REPORT TO CONGRESS

Availability of Credit to Small Businesses

October 2022

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

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Contents

Preface v

Executive Summary 1
Background 1

Flows and Terms of Business Credit 7
Aggregate Business Financing 7
Financing for Nonfinancial Corporations 8
Financing for Small Businesses 11

Credit Use by Small Businesses 17
Small Business: Definition and Background 17
Risks of Lending to Small Businesses 19
Credit Use 22

Providers of Credit to Small Businesses 33
Lending by Depository Institutions 36
Lending by Nondepository Sources 46

Government Initiatives to Support Credit Access for Small Businesses 49
Community Reinvestment Act 49
Small Business Administration Programs 53
Special Small Business Intervention Programs during the COVID-19 Pandemic 57

References 65

Corrections 71

Preface

Section 2227 of the Economic Growth and Regulatory Paperwork Reduction Act of 1996 requires that, every five years, the Board of Governors of the Federal Reserve System submit a report to the Congress detailing the extent of small business lending by all creditors. The act specifies that the study should identify factors that give policymakers insight into the small business credit market, including the demand for credit by small businesses, the availability of credit, the range of credit options available, the types of credit products used, the credit needs of small businesses, the risks of lending to small businesses, and any other factors that the Board deems appropriate.[1]

For previous reports on this topic, see the Board's website at https://www.federalreserve.gov/publications/availability-of-credit-to-small-businesses.htm.

[1] As required by law, the Board consulted with the Comptroller of the Currency, the Administrator of the National Credit Union Administration, the Administrator of the U.S. Small Business Administration, the Board of Directors of the Federal Deposit Insurance Corporation, and the Secretary of Commerce.

Executive Summary

This report examines recent patterns in the flows and terms of business credit, credit use by small firms, and the sources of credit provided to small businesses, with an emphasis on the lending activities of commercial banks. Government interventions, such as community reinvestment activities and special governmental policies implemented during the COVID-19 pandemic, are also discussed.

Financial conditions were mostly accommodative between 2018 and 2022, the years covered by this report. Although financial conditions deteriorated in mid-2020 at the onset of the COVID-19 pandemic, they have since returned to pre-pandemic levels for most businesses, reflecting the recovery in economic activity and government initiatives to protect the economy during the downturn.

Background

Defining what is meant by "small business" is the difficult first step in conducting a policy-relevant analysis of the financing needs of small businesses. The financing needs are very different for a "mom and pop" grocery store, a microenterprise in the inner city, a high-tech start-up firm, a business that is ready to expand from early-stage growth to the next level, and a business that has neared the point of issuing public debt or equity. Yet the term "small business" typically encompasses all of these entities. A commonly used definition of a small business is a firm or enterprise with fewer than 500 employees. This definition encompasses nearly all businesses in the United States.

The concerns of Congress and other policymaking bodies about small business financing largely stem from the perception that small firms have more difficulty gaining access to credit than do large businesses or other types of borrowers. The source of this difficulty may be the higher cost of lending to small firms due to greater riskiness or challenges in evaluating and monitoring credit risks, or it may be inefficiencies in markets that hinder pricing of risk or impede the effective pooling of risks. To the extent that private-market impediments or inefficiencies are the source of any difficulties for small business financing, policymakers may focus on measures that mitigate these market failures. It is important to note that no single policy prescription would likely work for all small businesses, and no single definition of small business would be appropriate for all industries. As discussed in this report, credit needs and borrowing sources differ widely among small businesses. In addition, aggregate business finance data broken down by firm size are generally

not available. For this report, various proxies are used, including organization type and the size of the debt at the time of origination.

Credit Flows and Terms

The total debt of nonfinancial businesses (for firms of all sizes) grew at an average annual rate of more than 6 percent from 2017 to 2021. As a result, the ratio of nonfinancial business debt to gross domestic product continued to trend up, on average, over this period and remains well above historical norms. Nonfinancial businesses also continued to issue equity at a robust pace, as seen in figure 3, supported by stock prices that rose notably, on net, over the period.[2]

Total debt of partnerships and proprietorships, of which small businesses represent the majority share, rose at a moderate pace from 2017 to 2021. The two largest components are commercial and residential mortgage debt and loans from commercial banks that are not secured by real estate. Outstanding mortgage debt rose moderately over the past several years, supported by sizable increases in both multifamily residential mortgages and commercial mortgages backed by a range of business property types. In addition, bank loans extended without real estate collateral have grown at a robust pace, reflecting in part the ongoing strengthening of bank balance sheets and a concurrent easing of standards as well as the loans extended under the Paycheck Protection Program (PPP), a program that originated almost $800 billion of forgivable loans to small businesses in 2020 and 2021 in response to the COVID-19 pandemic.

Credit Needs and Use

Despite the important role of small businesses in the U.S. economy, small businesses often have difficulty in gaining access to credit, as lending to small businesses is generally considered riskier and more costly than lending to larger firms. The failure rate in the early years of a business—when the firm is likely to be the smallest—is quite high relative to later years. Additionally, smaller firms fail at a higher rate than larger firms. Lending to small businesses is further complicated by the "informational opacity" of many such firms. The heterogeneity across small firms, together with widely varying uses of borrowed funds and smaller loan sizes, has impeded the development of general standards for assessing applications for small business loans and has made evaluating such loans relatively expensive.

Up-to-date and comprehensive information about the universe of small businesses is sparse, and most evidence about financing needs and sources is derived from surveys. While many of these surveys have limited coverage or rely on nonrepresentative samples, the U.S. Census Bureau has fielded a large-scale, nationally representative annual survey of businesses since 2015. The most recent survey for which data are available, the 2021 Annual Business Survey (ABS), collected

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[2] Small businesses rarely have publicly traded equity or debt securities. For the small businesses that do, it is generally an important share of their overall financing.

information from a random sample of approximately 300,000 firms with paid employees from the universe of private firms with receipts of $1,000 or more.[3]

Data from the ABS show that, while 60 percent of businesses have less than $50,000 in debt, many businesses have significant levels of debt. At the end of 2020, almost half of businesses reported having less than $5,000 in outstanding debt. An additional 15 percent had at least $5,000 in debt but less than $50,000, while 4 percent had between $500,000 and $999,999 and another 9 percent had at least $1,000,000 in debt.

Small businesses have long used a variety of sources to fulfill their credit needs, both informal and formal. ABS data show that approximately 15 percent of businesses formally applied for new credit in 2020, excluding applications to any pandemic-related programs. Among the businesses that applied for credit, almost 60 percent received the full amount for which they applied, while approximately 12 percent received none.

Providers of Credit

Providers of small business credit include depository institutions—commercial banks, savings institutions, and credit unions—as well as finance companies, nonfinancial firms, and individuals such as family members or friends.

Commercial banks. Lending to small businesses involves unique challenges that banks appear well suited to meet. Of particular significance, information on the financial condition, performance, and prospects of small firms may not be readily available, so, relative to other types of loans, loans to small firms are often based more heavily on information gathered through established relationships than loans for larger businesses.

Overall, small business loans—defined as loans classified as commercial and industrial (C&I) or secured by nonfarm or nonresidential real estate whose original amounts are $1 million or less—and microloans—defined as loans classified as C&I or secured by nonfarm or nonresidential real estate whose original amounts are $100,000 or less—outstanding from commercial banks grew significantly between 2017 and 2020. An important component of the growth in outstanding balances was the PPP. While growth in balances was relatively modest between 2017 and 2019, outstanding balances at the end of 2020—following the implementation of the first round of PPP loans—were 39 percent higher than a year earlier. Outstanding balances on small C&I loans, which include PPP loans, were 70 percent higher. In 2021, balances on all small business loans fell almost 10 percent despite a second round of PPP originations, as almost $600 billion of PPP loans across all lenders were forgiven.

[3] The Annual Business Survey is available on the U.S. Census Bureau's website at https://www.census.gov/programs-surveys/abs.html.

While banks of all sizes are important sources of credit for small businesses, large banks tend to be proportionately less committed than smaller banks to small business lending. As seen in table 10, the average banking organization with $1 billion or less in total assets held over 13 percent of its portfolio as small business loans in June 2021. In contrast, organizations with assets between $1 billion and $10 billion held 10.6 percent of their assets as small business loans, and the largest organizations—those with assets greater than $10 billion—held approximately 6 percent of their assets as such loans. Small business loans play a larger role in the portfolios of small banks than they do in the portfolios of large institutions.

While large banks tend to have a lower ratio of small business loans to assets relative to smaller banks, the leading small business lenders nonetheless typically include the largest banking organizations. Data on industry structure indicate that the leading small business loan holders, where banks are ranked on the basis of total outstanding balances on small business loans, hold a large share of total banking assets and a much smaller share of small business loans.

Savings institutions. Savings institutions, defined as savings banks and savings and loan associations, provide much less credit to small businesses than do commercial banks. The primary lines of business for these institutions, often referred to as thrifts, tend to involve providing retail financial services, such as residential mortgage loans, savings accounts, and negotiable order of withdrawal accounts, to households. As of 2021, savings institutions held $40 billion in small business loans and $7 billion in microloans, compared with $754.5 billion and $227.5 billion, respectively, held by commercial banks.

Credit unions. A credit union is a not-for-profit financial cooperative owned and controlled by its members. While credit unions offer many of the same financial services that banks do, they historically have devoted a smaller share of their assets toward providing small business lending. Outstanding loans to businesses by credit unions increased consistently in recent years; between 2017 and 2021, credit union outstanding loans to business members increased 51.8 percent, although the ratio of outstanding loans to credit union assets was fairly stable over this period.

Finance companies. Businesses use of finance companies peaked in 2018, after which it decreased at an increasing rate (table 16). Dollar volume in 2021 was more than 15 percent lower than in 2017. The primary use of finance companies by businesses is the purchase of motor vehicles or other business equipment, which account for about 80 percent of outstanding business finance company debt.

Online lenders. Online lending generally refers to platforms that bring together potential borrowers and lenders to facilitate the provision of loans. The online lending market has continued to evolve and expand, particularly during the pandemic. According to a recent report from the Cambridge

Centre for Alternative Finance, online alternative finance platforms in the United States facilitated more than $15 billion of loans to small and medium enterprises in 2019 (Ziegler et al., 2021).

Government Initiatives to Support Credit Access for Small Businesses

The federal government has historically affected the delivery and availability of credit through a variety of initiatives. Pursuant to the Community Reinvestment Act (CRA), the Federal Deposit Insurance Corporation (FDIC), the Federal Reserve System, and the Office of the Comptroller of the Currency (OCC) evaluate small business lending activities of "regulated financial institutions." In addition, the Small Business Administration (SBA) administers several loan programs that largely focus on the financing needs of small firms that cannot obtain credit elsewhere from conventional sources as well as firms in underserved communities, start-ups, and young firms without much, or any, financial history. In addition to these long-standing initiatives, government entities created several programs and expanded existing programs to support credit access to small businesses during the COVID-19 pandemic. The most prominent of these programs was the PPP, but other supporting programs of note include expansion of the Economic Injury Disaster Loan (EIDL) and the creation of the Paycheck Protection Program Liquidity Facility (PPPLF) and the Main Street Lending Program (MSLP).

Community Reinvestment Act. The Congress enacted the CRA in 1977 to encourage federally insured depository institutions to help meet the credit needs of their local communities, consistent with safe and sound operations. Under the CRA, the banking agencies assess an institution's record of meeting the credit needs of its entire community, including low- and moderate-income neighborhoods. Analysis of CRA data shows that the dollar volume of small business loan originations, as defined under CRA standards, grew steadily between 2010 and 2019.[4] While steady, however, growth was slow, and, as of 2019, the dollar value of originations was approximately 23 percent below its 2007 high. With the creation of the PPP in response to the COVID-19 pandemic, originations grew almost 80 percent in 2020, surpassing the 2007 high. Originations to businesses with revenues of less than $1 million followed a similar pattern of growth, although the rate of growth in 2020 was notably lower. Small business loan origination volume grew faster in non-LMI areas than LMI areas between 2015 and 2019, while, within each income group, lending grew slightly faster in assessment areas than outside assessment areas through 2019.

Small Business Administration programs. Support for small business development has been a priority of policymakers for several decades, and federal, state, and local agencies have sponsored programs that assist in channeling capital to small businesses. At the federal level, the agency with the most direct role in this objective is the SBA, which the Congress created in 1953 to help

[4] Small business loan originations are defined as loans whose original amounts are $1 million or less and are reported on the institution's Call Report as either "loans secured by nonfarm or nonresidential real estate" or as "Commercial and industrial loans." For more detail on CRA data collection and reporting requirements, see https://www.ffiec.gov/cra/pdf/2015_CRA_Guide.pdf.

entrepreneurs form successful small enterprises. The SBA provides financing to young and growing small firms through several channels such as the 7(a) Guarantee Loan Program and SBA 504 Certified Development Companies (CDCs). Among the small business growth policy objectives of the SBA loan programs is the goal of promoting entrepreneurship opportunities for women and minorities.

Data from SBA lending reports, indicate that, between fiscal years 2016 and 2020, the dollar volume for the 7(a) loans was relatively stable between $23 and $25 billion, while the number of loans declined from 60,000 to 42,000 over that same period. However, fiscal year 2021 saw nearly 52,000 loans originated, totaling $36.5 billion—the largest amount in 7(a) history. While some of the increase in the program may have come from an increased need for small businesses as a result of the COVID-19 pandemic, much of it is likely due to the enhancements made to the program under the Economic Aid to Hard-Hit Small Businesses, Nonprofits, and Venues Act (Economic Aid Act) that was signed into law in late December 2020. Funding under the CDC/504 program was generally flat between 2016 and 2019 in both count and dollar volume. Between 2016 and 2019, the number of 504 loans increased from just over 6,000 to nearly 10,000. At the same time, the dollar volume also increased nearly half a billion dollars to $8 billion in 2021.

Small business intervention programs. Important financial support for small businesses throughout the COVID-19 pandemic came in the form of several pieces of legislation providing an unprecedented $968 billion of aid to small businesses. These include the Coronavirus Preparedness and Response Supplemental Appropriations Act; the Coronavirus Aid, Relief, and Economic Security (CARES) Act; the PPP and Healthcare Enhancement Act; the Consolidated Appropriations Act, 2021; and the American Rescue Plan. In addition to the congressional assistance, the Federal Reserve System created two new facilities to further support small business access to credit: the PPPLF and the MSLP.

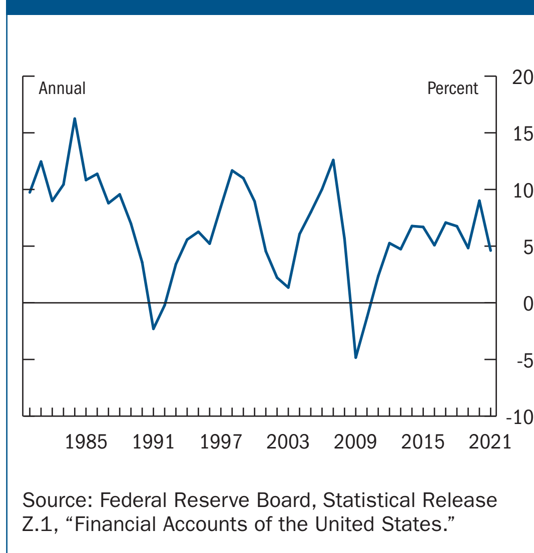
Flows and Terms of Business Credit

Financial conditions were mostly accommodative between 2018 and 2022, the years covered in this report. Although financial conditions deteriorated in mid-2020 at the onset of the COVID-19 pandemic, they have since returned to pre-pandemic levels for most businesses, reflecting the recovery in economic activity and government initiatives to protect the economy during the downturn. Equity prices rose notably, on net, and interest rates remained low by historical standards. The aggregate debt of all nonfinancial businesses (both large and small) increased moderately, supported especially by robust issuance in the corporate bond and syndicated loan markets.

Aggregate Business Financing

The total debt of nonfinancial businesses (for firms of all sizes) grew at an average annual rate of more than 6 percent from 2017 to 2021 (figure 1).[5] As a result, the ratio of nonfinancial business debt to gross domestic product continued to trend up, on average, over this period and remains well above historical norms (figure 2).[6]

Figure 1. Percentage change in total debt and equity of nonfinancial businesses, 1980–2021



Source: Federal Reserve Board, Statistical Release Z.1, "Financial Accounts of the United States."

Nonfinancial businesses also continued to issue equity at a robust pace, supported by stock prices that rose notably, on net, over the period (figure 3). Share repurchases and merger and acquisition activity also remained solid, on average, in part following the passage of the Tax Cuts and Jobs Act of 2017, which reduced the corporate tax rate, and the rebound in corporate earnings after March 2020. As a result, net equity issuance (that is, gross issuance minus retirements) continued to be negative.

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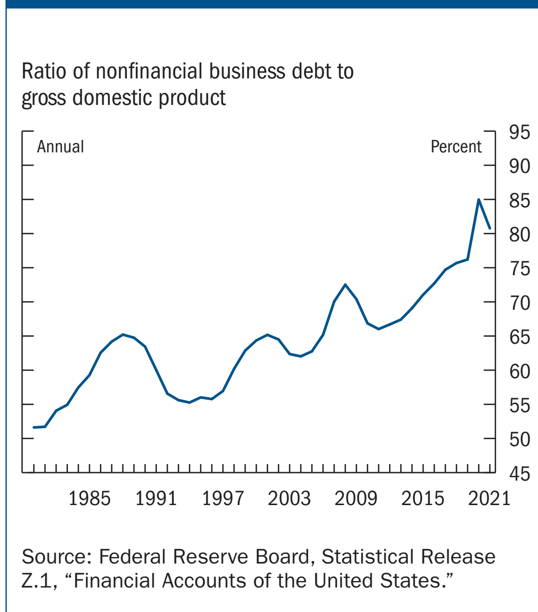
[5] Data used in this section are from the Financial Accounts of the United States published by the Federal Reserve Board, Consolidated Reports of Condition and Income by the FDIC for banks, and surveys of lenders and of small businesses. Information from the Financial Accounts of the United States relates to organizational type rather than to the size of the firm. A business can be organized as a corporation (C corporation or S corporation), a proprietorship, or a partnership. Most proprietorships and partnerships are small businesses. Large, publicly traded firms are generally C corporations, which are subject to corporate income taxes and securities laws. S corporations are designed primarily for small businesses and generally are not subject to corporate income taxes.

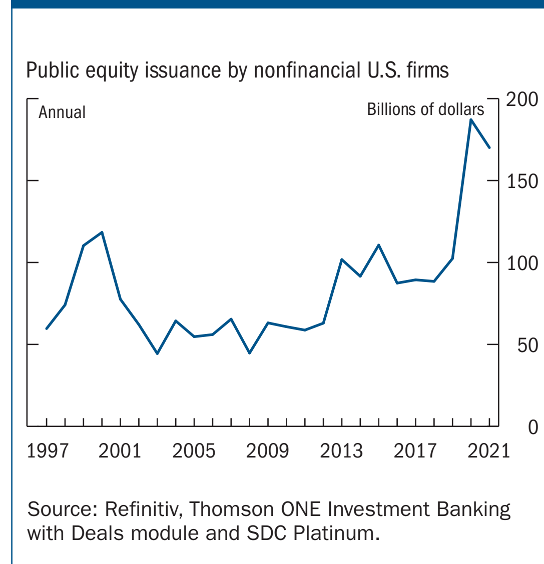
[6] The peak in 2020 is due primarily to the temporary decline in gross domestic product during the COVID-19 pandemic.

Figure 2. Total debt and equity of nonfinancial businesses, 1980–2021



Source: Federal Reserve Board, Statistical Release Z.1, "Financial Accounts of the United States."

Figure 3. Total debt and equity of nonfinancial businesses, 1997–2021



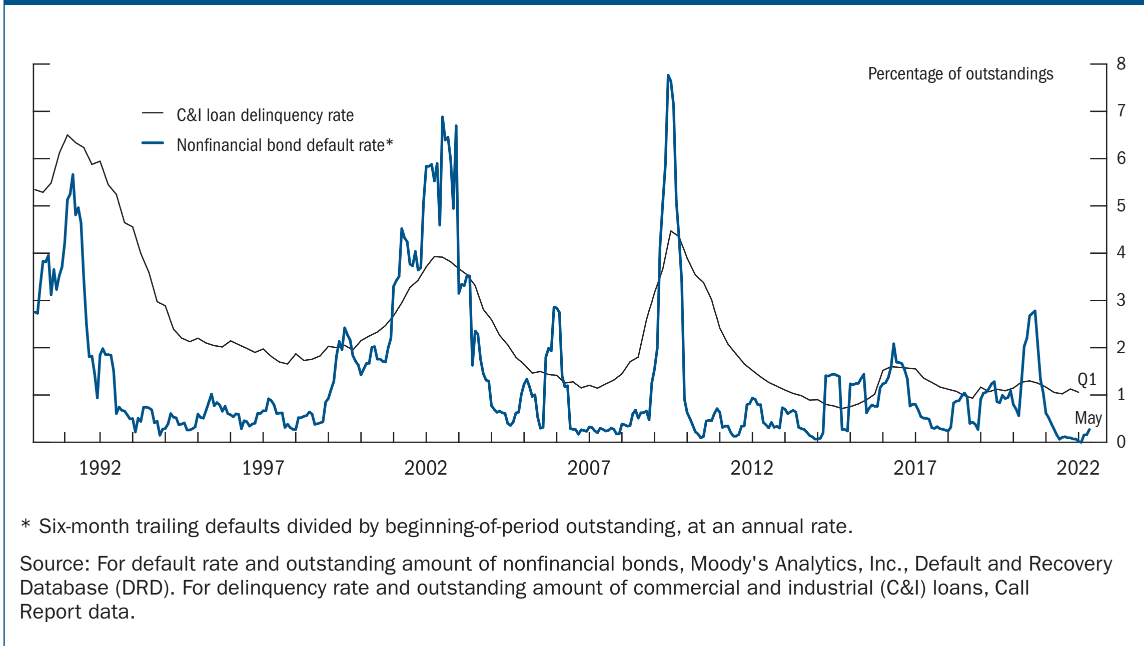
Source: Refinitiv, Thomson ONE Investment Banking with Deals module and SDC Platinum.

Financing for Nonfinancial Corporations

Indicators of financing conditions in the aggregate and for large businesses suggest that conditions were accommodative for most of the period. Financing conditions tightened at the onset of the COVID-19 pandemic but appear to have largely recovered to pre-pandemic levels. Default rates on C&I loans were low to moderate over the entire period. Default rates on nonfinancial bonds spiked over the summer of 2020 but dropped back down to near zero by the end of 2021 (figure 4). Yields on triple-B-rated and high-yield corporate bonds were low by historical standards through the end of 2021, with a small spike late in 2018 due to rising tensions between the United States and China and in the spring of 2020 due to the COVID-19 pandemic (figure 5). However, since early 2022, corporate bond yields across the rating spectrum increased amid rising inflation concerns, tightening in monetary policy, and uncertainty over economic outlook and now stand near the medians of their historical distributions. The spreads of yields on corporate bonds to those on comparable-maturity Treasuries moved in a similar pattern to the yields (figure 6). Borrowing costs for shorter-term debt issued by nonfinancial firms early in the period rose a bit but later declined before picking back up in 2022, as shown in figure 7. Spreads of rates on A2/P2-rated commercial paper over the target federal funds rate were generally stable at low levels, with a spike at the onset of the COVID-19 pandemic (figure 8).

Nonfinancial corporate debt rose steadily from 2017 to 2021 (table 1). Debt growth was supported by a robust pace of bond issuance by nonfinancial corporations, as firms took advantage of

Figure 4. Selected default and delinquency rates, 1990–2022



* Six-month trailing defaults divided by beginning-of-period outstanding, at an annual rate.

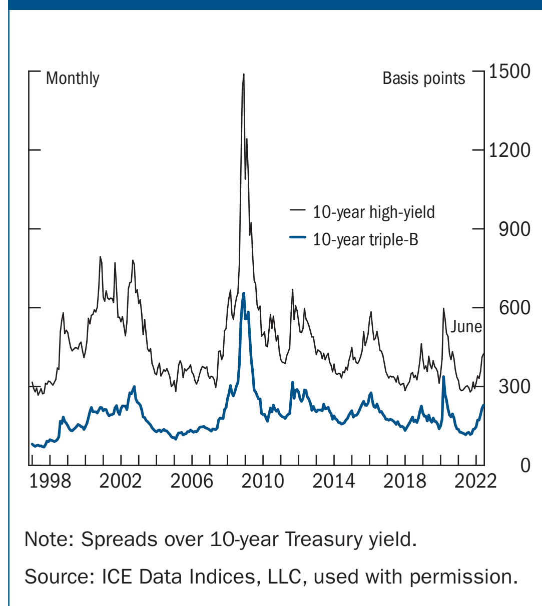
Source: For default rate and outstanding amount of nonfinancial bonds, Moody's Analytics, Inc., Default and Recovery Database (DRD). For delinquency rate and outstanding amount of commercial and industrial (C&I) loans, Call Report data.

the low interest rate environment. Commercial paper outstanding at nonfinancial firms was little changed between 2017 and 2019, but then stepped down in 2020, falling back to its level from 2012. Bank loans not secured by real estate fluctuated a bit over the period, especially after the

Figure 5. Corporate bond yields, 1997–2022

Source: ICE Data Indices, LLC, used with permission.

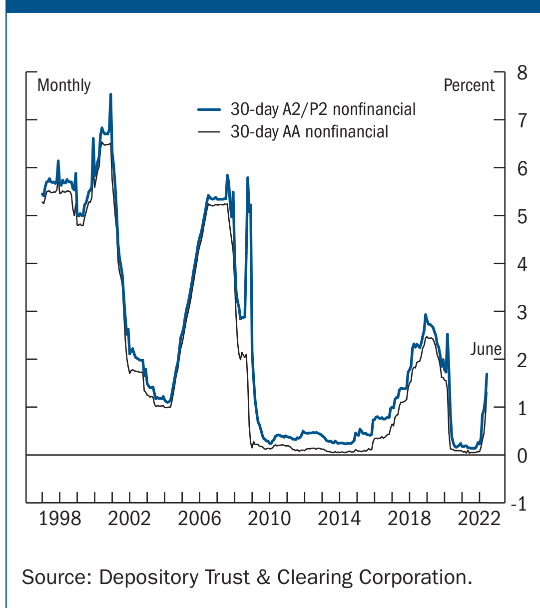
Figure 6. Corporate bond spreads, 1997–2022



Note: Spreads over 10-year Treasury yield.

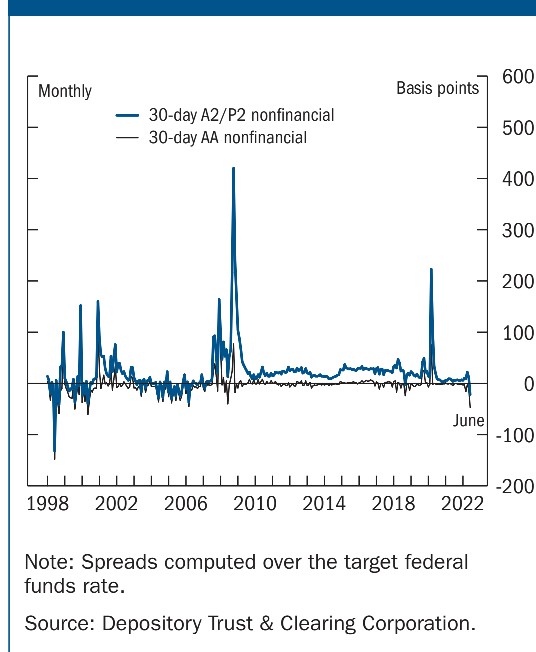
Source: ICE Data Indices, LLC, used with permission.

Figure 7. Commercial paper yields, 1997–2022



Source: Depository Trust & Clearing Corporation.

Figure 8. Commercial paper spreads, 1998–2022



Note: Spreads computed over the target federal funds rate.

Source: Depository Trust & Clearing Corporation.

onset of the COVID–19 pandemic. Commercial mortgage debt rose modestly over this period. Other loans—in particular, leveraged loans from nonbank institutions—grew rapidly.

Table 1. Level of debt, 2017–21
Billions of dollars

Type of debt	2017	2018	2019	2020	2021
Total debt	8,976	9,666	10,147	11,075	11,650
Corporate bonds[1]	5,394	5,559	5,816	6,491	6,652
Mortgages	536	626	679	724	859
Bank loans[2]	900	1,003	1,034	1,112	1,067
Commercial paper	207	196	195	132	138
Municipal securities	574	571	586	590	600
Other loans[3]	1,365	1,710	1,838	2,026	2,334
MEMO					
Trade debt	2,370	2,690	2,920	3,055	3,599

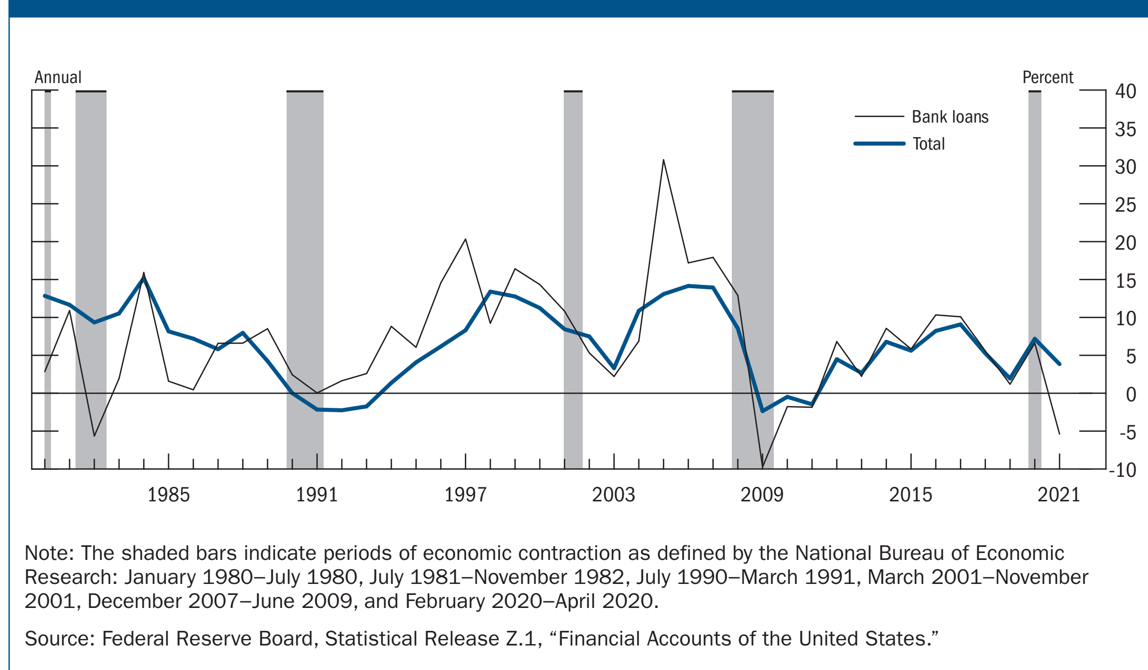
Note: Debt outstanding at end of period. Seasonally adjusted data.
1 Industrial revenue bonds and corporate bonds.
2 Extended without real estate as collateral.
3 Loans from finance companies and all other nonmortgage loans that are not extended by banks.
Source: Federal Reserve Board, Statistical Release Z.1, "Financial Accounts of the United States."

Financing for Small Businesses

Fully comprehensive data that directly measure the financing activities of small businesses do not exist. However, various sources of information can serve as proxies and can be used to identify patterns in small business financing. These sources suggest that financing flows to small businesses grew more slowly, on average, than those to large businesses over the past several years.

Total debt of partnerships and proprietorships—of which small businesses represent a significant majority—is largely comprised of bank debt. Figure 9 indicates that partnership and proprietorship debt rose at a moderate pace between 2017 and 2020.[7] In 2021, there was a large deceleration in bank debt that is directly attributable to loan forgiveness of PPP loans issued in 2020. The PPP is discussed more in depth in box 3 later in this report. The two largest components of total debt are commercial and residential mortgage debt and loans from commercial banks that are not secured by real estate (table 2). Outstanding mortgage debt rose moderately over the past several years, supported by sizable increases in both multifamily residential mortgages and commercial mortgages backed by a range of business property types. In addition, bank loans extended

Figure 9. Growth rates of bank loans and total debt for partnerships and proprietorships, 1980–2021



Note: The shaded bars indicate periods of economic contraction as defined by the National Bureau of Economic Research: January 1980–July 1980, July 1981–November 1982, July 1990–March 1991, March 2001–November 2001, December 2007–June 2009, and February 2020–April 2020.

Source: Federal Reserve Board, Statistical Release Z.1, “Financial Accounts of the United States.”

[7] It should be noted that, while small businesses represent a majority of the number of partnerships and proprietorships, total borrowing by these firms represents a much smaller share of the total liabilities of this group. Aggregate trends should thus be interpreted with some caution.

Table 2. Level of debt, 2017–21
Billions of dollars

Type of debt	2017	2018	2019	2020	2021
Total debt	5,571	5,864	6,137	6,653	6,891
Mortgages	3,945	4,151	4,399	4,646	4,911
Bank loans[1]	1,387	1,465	1,481	1,655	1,569
Other loans[2]	239	248	256	352	410
MEMO					
Trade debt	593	599	642	615	675

Note: The table shows debt outstanding at end of period. The data are seasonally adjusted.
[1] Extended without real estate as collateral.
[2] Loans from finance companies and all other nonmortgage loans that are not extended by banks.
Source: Federal Reserve Board, Statistical Release Z.1, "Financial Accounts of the United States."

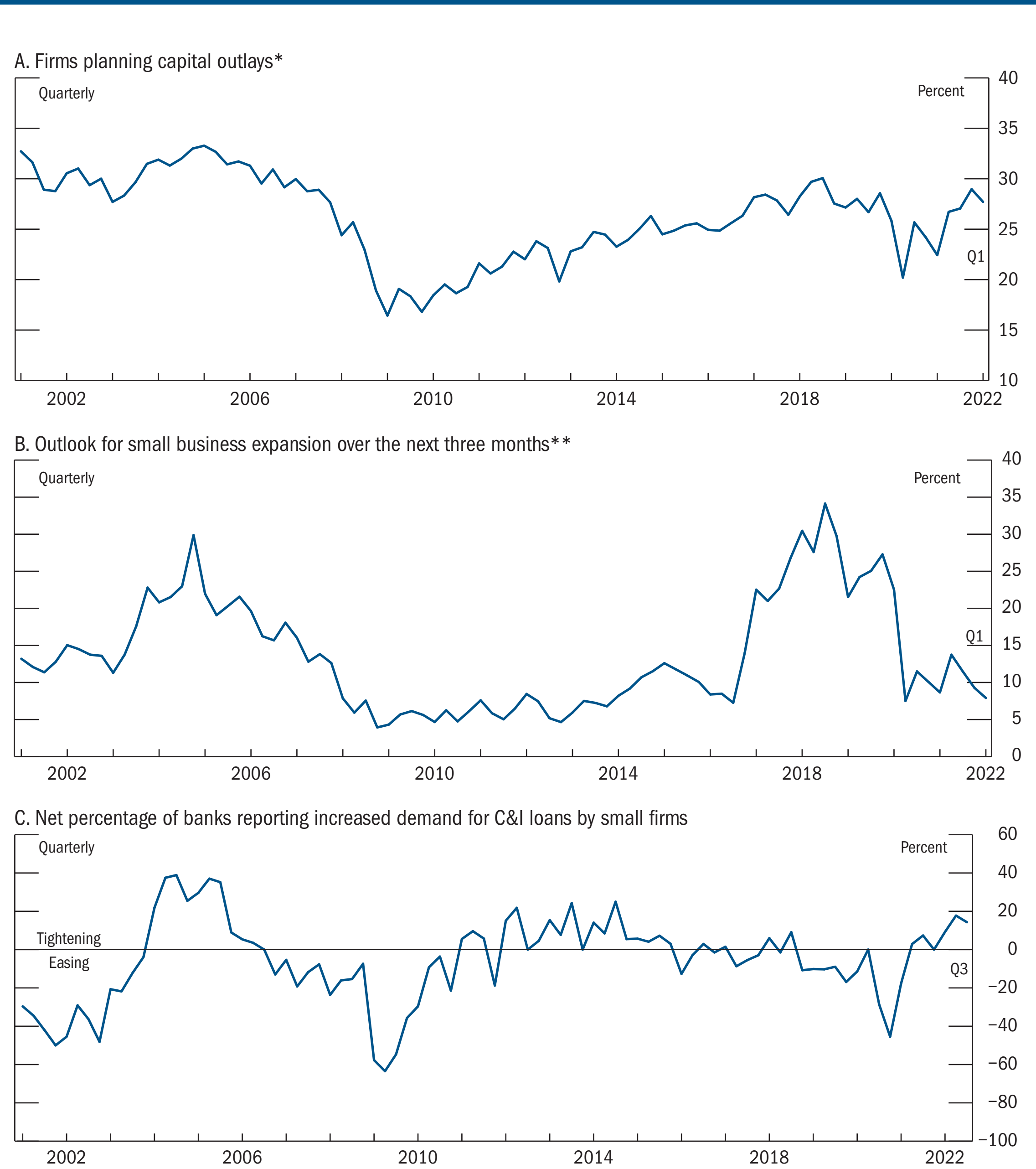
without real estate collateral grew at a robust pace, reflecting in part the ongoing strengthening of bank balance sheets and a concurrent easing of standards as well as the loans extended under the PPP.

The amount outstanding on loans to businesses by commercial banks (both with and without real estate collateral) with principals less than or equal to $1 million, which are typically extended to small firms, increased 6.3 percent between 2017 and 2018 and another 2 percent between 2018 and 2019. Between 2019 and 2021, outstanding volumes of these loans grew substantially because of PPP lending. Commercial bank loans with principal amounts less than or equal to $100,000 also saw relatively moderate growth between 2017 and 2019, with a similar PPP-induced bounce between 2019 and 2021.

Evidence suggests that small business credit demand was substantially weakened by the onset of the COVID-19 pandemic but has substantially recovered since then. Some insights into the demand for small business financing can be inferred from small business investment plans as reported in polls conducted by the National Federation of Independent Business (NFIB).[8] According to the polls, the net percentage of firms with planned capital outlays and the net percentage that anticipated business expansions dropped off substantially by the summer of 2020 (figure 10, panels A and B). While net planned capital expenditures increased some by the end of 2021, net planned business expansions continued to drift sideways, remaining close to the low levels that prevailed for several years after the financial crisis. Data on observed demand for C&I loans, as

[8] Each month, the NFIB polls a sample of its members to assess business conditions and the availability of credit for small businesses. Members of the NFIB are not representative of all small businesses. In particular, these businesses tend to be older and have more employees than the U.S. population of small businesses. The sample for the first month of each quarter is significantly larger than for the other two months. For instance, the January 2017 poll sampled 10,000 members with 1,874 responses. The February and March 2017 polls sampled 5,000 members with 764 and 704 responses, respectively. About 90 percent of the respondents have fewer than 40 employees.

Figure 10. Small business outlook, 2001–22



Note: NFIB data are quarterly and seasonally adjusted. SLOOS data are quarterly; not seasonally adjusted. C&I is commercial and industrial.

* Percentage of firms planning capital outlays in next six months.

** Percentage of firms that consider the next three months a good time to expand.

Source: For panels A and B, National Federation of Independent Business (NFIB); for panel C, Federal Reserve Board, Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS).

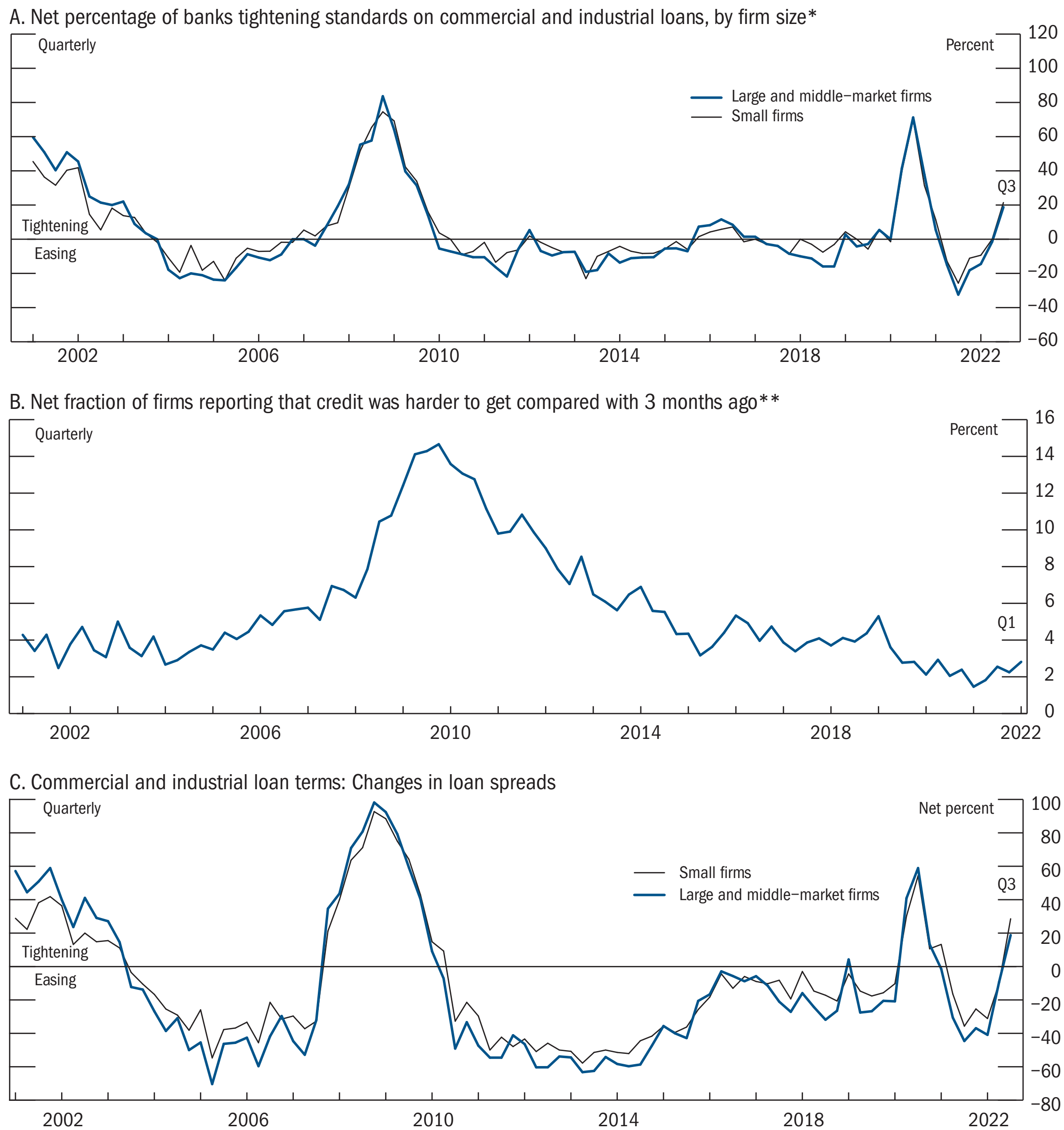
reported in the Federal Reserve's Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS), suggest that demand for loans began to recover in mid-2021 (figure 10, panel C).[9]

Regarding credit supply, credit conditions for small business lending were generally accommodative through the first quarter of 2020, after which they tightened substantially. Results from the SLOOS indicate that lending standards for small business borrowers have eased a bit since mid-2021 (figure 11, panel A). The net percentage of respondents to the NFIB reporting that it was somewhat or very difficult to obtain credit was increasing until early 2019, after which it drifted slowly downward and then began to increase in early 2021 (figure 11, panel B). The apparent disconnect between what the banks reported and the firms reported was possibly the result of a combination of the lower share of firms that wanted to borrow money in such an uncertain economic environment and the large amount of fiscal stimulus received by small businesses over this period.[10] In terms of borrowing costs, data from the SLOOS show that the net fraction of banks that report increasing interest rate spreads over costs of banks' funds on loans to small firms increased at the onset of the pandemic (figure 11, panel C). By mid-2021, banks were, on net, reporting narrowing spreads. Responses to other questions in the NFIB polls suggest credit availability is a relatively minor concern for well-established small businesses. In particular, respondents were much more likely to cite weak demand for the products and services they sell, taxes, or government regulations than the availability and cost of credit as the most significant problem they faced at any time since 2002 (figure 12).

[9] The SLOOS is available on the Federal Reserve Board's website at https://www.federalreserve.gov/data/sloos/sloos.htm.

[10] This question is asked only among those businesses that borrow at least once per quarter, which has dropped off substantially since the COVID-19 pandemic. The fiscal stimulus during the COVID-19 pandemic is discussed later in this report.

Figure 11. Credit availability to small businesses, 2001–22



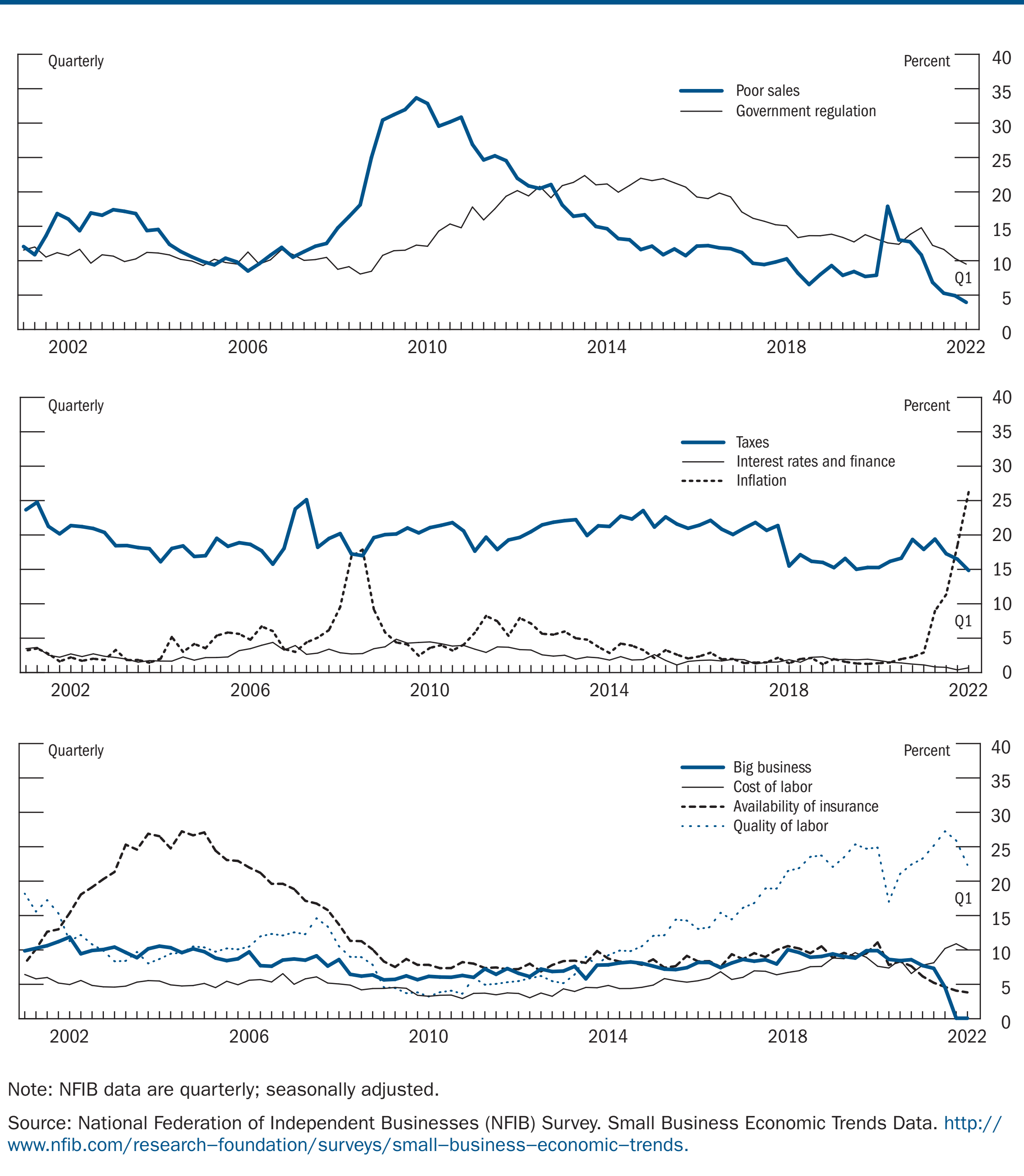
Note: Data are quarterly; not seasonally adjusted.

* Firms with annual sales of more than $50 million are considered large.

** This question is only asked of firms reporting that they regularly borrow.

Source: For panels A and C, Federal Reserve Board, Senior Loan Officer Opinion Survey on Bank Lending Practices; for panel B, National Federation of Independent Businesses (NFIB).

Figure 12. Most important problem facing small businesses, 2001–22



Note: NFIB data are quarterly; seasonally adjusted.

Source: National Federation of Independent Businesses (NFIB) Survey. Small Business Economic Trends Data. http://www.nfib.com/research–foundation/surveys/small–business–economic–trends.

Credit Use by Small Businesses

This section examines the composition of small firms and their borrowing behavior. It also discusses the role that small businesses play in the U.S. economy and the unique challenges they face in obtaining credit.

Small Business: Definition and Background

Defining what is meant by *small business* is the difficult first step in conducting a policy-relevant analysis of the financing needs of small businesses. The financing needs are very different for a "mom and pop" grocery store, a microenterprise in the inner city, a high-tech start-up firm, a business that is ready to expand from early-stage growth to the next higher level, and a business that has neared the point of issuing public debt or equity. Yet the term *small business* typically encompasses all of these entities. A commonly used definition of a small business is a firm or enterprise with fewer than 500 employees.[11] This definition encompasses nearly all businesses in the United States.

Data from the U.S. Census Bureau's Business Dynamics Statistics indicate that there were approximately 5.3 million employer firms—that is, firms with at least one paid employee—across 7.2 million establishments, which are defined as individual physical locations where the firm's business was conducted in 2019.[12] The vast majority of these firms were small businesses with 99.6 percent employing fewer than 500 employees, a fraction that is consistent with previous years.[13]

Among these small businesses, more than half employ fewer than 5 employees and about 30 percent employ between 5 and 19 employees (table 3). Fewer than 2 percent of small firms employ more than 100 employees. The employment shares show a higher concentration in larger small businesses.

[11] A more formal definition used by the U.S. Small Business Administration (SBA) has different thresholds of employment or revenue by industry. For more details, see https://www.sba.gov/sites/default/files/2022-07/Table%20of%20Size%20Standards_Effective%20July%2014%202022_Final-508.pdf.

[12] The Business Dynamics Statistics is a data set for public use that consists of annual aggregate statistics describing establishment openings and closings; firm start-ups; and job creation and destruction by firm size, age, industrial sector, and state. An establishment refers to a single location, while a firm is defined at the enterprise level as all establishments under the operational control of the enterprise. For more details, see https://www.census.gov/programs-surveys/bds.html.

[13] There are an additional 23.8 million small businesses that have no employees; these firms average less than 4 percent of all sales and receipts nationally. Because of their small economic effect, these firms are excluded from the Business Dynamics Statistics. In this report, *small businesses* refers to small employer businesses.

Table 3. Firm characteristics
Percent

Category	Firms	Establishments	Employment
Employment (number of employees)			
1–4	56.6	51.8	10.7
5–9	19.1	17.7	10.9
10–19	12.1	11.6	13.9
20–99	10.3	12.5	34.7
100–499	1.8	6.4	29.7
Industry			
Professional, scientific, and technical services	12.9	12.4	8.7
Other services (except public administration)	12.5	11.6	7.7
Construction	11.6	10.8	9.2
Health care and social assistance	11.2	11.9	14.9
Retail trade	10.7	11.1	8.8
Accommodation and food services	9.1	9.3	14.2
Administrative and support and waste management and remediation services	5.5	5.2	6.2
Real estate rental and leasing	4.9	5.1	2.4
Wholesale trade	4.8	5.1	5.4
Manufacturing	4.2	4.1	8.3
Finance and insurance	3.9	4.5	3.1
Transportation and warehousing	3.1	3.0	2.9
Arts, entertainment, and recreation	2.0	1.9	2.4
Educational services	1.6	1.6	2.8
Information	1.3	1.3	1.6
Agriculture, forestry, fishing, and hunting	.3	.3	.2
Management of companies and enterprises	.3	.3	.6
Mining	.3	.3	.4
Utilities	.1	.1	.2
Census region			
Midwest	20.4	20.9	22.1
Northeast	19.8	19.0	19.0
South	35.0	35.9	36.0
West	24.8	24.1	22.8

Source: Business Dynamics Statistics, U.S. Census Bureau.

Small businesses operate in every major segment of the U.S. economy. The most common industry for small businesses in 2019 was professional, scientific, and technical services, which accounted for almost 13 percent of small firms (table 3). Other services accounted for 12.5 percent of small firms, construction firms accounted for an additional 11.6 percent, the healthcare and social assistance sector accounted for 11.2 percent, and retail trade firms represented

another 10.7 percent. The remaining industries all contained fewer than 10 percent of small businesses.

Geographically, small businesses were widely located throughout the nation, with 20.4 percent residing in the Midwest, 19.8 percent in the Northeast, 35.0 percent in the South, and the remaining 24.8 percent in the West. This distribution roughly reflects the 2019 population distribution, as 20.8 percent of the population lived in the Midwest, 17.1 percent in the Northeast, 38.3 percent in the South, and the remaining 23.8 percent in the West (U.S. Census Bureau, Population Division, 2016).

Small businesses play a major role in the U.S. economy. According to the SBA, in addition to accounting for the vast majority of all firms, small businesses account for nearly one-half of private-sector employment, about two-fifths of private-sector payrolls, and roughly one-third of the total export value (U.S. Small Business Administration, Office of Advocacy, 2021).

Risks of Lending to Small Businesses

Despite the important role of small businesses in the U.S. economy, small businesses often have difficulty in gaining access to credit, as lending to small businesses is generally considered riskier and more costly than lending to larger firms. Business Dynamics Statistics data, compiled by the U.S. Census Bureau, provide insights into some of the risks. A couple of important facets of small business dynamics can be observed in table 4, which provides information on the failure rates of firms in 2019—the most recent data available—by the age and employment of the firm.

First, the failure rate in the early years of a business—when the firm is likely to be the smallest—is quite high relative to later years. For example, about 20 percent of new businesses failed within the first year of operation in 2019, while less than 6 percent of firms that were at least nine years old failed. Second, smaller firms fail at a higher rate than larger firms. Nearly 12 percent of firms with fewer than 5 employees and 5.1 percent of firms with between 5 and 9 employees failed in 2019, while less than 2 percent of firms with between 100 and 499 employees did so.

Table 4. Failure rates of small businesses, 2019

Category	Percent for 2019
All firms	8.6
Firm age	
0	19.7
1	13.5
2–4	10.7
5–9	8.2
10+	5.9
Firm employment	
1–4	11.8
5–9	5.1
10–19	4.6
20–99	3.6
100–499	1.9

Source: Business Dynamics Statistics, U.S. Census Bureau.

Historically, and particularly in the early life of a business, lenders have had difficulty determining the creditworthiness of applicants for small business loans. The heterogeneity across small firms, together with widely varying uses of borrowed funds, has impeded the development of general standards for assessing applications for small business loans and has made evaluating such loans relatively expensive.

Lending to small businesses is further complicated by the "informational opacity" of many such firms. Obtaining reliable information on the creditworthiness of a small business is often difficult because little, if any, public information exists about the performance of most small businesses. Many small businesses also lack detailed balance sheets and other financial information often used by lenders in making underwriting decisions.

The cost to the lender does not end with the decision to grant a loan. Small business lenders typically must monitor the credit arrangement with individual borrowers. For very small firms, a close association between the finances of the business and those of the owner may increase loan-monitoring costs.

Historically, the relatively elevated costs of evaluating small business loan applications and the ongoing costs of monitoring firm performance have made loans to small businesses less attractive for some lenders, especially because, when expressed as a percentage of the (small) dollar amount of the proposed loan, these noninterest costs are often quite high compared with loans to middle-market or large corporate borrowers. Financial institutions, especially commercial banks, are believed to have an advantage in dealing with information problems. By interacting with a firm through its other financial services, such as checking accounts, the lending institution can obtain additional information about the firm's activities, ownership, financial characteristics, and prospects, which are important in deciding whether to extend credit.[14] Lenders can use information gathered over time through long-term relationships with business owners and other members of the local community to monitor the health of the business and to build appropriate incentives into loan agreements.[15] The role of relationship lending will likely continue to be significant, even as developments such as automated banking, credit scoring, and bank consolidation influence the competitive structure of the banking industry.[16]

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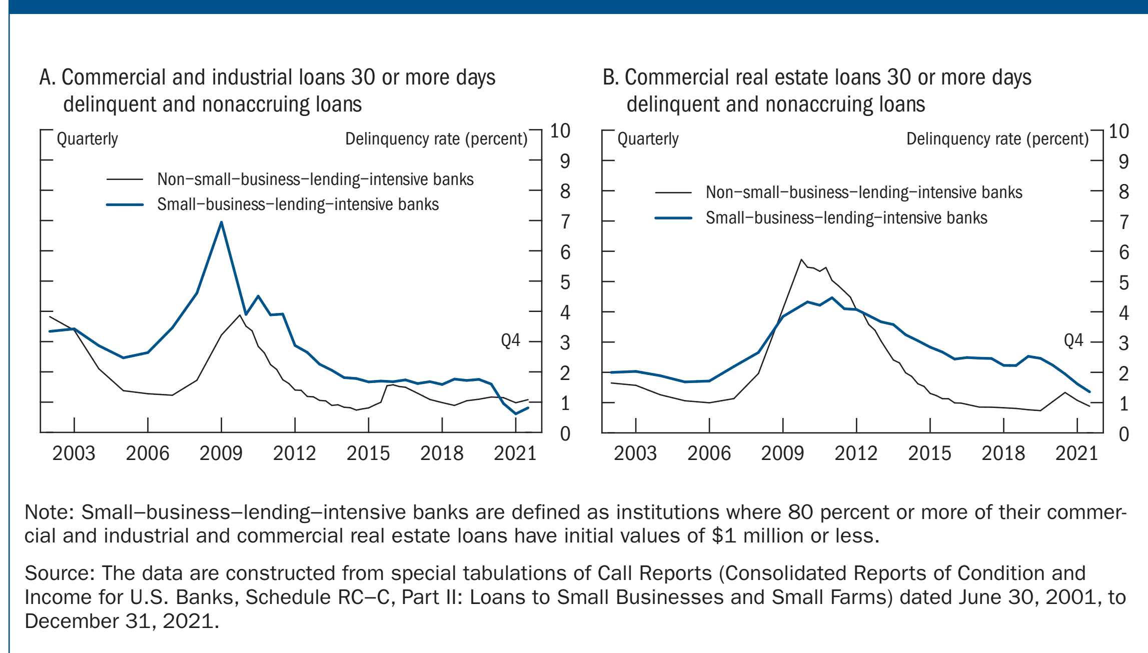
[14] Banks typically provide multiple products to small businesses. The 2003 Survey of Small Business Finances indicates that small firms that obtained at least one product at a commercial bank averaged 2.1 products at that bank. The comparable average number of products at nonbanks was 1.3. Small firms with at least one product at a bank had one or more other products at that bank almost 60 percent of the time. In contrast, more than 80 percent of small firms that had a product with a nonbank provider obtained no other products from the nonbank.

[15] A detailed description of the process of relationship lending and the way it differs from non-relationship lending is provided by Berger and Udell (2002). Boot (2000) and Berger and Udell (1998) include detailed discussions of the costs and benefits of relationship lending, including a review of the literature.

[16] Information on community banks and relationship lending is in Critchfield and others (2004) and Avery and Samolyk (2004).

Insights on the risks of lending to small businesses may be gained by examining delinquency rates at banks that primarily make business loans of less than $1 million, which will be referred to as small-business-lending-intensive (SBLI) banks.[17] Figure 13 shows the delinquency rates for C&I loans and loans secured by nonfarm nonresidential properties (NNP) for SBLI banks compared with other banks.[18] Historically, the C&I delinquency rate at SBLI banks has been higher than at other banks. As of 2021, however, this historical relation reversed, potentially because of the combination of the greater participation of SBLI banks in the PPP and the likely very low delinquency rate of PPP loans.[19] Delinquency rates on NNP loans at SBLI banks have declined in recent years, with much of that decline occurring in 2020 and 2021. In contrast, delinquency rates on NNP loans at other banks rose, on net, in 2020 and 2021 and, at the end of 2021, were at levels similar to five years earlier.

Figure 13. Delinquent commercial real estate and commercial and industrial loans, 2002–21



Note: Small–business–lending–intensive banks are defined as institutions where 80 percent or more of their commercial and industrial and commercial real estate loans have initial values of $1 million or less.

Source: The data are constructed from special tabulations of Call Reports (Consolidated Reports of Condition and Income for U.S. Banks, Schedule RC–C, Part II: Loans to Small Businesses and Small Farms) dated June 30, 2001, to December 31, 2021.

[17] SBLI banks are defined as banks for which at least 80 percent of the outstanding balances on loans to businesses are loans with original principal amounts of less than $1 million.

[18] Consolidated Reports of Condition and Income (Call Reports) do not provide information on delinquency rates by size of borrower or size of loan. In this report, delinquency rates on all C&I loans and all NNP loans at SBLI banks are used as proxies for performance on small C&I and small NNP loans.

[19] As of June 2021, PPP loans represented approximately 27 percent of total C&I loans at SBLI banks and approximately 15 percent of C&I loans at non-SBLI banks. Moreover, delinquency rates on PPP loans were likely to be very low. Borrowers were not required to make payments on PPP loans until 10 months after the end of the 24-week covered period. Therefore, PPP loans made in April 2020 did not require payments until August 2021, and PPP loans made in 2021 did not require payments until 2022. As a result, delinquency rates on PPP loans through the end of 2021 were likely extremely low relative to other C&I loans.

Credit Use

Up-to-date and comprehensive information about the universe of small businesses is sparse, and most evidence about financing needs and sources is derived from surveys. While many of these surveys have limited coverage or rely on nonrepresentative samples, the U.S. Census Bureau has fielded a large-scale, nationally representative annual survey of businesses since 2015. The most recent survey for which data are available, the 2021 Annual Business Survey (ABS), surveyed a random sample of approximately 300,000 firms with paid employees from the universe of private firms with receipts of $1,000 or more.[20]

The survey collects demographic information on up to four individual owners as well as firm-specific information. The owner-specific questions cover information including age, sex, educational attainment, citizenship, ethnicity, race, and veteran status. Firm-specific questions cover a variety of topics, including employment, sales, worker types, customer types, global presence, research and development activities, technology use, management practices, and financing.[21] At the writing of this report, only preliminary data on financing by owner characteristics for 2020 are available.[22]

While the ABS is a large-scale, nationally representative survey of employer businesses, the survey irregularly collects information on financing, and the type of data collected has changed in many respects. Therefore, it can be difficult to draw conclusions from these data on the evolution of credit use of small businesses in recent years. To better understand how credit use changed between 2017 and 2021, see box 1, which discusses data from the Small Business Credit Survey (SBCS), which is an annual, convenience-sampling survey of approximately 6,000 to 11,000 small employer businesses conducted by the Federal Reserve System since 2016.[23]

Outstanding Debt

Data from the ABS show that, while 60 percent of businesses have less than $50,000 in debt, many businesses have significant levels of debt (table 5). At the end of 2020, almost half of businesses reported having less than $5,000 in outstanding debt. An additional 15 percent had at least $5,000 in debt but less than $50,000, while 4 percent had between $500,000 and $999,999 and another 9 percent had at least $1,000,000 in debt.[24]

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[20] For information on the sampling methodology of the ABS, refer to U.S. Census Bureau (2021a).

[21] For a full list of the questions asked in the survey, refer to U.S. Census Bureau (2021b).

[22] Data by firm employment size are not available. As a result, all statistics from the ABS include both small and large businesses. However, given that businesses with fewer than 500 employees make up 99.6 percent of all businesses, these statistics should accurately represent credit use by small businesses.

Due to changes in the survey instrument over time, comparable data for previous surveys is not available.

[23] The findings from the ABS and SBCS, while not directly comparable, help provide a fuller perspective on the credit environment when taken together. While questions in the two surveys are similar, differences in question wording, as well as differences in sampling methodologies, can reasonably be expected to affect responses.

[24] Outstanding debt reported by small businesses at the end of 2020 includes PPP loans not yet forgiven.

Box 1. Financing Needs and Outcomes from the Federal Reserve Small Business Credit Survey

The Small Business Credit Survey (SBCS) is a survey administered by the 12 Federal Reserve Banks annually and surveys firms with fewer than 500 employees from a nationwide convenience sample of small businesses—that is, the sample is taken from a group of people who are easy to contact or to reach rather than from drawing a statistically representative sample.[1] Respondents are asked to report information about their business performance, financing needs and choices, and borrowing experiences. Respondents are solicited from organizations that serve small businesses, including chambers of commerce, small business development centers, incubators, business advisory organizations, and government agencies. The survey's large and diverse sample affords the opportunity to analyze the survey data on various dimensions, including firm size, industry, and the owners' race and ethnicity. In an attempt to reduce potential biases that may be present in the sample, SBCS data are weighted so the distribution of firms in the SBCS matches the distribution of the small firm (1 to 499 employees) population in the United States by number of employees, age, industry, geographic location (Census division and urban or rural location), gender of owner(s), and race or ethnicity of owner(s). The weighting methodology was developed in collaboration with the National Opinion Research Center (NORC) at the University of Chicago.[2]

Annual SBCS data from 2017 through 2021 show changes in small business experiences and financing outcomes over time, in addition to credit access disparities that persist. The 2017 and 2021 surveys were fielded in the third and fourth quarters of the respective years. The 2017 survey yielded 8,169 responses from employer firms, and the 2021 survey yielded 10,914 responses from employer firms.[3]

Outstanding Debt

Data from the 2017 and 2021 SBCS show that the share of firms with no outstanding debt decreased over time, while the share of firms with more than $100,000 in outstanding debt increased. Figure A indicates that 31 percent of firms held more than $100,000 in outstanding debt at the time of the 2017 survey, which increased to 40 percent at the time of the 2021 survey.

Credit Applicants

Over the same time, the share of firms that applied for financing decreased from 40 percent to 34 percent between 2016 and 2021 (figure B). The large decline from 2019 to 2021 is partially attributable to the fact that application for pandemic-related financial assistance is not counted in this measure. The application rate varied by the race and ethnicity of the owner over time. Black-owned businesses generally had the highest application rates, from 56 percent in 2016 to 42 percent in 2021, and white-owned businesses had the lowest application rates, from 44 percent in 2016 to 33 percent in 2021.

(continued)

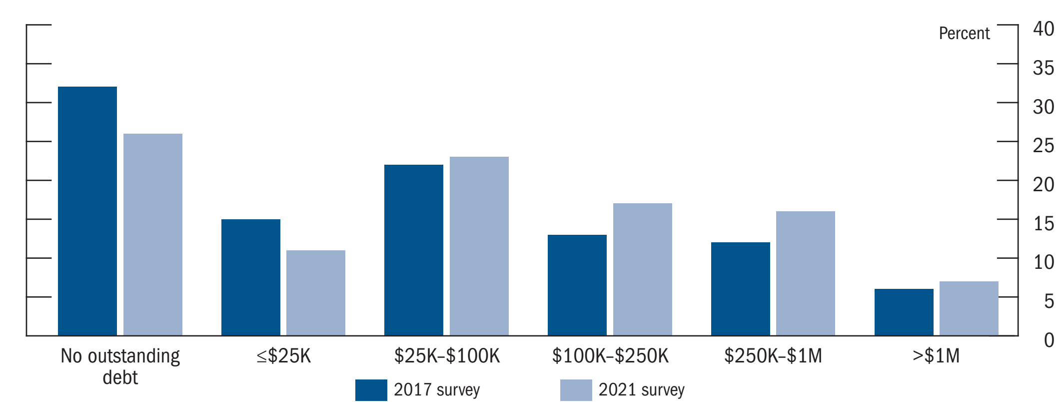
1 More information is available at fedsmallbusiness.org.

2 In spite of the weighting, the statistics calculated from the survey may not be representative of the small business population due to the convenience sampling population.

3 A total of 13,716 firms responded to the 2017 SBCS; 8,169 were employer firms and 5,547 were nonemployer firms. A total of 17,750 firms responded to the 2021 SBCS; 10,916 were employer firms, and 6,834 were nonemployer firms.

Box 1—*continued*

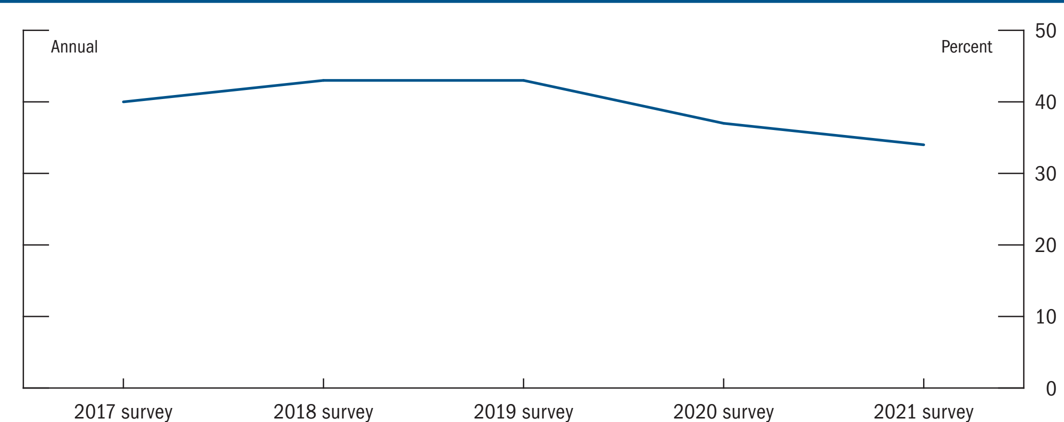
Figure A. Amount of debt outstanding at time of survey (percent of employer firms)



Note: In the 2021 survey, respondents were instructed to exclude from their debt any pandemic–related financial assistance loans that they expected would be forgiven (for example, Paycheck Protection Program loans). Key identifies bars in order from left to right.

Source: Small Business Credit Survey, Federal Reserve Banks.

Figure B. Share of firms that applied for financing, previous 12 months (percent of employer firms)



Note: Application rates for 2020 and 2021 exclude applications for pandemic–related financial assistance.

Source: Small Business Credit survey, Federal Reserve Banks.

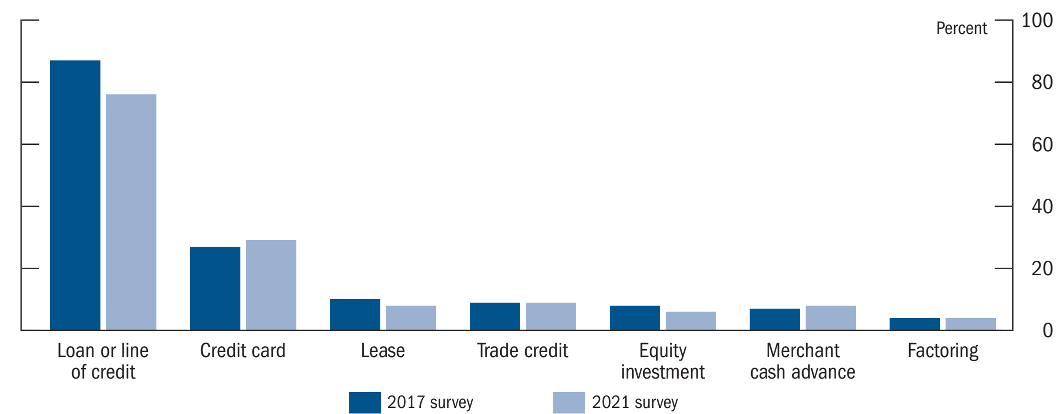
It is important to note that, while many of the firms that chose not to apply for financing did not need funding, some of these firms reported choosing not to apply because they did not believe their business would be approved. These "discouraged" small businesses accounted for 8 percent of employer firms in 2017 and 9 percent in 2021.

Loans and lines of credit are consistently the most sought credit products (see figure C). The percent of applicants seeking loans or lines of credit declined from 2017 to 2021, while the percent of applicants seeking credit cards, trade credit, merchant cash advances, and factoring either held steady or increased slightly.

(continued)

Box 1—*continued*

Figure C. Financing and credit products sought (percent of employer firms)



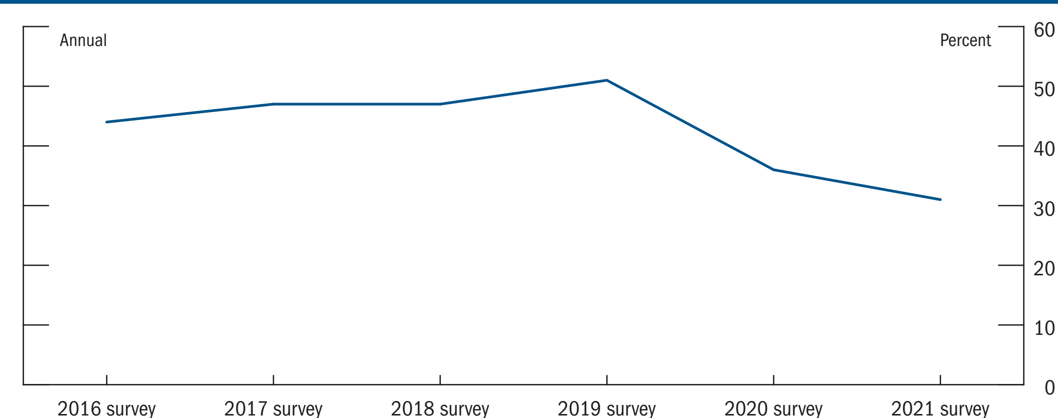
Note: Respondents could select multiple options. Application rates for 2021 exclude pandemic–related financial assistance. Key identifies bars in order from left to right.

Source: Small Business Credit Survey, Federal Reserve Banks.

Financing Outcomes

The share of applicants that received the full amount of financing sought was increasing pre-pandemic but has declined since the onset of the pandemic (see figure D).

Figure D. Share of firms that received all financing sought (percent of employer firms)



Note: Financing for 2020 and 2021 excludes pandemic–related financial assistance.

Source: Small Business Credit Survey, Federal Reserve Banks.

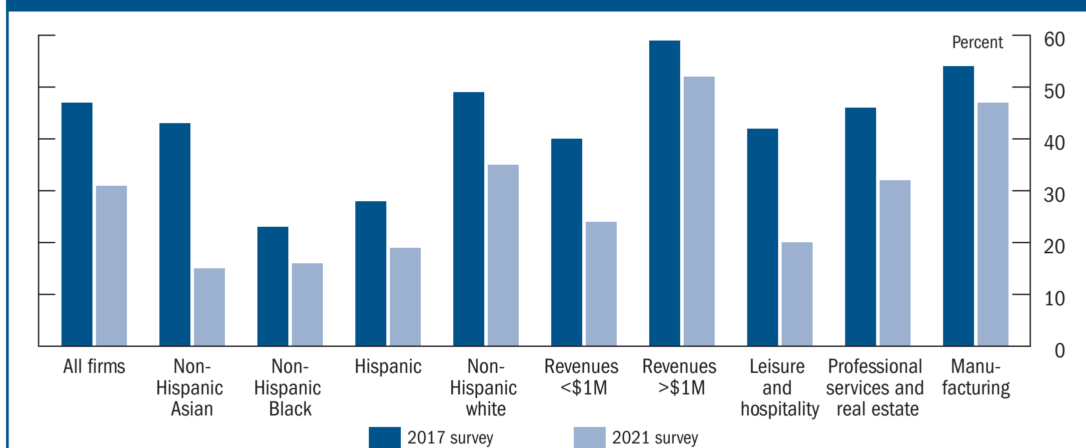
In 2017, 47 percent of applicant firms received all of the financing sought, compared with 51 percent in 2019 and 31 percent in 2021. The SBCS finds disparities in financing received based on firm and owner characteristics (see figure E). In 2021, 35 percent of white-owned applicant firms received all of the financing they sought, compared with 16 percent of Black-owned firms, 15 percent of Asian-owned firms, and 19 percent of Hispanic-owned firms. Outcomes for larger small businesses were more

(continued)

Box 1—*continued*

favorable than for the smallest firms, as 52 percent of firms with more than $1 million in annual revenues received all the financing they applied for, compared with 24 percent of firms with $1 million or less in annual revenues. Post-pandemic, industry has become a more important factor in financing success. In 2021, the share of leisure and hospitality firms that received all of the financing sought fell to 20 percent, while 47 percent of manufacturing firms received the full amount.

Figure E. Share of firms that received all financing sought, by type of firm (percent of employer firms)



Note: Financing for 2020 and 2021 excludes pandemic–related financial assistance. Key identifies bars in order from left to right.

Source: Small Business Credit Survey, Federal Reserve Banks.

The table also shows differences in debt levels according to the demographics of the firms' owners.[25] For instance, female-owned businesses were a touch more likely to have little to no debt, with about 52 percent of such businesses having less than $5,000 in outstanding debt, compared with male-owned businesses, 46 percent of which had less than $5,000 in debt.[26] Male-owned businesses were slightly more likely to have significant levels of debt, with almost 10 percent having $1,000,000 or more in debt compared with just 6 percent of female-owned businesses.

White- and Asian-owned businesses were more likely to have less than $5,000 in debt than businesses owned by members of other races, although Asian-owned businesses were also the most

[25] It is important to note that differences in debt usage across the demographics can arise because of differences in firm characteristics, such as size or industry, rather than necessarily being directly attributable to owner demographics.

[26] Female-owned businesses represented approximately 20.9 percent of businesses in the 2020 ABS. Comparable data from the 2021 ABS have not yet been released.

Table 5. Outstanding debt, by owner demographics, 2020

Category	Percent of employer firms								
	Less than $5,000	$5,000 to $9,999	$10,000 to $24,999	$25,000 to $49,999	$50,000 to $99,999	$100,000 to $249,000	$250,000 to $499,999	$500,000 to $999,999	$1,000,000 or more
Total	**47.1**	**2.3**	**6.3**	**6.2**	**8.0**	**11.3**	**5.8**	**4.3**	**8.7**
Sex									
Female	51.7	2.7	6.7	6.4	7.7	10.3	5.1	3.3	6.2
Male	45.5	2.2	6.4	6.1	7.9	11.6	6.1	4.7	9.5
Equally male and female	45.9	2.4	6.2	6.7	8.5	11.9	6.3	4.1	8.0
Race									
White	47.4	2.4	6.4	6.2	8.0	11.1	5.9	4.2	8.4
Black or African American	35.6	3.1	9.6	8.4	10.5	12.3	7.4	4.5	8.5
American Indian and Alaska Native	39.1	3.7	7.5	7.4	10.3	14.7	6.7	3.8	6.9
Asian	45.9	1.8	6.2	5.5	7.7	12.5	5.6	4.9	9.9
Ethnicity									
Hispanic	38.7	3.2	8.2	8.3	9.6	13.3	5.8	3.7	9.2
Equally Hispanic and non-Hispanic	42.1	2.8	7.6	7.6	10.3	13.7	4.2	3.4	8.3
Non-Hispanic	47.5	2.3	6.3	6.0	7.8	11.2	5.9	4.4	8.6
Minority status									
Minority	42.2	2.4	7.1	6.8	8.7	12.9	6.0	4.6	9.4
Equally minority and nonminority	43.5	2.9	6.8	7.6	9.3	13.1	5.3	3.9	7.7
Nonminority	48.1	2.2	6.2	6.1	7.9	11.0	5.9	4.2	8.4

Note: For the four persons owning the largest percentages in the business, data on sex, ethnicity, and race are collected. Business ownership is defined as having 51 percent or more of the stock or equity in the business and is categorized by firms classifiable by sex, ethnicity, and race. Firms classifiable by sex, ethnicity, and race have at least one person who owns 10 percent or more of the business. Firms classified as minority are those classified as any race and ethnicity combination other than non-Hispanic and white.
Source: 2021 Annual Business Survey, U.S. Census Bureau.

likely to have at least $500,000 in debt.[27] Black- and African American–owned businesses were the least likely to have the lowest levels of debt—less than $5,000—but the most likely to have moderate levels of debt—between $10,000 and $99,999. Hispanic-owned businesses were also less likely to have the lowest levels of debt and more likely to have moderate debt levels than non-Hispanic-owned businesses.[28]

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[27] White-, Asian-, and Black- and African American–owned businesses accounted for approximately 83.5 percent, 10.1 percent, and 2.3 percent of businesses in the 2020 ABS, respectively.

[28] Hispanic-owned businesses represented 6 percent of businesses in the 2020 ABS.

Table 6. Credit application experience, 2020

Category	Share that applied for credit	Portion of requested credit received from lenders in 2020		
		None	Some	All
Total	**15.6**	**11.8**	**28.2**	**59.9**
Sex				
Female	13.6	13.7	28.8	57.5
Male	16.2	11.5	28.5	60.0
Equally male and female	15.4	10.3	27.0	62.6
Race				
White	15.7	10.9	26.7	62.3
Black or African American	20.3	22.3	39.3	38.4
American Indian and Alaska Native	21.9	12.4	28.0	59.7
Asian	13.4	16.6	43.6	39.8
Native Hawaiian and other Pacific Islander	20.4	15.7	33.4	50.8
Ethnicity				
Hispanic	18.4	16.5	38.5	45.0
Equally Hispanic and non-Hispanic	17.5	13.4	36.5	50.1
Non-Hispanic	15.3	11.4	27.5	61.1
Minority status				
Minority	15.9	17.2	39.8	43.1
Equally minority and nonminority	17.4	14.1	33.4	52.5
Nonminority	15.4	10.5	25.6	63.9

Note: Excludes loans that were forgiven as part of a government response to the coronavirus pandemic.
Source: 2021 Annual Business Survey, U.S. Census Bureau.

Credit Application Experience

Differences in outstanding debt levels across firms may be attributable to differences in credit demand or to differences in credit supply. While the ABS does not collect information on credit demand and supply over the entire life of small businesses, it did collect information on a measure of demand in the year 2020—whether the business submitted an application for new credit—and information on a measure of supply in 2020—the proportion of requests fulfilled.[29]

Approximately 15 percent of businesses formally applied for new credit in 2020 (table 6). Among the businesses that did apply for credit, almost 60 percent received the full amount for which they applied, while approximately 12 percent received none.[30]

[29] In both questions, respondents were asked to exclude loans that were forgiven as part of the government response to the COVID-19 pandemic.

[30] The ABS did not collect comparable data in previous years.

In 2020, a slightly higher fraction of male-owned businesses applied for new credit than women-owned businesses (16 percent compared with 14 percent), and conditional on applying, male-owned businesses more frequently received the full amount for which they applied (60 percent compared with 58 percent). Women-owned businesses, in contrast, more often received none of the credit for which they applied (14 percent compared with 12 percent for male-owned firms).

Asian- and white-owned businesses applied for credit less frequently than other businesses; while approximately 13 percent of Asian-owned businesses and 16 percent of white-owned businesses applied for credit in 2020, more than 20 percent of businesses owned by individuals of other races applied for credit. Sixty-two percent of white-owned businesses were approved for the full amount of credit for which they applied, compared to 38 percent of Black- and African American–owned businesses. Hispanic-owned businesses applied for credit at a slightly higher rate than non-Hispanic-owned businesses—18 percent compared with 15 percent—but received the full amount of credit for which they applied much less often—45 percent compared with 61 percent.

While there are many causes for differences in the rate at which firms were approved for the credit they sought, one important explanation may be the reason for which businesses sought financing. For instance, some businesses use credit to meet operating expenses, while others use credit to expand their business operations. This difference in the use of credit has important implications for the riskiness of lending to the business; the use of credit to expand one's business likely reflects higher current and future profitability than the use of credit to cover operating expenses. As a result, it is reasonable to expect that businesses using credit to finance expansions are approved for credit at higher rates than businesses using credit to meet operating expenses.

The ABS collected information on the reason for seeking financing in 2020, and the pattern of responses suggests that the reason for applying for credit may help explain differences in approval rates across different businesses (table 7).[31] More than half of businesses that sought financing in 2020 did so to meet operating expenses. Slightly more than 30 percent did so to finance the business's expansion, while 23 percent sought financing to replace or repair existing assets. Finally, 13.5 percent sought new financing to repay existing debt.

Businesses that were less often approved for the full amount of credit for which they applied more often reported that the purpose of seeking credit was to meet operating expenses. For instance, 62 percent of female-owned businesses planned to use credit to meet operating expenses compared with 55 percent of male-owned businesses, while 72 percent of Black- and African American–owned businesses sought credit to meet operating expenses compared with 54 percent of white-owned businesses. Similarly, more Hispanic-owned businesses sought credit to pay operating expenses than non-Hispanic-owned businesses.

[31] The ABS did not collect comparable data in previous years.

Table 7. Purpose of seeking financing, 2020

Category	Percent of employer firms				
	Meet operating expenses	Expand business, pursue new opportunity, or acquire business assets	Replace capital assets or make repairs	Refinance or pay down debt	Other
Total	**56.0**	**30.9**	**22.6**	**13.5**	**11.8**
Sex					
Female	62.3	26.3	18.4	13.5	13.4
Male	54.6	32.6	23.6	13.6	11.1
Equally male and female	54.6	29.2	23.6	12.8	12.5
Race					
White	53.9	31.4	23.0	13.2	12.3
Black or African American	71.9	33.7	21.2	16.8	7.6
American Indian and Alaska Native	51.2	34.6	25.8	13.7	12.4
Asian	74.4	23.9	18.7	16.3	7.1
Native Hawaiian and other Pacific Islander	52.2	40.3	18.7	15.0	18.1
Ethnicity					
Hispanic	62.3	32.0	20.2	15.0	10.1
Equally Hispanic and non-Hispanic	63.3	27.9	20.8	10.4	15.0
Non-Hispanic	55.5	30.8	22.8	13.4	11.8
Minority status					
Minority	68.5	28.8	19.9	15.7	8.5
Equally minority and nonminority	60.7	28.6	21.6	9.7	16.4
Nonminority	53.1	31.4	23.2	13.1	12.4

Note: Excludes loans that were forgiven as part of a government response to the coronavirus pandemic.
Source: 2021 Annual Business Survey, U.S. Census Bureau.

Sources of Credit

Small businesses have long used a variety of sources to fulfill their credit needs, both informal and formal; common sources of credit include banks and other financial institutions, business owners, family and friends, and outside investors.[32] Nevertheless, as data from the ABS show, small businesses remain most reliant on banks for credit, as they overwhelmingly apply to banks more often than any other type of formal lender. Among businesses that applied for new credit in 2020, approximately 68 percent applied to a bank (table 8). The second most common type of lender to which businesses applied in 2020 were finance companies, at 18 percent. Additionally,

[32] For information on the different sources of credit used by small businesses in the 1990s and 2000s, see Berger and Udell (1998), Robb and Robinson (2012), and Kennickell, Kwast, and Pogach (2017).

Table 8. Lender types applications, 2020

Category	Percent of employer firms				
	Bank	Credit union	Fintech or online lender	Finance company	Community development financial institution
Total	**67.8**	**6.6**	**4.8**	**18.0**	**2.2**
Sex					
Female	62.6	6.6	5.3	15.5	3.4
Male	69.4	6.3	4.8	19.0	2.0
Equally male and female	66.8	7.8	3.9	17.2	1.7
Race					
White	67.9	6.8	4.6	18.6	2.0
Black or African American	69.2	7.3	9.2	19.8	5.8
American Indian and Alaska Native	61.8	8.9	4.1	19.2	2.6
Asian	65.9	3.7	5.3	11.3	4.3
Native Hawaiian and other Pacific Islander	69.4	10.9	S	20.0	.0
Ethnicity					
Hispanic	64.2	7.4	6.0	19.2	4.0
Equally Hispanic and non-Hispanic	60.2	9.4	4.9	16.7	S
Non-Hispanic	68.0	6.5	4.7	18.0	2.1
Minority Status					
Minority	65.6	5.9	6.2	15.9	4.2
Equally minority and nonminority	64.1	9.3	3.5	15.9	S
Nonminority	68.3	6.7	4.5	18.6	1.8

Note: An entry of "S" denotes that the estimate was suppressed, as it did not meet publication standards because of high sampling variability, poor response quality, or other concerns about the estimate quality.
Source: 2021 Annual Business Survey, U.S. Census Bureau.

7 percent applied to a credit union, 5 percent applied to a fintech or online lender, and 2 percent applied to a community development financial institution (CDFI).[33]

This ranking of lender type generally holds regardless of the demographic characteristics of the owner. Notably, though, Black- and African American–owned businesses applied to a fintech lender about twice as often as white-owned businesses (9 percent compared with 5 percent) and applied almost three times more often to a CDFI (6 percent compared with 2 percent). Similarly, conditional on having applied for credit, Hispanic-owned businesses applied to CDFIs more often than non-Hispanic-owned businesses (4 percent compared with 2 percent).

[33] The ABS questionnaire defines a fintech or online lender as a finance company that operates exclusively online or by phone to make loans that typically do not have collateral requirements. CDFIs are financial institutions certified by the U.S. Department of Treasury's CDFI Fund that provide financial services in low-income communities to people who lack access to financing. CDFIs include regulated institutions such as community development banks and credit unions and non-regulated institutions like loan and venture capital funds.

Providers of Credit to Small Businesses

Providers of small business credit include depository institutions—commercial banks, savings institutions, and credit unions—as well as finance companies, nonfinancial firms, and individuals such as family members or friends.[34] Because commercial banks traditionally have been the leading source of credit to small businesses, the analysis focuses primarily on their activities. This section explores the relationship between bank size and small business lending and discusses the concentration of small business lending by commercial banks. This section also presents a more modest analysis of small business lending by savings institutions, credit unions, and some nondepository institutions, which account for substantially less small business credit than commercial banks. Together, these analyses can provide insight into the availability of credit to small businesses.

Survey data highlight the importance of depository institutions to small business credit availability. As discussed previously, data from the 2021 ABS show that, among businesses that applied for new credit in 2020, approximately 68 percent applied to a bank. Similarly, according to the 2019 Survey of Consumer Finances (SCF), 68 percent of households that owned small businesses indicated that the primary institution for their business was a commercial bank, which is down from 73 percent in 2016.[35] Sources other than depository institutions are a smaller but important source of credit for small businesses; for instance, data from the 2021 ABS show that 18 percent of small businesses that sought credit in 2020 applied to a finance company. For a discussion of the sources of small business credit in the SBCS, see box 2.

Beyond survey data, an important source of information on the small business lending activities of commercial banks and savings institutions is the small business loan data collected by the Federal Reserve and other regulatory agencies on the Consolidated Reports of Condition and Income (Call Reports).[36] These data, which have been collected since June 1993, include information on outstanding small C&I loans and loans secured by nonfarm nonresidential properties.[37] The number of loans and amount outstanding are collected for loans with original amounts of

[34] Savings institutions (or thrifts) consist of savings banks and savings and loan associations.

[35] Since the SCF was expanded in 2010, it elicits additional information from households that owned small businesses with fewer than 500 employees. For more information on the survey, see Bricker and others (2012). “Primary” was determined by the respondent. The percentage reported is based on households with a small business that reported using a financial institution for their business.

[36] Another source of data on small business loans is the information reported pursuant to the regulations (such as the Federal Reserve Board’s Regulation BB) that implement the CRA which are discussed in detail in the section, “Government Initiatives to Support Credit Access for Small Businesses.”

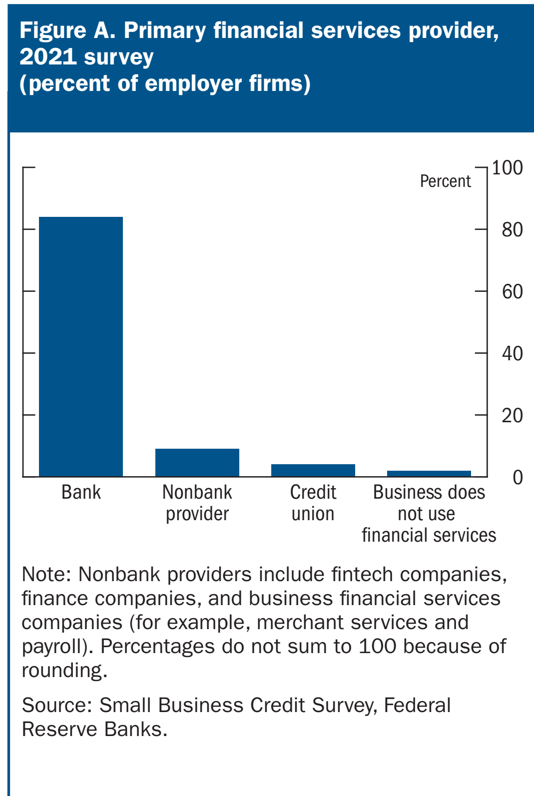
[37] Analysis in this section is based on Call Report data from June 2016.

Box 2. Experiences with Lenders from the Federal Reserve Small Business Credit Survey

The Small Business Credit Survey (SBCS) described in box 1 offers insights on small firms' relationships with lenders and other providers of financial services. The survey focuses primarily on the sources to which small businesses turned for financing within the past year and their outcomes and experiences with these sources. In 2020, the SBCS added a question about small firms' use of financial services providers—entities at which a business holds an account or obtains credit or other financial services such as payments processing. The 2021 SBCS found that 84 percent of employer firms use a bank as their primary financial services provider, 4 percent use a credit union, and 9 percent use a nonbank; 2 percent do not use financial services (see figure A).

Figure B breaks down where the 2,607 small businesses that reported applying for credit in the 2021 SBCS applied for credit. In spite of the relatively small sample of firms, it can be seen that just as small firms most often use a bank as their primary financial services provider, they also most often turn to banks for financing. Being a smaller and newer firm or owned by minorities is more correlated with using a nonbank for financing.

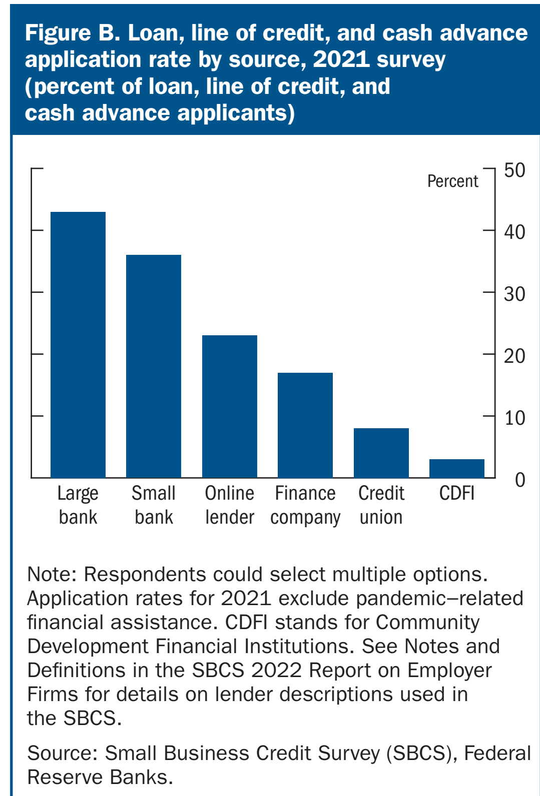
Figure A. Primary financial services provider, 2021 survey (percent of employer firms)



Note: Nonbank providers include fintech companies, finance companies, and business financial services companies (for example, merchant services and payroll). Percentages do not sum to 100 because of rounding.

Source: Small Business Credit Survey, Federal Reserve Banks.

Figure B. Loan, line of credit, and cash advance application rate by source, 2021 survey (percent of loan, line of credit, and cash advance applicants)



Note: Respondents could select multiple options. Application rates for 2021 exclude pandemic–related financial assistance. CDFI stands for Community Development Financial Institutions. See Notes and Definitions in the SBCS 2022 Report on Employer Firms for details on lender descriptions used in the SBCS.

Source: Small Business Credit Survey (SBCS), Federal Reserve Banks.

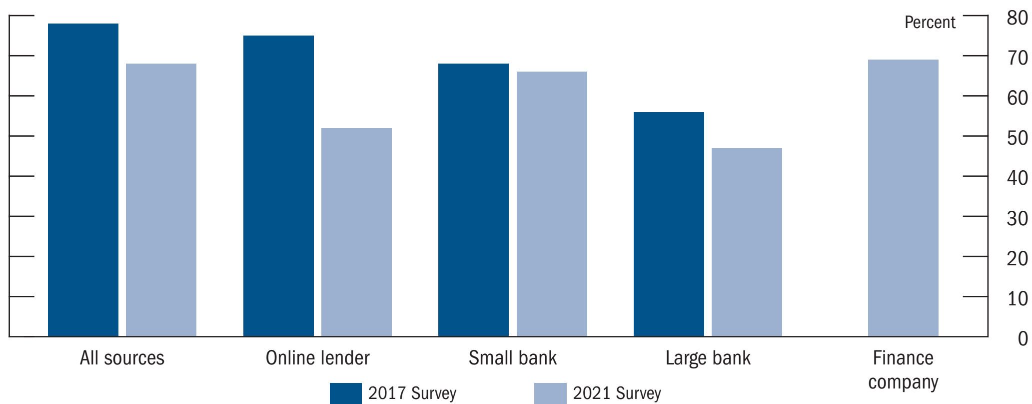
Approval rates by source have generally declined since 2017 (see figure C). Overall, approvals rose between 2017 and 2019 but dropped sharply after the onset of the pandemic. The decline in outcomes was particularly pronounced for applicants to online lenders, as 75 percent were at least partially approved in 2017 compared with just 52 percent in 2021.

(continued)

Box 2—*continued*

SBCS responses on applicant challenges by source indicate that online-lender applicants experienced more challenges with their lender than did applicants at other sources (see figure D). In particular, these firms more often reported concerns with high interest rates and unfavorable repayment terms. The challenges experienced by online-lender applicants are striking and should be examined more closely in a larger sample of loan applicants than available in the SBSC.

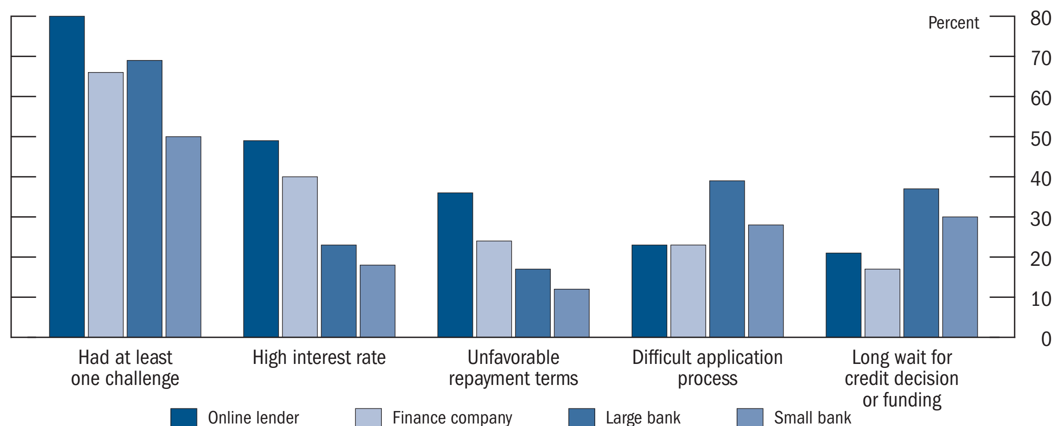
Figure C. Share of applicants approved for at least some financing at source (percent of loan, line of credit, and cash advance applicants at source)



Note: Finance company data for years before 2019 are not availble because it was not included as a discrete answer choice. Approval rates for 2021 exclude pandemic–related financial assistance. See Notes and Definitions in the SBCS 2022 Report on Employer Firms for details on lender descriptions used in the SBCS. Key identifies bars in order from left to right.

Source: Small Business Credit Survey, Federal Reserve Banks.

Figure D. Challenges with lenders (percent of loan, line of credit, and cash advance appliants at source)



Note: Respondents could select multiple options. Selected response options and lenders shown. See Notes and Definitions in the SBCS 2022 Report on Employer Firms for details on lender descriptions used in the SBCS. Key identifies bars in order from left to right.

Source: Small Business Credit Survey (SBCS), Federal Reserve Banks.

$100,000 or less, more than $100,000 but less than $250,000, and more than $250,000 but less than $1 million.[38]

These data are used to estimate the amount of credit extended to small firms. Because firm characteristics are not reported on Call Reports, loan size is often used as a proxy for the size of the firm receiving credit. However, this approach to measuring small business lending introduces two sources of inaccuracy in the number and dollar amount of loans to small businesses. First, the data likely include loans equal to or less than $1 million extended to large firms, and second, the data exclude loans of more than $1 million made to small firms.[39] Recent analysis of the 2016 collection of the Small Business Lending Survey, a nationally representative survey of banks sponsored by the FDIC and implemented by the U.S. Census, suggests that this proxy may—on net—understate small business lending by banks with $1 billion to $10 billion in assets by up to 23 percentage points (Goldston and Lee, 2020). According to data from this set of Community Reinvestment Act (CRA) reporters, a little more than one-third of the dollar volume of loans with initial values of less than $1 million is directed to firms with revenues of less than $1 million. This volume is likely to be an understatement because many reporters do not collect or submit information on the revenues of the firms to which they lend. This result does indicate, however, that a significant portion of loans included in the less than $1 million category are made to larger businesses.

Lending by Depository Institutions

Commercial Banks

Commercial banks are important providers of credit to small firms.[40] Lending to small businesses involves unique challenges that banks appear particularly well suited to meet. Of particular significance, information on the financial condition, performance, and prospects of small firms may not be readily available, so, relative to other types of loans, loans to small firms are often based more heavily on information gathered through established relationships than loans for larger businesses, as explained in the section Risks of Lending to Small Businesses. Commercial banks continue to maintain local branch networks, which aid them in nurturing relationships and gathering firm-specific information. Commercial banks also provide credit to small businesses through business credit cards, which rely on business or consumer credit ratings rather than established rela-

[38] For loans drawn down under lines of credit or loan commitments, the original amount of the loan is the size of the line of credit or loan commitment when it was most recently approved, extended, or renewed before the report date. If the amount currently outstanding exceeds this size, the original amount is the amount currently outstanding as of the report date. For loan participations and syndications, the original amount is the entire amount of the credit originated by the lead lender. For all other loans, the original amount is the total amount of the loan at origination or the amount currently outstanding as of the report date, whichever is larger.

[39] Other unreported small business loans include home mortgage and other consumer loans that are used by small business owners for commercial purposes. Such loans are not in statistics from the Call Reports or Thrift Financial Reports.

[40] Except where indicated, bank data are aggregated to the banking organization level by summing data for all commonly owned commercial banking institutions. The organization is considered a single entity. Data for affiliated nonbank subsidiaries are excluded. Savings institution data are treated in the same manner.

tionships. However, the bank size, industry structure, and concentration of the local banking markets play a role in the interaction of different banks in different markets with small businesses. These differences will be discussed below.

Aggregate Small Business Lending

Overall, small business loans—defined as loans classified as commercial and industrial (C&I) or secured by nonfarm or nonresidential real estate whose original amounts are $1 million or less—and microloans—defined as loans classified as C&I or secured by nonfarm or nonresidential real estate whose original amounts are $100,000 or less—outstanding from commercial banks grew significantly between 2017 and 2020 (table 9). An important component of the growth in outstanding balances was the PPP.[41] While growth in balances was relatively modest between 2017 and 2019, outstanding balances at the end of 2020, following the implementation of the first round of PPP loans, were 39.0 percent higher than a year earlier. Outstanding balances on small C&I loans, which include PPP loans, were 70 percent higher. In 2021, balances on all small business loans fell almost 10 percent despite a second round of PPP originations, as almost $600 billion of PPP loans across all lenders were forgiven. In contrast, outstanding balances on NNP loans shrank every year, continuing a trend that began in 2010.

Bank Size

While banks of all sizes are important sources of credit for small businesses, large banks tend to lend a smaller share of their total assets to small businesses than smaller banks. As seen in table 10, the average banking organization with $1 billion or less in total assets held over 13 percent of its portfolio as small business loans in June 2021. In contrast, organizations with assets between $1 billion and $10 billion held 10.6 percent of their assets as small business loans, and the largest organizations—those with assets greater than $10 billion—held approximately 6 percent of their assets as such loans. Small business loans represent a larger percentage of the portfolios of small banks than they do of the portfolios of large institutions.

The pattern for holdings of microloans, which are defined as business loans of $100,000 or less, is even stronger, with smaller banks maintaining an even larger share of their asset portfolios in such loans when compared with larger banks. While about 4 percent of the loan portfolio of the smallest banks is in small business microloans, this figure is about 1.6 percent for banks larger than $1 billion in assets.

The smallest banks tend to hold proportionately more of the smallest business loans for two primary reasons. First, many small banks specialize in providing banking services to a particular

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[41] For more information on the PPP, see box 3. Note that approximately 30 percent of PPP loan volume in dollar terms were loans of $1 million or more.

Table 9. Small business loan and microloan holdings of U.S. commercial banking organizations, by type of loan, 2017–21

Size of loan and year	All	Commercial and industrial	Nonfarm nonresidential
Amount outstanding, June 30 (in billions)			
Small business loans ($1 million or less)			
2017	588.5	310.1	278.4
2018	625.5	349.1	276.4
2019	638.2	364.6	273.6
2020	887.2	619.9	267.3
2021	799.5	538.4	261.1
Change[1] (in percent)			
2018	6.3	12.6	–.7
2019	2.0	4.4	–1.0
2020	39.0	70.0	–2.3
2021	–9.9	–13.1	–2.3
Amount outstanding, June 30 (in billions)			
Microloans ($100,000 or less)			
2017	137.6	126.3	11.3
2018	169.7	159.0	10.7
2019	178.5	168.2	10.3
2020	249.0	239.0	10.0
2021	234.0	225.2	8.8
Change[1] (in percent)			
2018	23.3	25.9	–5.3
2019	5.2	5.8	–3.7
2020	39.5	42.1	–2.9
2021	–6.0	–5.8	–12.0

Note: Small business loans are business loans of $1 million or less; microloans, a subset of small business loans, are for $100,000 or less. U.S. commercial banking organizations are insured U.S. domestically chartered banks excluding credit card institutions and U.S. branches and agencies of foreign banks. Details may not sum to totals because of rounding.
[1] Change is from June of preceding year to June of year indicated.
Source: Call Reports (June 30), various years.

local area. As a result, these banks are likely to accumulate knowledge of their local markets, which is often important in making risky, relationship-dependent small business loans. Difficulties in evaluating and monitoring loans likely become more severe as firms, and therefore loans, decrease in size. Second, bank regulations limit the amount that a bank can lend to a single borrower to 25 percent of the bank's capital; by definition, small banks are limited by their assets in their ability to make very large loans. Small banks can also maintain a more diversified portfolio by making many smaller loans, rather than fewer larger loans.

Table 10. Average microloan and small business loan holdings as a share of assets for U.S. commercial banking organizations of different sizes, 2021

Percent, except as noted

Bank size	Number of banking organizations[1]	Small business loans to assets	Microloan holdings to assets
All organizations	4,019	12.8	3.1
$250 million or less	1,749	13.6	4.2
$250 million to $1 billion (includes $1 billion)[2]	1,504	13.4	2.5
$1 billion to $10 billion (includes $10 billion)[2]	633	10.6	1.8
More than $10 billion	133	6.1	1.6

Note: Small business loans are business loans of $1 million or less; microloans, a subset of small business loans, are for $100,000 or less. U.S. commerical banking organizations are insured U.S. domestically chartered banks excluding credit card institutions and U.S. branches and agencies of foreign banks.

1 Banking organizations include bank holding companies and independent banks.

2 Banks with assets of $1 billion are included in the $250 million to $1 billion size class, and banks with assets of $10 billion are included in the $1 billion to $10 billion size class.

Source: Call Reports (June 30); National Information Center database.

Between 2017 and 2021 the overall volumes of small business loans and of microloans increased by 9.1 percent and 16.7 percent, respectively (table 11). However, for the smallest of the four size classes of banks—those with less than $250 million in assets—small business loans and microloans decreased. However, the decline in small business lending for these small banks was slower than the decline in total lending. The three larger size classes of banks saw positive growth in small business loans as well as microloans, although banks with between $250 million and $1 billion in assets saw a slight decline in total small business lending. Much of this growth is likely attributable to PPP loans that still remained on bank balance sheets at the

Table 11. Growth of small business loan and microloan holdings of U.S. commercial banking organizations, by asset class, 2017–21

Percent

Bank size	Microloan growth	Small loans growth	Total loan growth
All banks	16.7	9.1	4.2
$250 million or less	–4.0	–8.4	–9.2
$250 million to $1 billion (includes $1 billion)[1]	9.7	1.6	–.9
$1 billion to $10 billion (includes $10 billion)[1]	25.0	9.7	4.7
More than $10 billion	18.7	13.9	4.9

Note: Small business loans are business loans of $1 million or less; microloans, a subset of small business loans, are for $100,000 or less. U.S. commerical banking organizations are insured U.S. domestically chartered banks excluding credit card institutions and U.S. branches and agencies of foreign banks. No adjustments are made for banks that change asset classes during the period.

1 Banks with assets of $1 billion are included in the $250 million to $1 billion size class, and banks with assets of $10 billion are included in the $1 billion to $10 billion size class.

Source: Call Reports (June 30); National Information Center database.

end of 2021, with the growth in volumes in these loan types, exclusive of PPP loans, likely much lower.

While the ratio of microloans to assets remains lower at larger banks than at small banks, outstanding balances in microloans have grown faster in recent years at larger banks, reflecting the increasing role of large banking organizations in providing the smallest loans.[42] Increased use of sophisticated technological and analytical tools, particularly credit-scoring techniques, has likely contributed to the rise in the share of microloans held and originated by large banking organizations. The largest banks may also have expertise in credit card programs and may have leveraged this experience to provide business credit cards that typically have low balances (Brevoort and Hannan, 2006).

Industry Structure

While large banks tend to have a lower ratio of small business loans to assets relative to smaller banks, the small business lenders with the largest volumes nonetheless typically include the largest banking organizations.

Data on industry structure in table 12 indicate that the top small business loan holders, where banks are ranked on the basis of total outstanding balances on small business loans, hold a large share of total banking assets and a much smaller share of small business loans. For instance, in 2021, the 10 largest holders of small business loans held 53.9 percent of all banking assets. The role of these banks in small business lending was notably smaller, as they held 25.2 percent of all small business loans. Similar differences between the share of small business loans and the share of total assets are observed among the 25, 50, and 100 largest small business loan holders.

These data also show that the shares of small business loans held by the largest small business lenders increased a bit since 2017. The 100 small business bank lenders with the highest total outstanding balances on small business loans accounted for just over one-half of the outstanding small business loans and about five-sixths of total assets in both 2017 and 2021. Microloan lending became slightly more concentrated, with the top 100 most active small business bank lenders accounting for more than 78 percent of microloans in 2021, up from slightly less than 77 percent in 2017.

This pattern has implications for the availability of bank credit to small businesses. First, because the share of small business lending activity attributable to the 100 most active lenders is smaller than their share of total assets, other lenders remain a key source of credit for small firms.

[42] While part of the difference in the microloan growth rate may be attributable to differential participation in the PPP, banks with at least $1 billion in assets showed higher microloan growth between 2017 and 2019 than smaller banks.

Table 12. Share of assets and microloan and small business loan holdings of leading U.S. commercial banking organizations, 2017 and 2021
Percent

Leading banking organizations[1]	Share held by leading holders of small business loans		Share held by leading holders of microloans	
	Total outstanding small business loans	Bank assets	Total outstanding microloans	Bank assets
2017				
Top 10	28.7	55.3	58.3	53.4
Top 25	36.8	69.8	67.2	63.6
Top 50	45.2	78.3	72.7	68.9
Top 100	54.4	84.0	76.7	75.4
2021				
Top 10	25.2	53.9	55.2	48.7
Top 25	33.6	68.8	67.7	62.1
Top 50	46.9	77.7	73.8	67.4
Top 100	56.8	84.0	78.2	72.6

Note: Small business loans are business loans of $1 million or less; microloans, a subset of small business loans, are for $100,000 or less. U.S. commerical banking organizations are insured U.S. domestically chartered banks excluding credit card institutions and U.S. branches and agencies of foreign banks. For each category of loan activity, leading banking organizations account for the greatest share of that category.
[1] Banking organizations include bank holding companies and independent banks.
Source: Call Reports (June 30); National Information Center database.

Second, although the share of small business lending attributable to the top banks has increased, there has not been significant industry consolidation resulting in relatively few large banking organizations being the dominant providers of credit to small businesses.

Local Market Concentration

While the relationship between bank size and small business lending activity suggests that the industry-level structure is an important factor in the provision of credit to small businesses, the proximity of the bank and the small business also seems to be important. For instance, data from the 2019 SCF show that, among households that report owning businesses with fewer than 500 employees, the median distance to their firm's primary financial institution was four miles.

Conventional economic theory predicts, and empirical evidence suggests, that highly concentrated markets exhibit less competition, which results in higher prices and the provision of less credit. Some theories, however, predict that a less competitive lending environment may increase credit availability to at least some firms by allowing local banks more flexibility in structuring loan programs over time to promote longer-term relationships (for example, Petersen and Rajan, 1995). Long-term relationships, which facilitate loans to many small businesses in a process often referred to as relationship lending, may be more difficult to maintain in highly competitive markets

because businesses that are earning good profits will likely seek out the lender offering the most favorable, low-cost loan terms.

Therefore, the structure of the local banking market is particularly important because changes in concentration could affect the level of competition for small business lending, which, in turn, could influence the cost of borrowing and the quantity of credit demanded. Therefore, to address some key issues associated with the availability of credit to small businesses, one must shift the analysis from lending at the industry level to the local level. Analysis of bank structure within smaller geographic areas is likely to capture more accurately the relevant market conditions that small firms face when seeking credit and that influence competition in the market for small business loans.

Data from the annual Summary of Deposits—which reports the location and deposit level of every commercial bank, savings bank, and savings and loan branch as of June 30—are used to examine bank market structure and competition in local areas.[43] The primary measure used by antitrust authorities to assess market concentration is the deposit-based Herfindahl-Hirschman Index (HHI), which is computed as the sum of the squared market shares (that is, the shares of total deposits) of each firm in a market. These measures are shown in table 13, along with information on the number of banks and banking offices.[44] The data show that in 2021, about 24 banks provided banking services in the average metropolitan statistical area (MSA). The average level of the HHI with 50 percent weighting of savings institution deposits was 1,668, a level considered to reflect a moderately concentrated market.[45] In micropolitan areas, there was an average of approximately 8.5 banks providing services, with an average HHI with 50 percent weighting of savings institution deposits of 2,476. Rural areas—defined as counties not located in either metropolitan or micropolitan areas—are much more highly concentrated with respect to their deposits and, on average, have fewer banks and banking offices. In 2016, the average rural market had about 4 banks, and the average rural market HHI with 50 percent weighting of savings institution deposits was 4,437.

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[43] In assessing the likely competitive effects of proposed bank mergers and acquisitions, both the Federal Reserve Board and the U.S. Department of Justice use local deposits as a proxy for a banking organization's capacity to provide a cluster of commercial banking products and services within a banking market.

[44] In its initial review of bank merger applications, the Federal Reserve Board typically computes HHIs that give deposits of commercial banks full weight and deposits of savings institutions a weight of 50 percent. This "downweighting" of savings institutions reflects the fact that they are generally less active in commercial lending than commercial banks and hence should not be considered "full competitors" in the provision of banking services. On a case-by-case basis, the deposits of those savings institutions that are active commercial lenders are given full weight in the Federal Reserve Board's calculations.

[45] A value of 10,000 indicates perfect monopoly, and a value approaching zero indicates perfect competition. Under the 1992 *Horizontal Merger Guidelines* of the U.S. Department of Justice and the Federal Trade Commission, a market in which the HHI is less than 1,000 is considered unconcentrated, one in which it ranges from 1,000 to 1,800 is considered moderately concentrated, and one in which it is greater than 1,800 is considered highly concentrated (see U.S. Department of Justice and Federal Trade Commission, 1992). The *Horizontal Merger Guidelines* were updated in 2010. Under the 2010 guidelines, a market in which the HHI is less than 1,500 is considered unconcentrated, one in which it ranges from 1,500 to 2,500 is considered moderately concentrated, and one in which it is greater than 2,500 is considered highly concentrated (see U.S. Department of Justice and Federal Trade Commission, 2010). However, in the commercial banking industry, antitrust enforcement still relies on the 1992 guidelines.

Table 13. Average structural measures of U.S. commercial banking and thrift organizations, by metropolitan statistical area, micropolitan area, and rural county, 2012–21

Year	MSA			Micropolitan area			Rural county		
	Number of banks	HHI 50	Number of offices	Number of banks	HHI 50	Number of offices	Number of banks	HHI 50	Number of offices
2012	26.59	1,677	206.20	9.05	2,292	21.09	4.40	4,157	7.27
2013	26.27	1,671	204.30	8.97	2,301	20.80	4.38	4,194	7.18
2014	25.45	1,668	199.58	8.78	2,362	20.15	4.30	4,236	7.02
2015	25.07	1,699	194.76	8.67	2,402	19.73	4.27	4,252	6.94
2016	24.81	1,694	192.43	8.66	2,403	19.55	4.25	4,275	6.87
2017	24.65	1,681	188.29	8.61	2,421	19.14	4.21	4,313	6.76
2018	24.67	1,663	187.72	8.61	2,403	19.06	4.21	4,313	6.75
2019	24.71	1,660	185.54	8.36	2,416	18.89	4.18	4,356	6.71
2020	24.46	1,670	181.02	8.57	2,439	18.46	4.14	4,404	6.59
2021	24.38	1,668	173.56	8.50	2,476	17.90	4.08	4,437	6.47

Note: U.S. commercial banking organizations and thrifts are insured U.S. domestically chartered banks and insured U.S. domestically chartered savings banks and savings and loan associations excluding credit card institutions (derived from the National Information Center) and U.S. branches and agencies of foreign banks. MSA/Micropolitan area are defined by the Office of Management and Budget to be areas centered around an urban cluster with a population of at least 50,000 and with a population of at least 10,000 but less than 50,000, respectively. HHI 50 refers to the deposit-based Herfindahl-Hirschman index with 50 percent thrift inclusion. Offices are those with deposits greater than or equal to 0.
Source: Call Reports (June 30); Thrift Financial Reports (June 30); Summary of Deposits; National Information Center database; U.S. Census Bureau area definitions.

Savings Institutions

Savings institutions, defined as savings banks and savings and loan associations, provide much less credit to small businesses than do commercial banks. The primary lines of business for these institutions, often referred to as thrifts, tend to involve providing retail financial services, such as residential mortgage loans, savings accounts, and negotiable order of withdrawal accounts, to households.[46] As of June 30, 2021, there were 4,019 commercial banking organizations and 569 thrifts (tables 10 and 14). Savings institutions held $40 billion in small business loans and $7.0 billion in microloans, compared with $754.5 billion and $227.5 billion, respectively, held by commercial banks.

These differences between commercial banks and savings institutions reflect not only the disparity in overall size between the two groups of institutions, but also a lower proportion of small business lending conducted by the typical savings institution. In terms of overall size, in 2021, roughly $20.6 trillion in total domestic assets were held by commercial banks and savings institutions, with the latter holding about 7 percent of the total, or $1.4 trillion. In terms of small business lending intensity, the average thrift held roughly 8.1 percent of its asset portfolio in small business

[46] Savings institutions also make loans to businesses. Unlike commercial banks, federal savings institutions have statutory restrictions on the type of lending they may do; in the case of business lending, they may hold no more than 20 percent of their assets in commercial loans, and any amounts in excess of 10 percent must be used only for small business loans.

loans and 1.4 percent in microloans in 2021 (table 14). In contrast, the average commercial bank held 12.8 percent of its portfolio in small business loans and 3.1 percent in microloans (table 10). These differences in small business lending activity between banks and thrifts indicate that the typical savings institution has been much less active than the typical commercial bank in providing credit to small firms.

Table 14. Average microloan and small business loan holdings as a share of assets for U.S. savings institutions and thrifts of different sizes, 2021

Organization size	Number of savings institutions	Small business loans to assets	Microloan holdings to assets
All organizations	569	8.1	1.4
$250 million or less	227	7.7	1.6
$250 million to $1 billion (includes $1 billion)[1]	198	8.7	1.4
$1 billion to $10 billion (includes $10 billion)[1]	129	8.1	1.3
More than $10 billion	15	2.4	.4

Note: Small business loans are business loans of $1 million or less; microloans, a subset of small business loans, are for $100,000 or less. Insured U.S. savings institutions include insured U.S. domestically chartered savings banks and savings and loan associations excluding credit card institutions.

[1] Banks with assets of $1 billion are included in the $250 million to $1 billion size class, and banks with assets of $10 billion are included in the $1 billion to $10 billion size class.

Source: Call Reports (June 30); Thrift Financial Reports (June 30); National Information Center database.

Credit Unions

A credit union is a not-for-profit financial cooperative owned and controlled by the people who use its services. While credit unions offer many of the same financial services that banks do, they historically have devoted a smaller share of their assets toward providing credit to small businesses.[47] Outstanding loans to businesses by credit unions increased consistently in recent years; between 2017 and 2021, credit union outstanding loans to business members increased 51.8 percent, although the ratio of outstanding loans to credit union assets was fairly stable over this period (table 15).[48]

[47] One potential explanation for the lower provision of credit to small businesses by credit unions relative to banks is that, since the passage of the Credit Union Membership Access Act of 1998, much of credit union lending to member businesses has been subject to a statutory cap of the lesser of 1.75 times actual net worth or the net worth required to be well capitalized, which for most credit unions equates to 12.25 of total assets. As of June 2021, 5.1 percent of credit unions had outstanding loans to businesses totaling in excess of 80 percent of their cap. Thus, an increase in the cap has the potential to increase small business lending by credit unions.

[48] The outstanding business loans from credit unions are not directly comparable with those of commercial banks because the credit union Call Reports do not collect the dollar value of unfunded commitments on construction and development and farmland loans. In addition, credit union Call Reports report all business loans regardless of the size of the loan at origination. Most, but not all, credit unions were federally insured: In June 2021, 106 state-chartered credit unions were privately insured compared with 5,027 federally insured credit unions (FICUs). Therefore, business-loan numbers reported for FICUs slightly understate business lending for the credit-union sector. In addition, FICUs are not required to report business loans that do not sum to more than $50,000 to credit union members, which will also tend to understate business lending by credit unions.

Lending by Nondepository Sources

In this changing financial marketplace, small businesses have been diversifying their providers of financial services. Recently, small firms are turning to alternative nondepository sources for credit products. While current data are not available on the share of firms that use nondepository institutions, older survey results indicate the shares are rising. While the fraction of total outstanding dollars in this category is likely relatively small, the fact that it is increasing may indicate a growing appetite for this type of funding. Although there is an ever-growing number of nondepository sources of financing, data are scarce. This section briefly discusses finance company lending, venture capital funding, and online nondepository lending to small businesses.

Table 15. Business loan holdings of federally insured U.S. credit unions, 2017–21

Year	Number of credit unions	Total business loans to members (billions of dollars)	Member business loans over total assets
2017	5,693	63.97	4.74
2018	5,477	65.96	4.61
2019	5,308	71.73	4.72
2020	5,162	83.99	4.80
2021	5,027	97.08	4.91

Note: Business loans include loans regardless of the size of the loan at origination, which differs from the definition for commercial banks and savings banks.
Source: Quarterly Credit Union Reporting Forms (June 30).

Finance Companies

Businesses' use of finance companies peaked in 2018, after which it decreased at an increasing rate (table 16). Dollar volume in 2021 was more than 15 percent lower than in 2017. The primary use of finance companies by businesses is the purchase of motor vehicles or other business

Table 16. Outstanding loans to businesses by finance companies, 2017–21
Billions of dollars

Category	2017	2018	2019	2020	2021
Business	**387.2**	**397.1**	**386.7**	**360.8**	**323.7**
Motor vehicles	106.1	115.7	113.7	92.3	68.5
Retail loans	15.7	17.5	18.3	19.6	21.9
Wholesale loans[1]	81.7	88.9	86.2	64.1	38.7
Leases	8.7	9.2	9.2	8.6	8.0
Equipment	195.3	199.6	196.9	187.7	184.3
Loans	117.4	125.7	120.9	118.8	126.9
Leases[2]	77.9	73.9	76.0	68.9	57.4
Other business receivables[3]	85.8	81.7	76.1	80.9	70.8

[1] Credit arising from transactions between manufacturers and dealers--that is, floor plan financing.
[2] Includes loans on commercial accounts receivable, factored commercial accounts, and receivable dealer capital; small loans used primarily for business or farm purposes; and wholesale and lease paper for mobile homes, recreation vehicles, and travel trailers.
[3] Outstanding balances of pools upon which securities have been issued; these balances are no longer carried on the balance sheets of the loan originator. Detailed historical data on securitized business receivables are available from the Data Download Program.

equipment, which account for about 80 percent of outstanding business finance company debt. While lending in both of these subcategories followed the overall trend for finance companies, lending for motor vehicles dropped much more substantially, as motor vehicle sales fell throughout the COVID-19 pandemic. In 2021, finance company lending for motor vehicles was more than 35 percent lower than in 2017. Other business receivables fell about 18 percent over the period. It is important to note that it is not possible to separate the data according to the size of the business, but, if one assumes that the trends broadly hold for both large and small businesses, it would appear that lending to small businesses by finance companies likely decreased over the most recent period.

Online Lending to Small Businesses

The development of fintech has enabled small businesses to access credit in ways previously unavailable to them. Specifically, online lenders (also referred to as "fintech lenders") provide technology-based platforms for matching borrowers and investors. These platforms leverage their web-based and data-driven technologies to provide consumer and business credit products.[49]

Online lending generally refers to platforms that bring together potential borrowers and lenders to facilitate the provision of loans. An online lender can be broadly characterized as a nonbank entity that uses technology to simplify the loan process—including the application, decision process, funds distribution, and loan repayment—and operates as a two-sided market of consumers and investors. Along with interest, the borrower is typically charged a fee to originate the loan, and investors pay for servicing the loans. In general, marketplace lenders offer uncollateralized low-dollar loans with rapid decision times. The loans are typically funded and repaid via electronic transfers, with the lender and borrower never meeting in person.

The online lending market has continued to evolve and expand, particularly during the pandemic. According to a recent report from the Cambridge Centre for Alternative Finance, online alternative finance platforms in the United States facilitated more than $15 billion of loans to small and medium enterprises in 2019 (Ziegler et al., 2021).[50] While this amount remains small relative to the small business credit market as a whole—for reference, outstanding small loans to businesses on bank balance sheets in 2019:Q4 was $607 billion—this market has grown rapidly from less than $10 billion in 2016. In addition, fintech lenders are estimated to have provided nearly 8 percent of PPP loan dollars and 22 percent of PPP loans to small businesses during the COVID-19 pandemic.[51]

[49] Although online lenders collect a great deal of nontraditional data on borrowers, they report that most of such data are used to confirm identity and prevent fraud rather than for underwriting.

[50] See Ziegler and others (2021).

[51] See https://thehill.com/opinion/finance/560133-fintech-lenders-are-critical-to-small-businesses-accessing-ppp/.

Government Initiatives to Support Credit Access for Small Businesses

This section examines the role of government programs in supporting credit for small businesses. The federal government has historically affected the delivery and availability of credit through initiatives such as the CRA and several loan programs sponsored by the SBA, which largely focus on the financing needs of small firms in underserved communities and of young firms without much, or any, financial history. In addition to these long-standing initiatives, government entities created several programs and expanded existing programs to support credit access to small businesses during the COVID-19 pandemic. The most prominent of these programs was the PPP, but other supporting programs of note include expansion of the EIDL and the creation of the PPPLF and the MSLP.

Community Reinvestment Act

The Congress enacted the CRA in 1977 to encourage federally insured depository institutions to help meet the credit needs of their local communities consistent with safe and sound operations.[52] Under CRA, the FDIC, FRS, and OCC assess an institution's record of meeting the credit needs of its entire community, including low- and moderate-income (LMI) neighborhoods.[53]

Under existing CRA standards, CRA assessment areas are generally identified as the areas where banking institutions have their main offices, branches, and deposit-taking ATMs. LMI neighborhoods have been defined for regulatory purposes as census tracts with a median family income of less than 80 percent of the median family income of the broader area according to Census data.[54] As of the publication of this report, the agencies are undertaking an effort to strengthen and modernize the regulations implementing the CRA with respect to the evaluation of small business lending under CRA.[55]

Under CRA regulations, the bank regulatory agencies regularly review institutions' lending patterns and prepare publicly available written evaluations, which include ratings. The CRA requires that

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[52] 12 U.S.C. 2901. The CRA applies to "regulated financial institutions," defined as "insured depository institutions" (of note, credit unions are not subject to CRA requirements).

[53] Census tracts are identified as low, moderate, or high income on the basis of the median family income of the tract. A tract is identified as low-income if the median family income of the census tract is less than 50 percent of the MSA median family income and as moderate-income if the median family income of the census tract is at least 50 percent of the MSA median family income and less than 80 percent of the MSA median family income.

[54] For census tracts in an MSA, the MSA would be considered the broader area. For census tracts outside of an MSA, all non-MSA counties within the same state would be considered the broader area.

[55] For more information on the CRA and the proposed rulemaking, see https://www.federalreserve.gov/consumerscommunities/cra_about.htm.

supervisory agencies consider a financial institution's CRA performance when evaluating applications for, among other things, expansion or relocation of depository facilities through branching, mergers, or acquisitions. Decisions on these applications are made public.

One type of community reinvestment intermediary used by banks to help finance small businesses in lower-income areas is the bank-owned or bank-affiliated community development corporation. Under certain conditions, bank holding companies, national- and state-chartered commercial banks, and savings institutions may make equity investments in small businesses through a community development corporation or a limited liability company. Generally, these entities can make debt and equity investments in small businesses when the firms are located in LMI areas and the jobs created and services provided benefit primarily LMI persons.

Another form of intermediary is a consortium lending organization that specializes in financing young or start-up small and minority businesses. By participating in such consortiums, banks can mitigate the risks and costs of lending to small firms. These loan consortiums are usually organized in corporate form and may be nonprofit or for-profit organizations. Although many are organized primarily by banks, they often have nonbank participants such as insurance companies, utilities, other corporations, religious institutions, and other institutional investors. Other loan consortiums are quasi-public arms of state, regional governments, or local governments.

Because many institutions do not have the expertise or cannot bear the development costs of special small business finance programs, especially those focusing on reinvestment areas, many banks have created or assisted intermediaries that support small businesses in their communities. Indeed, a notable development in bank reinvestment programs has been formal and informal working partnerships among banks, regional or neighborhood nonprofit organizations, and community-based development corporations. These organizations identify prospective borrowers, provide loan counseling, serve as experienced developers in low-income and minority areas, and assist banks in marketing loan programs. These types of partnerships have also been effective in helping reduce the high transaction costs often associated with lending to very small firms. Such organizations also frequently package financial resources for small firms from several public and private sources. Overall, these types of partnerships enable banks to make small business loans that might not otherwise have been financially feasible.

Community Reinvestment Act Data on Lending in Lower-Income and Minority Neighborhoods

CRA regulations require larger commercial banks and savings associations to collect and report data regarding the geographic location of their small business lending. As a consequence of amendments to CRA regulations in 2005, as of January 1, 2022, banking institutions with assets of less than $1.384 billion as of December 31 in each of the two previous years are not required

to report data on their small business and small farm lending.[56] However, many smaller institutions still elect to report these data.[57] Analysis of Call Report data indicates that lenders reporting CRA data account for approximately three-fourths of the dollar volume of small business loans outstanding at all commercial banks and savings associations.

Each reporting bank submits an annual report on the total number and dollar volume of small business loan originations by census tract. As in the Call Report data, small business loans encompass C&I loans and NNP loans whose original amounts are $1 million or less. However, unlike the Call Report data, CRA data provide information on originations, or the *flow,* of small business credit rather than the *stock* of outstanding loan balances.[58] CRA data also provide information on the number and dollar volume of small business loans originated to businesses with revenues of less than $1 million, to the extent that the reporting institution collects such information when making credit decisions.

Figure 14, panel A, shows that the dollar volume of small business loan originations grew steadily between 2010 and 2019. While steady, however, growth was slow, and, as of 2019, the dollar value of originations was approximately 23 percent below its 2007 high. With the creation of the PPP in response to the COVID-19 pandemic, originations grew almost 80 percent in 2020, surpassing the 2007 high. Originations to businesses with revenues of less than $1 million followed a similar pattern of growth, although the rate of growth in 2020 was notably lower.[59]

Figure 14, panel B, disaggregates these two series by whether loans were made in LMI neighborhoods and whether loans were made in a bank's CRA assessment area (see previous section for definitions of LMI and assessment areas). Small business loan origination volume grew faster in non-LMI areas than LMI areas between 2015 and 2019, while, within each income group, lending grew slightly faster in assessment areas than outside of assessment areas through 2019. For instance, among LMI areas, origination volumes inside assessment areas were 7 percent higher in 2019 than in 2015, while volumes outside assessment areas were less than 1 percent higher. Finally, growth in 2020 was notably higher inside assessment areas.

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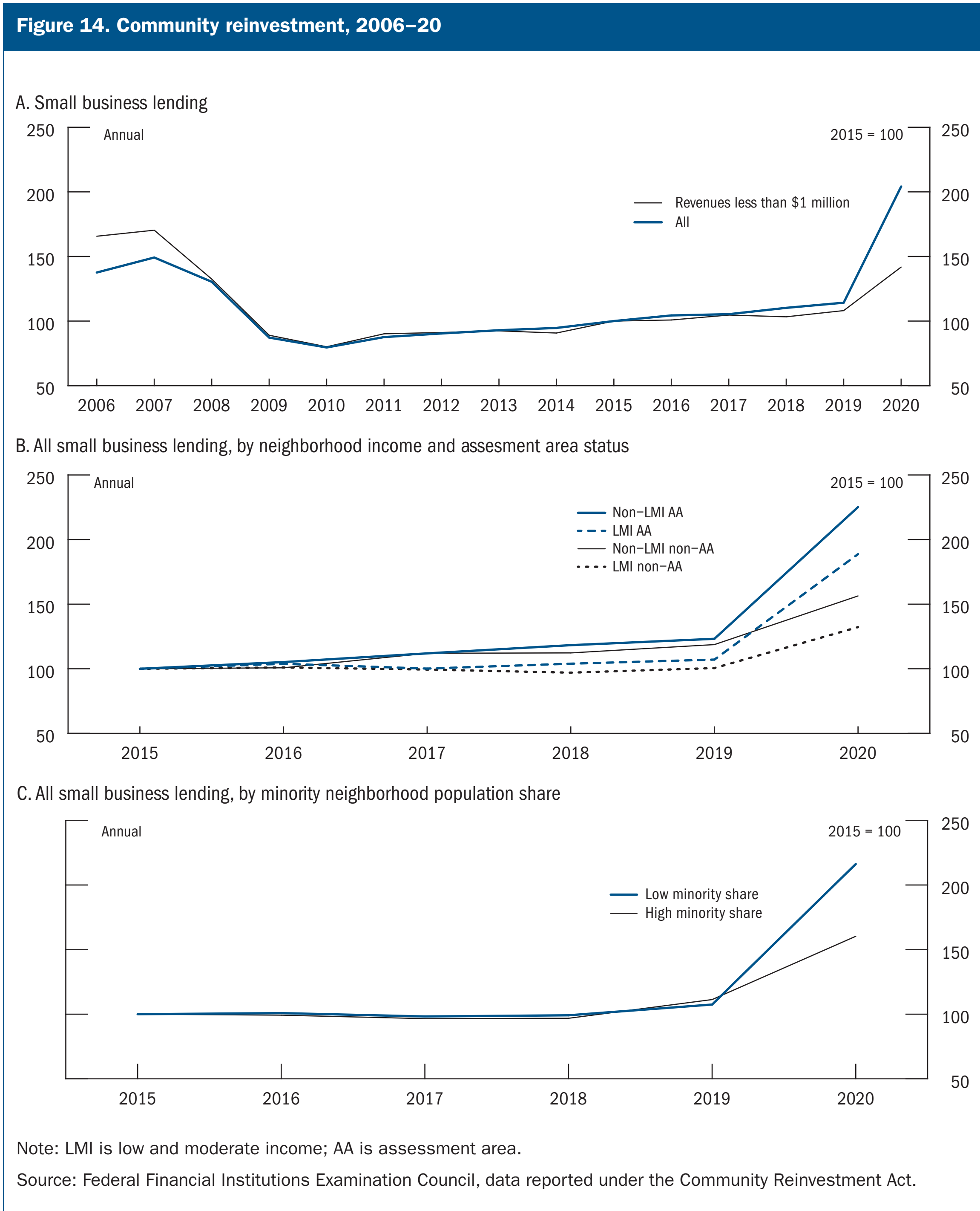
[56] This reporting threshold is adjusted annually to account for inflation.

[57] While not required to do so, some entities below the asset threshold do report data on small business or small farm lending activity. In 2020, out of the 687 banks that reported lending data, 124 were under the large bank asset threshold. Data from these reporters are included in the analysis below.

[58] For credit cards and lines of credit in the CRA data, banks report new and renewed line sizes (the maximum amount of available credit) as the amount originated. More details on CRA reporting requirements and standards are available on the Federal Financial Institutions Examination Council's website at https://www.ffiec.gov/cra/default.htm.

[59] One potential factor in the differences in growth rates for all businesses and businesses with revenues of less than $1 million in 2020 may be CRA reporting requirements. Generally, only loans to businesses for which the bank collects revenue information are eligible to be included in the latter category, regardless of the actual revenue of the business. Because of the structure of the PPP, banks may have been less likely to collect information on the revenue of businesses to which they lent in 2020 than in previous years. For more information on the treatment of PPP loans for CRA purposes, see The Fed - CA 21-5 Community Reinvestment Act (CRA) Consideration for Activities in Response to the Coronavirus (https://www.federalreserve.gov/supervisionreg/caletters/caltr2105.htm); https://www.fdic.gov/coronavirus/faq-cra.pdf; https://www.occ.gov/topics/supervision-and-examination/bank-operations/covid-19-information/covid-19-cra-faqs.pdf.

Figure 14. Community reinvestment, 2006–20



Note: LMI is low and moderate income; AA is assessment area.

Source: Federal Financial Institutions Examination Council, data reported under the Community Reinvestment Act.

Figure 14, panel C, displays the trend in lending across neighborhoods with higher (at least 30 percent) and lower (less than 30 percent) shares of minority residents. Between 2015 and 2019, higher-minority-share neighborhoods experienced slightly higher growth in origination volume. Relative to 2015, origination amounts in higher-minority-share neighborhoods were 11 percent higher in 2019, while they were approximately 7 percent higher in lower-minority-share neigh-

borhoods in 2019. Originations for 2020, however, showed significantly stronger growth in lower-minority-share neighborhoods. As a result, originations in 2020 for these neighborhoods were 116 percent higher than in 2019, compared with 60 percent higher for higher-minority-share neighborhoods.

Table 17 provides additional data on small business lending in LMI versus non-LMI neighborhoods as well as inside versus outside of CRA assessment areas. The top panel shows data for 2015, while the bottom panel shows data for 2020. Comparing across columns, the volume of lending is considerably higher in non-LMI neighborhoods than in LMI neighborhoods in both years, reflecting, at least in part, that roughly three-fourths of the population resides in non-LMI neighborhoods. Within each income group, assessment area lending exceeds non-assessment area lending in dollar terms in both years.

The role of credit card lending institutions is notably smaller in 2020 than in 2015.[60] Whereas credit card lenders accounted for slightly more than 20 percent of total lending in dollar terms in 2015, they accounted for a little more than 10 percent in 2020. This decline appears to be, at least in part, because of the relatively lower participation of credit card banks in the PPP than of other banks.[61] However, these institutions, which generally do not have an extensive network of bank branches and therefore have limited CRA assessment areas, did account for a significantly higher share of lending outside of assessment areas than in assessment areas in both years. Comparing LMI with non-LMI areas, table 17 indicates that credit card lenders made up a larger share of loan origination volume in non-LMI areas than in LMI areas in both 2015 (21.9 percent versus 19.0 percent) and 2020 (10.2 percent versus 9.0 percent).

Finally, table 17 also shows the share of small business lending by banks in the top 10 banking organizations according to total assets, by neighborhood income group. These data reveal that the top 10 organizations accounted for just under 30 percent of dollars loaned in both LMI and non-LMI neighborhoods in both 2015 and 2020.[62]

Small Business Administration Programs

Support for small business development has been a priority of policymakers for several decades, and federal, state, and local agencies have sponsored programs that assist in channeling capital

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[60] The list of credit card lending institutions is taken from the *Report to Congress on the Profitability of Credit Card Operations of Depository Institutions* and are identified by two criteria: (1) More than 50 percent of their assets are loans to individuals (consumer lending), and (2) 90 percent or more of their consumer lending involves credit cards or related plans.

[61] Analysis of PPP loan-level data shows that credit card banks accounted for less than 1 percent, in both number of loans and dollar value, of total PPP lending in 2020.

[62] It is important to keep in mind that the CRA data exclude a large number of smaller banks that may account for a significant number of loans, and, therefore, the share of lending attributed to the top 10 organizations is overstated in the CRA data.

Table 17. Small business lending, by neighborhood income and assessment area status, 2015 and 2020

Category	LMI			Non-LMI			Total[1]
	Inside AA	Outside AA	Total	Inside AA	Outside AA	Total	
2015							
Small business loans							
Dollar volume (millions)	42,220.0	12,242.0	54,462.0	119,931.0	43,591.0	163,522.0	219,703.0
Share by credit card lender (percent)	11.4	45.3	19.0	12.1	48.9	21.9	21.7
Share by top 10 bank organizations (percent)	33.2	8.8	27.7	34.6	10.2	28.1	28.4
Number of loans (thousands)	538.0	749.0	1,287.0	1,728.0	2,757.0	4,485.0	5,854.0
Average loan amount (thousands)	78.4	16.3	42.3	69.4	15.8	36.5	37.5
Loans to businesses with revenues less than $1 million							
Dollar volume (millions)	13,507.0	4,138.0	17,645.0	45,553.0	16,658.0	62,211.0	80,608.0
Share of all (percent)	32.0	33.8	32.4	38.0	38.2	38.0	36.7
Share by credit card lender (percent)	14.0	25.9	22.6	15.4	53.2	25.6	25.5
Share by top 10 bank organizations (percent)	30.5	11.6	26.1	33.5	13.6	28.2	28.3
Number of loans (thousands)	317.0	330.0	646.0	1,087.0	1,300.0	2,386.0	3,064.0
Average loan amount (thousands)	42.7	12.6	27.3	41.9	12.8	26.1	26.3
2020							
Small business loans							
Dollar volume (millions)	91,982.0	22,563.0	114,545.0	259,319.0	72,850.0	332,170.0	448,458.0
Share by credit card lender (percent)	6.1	20.8	9.0	6.7	23.0	10.2	10.1
Share by top 10 bank organizations (percent)	32.4	6.5	27.3	34.4	8.1	28.6	28.5
Number of loans (thousands)	1,117.0	748.0	1,865.0	3,642.0	2,453.0	6,095.0	8,003.0
Average loan amount (thousands)	82.3	30.2	61.4	71.2	29.7	54.5	56.0
Loans to businesses with revenues less than $1 million							
Dollar volume (millions)	22,143.0	3,780.0	25,924.0	73,024.0	14,566.0	87,590.0	114,290.0
Share of all (percent)	24.1	16.8	22.6	28.2	20.0	26.4	25.5
Share by credit card lender (percent)	9.6	25.9	12.0	11.2	27.0	13.9	13.9
Share by top 10 bank organizations (percent)	40.1	14.0	36.3	42.5	16.9	38.3	38.2
Number of loans (thousands)	531.0	174.0	705.0	1,842.0	688.0	2,530.0	3,256.0
Average loan amount (thousands)	41.7	21.8	36.8	39.6	21.2	34.6	35.1

Note: LMI is low and moderate income; AA is assessment area.
[1] Includes lending with unknown income and assessment area status.
Source: Federal Financial Institutions Examination Council, data reported under the Community Reinvestment Act.

to small business. At the federal level, the agency with the most direct role in this objective is the SBA, which the Congress created in 1953 to help entrepreneurs form successful small enterprises. The SBA provides financing to young and growing small firms through several channels such as the 7(a) Guarantee Loan Program, SBA 504 Certified Development Companies (CDCs),

and the Micro Loan Program. Among the policy objectives of the SBA loan programs is the goal of promoting entrepreneurship opportunities for women and minorities.

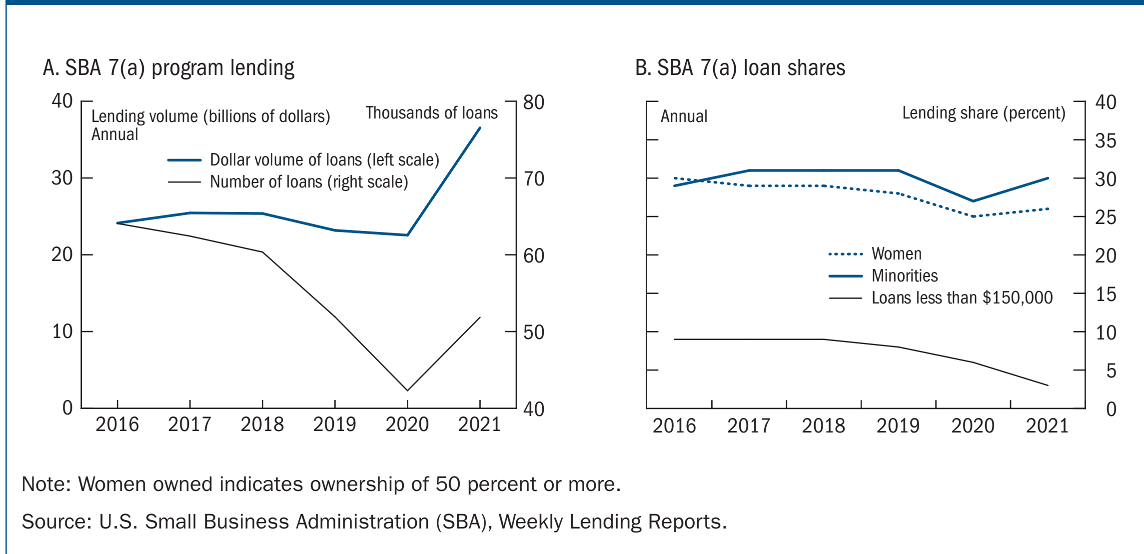
SBA 7(a) Guarantee Loan Program

The largest SBA program is the 7(a) Loan Program, which provides lenders with a partial loan guarantee for extending credit to small businesses that meet the SBA's underwriting and eligibility criteria. Participating lenders agree to structure loans according to the SBA's requirements that ensure reasonable rates and terms, and they apply for and receive a guarantee from the SBA on a portion of this loan. The SBA does not fully guarantee 7(a) loans—the lender and the SBA share the risk that a borrower will not be able to repay the loan in full. In regular times, the SBA provides a guarantee of as much as 85 percent for loans less than or equal to $150,000 and a guarantee of as much as 75 percent for loans greater than $150,000. The maximum loan amount is $5 million, increased in 2010 from $2 million under the Small Business Jobs Act of 2010. However, under the SBA Express loan program, which requires less loan documentation and provides a quicker turnaround time, only 50 percent of the loan is guaranteed, and the maximum loan amount is $500,000.

Figure 15, panel A, shows that between fiscal years 2016 and 2020, the dollar volume for the 7(a) loans was relatively stable between $23 and $25 billion, while the number of loans declined from 60,000 to 42,000 over that same period. However, fiscal year 2021 saw nearly 52,000 loans originated, totaling $36.5 billion—the largest amount in 7(a) history. While some of the increase in the program may have come from an increased need by small businesses as a result of the COVID-19 pandemic, much of it is likely due to the enhancements made to the program under the Economic Aid to Hard-Hit Small Businesses, Nonprofits, and Venues Act (Economic Aid Act) that was signed into law late December 2020. The Economic Aid Act temporarily increased the SBA guarantee on 7(a) loans to 90 percent for loans made between December 27, 2020, and September 30, 2021; waived some fees; and waived debt and interest payments of up to $9,000 per month on eligible loans for up to six months.

Figure 15, panel B, shows time trends in the fraction of 7(a) loan dollars reported to have gone to minority- and women-owned businesses as well as the fraction of loans below $150,000, which qualify for a larger percentage guarantee and are more likely to have gone to smaller businesses. The share of dollars to women-owned businesses fell over the period, from near 30 percent in 2016 to 26 percent in 2020. The share of dollars to minority-owned businesses increased between 2016 and 2019 before dropping off in 2020 and rebounding in 2021. This panel also shows that the fraction of dollars originated in loans of less than $150,000 has dropped from 9 percent in 2016 to 3 percent in 2021.

Figure 15. Small Business Administration 7(a) Program, 2016–21



Note: Women owned indicates ownership of 50 percent or more.

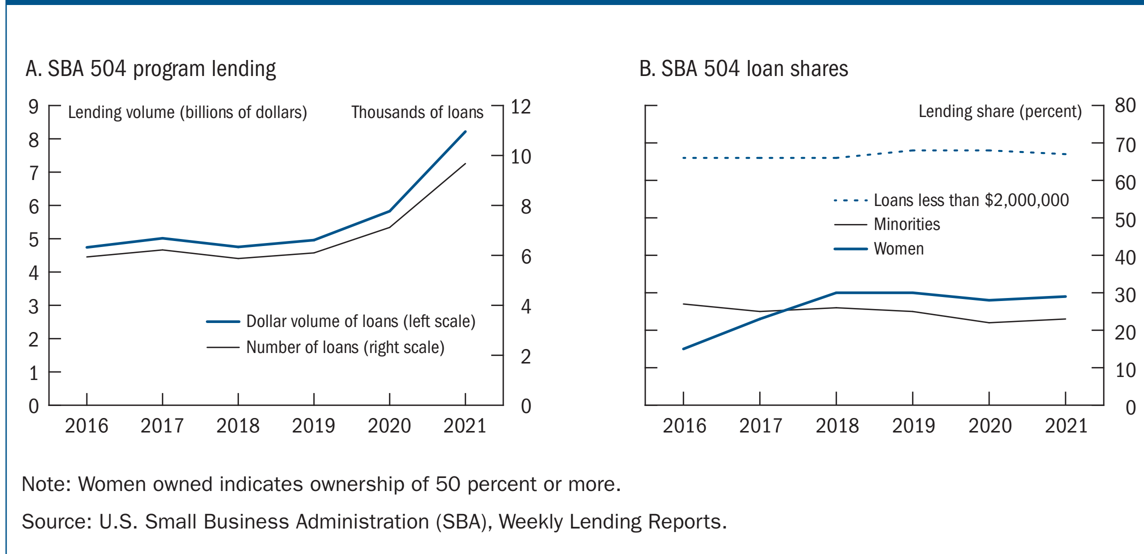
Source: U.S. Small Business Administration (SBA), Weekly Lending Reports.

SBA 504 Certified Development Companies

Banks often work with CDCs to leverage funds for small business financing. CDCs are generally nonprofit corporations specializing in small business finance and are certified by the SBA to participate in the agency's section 504 financing program. The SBA 504 program is intended to help small businesses expand and to create jobs by providing CDCs with the ability to issue SBA-guaranteed long-term debentures to fund small firms' purchases of plant, equipment, or real estate. Since 2015, 504 loans may also be used to refinance conventional (non-SBA) debt rather than for expansion or job creation. These loans are typically structured with three components: (1) a first mortgage or lien, which is made by a private commercial lender for 50 percent of the total project and does not come with a government guarantee; (2) a second mortgage or lien, which is made by a CDC for 40 percent of the total project and is backed by a 100 percent SBA-guaranteed debenture; and (3) borrower equity for the remaining 10 percent of the total project.

Figure 16, panel A, shows that funding under the 504 program was generally flat between 2016 and 2019 in both count and dollar volume. Between 2019 and 2021, the number of 504 loans increased from just over 6,000 to nearly 10,000. At the same time, the dollar volume also increased from $5 billion in 2019 to $8 billion in 2021. Panel B shows that the share of 504 loans issued to female-owned businesses went from 15 percent in 2016 to 29 percent in 2021. The share of loans to minorities generally decreased over the period, from 27 percent in 2016 to 23 percent in 2021. The share of 504 loans under $2 million has held steady over the period, accounting for about two-thirds of 504 loans.

Figure 16. Small Business Administration 504 Program, 2016–21



Note: Women owned indicates ownership of 50 percent or more.

Source: U.S. Small Business Administration (SBA), Weekly Lending Reports.

Special Small Business Intervention Programs during the COVID-19 Pandemic

Important financial support for small businesses throughout the COVID-19 pandemic came in the form of several pieces of legislation providing an unprecedented $968 billion of aid to small businesses.[63] These include the Coronavirus Preparedness and Response Supplemental Appropriations Act and the Coronavirus Aid, Relief, and Economic Security (CARES) Act; the PPP and Health Care Enhancement Act; the Consolidated Appropriations Act of 2021; and the American Rescue Plan. In addition to the congressional assistance, the Federal Reserve System created new facilities to support the flow of credit to households and businesses. Two programs were specifically targeted to support small business access to credit: the PPPLF and the MSLP.

The Coronavirus Aid, Relief, and Economic Security Act

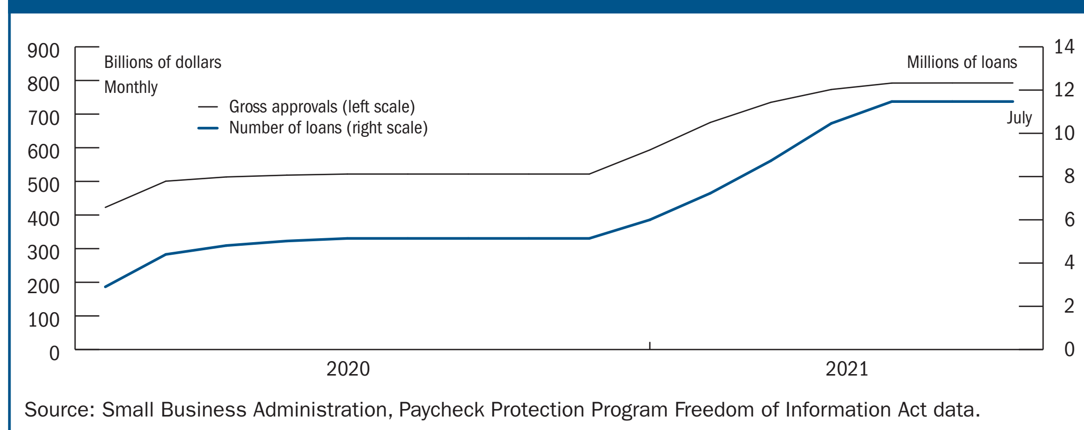
The CARES Act was enacted on March 27, 2020, to address the near-term economic effect the virus is having on families and businesses. This nearly $4 trillion relief package earmarked $380 billion to help small businesses. The largest component ($349 billion) was for the creation of the PPP, which provided forgivable loans to small businesses to help them avoid laying off their workers. The loans were intended to be forgiven if the business demonstrated it had spent the money on payroll, rent, utilities, or other allowable expenses. A more detailed description of the PPP is included in box 3.

[63] Eligibility for the programs was generally broader than the usual definition of small businesses and varied with each program.

Box 3. Paycheck Protection Program

The Paycheck Protection Program (PPP) was the single largest financial program for small businesses in history.[1] When the program stopped issuing loans on March 31, 2021, it had provided $792.6 billion of assistance to 11.5 million small businesses across the country (figure A).[2] The loan-level data from the PPP have been studied intensively. For studies on the effect of the PPP, see Autor et al. (2022) and the research discussed therein. For more information on the experiences of small businesses applying to these programs, see box 4.

Figure A. Paycheck Protection Program loans approved, 2020–21



Source: Small Business Administration, Paycheck Protection Program Freedom of Information Act data.

Eligible Borrowers

The definition of which businesses qualified for a first-draw PPP loan was quite broad. In general, it included any small business that met the Small Businesses Administration's (SBA) size standards (either the industry size standard or the alternative size standard). This group included sole proprietors, independent contractors, and self-employed persons; any 501(c)(3) nonprofit organization, 501(c)(19) veterans' organization, or tribal business; or any business with a North American Industry Classification System code that begins with 72 (accommodations and food services) that has more than one physical location and employs fewer than 500 per location.

In order to qualify for second-draw PPP loans, which were only available after the American Rescue Plan, firms must (1) have previously received a first-draw PPP loan and used the full amount only for authorized uses; (2) have no more than 300 employees; and (3) be able to demonstrate at least a 25 percent reduction in gross receipts between comparable quarters in 2019 and 2020.

(continued)

[1] For the definition of the eligible small business population, see https://www.sba.gov/funding-programs/loans/covid-19-relief-options/paycheck-protection-program/first-draw-ppp-loan and https://www.sba.gov/funding-programs/loans/covid-19-relief-options/paycheck-protection-program/second-draw-ppp-loan.

[2] While the last day to get a PPP loan approved was March 31, 2021, lenders had up to 90 days to disburse funds to the small businesses. The last loans were disbursed in June 2021.

Box 3—*continued*

Terms for Borrowers

All PPP loans have an interest rate of 1 percent. Loans issued before June 5, 2020, have a maturity of two years, while loans issued after June 5, 2020, have a maturity of five years. Loan payments were deferred for borrowers who applied for loan forgiveness until the SBA remitted the borrower's loan forgiveness amount to the lender. If a borrower did not apply for loan forgiveness, payments were deferred 10 months after the end of the covered period for the borrower's loan forgiveness (between 8 and 24 weeks). No collateral or personal guarantees were required, and there were no fees associated with taking out a PPP loan. Firms generally qualified for loans equal to 2.5 times their average monthly payroll up to a maximum of $10 million.

Loan Volumes

In 2020, under the CARES Act and subsequent Health Care Enhancement Act, the PPP approved $525 billion in loans to 5.2 million small businesses. The average loan size was just over $100,000 (table 1). These loans were made to businesses across the country and across all industries. The top five industries by dollar volume were health care and social assistance; professional, scientific, and technical services; construction; manufacturing; and accommodation and food services, which jointly accounted for just under half of all the funding (table 2). When the program ceased lending on August 8, 2020, there were $134 billion of unspent appropriated funds.

Table 1. Total PPP loans by year and first and second draw

	Number of loans	Total dollars	Average loan
2020 first-draw loans	5,212,128	$525,012,201,124	$101,000
2021 first-draw loans	3,768,309	$ 68,915,276,574	$ 18,288
2021 second-draw loans	2,913,620	$208,784,831,505	$ 71,658

Source: Small Business Administration, Paycheck Protection Program Lending Reports: Approvals through 08/08/2020 and Paycheck Protection Program Reports: Approvals through 05/31/2021.

In 2021, an additional $278 billion in PPP loans were made to 6.7 million businesses (table 2). Just over half (56 percent) of the total number of loans were to first-draw borrowers. However, these first-draw borrowers received much smaller loans than in 2020, with an average loan of $18,000. This much smaller loan size likely stems from rule clarifications that allowed sole proprietors and self-employed persons to receive PPP loans as well as increased participation of fintech lenders.[1] The average second-draw loan was $72,000. Accommodation and food services; construction; health care and social assistance; professional, scientific, and technical services; and other services topped out the top five industries, accounting for nearly 70 percent of total loan dollars.

(continued)

[1] See Stacy Cowley and Ella Koeze (2021), "How Two Start-Ups Reaped Billions in Fees on Small Business Relief Loans," *New York Times*, June 27 (updated October 11).

Box 3—*continued*

Table 2. Total PPP loans by industry and year, 2020 and 2021

Industry	2020		2021	
	Number of loans	Total dollars	Number of loans	Total dollars
Administrative services	258,907	26,591,901,997	393,563	12,955,372,474
Agriculture, forestry, fishing and hunting	149,535	8,140,628,410	532,884	10,022,835,191
Arts, entertainment and recreation	130,760	8,223,383,720	223,882	7,452,355,755
Construction	496,551	65,070,483,743	558,180	33,443,602,502
Educational services	88,022	12,075,274,769	101,773	5,122,704,390
Finance and Insurance	181,493	12,202,534,934	127,088	3,423,154,208
Health care	532,775	67,802,899,625	485,698	28,820,477,425
Information	73,824	9,336,848,657	75,128	4,123,673,365
Manufacturing	238,494	54,101,623,487	221,216	22,148,692,329
Mining	22,503	4,542,309,832	21,676	2,383,826,599
Other services	583,385	31,687,938,997	1,107,768	27,345,366,128
Professional, scientific and technical services	681,111	66,806,585,368	657,326	28,559,859,211
Real estate	262,921	15,732,532,646	262,928	7,335,291,000
Retail trade	472,418	40,576,055,345	468,043	15,263,246,977
Transportation and warehousing	229,565	17,522,942,736	763,810	15,772,271,550
Wholesale trade	174,707	27,650,501,453	187,490	10,379,776,487
Other	251,596	14,470,385,907	30,998	1,641,380,917

Source: Small Business Administration, Paycheck Protection Program Lending Reports: Approvals through 08/08/2020 and Paycheck Protection Program Reports: Approvals through 05/31/2021.

Forgiveness

PPP loans were intended to be forgiven provided the borrowers spent the funds on allowable expenses. PPP loan recipients were eligible for full loan forgiveness if, during the 8- to 24-week covered period following loan disbursement, the firm (1) maintained employee and compensations levels, (2) spent loan proceeds on payroll costs and other eligible expenses, and (3) spent at least 60 percent of the proceeds on payroll costs.

A borrower could apply for forgiveness once all loan proceeds for which the borrower is requesting forgiveness have been used. Borrowers could apply for forgiveness any time up to the maturity date of the loan. If borrowers do not apply for forgiveness within 10 months after the last day of the covered period, then PPP loan payments are no longer deferred, and borrowers will begin making loan payments to their PPP lender.

Paycheck Protection Program and Health Care Enhancement Act

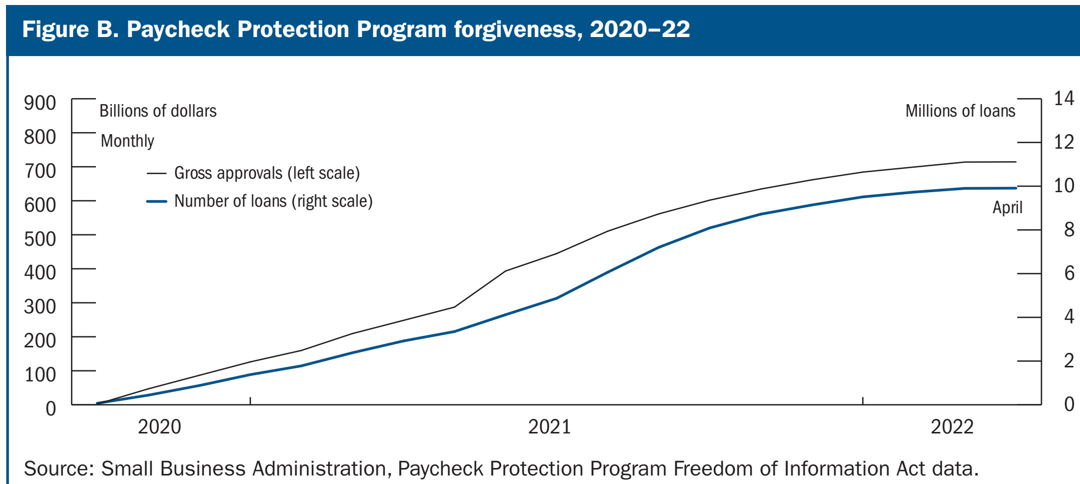
On April 24, 2020, the PPP and Health Care Enhancement Act was enacted. That bill, totaling $483 billion, provided an additional $383 billion in economic support for small businesses.[64] The

[64] For the eligible small business population, see https://www.sba.gov/funding-programs/loans/covid-19-relief-options/paycheck-protection-program/first-draw-ppp-loan and https://www.sba.gov/funding-programs/loans/covid-19-relief-options/paycheck-protection-program/second-draw-ppp-loan.

Box 3—*continued*

Figure B depicts the dollar and loan volume of loans forgiven over time. Firms began submitting forgiveness applications in October 2020 and will likely continue to do so into 2023. By April 2022, more than 9.9 million PPP loan applications were forgiven, totaling more than $710 billion.

Figure B. Paycheck Protection Program forgiveness, 2020–22



Source: Small Business Administration, Paycheck Protection Program Freedom of Information Act data.

majority of this funding ($321 billion) was allocated to replenish the PPP, which exhausted its initial funding within two weeks because of overwhelming demand.

Consolidated Appropriations Act of 2021

The $868 billion Consolidated Appropriations Act, enacted on December 27, 2020, included an additional $302 billion for small businesses. The bill provided funding for additional PPP loans—including second-draw loans for firms that had already exhausted their first-draw loan—as well as EIDL grants, the Shuttered Venue Operators Grant (SVOG) program, and enhancements to other SBA lending programs.

American Rescue Plan

The American Rescue Plan, which was enacted on March 11, 2021, provided an additional $1.9 trillion of federal relief in a variety of areas. For small businesses, the bill allocated $59 billion in targeted aid. In addition to providing further funding for the PPP, the SVOG, and EIDL, it allocated $28.6 billion for the Restaurant Revitalization Fund—which issued grants equal to pandemic-related revenue losses, up to certain thresholds, to restaurants and other eligible businesses—and the State Small Business Credit Initiative, which provided up to $10 billion to be matched by private funding over the next 10 years.

Paycheck Protection Program Liquidity Facility

To bolster the ability of banks to extend PPP loans, the Federal Reserve established the PPPLF. The facility allowed PPP lenders to pledge their PPP loans as collateral for advances from the Federal Reserve. The facility was launched April 16, 2020. To expand the reach of the PPPLF, on April 30, 2020, the FRB opened the facility to certain types of PPP lenders that are nondepository institutions including community development financial institutions (CDFIs), small business lending companies licensed by the SBA, and some financial technology firms. By the end of August 2020 when the first round of PPP was completed, the facility had issued $68 billion in loans.[65] When additional PPP funding was added in 2021, the PPPLF once again provided liquidity to lenders. At the end of June 2021, the PPPLF had issued more than $90 billion. Research finds that, on average, commercial banks that used the PPPLF extended over twice as many PPP loans, relative to their total assets, as banks that did not use the PPPLF (Anbil, Carlson, and Styczynski, 2021).

Main Street Lending Program

On April 9, 2020, the MSLP was established by the Federal Reserve System to support small- and medium-sized businesses and nonprofit employers affected by the COVID-19 pandemic.[66] The program made available $600 billion in loan facilities to employers who must have been in good financial standing before the onset of the COVID-19 pandemic. To relieve bank balance sheet constraints and allows banks to make more loans in an uncertain environment, the Federal Reserve bought 95 percent of new or existing loans to qualified employers, while the issuing bank retained 5 percent of each loan. In exchange for the loan, employers must have made reasonable efforts to maintain payroll and retain workers. In total, the MSLP purchased $17.5 billion in business loans.

[65] See the H.4.1 Statistical Release at https://www.federalreserve.gov/releases/H41/current.
[66] For information on the eligible population, see https://www.federalreserve.gov/monetarypolicy/mainstreetlending.htm.

Box 4. Perspectives from Main Street: Supporting Long-Term Small Business Resiliency Beyond the COVID-19 Pandemic

In 2021, the Federal Reserve System's (FRS) community development function organized a series of listening sessions with individuals representing small businesses, national and local intermediaries, lenders, and others to hear the experiences of small businesses through the pandemic and learn about the strategies and efforts that have helped foster small business resiliency at the firm and community level. The conversations aimed to add to the collective knowledge about what makes small businesses resilient one year after the broad-scale shutdown of the economy. A report summarizing findings from these sessions, *Perspectives from Main Street: Supporting Long-Term Small Business Resiliency Beyond the COVID-19 Pandemic,* is due to be released later this year.

Technical assistance in the form of information and guidance, especially in the early days of the pandemic when assistance program criteria changed frequently, was critical to the survival of many small businesses, according to discussants.

Depending on the type of small business or group represented in the discussion, many participants noted that PPP and other federal funding were more accessible to certain small businesses—especially smaller, younger, more financially fragile firms that often lacked strong banking relationships—through community banks, CDFIs, or fintech-enabled online lenders and brokers. In noting these institutions, many participants mentioned how the technical assistance that these institutions provided was especially beneficial in helping them navigate the application process.

Many participants lauded the numerous local programs that provided small-dollar loans and grants to struggling small businesses that were often unable to access federal pandemic-related assistance.

In several discussions, participants often mentioned that small businesses that were connected with networks—both formal and informal—benefited from information and assistance through these channels. Representatives of small business intermediaries and member organizations universally noted that the demand for information from trusted sources to explain and guide understanding of the federal and state stimulus programs was overwhelming. Many participants mentioned that feedback received from their members indicated that these explanations and information to small business owners significantly improved their firms' resilience and effectively supported their ability to navigate the programs available to them.

References

Adams, Robert M. (2012). “Consolidation and Merger Activity in the United States Banking Industry from 2000 through 2010,” Finance and Economics Discussion Series 2012-51. Washington: Board of Governors of the Federal Reserve System, August, https://www.federalreserve.gov/pubs/feds/2012/201251/201251abs.html.

Adams, Robert M., and Dean F. Amel (2007). “The Effects of Past Entry, Market Consolidation, and Expansion by Incumbents on the Probability of Entry,” Finance and Economics Discussion Series 2007-51. Washington: Board of Governors of the Federal Reserve System, October, https://www.federalreserve.gov/pubs/feds/2007/200751/200751pap.pdf.

Akkus, Oktay, J. Anthony Cookson, and Ali Hortasu (2016). “The Determinants of Bank Mergers: A Revealed Preference Analysis,” *Management Science,* vol. 62 (8), pp. 2241–58.

Amel, Dean F., and Kenneth P. Brevoort (2005). “The Perceived Size of Small Business Banking Markets,” *Journal of Competition Law and Economics,* vol. 1 (4), pp. 771–84.

Anbil, Sriya, Mark Carlson, and Mary-Frances Styczynski (2021). “The Effect of the PPPLF on PPP Lending by Commercial Banks,” Finance and Economics Discussion Series 2021-030. Washington: Board of Governors of the Federal Reserve System, May, https://doi.org/10.17016/feds.2021.030.

Autor, David, David Cho, Leland D. Crane, Mita Goldar, Byron Lutz, Joshua Montes, William B. Peterman, David D. Ratner, Daniel Villar Vallenas, and Ahu Yildirmaz (2022). “An Evaluation of the Paycheck Protection Program Using Administrative Payroll Microdata,” NBER Working Paper Series 29972. Cambridge, Mass: National Bureau of Economic Research, April, https://www.nber.org/system/files/working_papers/w29972/w29972.pdf.

Avery, Robert B., and Katherine Samolyk (2000). “Bank Consolidation and the Provision of Banking Services: The Case of Small Commercial Loans,” Working Paper Series 00-1. Washington: Federal Deposit Insurance Corporation, December, https://www.fdic.gov/bank/analytical/working/wp00-01.pdf.

_____ (2004). “Bank Consolidation and Small Business Lending: The Role of Community Banks,” *Journal of Financial Services Research,* vol. 25 (April–June), pp. 291–325.

Berger, Allen N., Seth D. Bonime, Lawrence G. Goldberg, and Lawrence J. White (2004). “The Dynamics of Market Entry: The Effects of Mergers and Acquisitions on Entry in the Banking Industry,” *Journal of Business,* vol. 77 (October), pp. 797–834.

Berger, Allen N., Rebecca S. Demsetz, and Philip E. Strahan (1999). “The Consolidation of the Financial Services Industry: Causes, Consequences, and Implications for the Future,” *Journal of Banking and Finance,* vol. 23 (February), pp. 135–94.

Berger, Allen N., Lawrence G. Goldberg, and Lawrence J. White (2001). “The Effects of Dynamic Changes in Bank Competition on the Supply of Small Business Credit,” *European Finance Review,* vol. 5 (1–2), pp. 115–39.

Berger, Allen N., Richard J. Rosen, and Gregory F. Udell (2001). “The Effect of Market Size Structure on Competition: The Case of Small Business Lending,” Finance and Economics Discussion Series 2001-63. Washington: Board of Governors of the Federal Reserve System, December, https://www.federalreserve.gov/pubs/feds/2001/200163/200163abs.html.

Berger, Allen N., and Gregory F. Udell (1998). “The Economics of Small Business Finance: The Roles of Private Equity and Debt Markets in the Financial Growth Cycle,” *Journal of Banking and Finance,* vol. 22 (August), pp. 613–73.

_____ (2002). “Small Business Credit Availability and Relationship Lending: The Importance of Bank Organisational Structure,” *Economic Journal,* vol. 112 (February), pp. F32–F53.

Bitler, Marianne P., Alicia M. Robb, and John D. Wolken (2001). “Financial Services Used by Small Businesses: Evidence from the 1998 Survey of Small Business Finances,” *Federal Reserve Bulletin,* vol. 87 (April), pp. 183–205, https://www.federalreserve.gov/pubs/bulletin/2001/0401lead.pdf.

Board of Governors of the Federal Reserve System (2002). *Report to the Congress on the Availability of Credit to Small Businesses.* Washington: Board of Governors, September, https://www.federalreserve.gov/boarddocs/rptcongress/sbfreport2002.pdf.

_____ (2012). *Report to the Congress on the Availability of Credit to Small Businesses.* Washington: Board of Governors, September, https://www.federalreserve.gov/publications/other-reports/files/sbfreport2012.pdf.

_____ (2017). *Survey of Consumer Finances,* https://www.federalreserve.gov/econres/scfindex.htm.

Boot, Arnoud W.A. (2000). “Relationship Banking: What Do We Know?” *Journal of Financial Intermediation,* vol. 9 (January), pp. 7–25.

Brevoort, Kenneth P., and Timothy H. Hannan (2006). “Commercial Lending and Distance: Evidence from Community Reinvestment Act Data,” *Journal of Money, Credit and Banking,* vol. 38 (December), pp. 1991–2012.

Bricker, Jesse, Arthur B. Kennickell, Kevin B. Moore, and John Sabelhaus (2012). “Changes in U.S. Family Finances from 2007 to 2010: Evidence from the Survey of Consumer Finances,” *Federal Reserve Bulletin,* vol. 98 (June), pp. 1–80, https://www.federalreserve.gov/pubs/bulletin/2012/PDF/scf12.pdf.

Chang, Andrew C. (2016). “Banking Consolidation and Small Firm Financing for Research and Development,” Finance and Economics Discussion Series 2016-029. Washington: Board of Governors of the Federal Reserve System, April, http://dx.doi.org/10.17016/FEDS.2016.029.

Cowan, Charles D., and Adrian M. Cowan (2006). “A Survey Based Assessment of Financial Institution Use of Credit Scoring for Small Business Lending,” unpublished paper, U.S. Small Business Administration, Office of Advocacy, November.

Craig, Steven G., and Pauline Hardee (2007). “The Impact of Bank Consolidation on Small Business Credit Availability,” *Journal of Banking and Finance,* vol. 31 (April), pp. 1237–63.

Critchfield, Tim, Tyler Davis, Lee Davison, Heather Gratton, George Hanc, and Katherine Samolyk (2004). “The Future of Banking in America: Community Banks: Their Recent Past, Current Performance, and Future Prospects,” *FDIC Banking Review,* vol. 16 (3), pp. 1–56, https://www.fdic.gov/bank/analytical/banking/2005jan/article1.pdf.

DeYoung, Robert, Lawrence G. Goldberg, and Lawrence J. White (1999). “Youth, Adolescence, and Maturity of Banks: Credit Availability to Small Business in an Era of Banking Consolidation,” *Journal of Banking and Finance,* vol. 23 (February), pp. 463–92.

Federal Reserve Banks of Atlanta, Boston, Chicago, Cleveland, Dallas, Kansas, Minneapolis, New York, Philadelphia, Richmond, St. Louis, and San Francisco (2021). *Small Business Credit Survey: Report on Employer Firms*. New York: Federal Reserve Bank of New York, May, https://www.fedsmallbusiness.org/medialibrary/FedSmallBusiness/files/2021/2022-sbcs-employer-firms-report.

Federal Reserve Banks of Atlanta, Boston, Chicago, Cleveland, Dallas, Kansas City, Minneapolis, New York, Philadelphia, Richmond, St. Louis, and San Francisco (2017). *2016 Small Business Credit Survey: Report on Employer Firms.* New York: Federal Reserve Bank of New York, April, https://www.newyorkfed.org/medialibrary/media/smallbusiness/2016/SBCS-Report-EmployerFirms-2016.pdf.

Goldston, Jacob, and Yan Y. Lee (2020). *Measurement of Small Business Lending Using Call Reports: Further Insights from the Small Business Lending Survey.* Report No. 2020-04. Washington: Federal Deposit Insurance Corporation, July, https://www.fdic.gov/analysis/cfr/staff-studies/2020-04.pdf.

Group of Ten (2001). *Report on Consolidation in the Financial Sector.* Washington: International Monetary Fund, Bank for International Settlements, and Organisation for Economic Co-operation and Development, January, https://www.imf.org/external/np/g10/2001/01/Eng/pdf/file1.pdf.

Jagtiani, Julapa, Ian Kotliar, and Raman Quinn Maingi (2016). "Community Bank Mergers and Their Impact on Small Business Lending," *Journal of Financial Stability,* vol. 27 (December), pp. 106–21.

Jayaratne, Jith, and John Wolken (1999). "How Important Are Small Banks to Small Business Lending? New Evidence from a Survey of Small Firms," *Journal of Banking and Finance,* vol. 23 (February), pp. 427–58.

Kahle, Kathleen M., and Rene M. Stulz (2017). "Is the U.S. Public Corporation in Trouble?" *Journal of Economic Perspectives,* vol. 31 (3), pp. 67–88.

Kaplan, Steven, and Per Strömberg (2003). "Financial Contracting Theory Meets the Real World: Evidence from Venture Capital Contracts," *Review of Economic Studies,* vol. 70, pp. 281–316.

Keeton, William R. (2000). "Are Mergers Responsible for the Surge in New Bank Charters?" Federal Reserve Bank of Kansas City, *Economic Review,* vol. 85 (1), pp. 21–41, https://www.kansascityfed.org/Economic%20Review/documents/1668/2000-Are%20Mergers%20Responsible%20for%20the%20Surge%20in%20New%20Bank%20Charters.pdf.

Kendall, Leon T., and Michael J. Fishman, eds. (1998). *A Primer on Securitization.* Cambridge, Mass.: MIT Press.

Kiser, Elizabeth K., Robin A. Prager, and Jason R. Scott (2016). "Supervisory Ratings and Bank Lending to Small Businesses During the Financial Crisis and Great Recession," *Journal of Financial Services Research,* vol. 50 (October), pp. 163–86.

Mach, Traci L., and John D. Wolken (2006). "Financial Services Used by Small Businesses: Evidence from the 2003 Survey of Small Business Finances," *Federal Reserve Bulletin,* vol. 92 (October), pp. A167–A195, https://www.federalreserve.gov/pubs/bulletin/2006/smallbusiness/smallbusiness.pdf.

Moody's Analytics, Inc. (2014). *2015 Outlook—US Commercial & Esoteric ABS.* New York: Moody's, December.

National Federation of Independent Business (2022). "Small Business Optimism Index," web page, https://www.nfib.com/surveys/small-business-economic-trends.

Ou, Charles (2005). “Banking Consolidation and Small Business Lending: A Review of Recent Research,” Working Paper. Washington: U.S. Small Business Administration, Office of Advocacy, March, https://ideas.repec.org/p/sba/wpaper/05ou.html.

Peek, Joe, and Eric S. Rosengren (1998). “Bank Consolidation and Small Business Lending: It’s Not Just Size That Matters,” *Journal of Banking and Finance,* vol. 22 (August), pp. 799–819.

Petersen, Mitchell A., and Raghuram G. Rajan (1995). “The Effect of Credit Market Competition on Lending Relationships,” *Quarterly Journal of Economics,* vol. 110 (May), pp. 407–43.

Pilloff, Steven J. (2001). “Commercial Banking,” in Walter Adams and James Brock, eds., *The Structure of American Industry.* Upper Saddle River, N.J.: Prentice-Hall.

_____ (2004). *Bank Merger Activity in the United States, 1994–2003*, Staff Study 176. Washington: Board of Governors of the Federal Reserve System, May, https://www.federalreserve.gov/pubs/staffstudies/2000-present/176sum.htm.

Reichow, Kelsey (2017). “Small-Business Lending Languishes as Community Banking Weakens,” Federal Reserve Bank of Dallas, *Economic Letter,* vol. 12 (February), article 3, https://fraser.stlouisfed.org/title/economic-letter-6362/small-business-lending-languishes-community-banking-weakens-607728.

Rhoades, Stephen A. (2000). *Bank Mergers and Banking Structure in the United States, 1980–98,* Staff Study 174. Washington: Board of Governors of the Federal Reserve System, August, https://www.federalreserve.gov/pubs/staffstudies/2000-present/ss174.pdf.

Samolyk, Katherine, and Christopher A. Richardson (2003). “Bank Consolidation and Small Business Lending within Local Markets,” Working Paper 03-2. Washington: Federal Deposit Insurance Corporation, April, https://www.fdic.gov/bank/analytical/working/wp03-02.pdf.

Scott, Jonathan A., William C. Dunkelberg, and William J. Dennis, Jr. (2003). *Credit, Banks and Small Business—The New Century.* Washington: National Federation of Independent Business, January, www.nfib.com/Portals/0/PDF/AllUsers/The%20New%20Century-Credit,%20Banks%20and%20Small%20Business.pdf.

Seelig, Steven A., and Tim Critchfield (2003). “Merger Activity as a Determinant of De Novo Entry into Urban Banking Markets,” Working Paper 03-1. Washington: Federal Deposit Insurance Corporation, April, https://www.fdic.gov/analysis/archived-research/working-papers/2003/wp2003-01.pdf.

Strahan, Philip E., and James P. Weston (1998). “Small Business Lending and the Changing Structure of the Banking Industry,” *Journal of Banking and Finance,* vol. 22 (August), pp. 821–45.

U.S. Census Bureau, Population Division (2020). “Annual Estimates of the Resident Population for the United States, Regions, States, the District of Columbia, and Puerto Rico: April 1, 2010 to July 1, 2019; April 1, 2020; and July 1, 2020 (NST-EST2020)” table, https://www2.census.gov/programs-surveys/popest/tables/2010-2020/national/totals/NST-EST2020.xlsx.

U.S. Census Bureau (2021a). “Annual Business Survey Methodology,” webpage, https://www.census.gov/programs-surveys/abs/technical-documentation/methodology.html.

_____ (2021b). *2021 Annual Business Survey Worksheet.* Washington: Census, https://www2.census.gov/programs-surveys/abs/information/abs_2021.pdf.

U.S. Congress, House (1994). *H.R.3474 - Riegle Community Development and Regulatory Improvement Act of 1994,* House Report 103–652, 103 Cong., https://www.congress.gov/bill/103rd-congress/house-bill/3474.

U.S. Congress, Senate (2015). *S.966 - CREED Act of 2015,* Senate Report 114–266, 114 Cong., https://www.congress.gov/bill/114th-congress/senate-bill/966.

U.S. Department of Justice and Federal Trade Commission (1992). *Horizontal Merger Guidelines.* Washington: DOJ and FTC, https://www.justice.gov/archives/atr/1992-merger-guidelines.

_____ (2010). *Horizontal Merger Guidelines.* Washington: DOJ and FTC, https://www.justice.gov/atr/horizontal-merger-guidelines-08192010.

U.S. Small Business Administration, Office of Advocacy (2021). Frequently Asked Questions, Washington: SBA, https://cdn.advocacy.sba.gov/wp-content/uploads/2021/12/06095731/Small-Business-FAQ-Revised-December-2021.pdf.

Ziegler, Tania, Rotem Shneor, Karsten Wenzlaff, Britney Wanxin Wang, Jaesik Kim, Ana Odorovic, Felipe Ferri de Camargo Paes, Krishnamurthy Suresh, Bryan Zheng Zhang, Daniel Johanson, Cecilia Lopez, Leyla Mammadova, Nicola Adams, and Dan Luo (2021). *The Global Alternative Finance Market Benchmarking Report.* Cambridge, United Kingdom: Cambridge Centre for Alternative Finance.

Corrections

The Federal Reserve revised this report on November 4, 2022. The revisions are listed below.

On page 8, in figure 2:

The date range in the figure title was corrected to 1980–2021.

On page 10, in figures 7 and 8:

The legend labels have been corrected so that the blue line curves now show the 30-day A2/P2 nonfinancial series and the black line curves show the 30-day AA nonfinancial series.

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1022