent of the number of losses as of August 2023 (compared with about 76 percent of loans made). Overall, losses in service-providing sectors accounted for about $121 million while losses in goods-producing sectors accounted for about $66 million. The sector with the highest number of losses was trade, transportation, and utilities.

Agency Comments

We provided a draft of this report to the Federal Reserve and Treasury for review and comment. The Federal Reserve provided technical comments, which we incorporated as appropriate. Treasury informed us it had no comments.

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 GAO’s website at https://www.gao.gov.

If you or your staff have any questions about 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. GAO staff who made key contributions to this report are listed in appendix IV.

Michael E. Clements
Director, Financial Markets and Community Investment

List of Committees

The Honorable Patty Murray
Chair
The Honorable Susan Collins
Ranking Member
Committee on Appropriations
United States Senate

The Honorable Sherrod Brown
Chairman
The Honorable Tim Scott
Ranking Member
Committee on Banking, Housing, and Urban Affairs
United States Senate

The Honorable Sheldon Whitehouse
Chairman
The Honorable Chuck Grassley
Ranking Member
Committee on the Budget
United States Senate

The Honorable Maria Cantwell
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The Honorable Ted Cruz
Ranking Member
Committee on Commerce, Science, and Transportation
United States Senate

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

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House of Representatives

The Honorable Jodey Arrington
Chairman
The Honorable Brendan Boyle
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House of Representatives

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

The Honorable Sam Graves
Chairman
The Honorable Rick Larsen
Ranking Member
Committee on Transportation and Infrastructure
House of Representatives

Appendix I: Objectives, Scope, and Methodology

The objectives of this report were to examine (1) the Federal Reserve's oversight and monitoring of the CARES Act facilities, (2) what available evidence suggests about trends in credit markets that CARES Act facilities targeted, and (3) the status of Main Street loans and their characteristics and trends in loan performance.

To address the first objective, we analyzed documentation from the Federal Reserve's Division of Reserve Bank Operations and Payment Systems (RBOPS). This included its 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. We also obtained written responses from Federal Reserve officials on RBOPS's framework and approach for ongoing monitoring of the facilities and results of RBOPS's oversight reviews.

We compared RBOPS's monitoring plans 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 financial statements for updates on potential and actual losses incurred by the Federal Reserve facilities, and we interviewed RBOPS officials.

To address the second objective, we analyzed indicators of the performance of credit markets affected by the facilities and the near-term vulnerabilities of these markets. We reviewed research from academics, the Federal Reserve, the Department of the Treasury's Office of Financial Research, the Financial Stability Oversight Council, and industry experts. We also analyzed data from January 2019 through September 2023 on indicators of the performance of credit markets supported by the facilities. We used 2019 as our starting point to provide a benchmark prior to the pandemic, and we used September 2023 as our end point because the most recently available data were as of that date. We selected indicators previously identified in prior GAO work on the Federal Reserve lending programs, which was based on several sources, including reports and data from the Federal Reserve Board and Federal Reserve Bank of New York, the Office of Financial Research, and data from private

[1]See GAO, *Standards for Internal Control in the Federal Government*, GAO-14-704G (Washington, D.C.: Sept. 10, 2014).

organizations, including Bloomberg, the Securities Industry and Financial Markets Association, and Dun & Bradstreet.[2]

The data on short-term and longer-term corporate credit market indicators we analyzed included credit spreads, issuances, and outstanding balances from the Federal Reserve, the Federal Reserve Bank of New York's Corporate Market Distress Index database, the Office of Financial Research's Financial Stress Index, the Bloomberg Terminal, and the Securities Industry and Financial Markets Association. The credit market indicators for small businesses we analyzed included data and surveys on credit market conditions experienced by small business owners from Dun & Bradstreet (on the health of employer and nonemployer businesses with fewer than 100 employees) and information on lenders from the Federal Reserve's Senior Loan Officer Opinion Survey (for businesses with annual sales of less than $50 million). The municipal credit market indicators we analyzed included credit spreads and rates and issuances from the Bloomberg Terminal and the Securities Industry and Financial Markets Association.

For the near-term indicators of vulnerabilities in these credit markets, we analyzed data from the Federal Reserve and Bureau of Economic Analysis to assess the potential sustainability of the debts of large businesses, small businesses, and state and local governments. We also analyzed bankruptcy filings of large businesses from the Bloomberg Terminal; credit card and trade credit delinquencies and failures of small businesses from Dun & Bradstreet; and state and local government tax revenue data from the Census Bureau. We reviewed research from the Federal Reserve, Treasury's Office of Financial Research, the Financial Stability Oversight Council, and industry experts on economic conditions that could adversely affect the credit markets.

We took a number of steps to assess the reliability of these data sources and indicators. These steps included reviewing relevant documentation on data collection methodology and reviewing prior GAO work. We found

[2]See GAO, *Federal Reserve Lending Programs: Risks Remain Low in Related Credit Markets, and Main Street Loans Have Generally Performed Well*, GAO-23-105629 (Washington, D.C.: Dec. 19, 2022); *Federal Reserve Lending Programs: Credit Markets Served by the Programs Have Stabilized, but Vulnerabilities Remain*, GAO-22-104640 (Washington, D.C.: Oct. 19, 2021); and *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).

that, collectively, the indicators were sufficiently reliable for the purpose of providing a general sense of how credit markets are performing.

To address the third objective, we conducted on-site reviews of Main Street Lending Program data at the Federal Reserve Bank of Boston. To assess the status, characteristics, and trends in the performance of Main Street Lending Program loans, we retrieved information from two data sources: (1) a compendium from the Reserve Bank of borrower information collected in the lender registration and participation review processes and (2) Main Street accounting records that are generated by a third-party contractor. The compendium included borrower information at loan origination, as well as borrower-reported payment information. The accounting records included information on loan positions, loan transactions from inception, and loan delinquencies. We reviewed and analyzed participation data and loan-level payment data as of the end of August 2023, the most recent data available.

We analyzed data from the program's inception through August 2023 to determine

- the regularity of Main Street loan repayments, including payments due and made;
- the number and dollar amount of outstanding, fully repaid, and charged-off loans;
- the distribution of outstanding, fully repaid, and charged-off loans by their loan and business sizes; and
- the rate of delinquent Main Street loan repayments per month.

In addition, we analyzed geographic and sectoral information for outstanding, fully repaid, delinquent, and charged-off loans. For our geographic analysis, we used Main Street program data to match loan payment information as of the end of August 2023 to geographic identifiers collected from borrowers at intake. To avoid potentially revealing borrower-specific information in our analysis, we aggregated geographic data to the census region level, and we reported counts for each type of loan status listed above. We also analyzed and reported dollar amounts for outstanding, fully repaid, and charged-off loans.[3] For

[3]The Census Bureau divides the United States into a variety of geographies for analytical purposes. Regions are the largest geographic unit, dividing the country into four major areas, with U.S. territories (other than the District of Columbia) not represented in a formal region. Region 1 represents the Northeast, Region 2 the Midwest, Region 3 the South, and Region 4 the West.

our sectoral analysis, we used program data to match loan payment information to North American Industry Classification System (NAICS) codes collected from borrowers at intake. To avoid revealing borrower-specific information in our analysis, we aggregated Main Street borrowers' designated NAICS codes into sectors defined by the Bureau of Labor Statistics.[4] We then reported the count for each type of loan status listed above. We also analyzed and reported dollar amounts for outstanding, fully repaid, and charged-off loans.

To determine if Main Street loans were affected by shifts in their variable loan interest rates, we retrieved daily term-rate information on Main Street base rates—the rates to which Main Street loans were fixed—from the Bloomberg Terminal.[5] This included information for (1) the 1-month London Interbank Offered Rate (LIBOR) from July 2020 through its decommissioning on June 30, 2023, and (2) the 1-month Term Secure Overnight Financing Rate (SOFR) from July 2020 through August 2023.[6] We then compared the monthly averages of the term rates to the rate of monthly Main Street delinquencies and the median interest rate for each month from July 2020 to August 2023.

We assessed the reliability of the Main Street data we used by reviewing agency documentation, including a data dictionary and relational diagrams, and conducting electronic testing on-site for outliers, missing data, and erroneous values. We also interviewed officials of the Federal Reserve Bank of Boston to discuss the interpretation and reliability of various data fields and how data are collected, stored, and maintained.

[4]According to the Bureau of Labor Statistics, NAICS codes can be grouped into 10 sectors: construction; education and health services; financial activities; information; leisure and hospitality; manufacturing; natural resources and mining; professional and business services; trade, transportation, and utilities; and other services.

[5]At program inception, borrowers agreed to take on an adjustable interest rate, calculated by adding 300 basis points (or 3 percent) to the adjustable 1-month or 3-month London Interbank Offered Rate, depending on a loan's terms.

[6]Due to the decommissioning of LIBOR on June 30, 2023, Main Street borrowers were allowed to file a Core Rights Request form to change from a LIBOR-pegged rate to a comparable rate—generally, the SOFR. According to officials of the Federal Reserve Bank of Boston, 96 percent of Main Street loans have transitioned from LIBOR to SOFR. The remaining 4 percent transitioned to other comparable rates (e.g., the prime rate). Basis point adjustments also differed from the standard 300-point LIBOR adjustment depending on the term rate (e.g., 1-month SOFR-pegged loans were required to add 311.448 basis points to their base rate).

We determined the data were sufficiently reliable for describing selected characteristics of Main Street loans and payment performance.

We conducted this performance audit from December 2022 to December 2023 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: Facilities Not Funded by the CARES Act That Supported Short-Term Credit Markets

The Federal Reserve established three lending facilities in March and April 2020 to support the functioning of short-term credit markets. These facilities—the Primary Dealer Credit Facility, Money Market Mutual Fund Liquidity Facility, and Commercial Paper Funding Facility—did not receive CARES Act-appropriated funds. They were terminated on March 31, 2021. Since the termination of the facilities, risks in the markets they supported have continued to remain generally low.

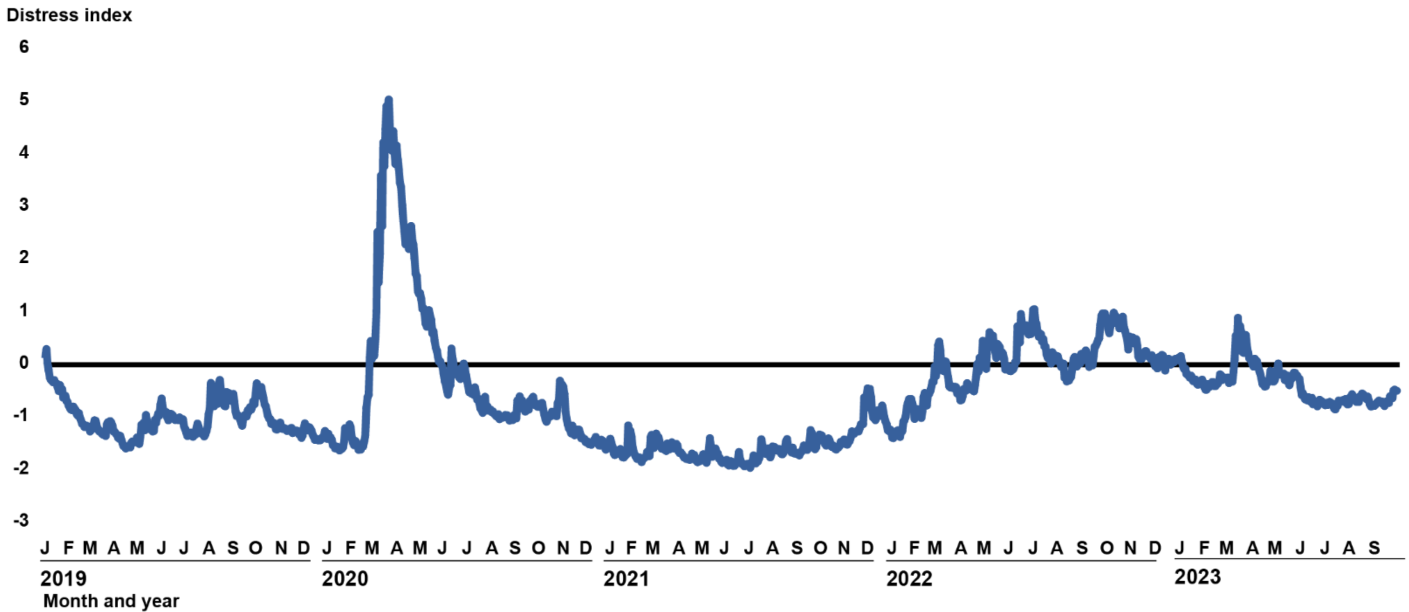
Market metrics that measure the level of systemic financial stress suggest that risks, including short-term risks, have remained below pandemic levels. Specifically, the Office of Financial Research's Financial Stress Index provides a snapshot of disruptions to the normal functioning of financial markets. The index is positive when stress levels are above average and negative when stress levels are below average.[1] The index suggests that risks have generally eased since March 2021, when the facilities supporting the functioning of short-term credit markets were terminated (see fig. 24). However, there were brief spikes in 2022 and 2023:

- A spike in March 2022 was likely due to the effects of inflation and the Russia-Ukraine war.
- Another spike from June through November 2022 was likely due to increased interest rates.
- A third spike in March 2023 was likely related to the failures of Silicon Valley Bank and Signature Bank during that month.[2]

[1]The index incorporates five categories of indicators: credit, equity valuation, funding, safe assets, and volatility. The forward rate agreement-overnight indexed swap spread, which provides a snapshot of how the market views short-term credit conditions, generally showed a trend similar to that of the Office of Financial Research's Financial Stress Index. The forward rate agreement-overnight indexed swap spread was discontinued in June 2023.

[2]On March 12, 2023, the Federal Reserve created the Bank Term Funding Program after the failure of Silicon Valley Bank 2 days earlier. The program provides eligible banks with additional liquidity by allowing the 12 Reserve Banks to provide loans of up to 1 year.

Figure 24: Financial Stress Index, January 2019–September 2023

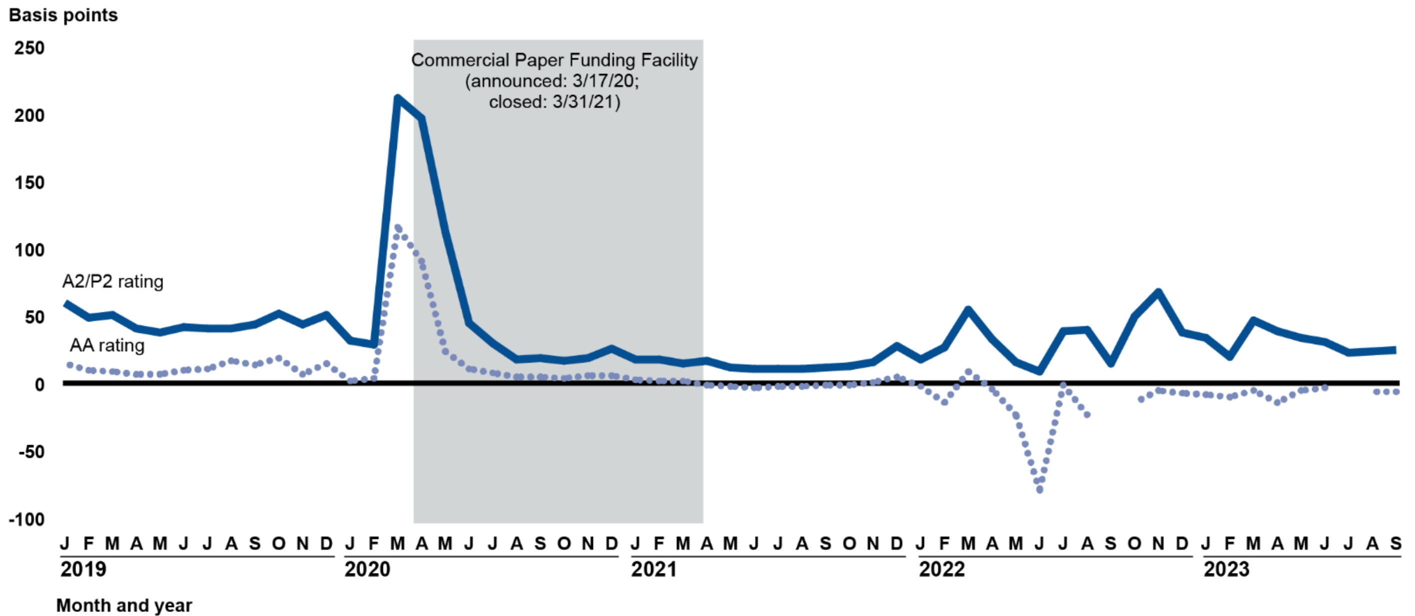


Source: GAO analysis of Office of Financial Research data. | GAO-24-106482

Note: The source of the index is Office of Financial Research's Financial Stress Index; see https://www.financialresearch.gov/financial-stress-index/ (accessed Oct. 25, 2023). The Financial Stress Index is a daily market-based snapshot of stress in global financial markets. It is constructed from 33 financial market variables, such as yield spreads, valuation measures, and interest rates. The index is positive when stress levels are above average and negative when stress levels are below average. The index incorporates five categories of indicators: credit, equity valuation, funding, safe assets, and volatility. The index shown is for the United States.

Spreads on 90-day commercial paper, a source of short-term credit for large nonfinancial businesses, have remained low and have generally been close to prepandemic levels since March 2021 (see fig. 25).

Figure 25: Spreads on 90-Day Commercial Paper for Large Nonfinancial Businesses, January 2019–September 2023

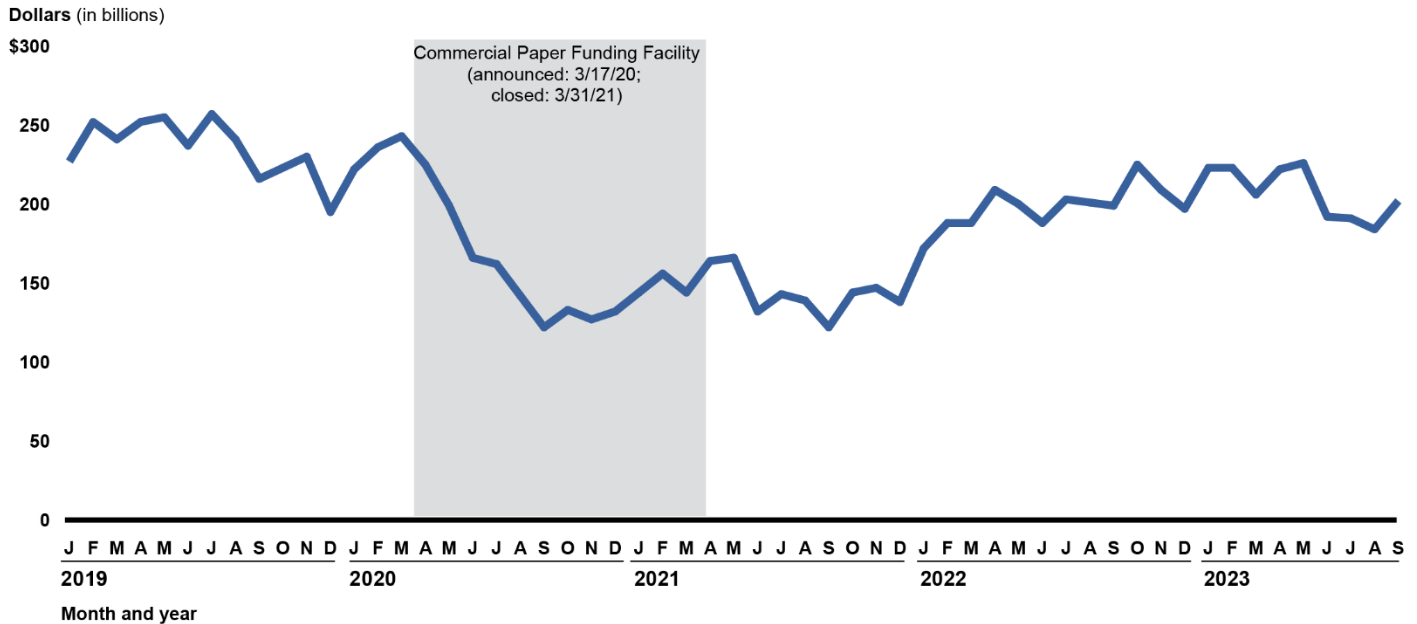


Source: GAO analysis of Bloomberg and Board of Governors of the Federal Reserve System data. | GAO-24-106482

Note: The figure shows the monthly average of the daily rates because the rates were not reported for some days. 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.

Outstanding balances on commercial paper for funding large nonfinancial businesses have increased since September 2021 and have almost reached prepandemic levels, indicating improved investor confidence (see fig. 26).

Figure 26: Commercial Paper Outstanding for Large Nonfinancial Businesses, January 2019–September 2023

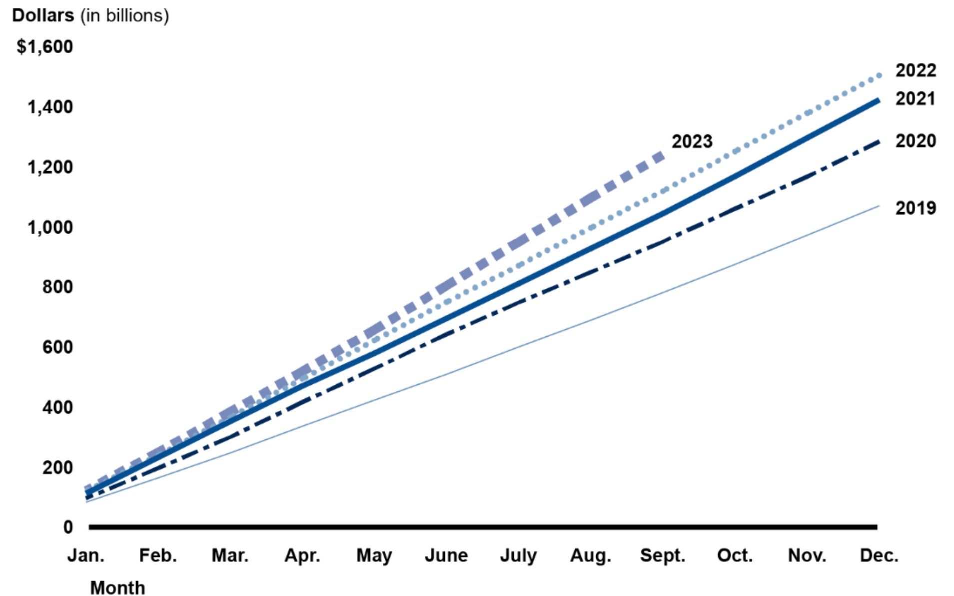


Source: GAO analysis of Board of Governors of the Federal Reserve System data. | GAO-24-106482

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

Triparty repurchase agreements financing corporate bond collateral have continued to increase in volume since March 2021, providing access to short-term funding (see fig. 27). 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.

Figure 27: Annual Cumulative Triparty Repurchase Agreements of Corporate Securities, January 2019–September 2023

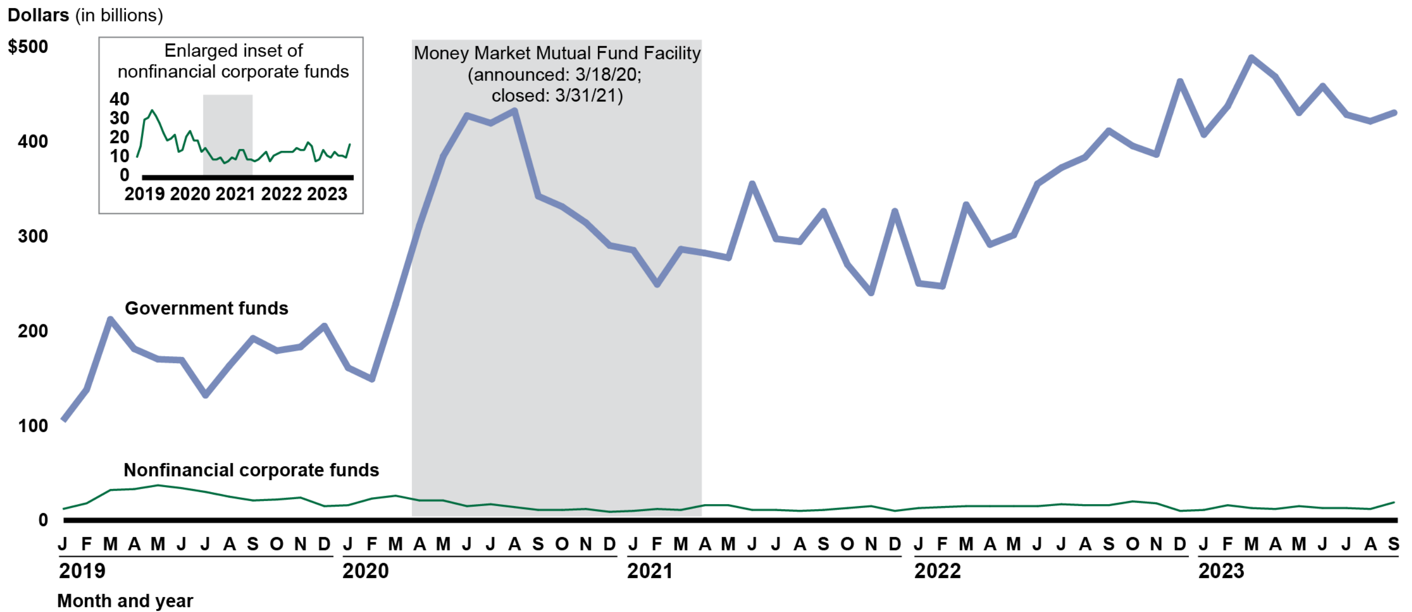


Source: GAO analysis of Securities Industry and Financial Markets Association data. | GAO-24-106482

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. In a triparty repurchase agreement, market clearing banks facilitate the settlement, unlike bilateral repurchase agreement markets, where the parties directly exchange money and securities. Fedwire is an electronic funds transfer system used by banks, businesses, and government agencies for large, same-day transactions.

The volume of nonfinancial corporate prime money market funds—used mostly by large businesses to raise funds—began decreasing in June 2019 and has been generally lower than the levels at the onset of the pandemic (see fig. 28). This trend suggests that large businesses are having difficulty obtaining credit in the short-term funding markets. In contrast, investments in government funds, which are perceived to be less risky, have increased.

Figure 28: Prime Money Market Fund Investments, January 2019–September 2023

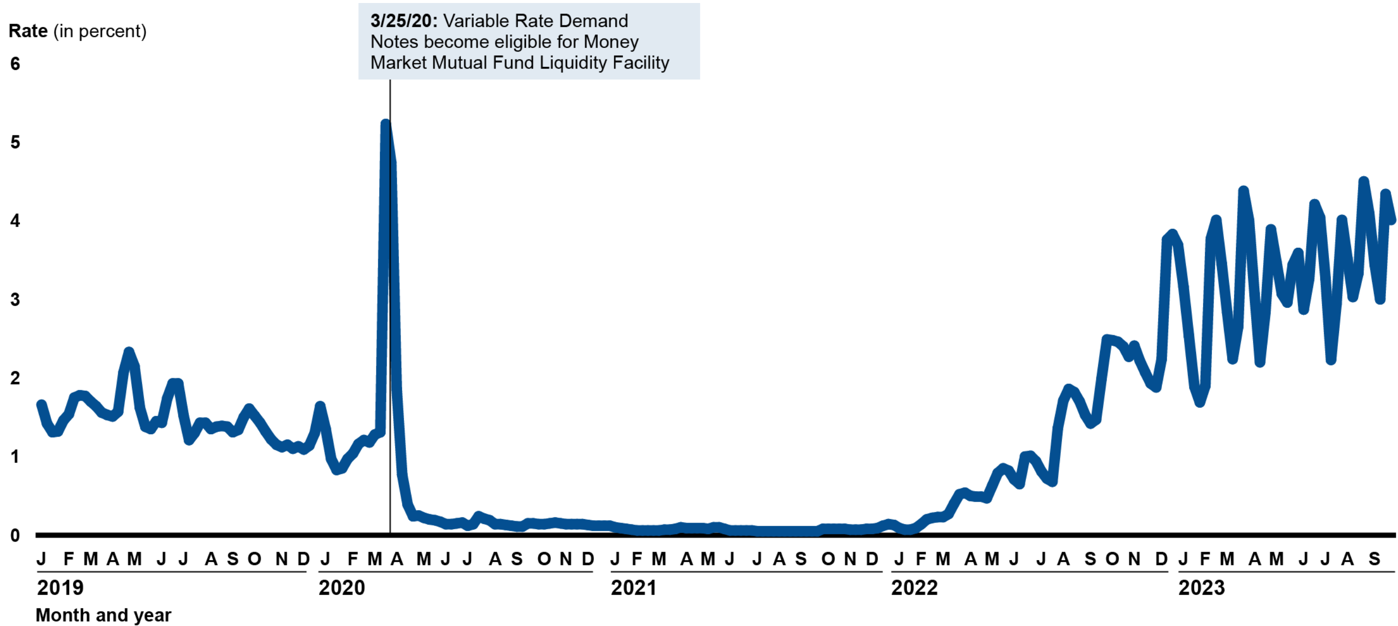


Source: GAO analysis of Office of Financial Research data. | GAO-24-106482

Note: The prime money market funds reported in this figure are investments in government, financial institution, nonfinancial corporate, and municipal entities and other entities in the United States.

The rates on variable demand rate notes, the most commonly held type of asset in municipal money market funds, have increased since 2022 (see fig. 29). This is partly due to the Federal Reserve raising interest rates, as the rates are based on the prevailing money market rate.

Figure 29: Municipal Swap Index of Rates on Tax-Exempt Variable Rate Demand Notes, January 2019–September 2023

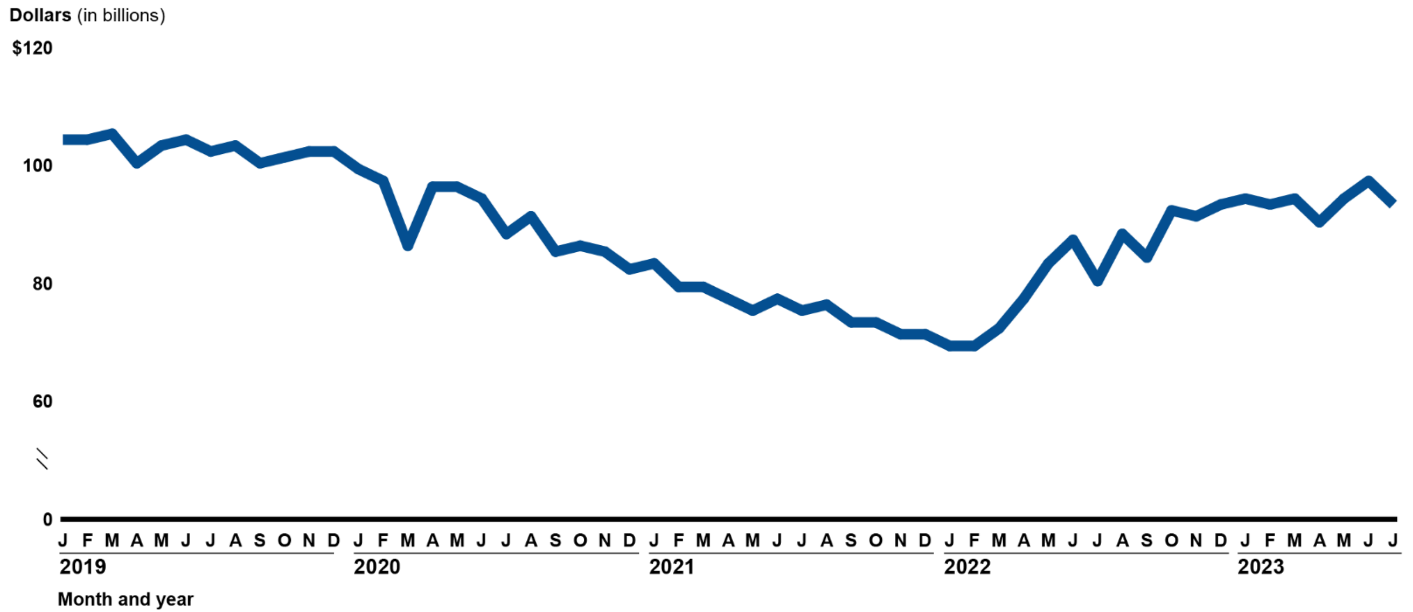


Source: GAO analysis of Securities Industry and Financial Markets Association data. | GAO-24-106482

Note: The index is a weekly nonweighted average of the reset rates of high-grade tax-exempt variable rate demand notes.

However, outstanding balances of variable rate demand notes have generally increased since 2022 and are close to prepandemic levels (see fig. 30). While this trend suggests improved confidence in the municipal credit market, this increase occurred after a long period of decline. The increase in the outstanding balances of variable rate demand notes is likely due to increased demand as prevailing interest rates are higher and to issuances by borrowers seeking variable rates to avoid locking in higher rates in the long term.

Figure 30: Variable Rate Demand Notes Outstanding, January 2019–July 2023



Source: GAO analysis of Board of Governers of the Federal Reserve System data. | GAO-24-106482

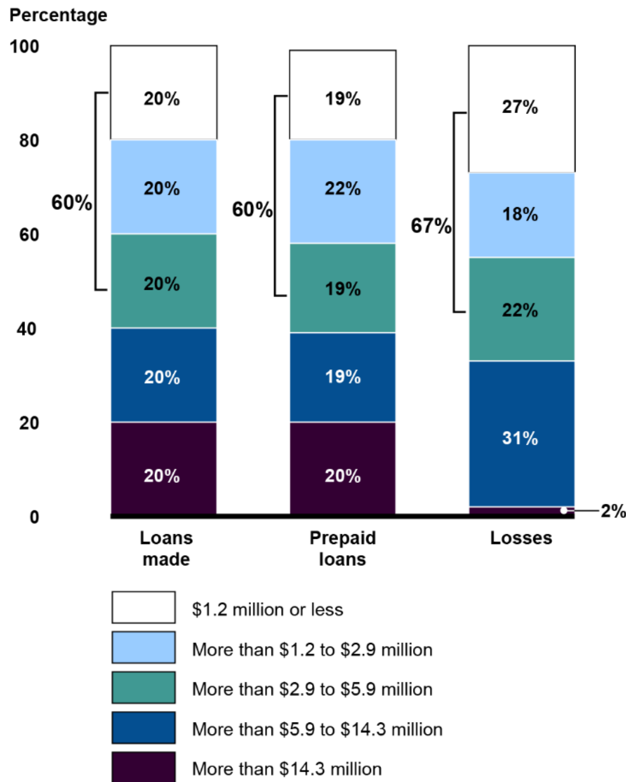
Appendix III: Main Street Loan Performance by Loan Size and Business Size for Fully Repaid and Charged-Off Loans

According to our analysis of the Federal Reserve Bank of Boston's Main Street Lending Program data, the distribution of fully repaid loans aligned more closely with the distribution of Main Street loans made by loan size and by business size than did loans with recorded losses, as of August 2023.

Loan size. More than half of Main Street loans made were for less than $5.9 million, which is generally consistent with the distribution of both fully repaid loans and loans with recorded losses. Specifically, 60 percent of fully repaid loans were loans of less than $5.9 million, as of August 2023. Similarly, 67 percent of loans with recorded losses were also loans less than $5.9 million.

In addition, loans of $1.2 million to less than $2.9 million generally represented a greater share of fully repaid loans compared with their share of loans made. However, loans of the same size represented a slightly smaller share of loans with losses compared with their share of loans made. Loans of more than $5.9 million to less than $14.3 million incurred losses at a disproportionally higher rate than the distribution for the category. (See fig. 31.)

Figure 31: Distribution of Main Street Loans Made, Loans Fully Repaid, and Loans with Losses, by Loan Size, as of August 2023

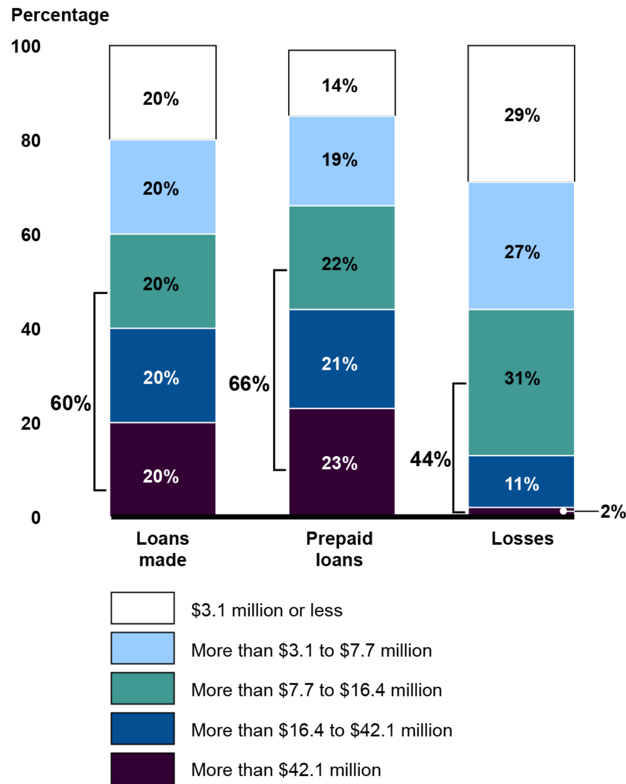


Source: GAO analysis of Federal Reserve Bank of Boston data. | GAO-24-106482

Note: Prepaid loans do not sum to 100 percent because of rounding.

Business size. Fully repaid loans were proportionally higher for larger businesses, while loans with recorded losses were proportionally higher for smaller businesses. For example, businesses that had 2019 gross revenue of $7.7 million or more accounted for the majority of fully repaid loans, as of August 2023. This is generally consistent with the distribution of all loans made through the Main Street program. In contrast, 44 percent of loans to these larger businesses resulted in losses. In other words, more of the loans with recorded losses were made to smaller businesses. (See fig. 32.)

Figure 32: Distribution of Main Street Loans Made, Loans Fully Repaid, and Loans with Losses, by Business Size, as of August 2023



Source: GAO analysis of Federal Reserve Bank of Boston data. | GAO-24-106482

Note: Prepaid loans do not sum to 100 percent because of rounding. Business size is measured in 2019 gross revenue.

Appendix IV: GAO Contacts and Staff Acknowledgments

GAO Contact

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Staff Acknowledgments

In addition to the contact named above, Tarek Mahmassani (Assistant Director), Chir-Jen Huang (Analyst in Charge), Daniel Flavin, John Karikari, Christopher Klemmer, Bryan Prince, Zamir Ruli, Jessica Sandler, Jennifer Schwartz, Jena Sinkfield, and Farrah Stone made key contributions to this report.

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