From Crisis to Opportunity

Financing for Underserved Small Businesses Since COVID-19

FinRegLab

MARKET CONTEXT REPORT
JUNE 2024

About FinRegLab

FinRegLab is a nonprofit, nonpartisan innovation center that tests new technologies and data to inform public policy and drive the financial sector toward a responsible and inclusive financial marketplace. With our research insights, we facilitate discourse across the financial ecosystem to inform public policy and market practices.

Acknowledgments

Support for this publication and other aspects of FinRegLab's research on innovations for underwriting minority business enterprises and other underserved small businesses was provided by the U.S. Department of Commerce, Minority Business Development Agency, Visa, and Plaid. Detailed information about our funders can be found on the inside back cover.

This report is part of a broader research project to evaluate ways to improve credit access through the use of non-traditional data sources and mission-based lenders such as minority depository institutions, community development financial institutions, and other mission- and community-based lenders. We are working with Sabrina Howell of New York University and Emmanuel Yimfor of Columbia University on related empirical analyses.

Many of the insights in this report were derived from interviews with stakeholders in the financial services, technology, and civil society sectors. FinRegLab would like to thank stakeholders who participated in interviews and discussions, including members of our project Advisory Board.

We would also like to thank individuals who provided valuable feedback on this report. They include:

Todd Baker, Columbia University
Patrick Davis, Community Reinvestment Fund USA
Gadi Meir, Wells Fargo
Ryan Metcalf, Funding Circle
Sandip Nayak, Quantum Financial Technologies (Parent Company of Fundation & Camino)
Natasha Sim O'Keefe, National Community Reinvestment Coalition
Brett Simmons, Scale Link
Philip Taliaferro, Lendio
Eric Weaver, Consultant

Lastly, we would like to acknowledge the FinRegLab team for their work in writing this report:

Paula Ochiel, Karla Renschler, and Kelly Thompson Cochran

When viewed with an Adobe Acrobat reader, elements listed in the Table of Contents or in blue text are links to the referenced section or feature. Functionality may be limited in non-Adobe readers. Adobe's reader can be downloaded for free at get.adobe.com/reader.

CONTENTS

1. EXECUTIVE SUMMARY

Just four years after the COVID-19 pandemic prompted fears of the worst round of small business closures and bankruptcies since the Great Depression, small businesses have experienced an extraordinary resurgence in the United States. Despite uneven pandemic relief programs, continuing economic volatility, and substantial credit constraints, business formation has reached exceptionally high levels, producing the largest volume of startups by entrepreneurs of color and women ever reported.[1] While loan delinquencies and business closures have increased over time, surveys underscore small business owners' resilience in the face of persistent uncertainty.[2]

As policymakers debate potential timelines for beginning to reduce interest rates, small business lenders face important choices about how to serve this vital component of the US economy going forward. Credit can play a critical role in helping entrepreneurs manage day-to-day cash flows and grow their businesses over time, but lending to smaller, younger businesses is particularly challenging due to higher failure rates, data limitations, and cost factors. After the 2008 financial crisis, many banks stopped issuing small business loans to companies that did not meet certain size and age thresholds, making it more difficult for startups and sole proprietors to access capital. Businesses owned by minority entrepreneurs, recent immigrants, and women are particularly affected by these credit constraints.

The decisions that lenders and other stakeholders make about whether and how to increase the scale of credit access for younger, smaller businesses could thus help to determine the extent to which the nation's recent small business resurgence produces long-term financial benefits for entrepreneurs, their communities, and the broader US economy. To inform these issues, FinRegLab has received a grant from the Minority Business Development Agency (MBDA) and support from Visa and Plaid to evaluate the potential for data and technology innovations to increase credit access among minority business enterprises (MBEs) and smaller, younger businesses more generally. The project will build on FinRegLab's past empirical evaluations of the potential for cash-flow data to improve the predictiveness and inclusion of small business underwriting models,[3] as well as analyzing challenges to data and technology adoption by mission-based lenders, such as community development financial institutions (CDFIs) and minority depository institutions (MDIs).

This report lays the project's foundation by surveying the evolving market landscape of small business lending since the pandemic to identify trends that are helping to move the lending ecosystem toward a potential inflection point. Key findings include:

1. **Pandemic relief efforts and racial justice initiatives in 2020-2021 injected unprecedented volumes of capital into the small business lending ecosystem, resulting in substantial growth and accelerating technology adoption particularly among mission-based lenders.** This marked a watershed moment for these lenders, enhancing their visibility and capabilities, and positioning them to better meet the capital needs of small businesses going forward.

2. **Both supply and demand for small business loans have been negatively affected by economic volatility since 2022.** Higher interest rates have discouraged borrower applications, while tighter loan criteria and market consolidation have constrained the availability of credit.
3. **Despite these pressures, small businesses have demonstrated substantial resilience over the past four years.** Formation levels rebounded rapidly in the first two years after the shutdown and remained high over subsequent years, including record levels of formation among entrepreneurs of color. Delinquencies and business closures have increased as economic conditions worsened after 2022, though they remain below levels seen in the 2008 financial crisis.
4. **Recent data and technology developments and federal policy initiatives could help to facilitate further expansion of small business lending programs, particularly by mission-based lenders and banks, though the timing and scale of their impact is difficult to predict.** Understanding more about the makeup and needs of the businesses formed since the pandemic—particularly those formed by entrepreneurs of color and other historically underserved populations—is also important to inform and incentivize future initiatives to expand credit access.

While these trends are largely encouraging, making substantial long-term improvements in credit access for historically underserved entrepreneurs and smaller, younger businesses is likely to require sustained engagement and partnerships from the full range of ecosystem actors. As stakeholders wait for economic conditions to stabilize, this could be a productive time for banks, fintechs, mission-based lenders, philanthropic donors and investors, advocates, and policymakers to engage with each other to map options for sustaining and expanding upon the progress of the past four years.

This research project will help to facilitate such discussions by examining how data and technology can potentially expand credit access for MBEs and smaller, younger businesses more generally, particularly through mission-based lenders' efforts to scale their programs. Topics include:

- Working with researchers from New York University and Columbia University to analyze the impacts of specific cash-flow attributes on the predictiveness and inclusion of different lenders' underwriting models.
- Research and initiatives to determine how to better serve the businesses formed since the pandemic.
- The evolving role of mission-based lenders in deploying capital to underserved small businesses vis-à-vis traditional banks and fintechs, including through diversifying their product offerings.
- Efforts by CDFIs and MDIs to scale lending to minority business enterprises and other historically underserved entrepreneurs through the use of technology, automated data flows, non-traditional data sources, and partnerships with other ecosystem participants.
- The importance of evolving mission-based lenders' customer acquisition, capital access, and technical assistance programs to support larger scale operations.
- Opportunities for philanthropic donors, policymakers, technology vendors, intermediary organizations, and other stakeholders to support the efforts of mission-based lenders to scale small business lending.

In addition to the empirical and qualitative research, the project will explore the potential evolution of related policy, regulation, and market practices based on stakeholder engagement and policy and legal analyses. The goal is to take a broad-based look at options to improve credit access among smaller, younger businesses as a way to address racial wealth gaps, spur job creation, and expand local and national economic activity.

* * *

Part One of this report provides a primer on the crucial role that small businesses play in the US economy, outlines the factors that make it particularly challenging for lenders to underwrite younger, smaller businesses and for minority business enterprises and other historically underserved entrepreneurs to access credit, and describes how the small business lending marketplace diversified in the decade prior to the pandemic.

Part Two considers how the events of the past four years have laid the groundwork for potential long-term improvements in the lending ecosystem. Specifically, Section 3 and Section 4 follow recent market developments and policy initiatives, focusing on 2020-2021 and 2022-2024, respectively. Section 5 looks forward by examining how recent shifts in technology, market dynamics, and public policy can potentially position both mission-based lenders and traditional banks to provide greater capital access to historically underserved entrepreneurs and younger, smaller businesses more generally.

Appendix A provides a glossary of key terms used throughout the report. Appendix B summarizes the structure, terms, and accessibility of different federal small business loan programs offered throughout the pandemic. Appendix C provides a deeper analysis of recent federal and regulatory policy developments that may impact small business lending.

PART ONE

THE IMPORTANCE OF SMALL AND MINORITY BUSINESS ENTERPRISES

Small businesses are a critical part of the US economy. They drive nearly half of gross domestic product, support community development, and contribute significantly to the labor market.[4] As of 2023, there are over 33 million firms in the US that meet the Small Business Administration's definition for small business: independent businesses with fewer than five hundred employees.[5] These businesses collectively employ 62 million Americans—half of the American workforce—and have contributed two-thirds of all net new jobs created since 1995.[6] They pay 40 percent of the private sector payroll and create significant benefits for local economies through employment, supply chains, and innovation.[7] They also enhance quality of life in the neighborhoods where they operate.

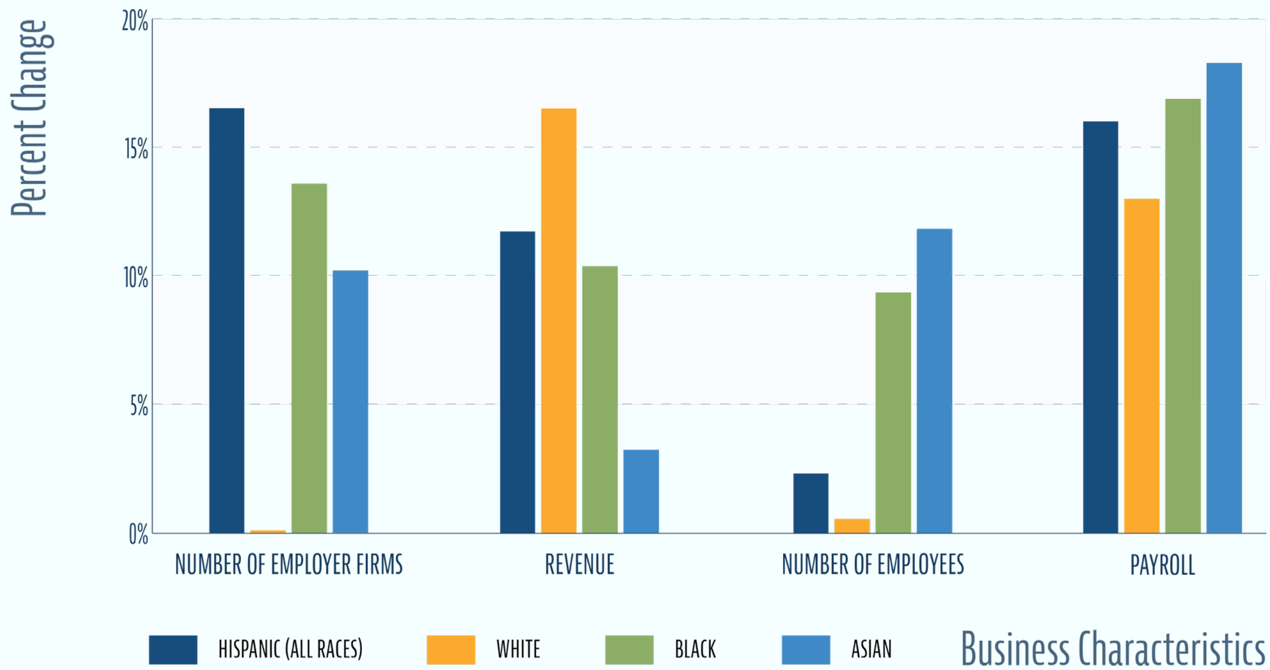
The landscape of small business ownership is also broadening to include more historically excluded populations. As the country moves towards a minority-majority population in the next 20 years, the US is experiencing long-term shifts in business owner demographics. In the decade before the pandemic, the number of small businesses owned by people of color nearly doubled, increasing from 6 million to more than 11 million. This represents a growth rate ten times that of all small businesses during the same period.[8] As shown in the chart below, between 2017 and 2020, the number of Black-, Asian-American-, and Latino- or Hispanic-owned businesses each grew by over 10 percent, while the number of White-owned businesses stayed flat.[9] Over the last ten years, minority business enterprises have accounted for more than 50 percent of new businesses.[10]

The trend in small business ownership demographics is an important development, as entrepreneurship can be a powerful vehicle to build wealth and break cycles of generational poverty.[11] The racial wealth gap is one of the starkest examples of socioeconomic disparities in the US: For every dollar held by median White families, median Hispanic families have 19 cents and median Black families have 11 cents.[12] These racial wealth gaps have been estimated to cost the US economy up to $1.5 trillion per year in dampened consumption and investment.[13]

Research suggests that increasing both minority business formation and success rates are critical to closing racial wealth gaps and reducing their effect on the broader US economy.[14] Black business owners have twelve times more wealth than Black wage earners, and the net worth of Latino business owners is ten times that of the general Latino population.[15] Research also shows that the wealth mobility of Black entrepreneurs whose businesses succeed is equal to that of White entrepreneurs, in contrast to the economic mobility gap that persists between Black and White wage workers.[16] However, particularly within the first four years of operation, closure rates have historically been substantially higher among minority-owned businesses due in significant part to challenges in accessing capital.[17]

Overall, about 50 percent of small businesses close within the first five years. Thus, over the next few years, factors that impact the ability of smaller, younger businesses and MBEs in particular to access capital will determine the extent to which the record number of small businesses formed since the pandemic will translate into tangible long-term financial benefits for entrepreneurs, communities, and the broader US economy.

FIGURE 1 PERCENT CHANGE IN BUSINESS CHARACTERISTICS BY RACE AND ETHNICITY (2017-2020)



Data Source: US Census Bureau, Annual Business Survey

Note: Payroll and revenue numbers may be adjusted for inflation.

2. BACKGROUND

The following section provides an overview of the factors contributing to the credit gap for small businesses. Section 2.1 outlines the particular challenges of underwriting small businesses and ways that traditional bank lenders began reducing their offerings for younger, smaller businesses in the aftermath of the 2008 financial crisis. Section 2.2 describes the particular barriers that minority business owners face due to income, wealth, and credit score disparities as well as factors such as discouragement and discrimination. The final section describes the increasing role that non-bank and mission-based lenders took on in providing credit to small businesses in the decade before the pandemic.

2.1 Difficulty of providing credit access to small businesses

Access to capital is critical for the growth and survival of any business.[18] Financial buffers allow small businesses to navigate unexpected liquidity shortages due to payment delays, seasonality, equipment breakdowns, natural disasters, or economic downturns. Capital also facilitates business development from the startup to the growth and maturity phases by funding the expansion of business operations, such as leasing new locations, buying equipment, hiring additional employees, or enabling entrepreneurs to compete for new opportunities, such as bigger contracts.[19] Capital can also drive innovation by enabling businesses to invest in technology, research, and the development of new products or processes.

Many entrepreneurs rely on their personal savings and credit sources during the startup phase of the business and beyond, often supplementing that with financing from friends and family.[20] However, these enterprises ultimately require external capital, such as small business loans or equity from outside investors, to survive and grow.[21] But small businesses are highly volatile by nature, which makes them risky customers for lenders. In particular, younger and smaller businesses are the most challenging segment to underwrite as a result of higher failure rates and default risk, difficulty assessing business and business-owner creditworthiness, and unfavorable lending economics.

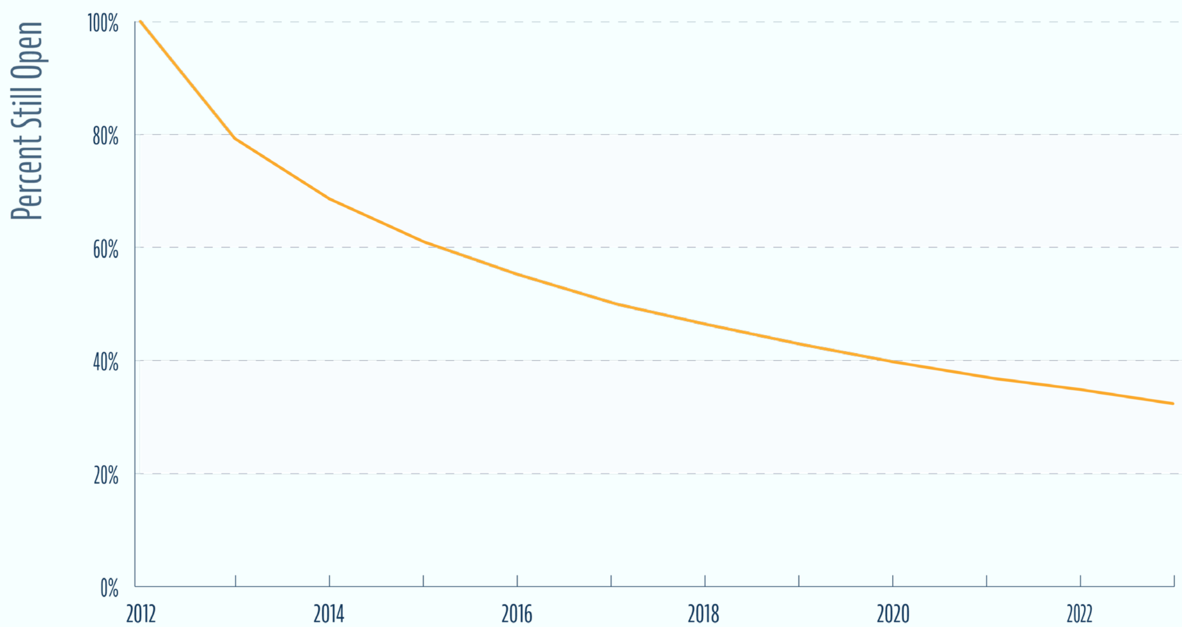
2.1.1 Risk of failure

Lending to small businesses is inherently more risky than lending to larger firms. A Federal Reserve analysis found that banks that primarily focus on business loans of less than $1 million have much higher delinquency rates than banks that focus on larger business loans, especially through recession periods such as the 2008-2010 financial crisis.[22]

Even in stable economic conditions, small business failure rates are much higher than larger companies. Overall, about twenty percent of new small businesses fail in their first year, and half of small businesses fail within the first five years.[23]

A lack of cash reserves is a major contributor to this pattern, making it difficult for small businesses to meet liquidity needs and smooth over cash-flow shortfalls. Over half of small businesses in the US only have reserves to cover one month of operating expenses, and one-fourth of businesses only have reserves to cover two weeks.[24] Cash reserves are even lower for young businesses, as they are still building out and stabilizing their revenue streams. A US Bank study showed that over 80 percent of businesses that failed did so because of inadequate cash reserves.[25] Younger businesses—in particular those less than two years old—face elevated failure rates compared to their larger, more established peers. Their business models are often still unstable and untested at this stage, and entrepreneurs may not be as experienced in forecasting income or cash flows, managing balance sheets, or creating financial statements, and therefore experience greater uncertainty and volatility.

FIGURE 2 SURVIVAL RATES SINCE BIRTH FOR COMPANIES FOUNDED IN 2012



Data Source: Bureau of Labor Statistics

These factors all increase the risk of default for lenders, especially in lending to startups. In response, many banks have implemented limits on the maturity or size of the businesses they lend to—for instance by requiring at least two or three years of tax returns or financial history from loan applicants. According to research by the Federal Deposit Insurance Corporation (FDIC), nearly 90 percent of large banks use business age as an underwriting criterion for small businesses loans.[26] This makes it difficult to find traditional lenders offering loans for startups. Other lenders use size thresholds such as limiting applications to businesses with a minimum amount of annual revenue. The 2022 Federal Reserve Small Business Credit Survey found that small businesses with annual revenues of less than $100,000 have the lowest rates of being fully approved for business loans, lines of credit, and cash advances, with just 32 percent reporting that they received all of their requested financing, compared to over 70 percent for businesses with annual revenues over $1M.

2.1.2 Data limitations

The lack of consistent, widely available data about small businesses also makes it difficult for lenders to assess their ability and willingness to pay back loans. The commercial credit scoring system is less standardized, regulated, and comprehensive than the consumer credit scoring system, particularly for smaller businesses. Commercial credit score coverage is much less widespread than for consumers, with lenders reporting between a 20-40 percent hit rate for small business applicants from commercial credit reporting providers such as Dun & Bradstreet and Experian.[27] This number is even lower for smaller and younger businesses, since commercial credit databases rely on historical tradeline information such as past business payments to vendors and creditors.[28] As a result, most lenders still rely primarily on the business owner's personal credit score in assessing risk for small business loans. According to surveys by the Federal Reserve Banks, 88 percent of small business owners report that they rely on their personal credit score to apply for business financing.[29]

Small businesses are also a notoriously heterogeneous segment. This makes them difficult to group across factors such as geography, size, age, industry, experience, growth, ownership structure, financing, and business model, as well as the intended use of borrowed funds. Small business owners vary greatly in their experience levels, motivations, level of innovation, and growth plans for the business.[30] Lending risk diverges significantly between industries with skilled professionals such as doctors or veterinarians, who have more reliable customers and revenue-generation models, and industries like food service and retail (e.g., bars, restaurants, bodegas) that face often large, unpredictable revenue fluctuations and higher failure rates.

A small business owner may also use a loan for a variety of purposes with varying degrees of risk—such as startup costs, inventory purchases, working capital to cover general operating expenses during a cash-flow shortage, real estate costs or business expansion, investments in new equipment or machinery, or debt consolidation. To counter this degree of heterogeneity, some lenders have developed expertise in and preferences for specific industries that have lower risk or more transparent financial or accounting practices, leaving other small business borrowers with limited options.[31] Additionally, some lenders have created products that are tailored to specific borrowing needs, such as heavy equipment or truck financing. While these strategies can lower risk, they are also expensive for lenders to develop and are narrower in scope than generalized products.

To augment personal credit scores and build a more complete picture of the business, traditional bank lenders have historically required small business applicants to submit detailed documentation, such as cash-flow statements, balance sheets, profit and loss statements, and tax returns. However, newer and less experienced business owners may not be adept at putting together these kinds of financial statements, which means they must spend substantial time and effort to complete the application process. They are also more likely to commingle their personal and business finances in transaction accounts and rely on consumer credit to start their business, creating a more complex financial picture that can make it difficult for lenders to accurately assess their business finances. With a shorter operating history, they are not likely to have an established history of payments against commercial tradelines, especially when applying for their first business loan. All of these dynamics create challenges for lenders looking to assess an applicant's expected loan performance compared to an existing small business loan portfolio.

BOX 1 CONSUMER VS. COMMERCIAL CREDIT REPORTING DATA

Credit bureaus emerged in the US more than a century ago, and in recent decades have supplied increasingly standardized data for use in automated credit scoring and underwriting systems for consumers.[32] Credit scoring models developed by companies such as Fair Isaac Corporation (FICO) use historical data about lending behavior to assign individuals into bands according to a predicted likelihood of default. These scoring models help lenders predict the likelihood of borrower default by assessing historical payment behavior, debt levels, and other factors related to past loans. This offers lenders a way to compare and assess risk across credit applicants, with widespread coverage across the three nationwide consumer reporting agencies: Equifax, Experian, and TransUnion.[33] Research suggests these models do have some gaps in accuracy and coverage, particularly for underserved consumer segments—there are an estimated 28 million consumers who lack traditional credit files (often called credit invisibles) and 21 million consumers who lack sufficient history to generate credit scores (often called unscored or unscorable) using the most widely adopted models in the US. However, given the value of standardization in financial services, most consumer lenders have incorporated credit scores and reports into their internal underwriting models and criteria.

Commercial credit scoring, by contrast, developed later in small business lending. In the early 2000s, commercial credit scores primarily relied on business owners' personal credit scores, augmented with limited information about the business. Although business credit bureaus such as Dun & Bradstreet, Equifax, and Experian have begun to invest in standardizing business records as well as reports on business debts and repayments ("tradeline" data), many lenders today still rely on the business owner's personal credit history. This presents a barrier to entrepreneurs from underserved backgrounds, preventing them from accessing the credit needed to establish and grow their businesses, as they often do not have prime personal credit histories.

2.1.3 Unfavorable economics

The heightened risk of closure, difficulty of assessing creditworthiness, and heterogeneity of small businesses also tend to drive up lender costs, particularly for smaller loans to smaller businesses. Considering baseline economics, the fixed costs of originating and underwriting a loan regardless of loan size mean that lenders see much lower margins when offering a $15,000 loan compared to a $1 million loan.[34] Small business loans are also generally more complex to underwrite than consumer loans, and banks have traditionally relied on manual and relationship underwriting. This requires loan officers to spend substantial time working with applicants to collect and review their financial documents and often includes the banker's subjective evaluation of the applicant's likelihood to repay a loan. This kind of relationship-based underwriting frequently takes into account knowledge of local market conditions and community contacts that provide valuable input into the chances of a business succeeding, but it is substantially more labor intensive than relying on automated scoring and underwriting models.[35] Intermingled finances and heterogeneity among small business borrowers can also increase loan-monitoring costs for lenders in this segment, creating additional expenses even after origination.[36] In addition, depository institutions often depend on capital from bank deposits to support their business lending activities, but the smallest businesses do not bring in stable, large deposits for banks, as they struggle to balance cash inflows and outflows.

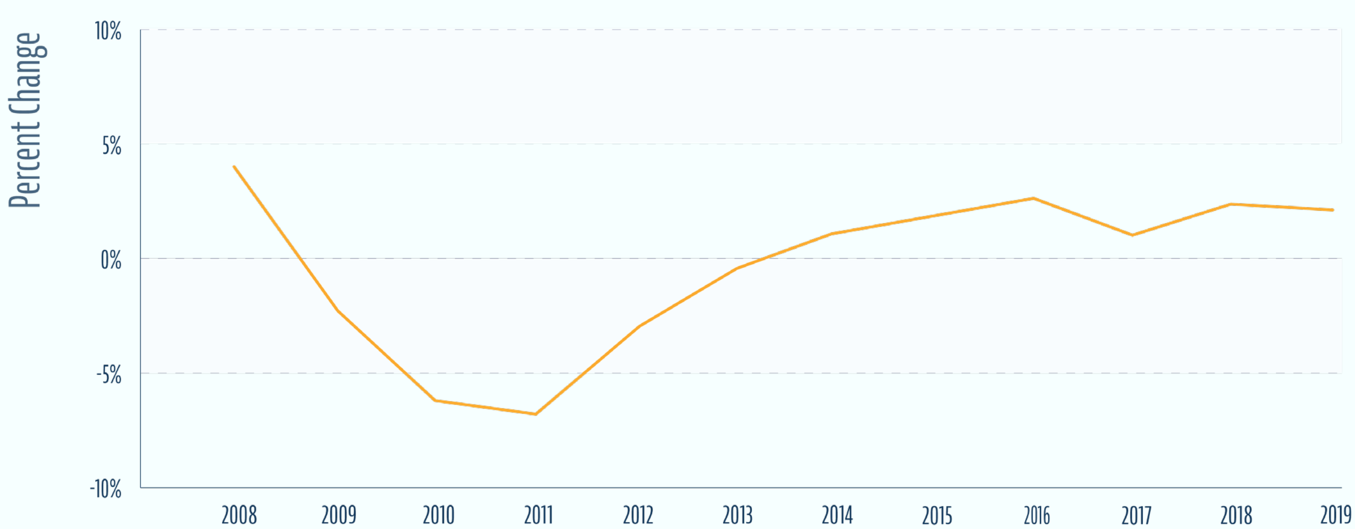
Conversations with lenders across traditional banks, fintechs, CDFIs, and MDIs all emphasize the fundamental challenge of making the economics work for smaller loan sizes, in contrast to larger commercial and real estate lending where the unit economics are more favorable. One stakeholder analogized small business lending to the decision between using a truck to haul a couple of large boulders, or individually picking up thousands of small pebbles by hand.

In the aftermath of the 2008 crisis, banks increasingly implemented thresholds based on loan size to improve their lending economics. For instance, many large and community banks set minimum loan requirements for small businesses and decided they would not approve loans below $50,000 or $100,000.[37] To reduce lending costs, larger banks have also implemented automated underwriting systems leveraging quantitative models that use standard data inputs like credit scores. These systems are built to ingest "hard" data rather than the "soft" data gathered from small business owners during meetings with loan officers.[38] Soft or relationship-based data is harder to quantify, verify, and transmit into these models, further reducing the chances of a bank approving a loan applicant that may have otherwise been approved with a judgmental underwriting approach.[39]

Many banks also require security or collateral for small business loans to serve as a potential second source of repayment, which lowers their risk. Secured loans require borrowers to offer up collateral such as cash, real estate, vehicles, inventory, or equipment that the lender can seize in the event of default. These loans require the business owner to have valuable assets, either owned by their business or personally. By contrast, unsecured loans allow small businesses to take out financing without backing it with collateral, which tends to be more expensive for lenders because of the higher risk of losses. To mitigate this, it is common for lenders offering unsecured loans to require a personal guarantee, where the business owners guarantee the loan with their personal assets.[40] Many lenders also require a blanket lien, or UCC-1 lien, which gives them the right to claim the borrower's business assets in the case of default to repay the value of the debt.[41] However, lenders usually do not factor liens into their underwriting processes because the likelihood of recovery is limited and highly variable depending on the circumstances, and microbusinesses and startups frequently lack sufficient assets to secure the loan amount. UCC-1 liens are therefore a last resort and do not ensure that the lender recovers default losses.

As a result of these factors, many big banks have significantly decreased lending to smaller, younger businesses. This trend began in the aftermath of the 2008 recession, when banks pulled back aggressively from the market, given poor loan performance, market volatility, and regulatory and investor pressure to stabilize their portfolios.[42] For instance, the Big Four banks reduced their annual lending volume to small businesses by 44 percent between 2008 and 2020.[43] Data on loan originations across US banks shows that volumes across the entire small business lending sector were slow to recover throughout the decade after the recession, never fully returning to pre-2008 volumes.[44] As a result, small business loans as a share of total loans declined over the decade before the pandemic.[45]

FIGURE 3 PERCENT CHANGE IN SMALL BUSINESS LOAN BALANCES SINCE 2008



Data Source: Call Reports FDIC, and Gross Domestic Product, BEA.

This created an inverse linear relationship between the size of a bank and their likelihood to lend to small business—the bigger the bank, the less likely they are to offer small business loans.[46] This is especially true for unsecured or lightly secured "microloans," which are often defined as loans with balances under $50,000, though there is no single universal threshold. Big banks have the smallest ratio of microloan holdings to assets, compared to smaller banks.[47] While other lenders have begun to step into the gaps created by bank retrenchment, as discussed in more detail in Section 2.3, these factors and trends create a misalignment between credit supply and demand, especially for younger, smaller businesses. These strains are particularly severe for minority business enterprises and other historically underserved entrepreneurs, affecting patterns of business formation, longevity, and growth, as discussed in the following section.

2.2 Heightened access challenges for MBEs and other historically underserved entrepreneurs

Businesses owned by people of color, recent immigrants, women, and other socially and economically disadvantaged individuals often face substantial additional obstacles in accessing credit beyond the general challenges facing smaller, younger businesses described above.[48] These challenges are due to a combination of factors that can reinforce each other and play out over a business's life cycle, making it more challenging not only to launch but also to meet bank lending thresholds over time. While this paper focuses specifically on the challenges facing minority business enterprises, increasing access to credit for younger, smaller businesses more broadly could also provide benefits to other types of historically underserved entrepreneurs.[49]

BOX 2 WHAT CATEGORIES OF SMALL BUSINESSES ARE PARTICULARLY UNDERSERVED?

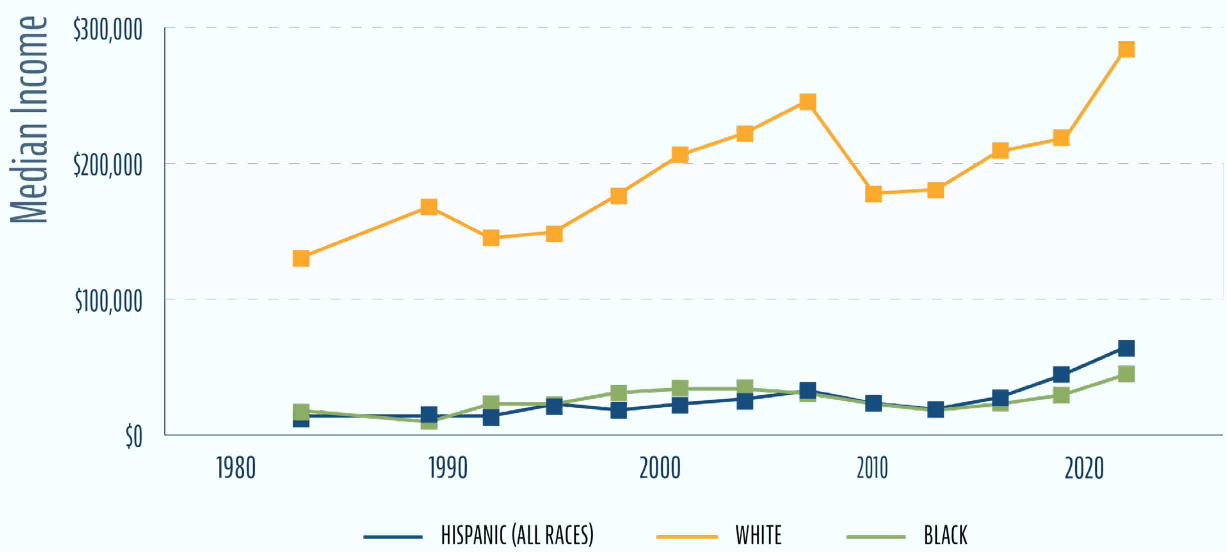
In addition to entrepreneurs of color, research suggests that firms owned by women,[50] immigrants,[51] justice-impacted individuals,[52] residents of historically redlined neighborhoods,[53] and to a certain extent veterans[54] and entrepreneurs in rural communities[55] can face heightened challenges in accessing credit to start or grow their businesses. Relative to their peers, business owners who belong to one or more of these groups often report higher rates of loan denials, approvals for less credit than requested, and discouragement in deciding whether to apply for credit in the first place.

A number of factors may contribute to such outcomes, including disparities in revenue and the length of business operations, lack of personal assets and collateral, credit history and scoring gaps, and other types of formal and informal barriers.[56] While some obstacles are similar across different underserved segments, others may not be. For example, somewhat similar to MBEs, women-owned businesses tend to be younger, have less equity capital, and are more likely to report discrimination and discouragement than male-owned businesses,[57] but analyses of the extent of credit score gaps between male and female entrepreneurs are mixed.[58] Immigrants often face difficulties transferring credit history from their countries of origin, as well as additional barriers to accessing financial services compared to non-immigrant groups, such as language barriers and their immigration status. Similarly, justice-impacted individuals often start small businesses because of severe challenges in finding employment, but then find that thin or damaged credit files or lender policies concerning criminal histories may limit their ability to access business loans.[59] Rural business owners tend to be more financially stable than non-rural businesses and are eligible for some specialized federal programs, but have been disproportionately impacted by bank branch closures and consolidations in their local communities.[60]

Similar to MBEs, closing existing disparities for these businesses would contribute substantially to the economy, particularly given that many of these subgroups are founding small businesses at much faster rates than the US average. For example, the rate of business formation, job creation, and revenue growth among women-owned firms was roughly double the rate of men-owned firms between 2019 to 2023, and firms owned by Black women produced higher rates of job creation and revenue growth than either women- or Black-owned businesses more generally.[61] One study estimates that eliminating the gaps in average revenues between firms owned by women of color and White women would increase annual revenues by $667 billion and between women and men-owned businesses by $8.7 billion.[62] Other analyses find that immigrant-owned businesses make disproportionately large contributions to innovation and growth in the broader US economy.[63]

Gaps in income and asset accumulation are important factors, as they impact the ability of entrepreneurs to invest in new businesses, obtain support from friends and family, and qualify for loans. Existing asset disparities between White and racial minority households can pose particularly significant challenges to MBEs in securing capital.[64] Over the two decades leading up to the pandemic, the median White household held between $100,000 and $175,000 more in assets than median Black and Latino/Hispanic households, with disparities often exceeding a factor of ten.[65] Black and Hispanic households' median incomes remained between 55 percent and 75 percent of White household income over the same time period.[66] After the pandemic, median family wealth jumped more rapidly for White households than for Black and Hispanic households.[67]

FIGURE 4 MEDIAN FAMILY WEALTH BY RACE AND ETHNICITY, 1983-2022



Data Source: Urban Institute calculations from the Survey of Financial Characteristics of Consumers 1962, the Survey of Changes in Family Finances 1963, and the Survey of Consumer Finances 1983–2022.

These disparities make it harder for minority businesses to access capital, as they often lack the assets required to collateralize loans and may struggle to accumulate personal savings or to leverage their networks for funding.[68] When it comes to obtaining capital to start their businesses, minority business owners often lag behind their peers. For example, studies have shown that, on average, entrepreneurs of color start with much less capital than their White counterparts, regardless of how they enter business ownership, whether through founding, inheriting, or purchasing the business.[69] One study cites that, on average, Black-owned firms obtain just $35,000 in startup capital in their first year of operation, compared to $107,000 for the average White-owned firm.[70] Business owners of color are more likely to rely on personal savings, families, and friends to finance their businesses compared to their peers.[71] However, due to systemic barriers and wealth gaps, these sources of equity investment are often limited, making it more difficult to sustain and grow their businesses in the long term.

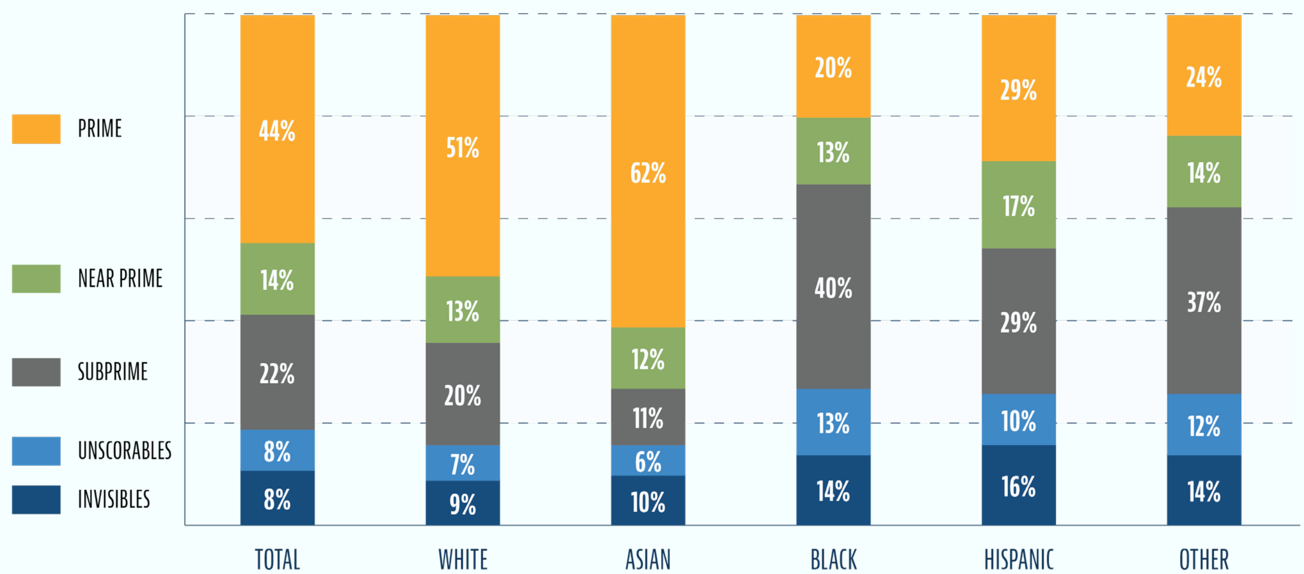
Similar disparities appear in credit scoring.[72] Racial minorities and recent immigrants are less likely to have sufficient credit history to generate personal credit scores. Research shows that over 25 percent of Black and Hispanic adults lack scores under the most widely used models, compared to about 16 percent of White adults.[73] Among adults with credit scores, median FICO scores are 60 to

100 points lower among Black and Hispanic adults as compared to White adults.[74] A recent study by the Urban Institute also showed that the median credit scores of Black and Hispanic business owners were about 50 to 100 points lower than those of White business owners during the pandemic period.[75] Furthermore, Black and Hispanic adults are up to two times less likely than White adults to have prime or near prime credit scores.[76]

Racial minority and female business owners also face higher rates of denial when applying for funding, even when financial factors are accounted for.[77] Minority firms are denied loans at a rate of nearly three times that of non-minority firms.[78] Even when approved, they are less likely to get the full amount they requested.[79] Surveys also show higher rates of discouragement among MBEs and women—having often faced systemic barriers, discrimination, and denial in the past, they are less likely to apply for funding in the first place out of fear of rejection.[80]

FIGURE 5 ACCESS TO CREDIT BY RACE AND ETHNICITY

Differences in access to credit by race and ethnicity (% of total in each segment)

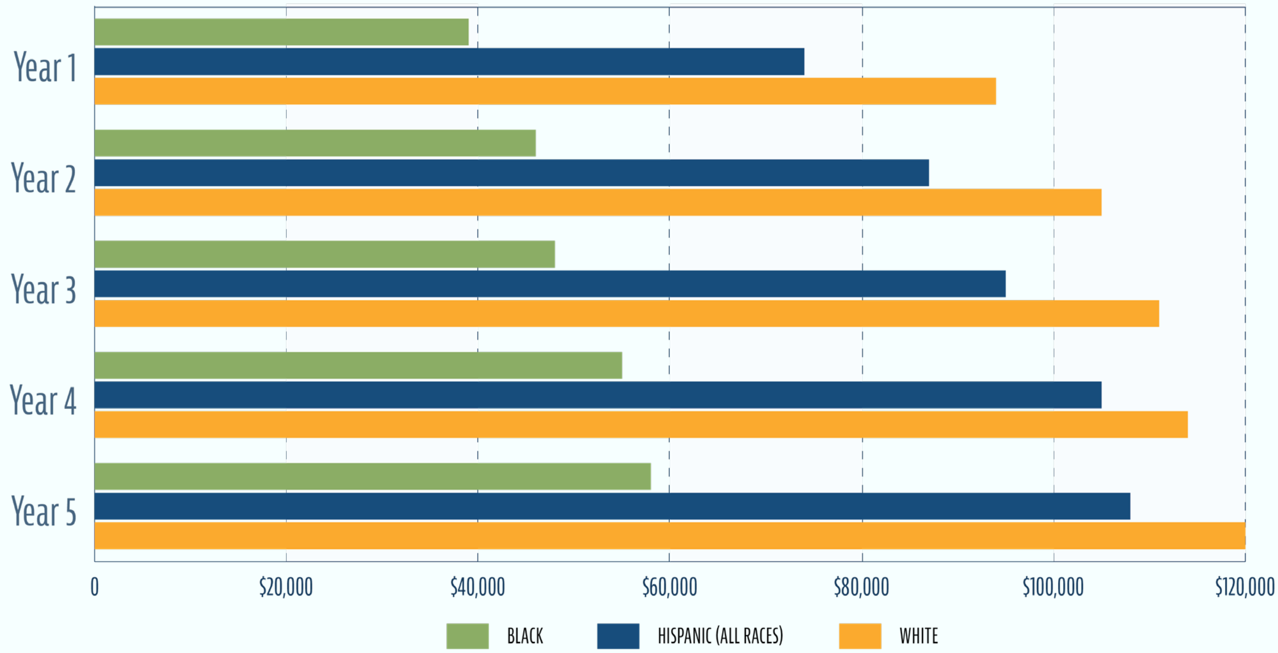


Data Source: Oliver Wyman Analysis

Notes: Compared to White individuals, Black individuals are 1.8x more likely to be credit invisible or unscorable. Even when scorable, they are 1.9x less likely to have access to prime or near-prime rates.

These dynamics help to explain why minority business enterprises are disproportionately concentrated in industries with lower barriers to entry, which often have relatively high competition, lower revenues, and thinner profit margins. Traditionally, minority-owned businesses have been overrepresented in low-growth, low-revenue industries such as food service, accommodation, small-scale retail, and other service industries such as beauty parlors, dry cleaners, laundromats, and grocery stores.[81] They also tend to be smaller than non-minority owned businesses by employee count and receipts, with a gap in combined gross receipts of ten to one.[82] This, in turn, can affect the size and availability of loans since many lenders limit loan size to twice monthly revenue, which is often under $50,000 for minority firms.[83] A study by JPMorgan Chase & Co. Institute revealed that, among businesses established in 2012 and 2013, the median revenues of Black-owned firms were persistently less than half of those generated by White-owned firms, and the median revenues of Latino-owned firms were approximately three-quarters of their White counterparts, as shown in the chart below.

FIGURE 6 MEDIAN REVENUES IN FIRST FIVE YEARS FOR BUSINESSES FORMED 2013-2014, BY OWNER RACE



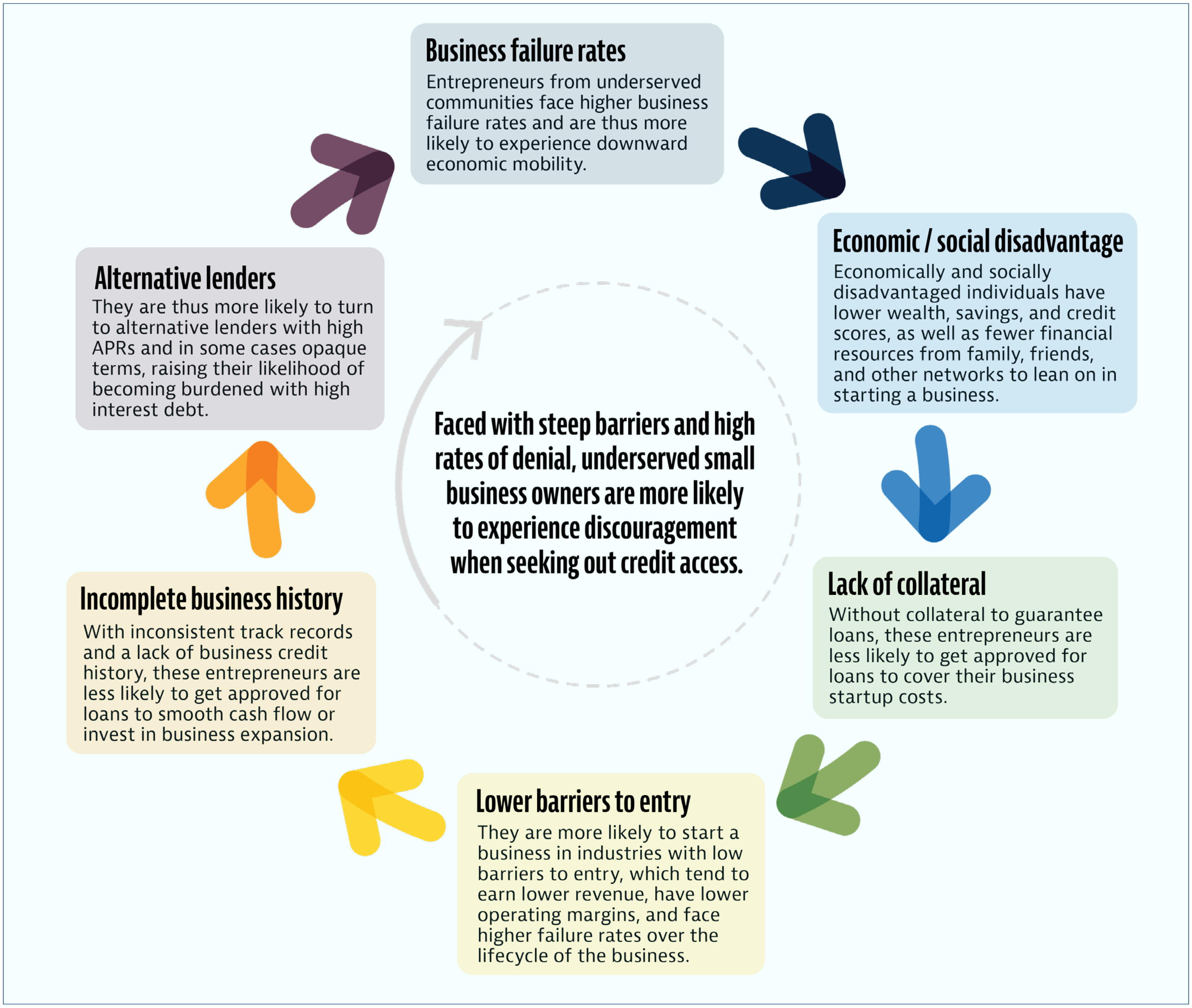
Data Source: JPMorgan Chase Institute

Note: Sample includes firms founded in 2013 and 2014.

A strong track record is important for building a successful business profile—a key determinant for accessing capital.[84] However, the disadvantages faced by minority businesses described above often continue or even compound throughout the life of the business and can make it difficult for them to meet the criteria set by traditional lenders to qualify for loans. Lack of access to credit or other capital particularly during early stages in turn can contribute to higher failure rates, particularly within the first five years of operation.[85] This means that Black entrepreneurs are more likely to experience downward economic mobility than White entrepreneurs.[86]

The gaps that MBEs face in business growth and capital access present a massive opportunity cost to households, communities, and the broader US economy. A recent report by the Minority Business Development Agency calculates that $5.3 trillion in economic potential is left untapped due to the opportunity gap between minority and non-minority-owned businesses.[87] Prosperity Now estimates that increasing the share of minority-owned businesses with $1 million or more in revenue and bringing the share of minority-owned employer businesses into parity with White-owned employer businesses would add 13 million new jobs and more than $3 trillion to the economy, respectively.[88] Several other studies emphasize the transformative impact that closing gaps in wealth and in the number of minority-owned employer businesses could have on the economy.[89] As discussed above, the potential to address racial wealth gaps through entrepreneurship is also substantial.

FIGURE 7 THE SELF-REINFORCING CYCLE OF UNDERSERVED BUSINESS OWNERS & CREDIT ACCESS



2.3 Role of non-traditional lenders in meeting small businesses' credit needs

Faced with these cumulative challenges, smaller, younger businesses and MBEs have increasingly turned to non-traditional lenders, especially as bank products became more difficult to obtain after the 2008 financial crisis. While banks generally maintained their small business credit card programs—which can carry interest rates three times the level of business loans and primarily rely on consumer credit reports for underwriting—many constrained the availability of small business loans and lines of credit by imposing new thresholds and criteria in the aftermath of the financial crisis as described above. In addition, more than 13,000 bank branches closed between 2008 and 2020, a 14 percent decline driven by digital adoption, mergers, shifting banking economics, and competition.[90] Because banks' small business lending programs still relied in large part on branches, these closures affected the ability of small businesses to access credit, particularly in low-income and minority communities.[91]

The decline in bank lending coupled with technological innovation during the decade prior to 2020 led a variety of non-bank lenders to take on heightened roles in providing capital to small businesses.[92] Non-bank lenders grew rapidly, including fintechs such as Funding Circle, merchant cash advance companies such as CAN Capital and RapidFinance, payment processors such as Square and Paypal, and e-commerce companies and platforms such as Amazon and Walmart. Some mission-driven lenders also began to prioritize lending to smaller, younger businesses, though at a much smaller scale. These alternative lenders have increasingly dominated the landscape of small business lending since the Great Recession, experiencing a tenfold increase in small business loan originations between 2010 and 2016 alone.[93] Paypal has reported that over half of the total value of its working capital and business loan originations in the US were in areas with ten or more branch closures between 2017 and 2021.[94] The Federal Reserve small business credit survey showed that over 40 percent of employer small businesses turned to alternative funding sources such as online lenders, finance companies, and non-profit lenders between 2014-2019.[95]

2.3.1 Fintechs & other non-banks

Alternative lenders differ from their bank counterparts across several dimensions—including diversity of products, use of technology and data, capital sources, and risk appetite—driving shifts in the small business lending market.

Whereas banks have offered relatively similar and standard small business loan products for decades, non-bank lenders vary widely as to their product structures and business models, from standard term loans and lines of credit to revenue-based products, crowd-sourced and peer-to-peer funding, and specialized equipment or vehicle financing. Many alternative lenders offer shorter repayment schedules, opting for daily, weekly, or bi-weekly draws directly from borrower accounts instead of monthly repayments, or taking a percentage of each credit or debit card payment a small business receives. This can be challenging for small businesses as they have less time in between payments, although allowing repayment amounts to vary with revenues can also give small business borrowers greater choice in aligning repayment structures to their unique needs and financial situations.

Many alternative lenders have used technology and, in some cases, new data sources to streamline loan processes. Online lenders have developed digital platforms for application processing and funding delivery, leveraging automated screening processes to make approval decisions more quickly than traditional bank systems. While the sophistication of their underwriting and the extent to which they rely on non-traditional data sources varies, many alternative lenders have driven innovation in underwriting methods. A number of fintechs rely on automated feeds of bank account information, payment records, and credit bureau data rather than requiring applicants to submit traditional financial statements, which can be helpful to smaller, younger businesses that have less formalized accounting systems.[96] Research suggests that MBEs and other small business borrowers are drawn to fintechs and other alternative lenders in significant part because of their more rapid underwriting and funding processes enabled by data and technology. The use of online applications, technology and automation in underwriting methods, and open banking integrations often allows them to provide same-day decisions and even disbursements.[97] While historically banks have taken over one month to process a loan application and deliver funding, fintechs can offer loan approval and funding within a day to a week.[98] This can make an enormous difference for small businesses facing cash-flow shortfalls or in need of emergency funding.

BOX 3 MERCHANT CASH ADVANCES (MCAs)

MCAs operate by providing funding to small businesses and collecting repayment either through daily withdrawals from business bank accounts as a percentage of historical revenues or by taking a percentage of each credit or debit card payment the small business receives. They are known for their high fees and extractive repayment structures and are often criticized for concealing the true costs that borrowers will pay. Several MCA providers have been prosecuted by the Federal Trade Commission (FTC) for deceptive and unfair business practices.[99] While borrowers may feel that they have little alternative particularly if they have been rejected by other lenders, the higher capital cost, stringent repayment timelines, and questionable business practices of some MCA providers can pose significant risks for underserved entrepreneurs.[100]

However, while the lenders' speed and adoption of technology and data-driven models have profoundly reshaped the financial services industry, many charge higher fees and interest on loans.[101] Without access to customer deposits like traditional banks, alternative lenders rely on more expensive and impatient sources of funding. Their pricing is also affected by their willingness to extend smaller loans and their risk appetites.[102] This has resulted in a spectrum where some lenders may offer lower rates to certain subgroups of borrowers than traditional banks,[103] while others charge annual percentage rates in the triple digits. The extent to which alternative lenders are willing to lend to applicants with substantially lower credit scores and higher risk profiles than traditional banks also varies.

Not surprisingly, given the high degree of variation among alternative lenders, stakeholders are divided as to the extent to which they are having positive impacts on small business borrowers. Online lenders often receive lower satisfaction ratings than traditional lenders, and critics argue that some claims about the sector's impact on financial inclusion are overblown. Merchant cash advances (MCAs) have been particularly controversial despite their substantial growth over the last two decades.[104] At the same time, alternative lenders' ability to deliver smaller loans more quickly and their openness to trying new product structures and data sources have also sparked substantial innovation in the market and provided new options to business owners that have struggled to obtain loans from traditional sources.[105] In a number of cases, alternative lenders have partnered with banks and mission-based lenders as a way of reaching additional customers and leveraging their lending platforms more broadly.[106]

TABLE 1 SMALL BUSINESS CAPITAL SOURCES

LENDER TYPE	SMALL BUSINESS PRODUCTS & SERVICES OFFERED	ACCESSIBILITY	COSTS	SPEED
BIG BANKS	Standard banking products such as business checking and savings accounts, term loans and lines of credit, typically upwards of $100k. Business credit cards with variable, risk-based double-digit APRs.	Often limited to larger, established businesses with at least 2-3 years of operating history, prime credit scores, and annual revenue over $100K. Typically require prime credit and sometimes business credit history. Also often require collateral in the form of real estate or business assets.	Typically charge market interest rates for loans as well as standard 1-6% originations fees. Business credit cards have higher interest rates and use risk-based pricing to account for default risk.	Historically, traditional lenders take at least one week to make an approval decision, and another 1-2 months to get funds disbursed. They are also less likely to offer online applications and loan processing, requiring business owners to visit a branch or call.
MINORITY DEPOSITORY INSTITUTIONS (MDI), COMMUNITY BANKS, AND CREDIT UNIONS	Standard banking products like business checking and savings accounts, as well as business term loans and lines of credit.	Frequently offer special products and programs tailored to minority business owners, though they may still require at least 1-2 years of operating history and a prime credit score or an established business tradeline record.	Frequently offer below-market interest rates to borrowers that they offset with philanthropy and bank CRA partnerships.	As long or longer than traditional banks, smaller banks are likely to have a loan committee to manually review applications.
CDFIS	Small business term loans, microloans, and credit building loans as small as $1000. Some CDFIs have recently begun offering lines of credit to meet the day-to-day cash-flow needs of business borrowers.	Typically offer special products and programs tailored to underserved business owners and startups. Provide technical assistance to help applicants.	Offer below-market interest rates to borrowers that they offset with philanthropy and bank CRA partnerships.	As long or longer than traditional banks, with manual loan processing and limited operations.
FINTECHS AND ONLINE LENDERS	A variety of products with varying terms and repayment options, from standard term loans and lines of credit to revenue-based products, crowd-sourced and peer-to-peer funding, and specialized equipment or vehicle financing.	Available to smaller, younger businesses with shorter operating history, smaller annual revenue. Frequently don't require owner to have prime credit history.	Often charge higher interest than traditional bank lenders, reflecting the additional risk they take on.	Known for fast turnaround, they can make an approval decision nearly instantly and sometimes get funding disbursed in the same day.
MERCHANT CASH ADVANCE (MCA) COMPANIES	Funding as an advance on future earnings and collect repayment as a share of earnings plus fees and interest.	Widely available to small business owners.	Charge high fees and interest, sometimes obscuring true costs to the borrower.	Known for fast turnaround, they are frequently a "last resort" option for business owners facing an emergency or a cash-flow shortfall with limited capital options.

2.3.2 Mission-based lenders

A number of mission-based lenders also increased the scale of their small business operations in the aftermath of the 2008 financial crisis to help fill the gaps left by traditional lenders.[107] Although many CDFIs and MDIs concentrate on larger-scale community development projects and larger small business loans, some have specialized in lending to smaller, younger businesses as a critical strategy for meeting the needs of minority business enterprises and other historically underserved entrepreneurs. The international nonprofit Accion helped to encourage the foundation of US based microlending programs starting in the 1990s by licensing the Accion brand to several non-profits around the country. It later formed a non-profit called the Accion U.S. Network to help its licensed affiliates to reach greater scale.[108] The Aspen Institute also organized a series of programs in the decade following the financial crisis to encourage the establishment and expansion of small business microlending programs.[109]

Mission-based lenders that offer microlending programs provide not only capital but also business advisory services (often called technical assistance or developmental services) and networking opportunities for entrepreneurs. They frequently employ specialized, relationship-driven underwriting techniques and unique credit products that cater to the needs of underserved groups like entrepreneurs of color. Some microlenders also began developing lending platforms, fintech partnerships, and more sophisticated data analytics over the course of the decade to better meet the scale of demand in this segment. However, although mission-based lenders can often access relatively low-cost capital from philanthropic organizations, bank community reinvestment partnerships, and other sources, they too struggle with the economics of making very small loans to smaller, younger businesses given relatively high fixed costs for underwriting. Indeed, the combination of these cost dynamics and mission- and funder-driven pressures to keep rates low can affect the extent to which mission-based lenders can serve borrowers with riskier profiles.[110]

BOX 4 TECHNICAL ASSISTANCE FROM MISSION-BASED LENDERS

Mission-based lenders like CDFIs typically go beyond just providing direct lending or capital to their borrowers. They often offer additional valuable support services that include business coaching, financial education, credit counseling, loan application assistance, networking opportunities, and other services. Technical Assistance (TA) generally refers to these kinds of supplemental support services, often non-financial in nature, that mission-based lenders provide. The services are intended to equip borrowers with knowledge and resources, help build capacity and improve operations, and are typically aimed at helping address some of the barriers that underserved businesses face in either starting, running or growing their businesses or in accessing capital.[111]

The types of TA offered can vary widely. TA may focus on business development and operations, including assistance with business planning, budgeting, cash flow management, financial literacy and financial trauma training, marketing, sales, e-commerce, and leadership training. TA may also focus directly on lending, including assisting borrowers in preparing financial statements and completing other loan application requirements, as well as counseling with regard to prior debts in some cases. TA provided after origination may also play a role in facilitating loan repayment, and evidence suggests that CDFIs leverage it to improve client outcomes and mitigate risk.[112]

There is also variation in how the TA is offered. Some lenders provide formal programs, often with designated staff and curriculums.[113] In other cases, the TA is more informal and ad-hoc, tailored to the needs of the borrowers as they arise. Given the resource constraints that CDFIs face, it can be challenging for a CDFI to have a full-time TA staff member. In such cases, staff members typically toggle between different roles. For example, lending staff often provide informal TA as well as processing applications. Prior to the COVID-19 pandemic, many of these TA programs were held mostly in person, requiring clients to carve out time and other resources to attend. However, the digital transformation that took place during and after the pandemic has led to a shift towards online or hybrid TA programs, to make them more accessible and convenient for business owners.

TA is viewed by many mission-based lenders as a critical component of their approach, often described as the “secret sauce” that sets them apart from fintechs and traditional banks. However, it can be time consuming, expensive, and difficult to replicate or scale.

As the small business lending market slowly began to grow again after the 2008 crisis, market share increasingly shifted toward these non-bank lenders. As mentioned earlier, overall loan volumes among banks did not return to pre-crisis levels until the middle of the decade and remained largely flat thereafter.[114] In contrast, non-bank volumes recovered earlier and kept rising over time. Investors also concentrated on alternative lenders, with several companies reaching unicorn status, including OnDeck and CAN Capital.[115] Across the fintech sector as a whole, venture capital funding grew from $19.4 billion in 2015 to $92.3 billion in 2021.[116]

FIGURE 8 BANK VS. NON-BANK LOAN ORIGINATION

Data Source: Federal Deposit Insurance Corporation (FDIC)

Heading into 2020, the small business lending market appeared to be moving toward a new equilibrium increasingly dominated by non-bank lenders. However, many small businesses—particularly MBEs and other historically underserved entrepreneurs—reported that they were still struggling to obtain credit even after the longest period of economic growth in the nation's history.[117] As of the end of 2019, only 1 in 2 employer firms that applied for credit received the financing they sought,[118] highlighting a lingering credit gap that would soon be exacerbated by the COVID-19 pandemic.

PART TWO

CREDIT ACCESS AND THE COVID-19 RECOVERY

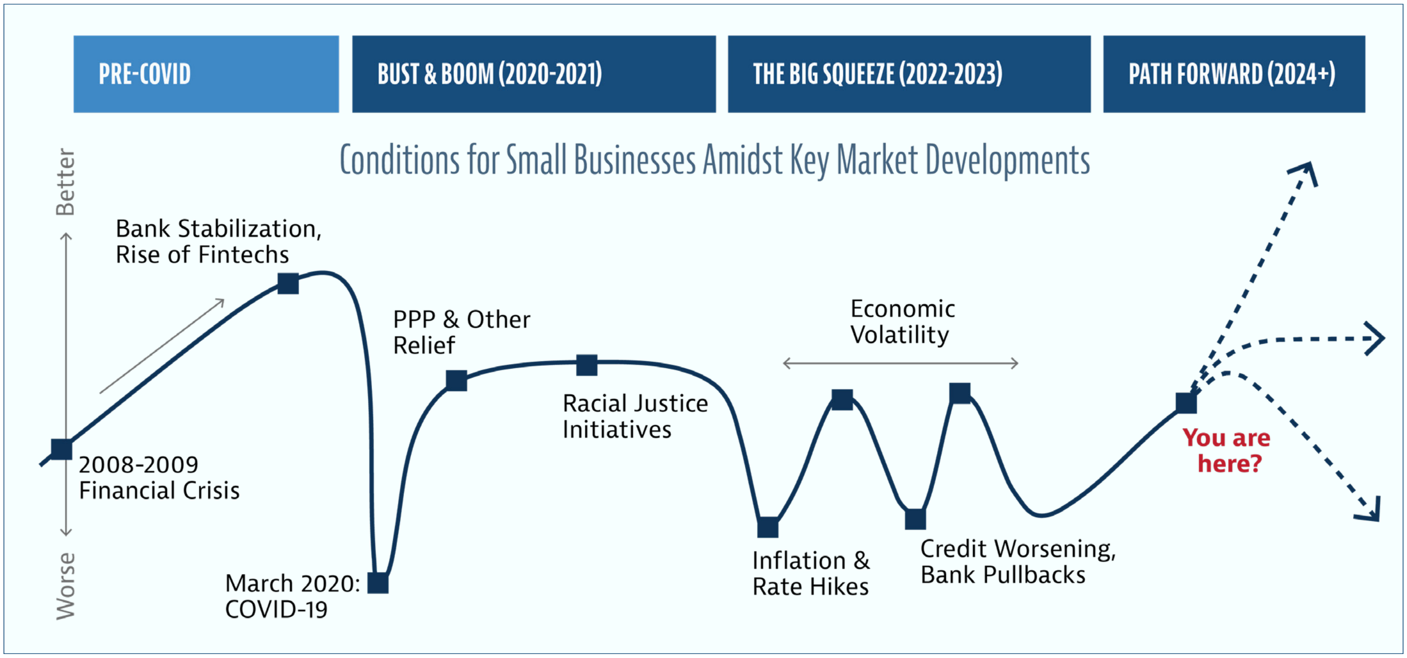
When the COVID-19 pandemic struck, no one anticipated that it could lay the groundwork for long-term improvements in the credit ecosystem for historically underserved entrepreneurs and younger, smaller businesses more generally. The immediate focus was on the existential health and economic threats created by the pandemic and lockdown, and later on managing the substantial hardships created by sharp increases in inflation and interest rates. Nearly two years after inflation rates began declining in mid-2022, small businesses and lenders are still waiting to see whether the US economy makes a soft landing without triggering another recession.

Yet while managing these hardships and uncertainties continues to require substantial attention, there have been important developments with regard to the underlying composition of both the small business sector and the lending ecosystem that supports it. Depending on economic developments and the choices made by stakeholders, the lending ecosystem appears to be approaching an inflection point that will determine the extent to which recent short-term improvements can translate into substantial, longer term improvements in economic and financial inclusion.

As represented by the graphic below, there are at least three possible pathways forward. Though it is looking increasingly unlikely, there is still some risk of market conditions worsening and leading to a delayed recession. This would likely drive further credit tightening and widespread business closures among the new businesses formed since 2020. The market could continue on a middling course, with substantial involvement from alternative lenders but a continuing gap between supply and demand driven by a shortage in microlending and non-traditional underwriting methods. A third path would capitalize on the momentum developed over the last few years to increase the scale of responsible lending to younger, smaller businesses substantially, helping the enormous cohort of post-COVID businesses to sustain their momentum, with significant benefits for the economy and underserved communities.

Tracing the developments of the past four years helps to understand this potential inflection point and inform discussions about possible paths forward. In the next two sections, we examine critical economic, policy, and credit market developments between 2020-2021 and 2022 to early 2024, as well as their impacts on both small businesses and lenders. The third section looks ahead, analyzing the ways that broader technology adoption trends and additional recent policy initiatives could facilitate additional lending system improvements, as well as the importance of better understanding the businesses that have formed since the pandemic to help sustain and deepen their impacts on wealth formation, job creation, and the broader economy.

FIGURE 9 A ROLLERCOASTER OF CHANGES FOR SMALL BUSINESS



3. BUST & BOOM (2020-2021)

3.1 Market dynamics & policy response

Small business owners were among the first groups affected and, in many ways, the hardest hit by the sudden economic contraction caused by COVID, especially during the initial phases of the pandemic. Government-imposed shutdowns to reduce the spread of COVID resulted in an immediate wave of business closures. Many small business owners faced a total loss of their revenue and livelihoods. Small businesses tend to be more vulnerable to economic shocks than larger businesses generally because they are less likely to have backup capital, emergency plans, or safety nets.[119] Not only were small businesses dealing with economic impacts from the pandemic, but many owners also bore the emotional toll of worrying about the safety of their employees, customers, and family members.

Small businesses in underserved communities were even more likely to be affected by the pandemic, subsequent government shutdowns, and directives such as stay-at-home orders, travel restrictions, and sanitation requirements.[120] While the number of total active business owners declined by 22 percent between March and May of 2020, the largest decreases were experienced by racial minority-, immigrant- and women-owned businesses.[121] An estimated 41 percent of Black-owned and 32 percent of Latino-owned businesses closed.[122] Many business owners turned to emergency loans and relief programs to sustain them.

Lenders across the board recognized the dire need for relief and began offering support to small businesses within weeks of the first stay-at-home orders. Rapidly transitioning to digital channels, banks implemented temporary customer assistance programs to defer payments, waive overdraft and late fees, and pause foreclosures, repossessions, and negative credit bureau reporting.[123] Consistent with past disasters, mission-based lenders such as CDFIs also stepped in ahead of government relief programs to support small businesses through the pandemic. They implemented emergency loan products, offered delayed repayment plans, partnered with local governments to roll out emergency grant programs, and provided technical assistance to help businesses navigate the crisis and apply for relief programs.[124]

Federal and state relief programs were unprecedented in their size, scope, and speed relative to other downturns and disasters. With the passing of the CARES Act on March 27, 2020, the Small Business Administration (SBA) implemented the Paycheck Protection Program (PPP), updated terms of SBA 7(a) and 504 loans, and revived the Economic Injury Disaster Loan (EIDL) program.[125] The first round of PPP funding for small businesses went live just seven days later, on April 3, 2020, allocating $349 billion in loans.[126] The second round of PPP provisioned another $310 billion, and the third round $284 billion.[127] Altogether, the SBA provided more than $1 trillion in relief funds to small businesses between

2020 and 2021—over 1,000 times what the SBA sets aside annually for its entire lending program.[128] PPP, the largest SBA relief program, increased average small business cash balances by 136 percent, enough to cover nearly four weeks of expenses, and reportedly saved nearly 90 million jobs.[129]

TABLE 2 STANDARD VS. PANDEMIC FEDERAL SMALL BUSINESS LOANS

	STANDARD SBA 7(A) LOANS	PANDEMIC RELIEF PROGRAMS: PPP & EIDL
PURPOSE	» SBA's flagship small business loan program provides financial assistance to eligible small businesses for various business-related purposes such as working capital, equipment, business expansion, etc. in the form of government guaranteed loans. » Loans are offered through participating lenders that enter into an agreement with SBA.	» Pandemic relief programs were designed to help businesses keep their workforce employed during the COVID-19 crisis and provide economic relief to small businesses experiencing a temporary loss of revenue. » PPP loans were offered through participating lenders that entered into an agreement with SBA. EIDL loans were offered directly through SBA.

ELIGIBILITY	» Operating business (for-profit)
	» Located in the US
	» "Small" under SBA size requirements
	» Meet SBA's business type eligibility requirements
	» Inability to obtain the desired credit on reasonable terms from non-Federal, non-State, and non-local government sources
	» Creditworthy and demonstrate a reasonable ability to repay the loan
		» Eligibility criteria shifted across three rounds of PPP, but generally included:
		  » Small businesses with fewer than 500 employees (or meeting SBA industry size standards)
		  » Self-employed individuals and certain non-profit organizations
		» EIDL loans were designated for small businesses directly affected by COVID-19 or those in related industries likely to be harmed by losses

LOAN SIZE	» Maximum amount of $5 million » Average loan size of $500,000 for FY 2023, a decline of $60,000 from the previous year » SBA guarantees 75% or 85% of the loan amount	» Maximum amount of $2-10 million (based on 2.5x average monthly payroll costs, with a cap of $100K annual salary per employee) » **PPP:** Average loan size of $206,000 in round 1, $101,000 in round 2, $42,000 in round 3. » **EIDL:** Average loan size of $96,000 » Initially had a $10,000 emergency advance program, which ended in July 2020.
INTEREST RATE; FEES; COLLATERAL; GUARANTEES	» Vary depending on the lender and the specific terms of the loan, but typically fall between 10-15%. Interest rates are negotiated between the borrower and the lender, but are subject to SBA maximums, which are pegged to the prime rate or an optional peg rate. Interest rates may be fixed or variable. » Lenders pay an upfront fee (SBA Guarantee Fee) for each loan guaranteed but are permitted to pass the cost of the fee on to the borrower » Lenders also pay an annual service fee which they cannot pass on to borrowers	» **PPP:** 1% fixed for all borrowers, with 100% SBA guarantee and no collateral required » **EIDL:** 3.75% for small businesses, 2.75% for non-profits, with no personal guarantees for loans under $200K » EIDL had a lien filing fee only for loans greater than $25K
REPAYMENT TERMS	» The shortest appropriate term, depending upon the borrower's ability to repay. » The term varies, depending on the lender and the specific terms of the loan (usually up to 10 years for working capital and up to 25 years for real estate)	» **PPP:** 5 years for loans made after June 5, 2020; 2 years for loans made before that date (with the possibility of deferment), but borrower can apply for forgiveness, which converts the loan into a grant. » **EIDL:** 30 years with payments deferred for the first 2 years
LOAN FORGIVENESS	» None	» **PPP:** Up to 100% of PPP loans can be forgiven if the funds are used for eligible expenses (e.g., payroll, rent, utilities) and the borrower maintains or rehires employees » **EIDL:** no loan forgiveness outside of the initial $10,000 emergency advance grant

The need to rapidly deploy vast volumes of capital to small businesses during COVID necessitated the relaxing of rules and requirements that typically accompany federal loan programs. For example, PPP substantially decreased the amount of paperwork and documentation needed from borrowers and did not require personal guarantees or collateral, which can often discourage small businesses from seeking traditional SBA-backed loans.[130] PPP loans also did not require repayment if borrowers complied with specified rules about how the funds could be used, and they applied for and met criteria for forgiveness. As of October 2023, over 90 percent of PPP loans and 96 percent of loan amounts had been forgiven, indicating the effectiveness of this policy for small business borrowers.[131]

The initial rollout of PPP, while extraordinary in its magnitude and crucial for saving businesses and the economy, also magnified existing inequities.[132] The design of the first phase program and its delivery system were not well equipped to reach underserved small businesses, providing capital mainly to bigger, established businesses through traditional, larger lenders.[133] For example, the eligibility threshold for lenders in the first rollout of the program in April 2020 was set at $50 million in assets, which exceeded the size of many CDFIs and made it nearly impossible for them to participate, and structural requirements also complicated fintech participation. Application of "Know Your Customer" requirements under anti-money laundering rules incentivized participating lenders to focus on existing customers, particularly in the initial rush to get first round funds out the door, and the initial fee structure incentivized larger loans.[134] Banks that were eligible prioritized existing customer relationships with larger, more established businesses.[135] Smaller businesses, the majority of whom are from underrepresented groups, were left out: in 2019, only 23 percent of Black owned businesses and 34 percent of Latino-owned businesses had used banks as a financing source in the previous five years.[136] They were also less likely to have the networks to help them navigate the complex program and application process.[137]

These patterns highlighted the important role that mission-based lenders, community banks, and fintechs play in deploying capital to the small businesses that face the greatest access challenges. During the second and subsequent rounds of PPP, the government relaxed lender eligibility requirements, allowing smaller mission-based lenders and non-profits to participate. It also opened up the PPP loan portal to CDFIs and MDIs first before opening it to other lenders.[138] Together, alternative lenders gave out more than $27 billion across nearly 500,000 loans just in the second round of PPP.[139] The contrast between the first and subsequent rounds of PPP funding illustrates the importance of designing government support programs to account for structural barriers and market failures. Without special measures to actively include smaller businesses seeking small-dollar loans and non-traditional lenders like CDFIs, these players were left out.[140] Recognizing the importance of non-depository institutions learned through PPP, in November 2023, the SBA expanded its loan program to new lenders for the first time in 40 years, in an effort to expand access in underserved markets.[141]

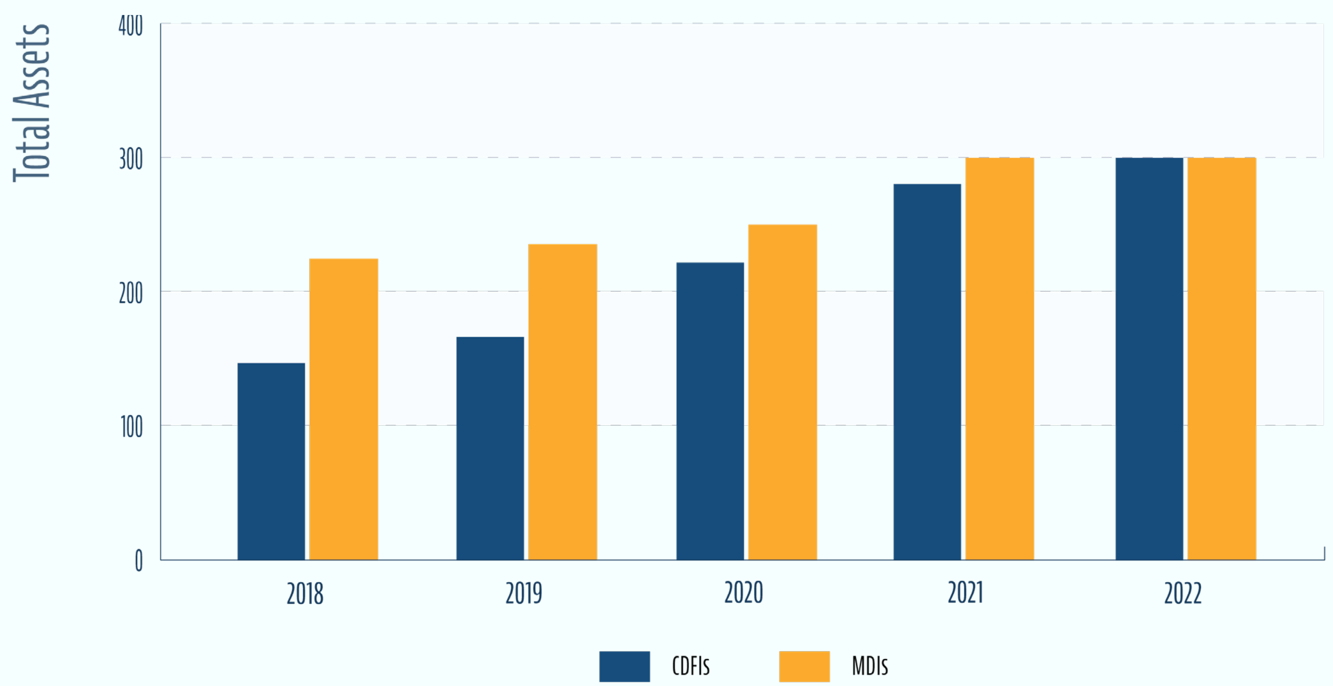
Amidst the pandemic, the killings of George Floyd, Breonna Taylor, Ahmaud Arbery, among other Black Americans sparked a public discourse on race and a social justice movement across the globe, leading to a major surge in philanthropy and private capital to address systemic racial inequities, including barriers to access to capital. America's fifty largest public companies collectively pledged over $50 billion towards addressing racial inequities, though over 90 percent of that funding was in the form of loans and investments, rather than grants.[142] The movement also drove funding specifically targeting microlending through CDFIs and MDIs to increase capital access for minority entrepreneurs, with the largest US banks investing more than $9 billion in CDFIs and $500 million in MDIs since the start of 2020.[143] It also caused some banks to consider their own direct lending to underserved populations, for instance by fueling interest in special purpose credit programs as discussed further in Section 5.

3.2 Lender impacts

3.2.1 Mission-based lenders

PPP and racial justice initiatives had profound impacts on the landscape of mission-based small business lenders. The changes to lender and borrower requirements and special consideration of mission-based lenders in the subsequent rounds of PPP, driven by considerable advocacy efforts, greatly increased the volume of funding distributed by CDFIs and MDIs.[144] These community-oriented lenders were more likely to deploy PPP funding to smaller businesses and minority business enterprises.[145] For example, Black-owned firms represented only 5 percent of PPP loans at large banks and 6 percent at Top Four banks, whereas they made up over 10 percent of PPP loans at CDFIs.[146] Underserved borrowers were also more likely to gravitate towards mission-based lenders, even in cases where they did not have a prior relationship with the institution.[147] There is also emerging evidence that PPP loans distributed by community banks may have been more effective at reducing unemployment compared to larger banks.[148]

FIGURE 10 ASSET GROWTH AMONG CDFIs AND MDIs



Data Source: Federal Reserve

Mission-based lenders' effectiveness in deploying PPP funding significantly increased the visibility of the sector, particularly for CDFIs.[149] For many mission-based lenders, the volume of PPP loans surpassed their previous scale of lending by several orders of magnitude. While the entire CDFI industry had just over $200 billion in assets in 2020, CDFIs distributed more than $7 billion in PPP loans in just three months.[150] Small banks participating in PPP also originated a disproportionately larger share of these emergency loans than their share of the total banking market.[151] Community banks saw growth rates of commercial and industrial loans upwards of 60 percent just in 2020.[152] In total, mission-based lenders and community banks together disbursed over $34 billion in PPP loans, with underserved businesses making up a higher share of their loans than any other type of PPP lender.[153]

While mission-based lenders had the community relationships to distribute pandemic relief funding to the businesses that needed it most, some faced operational challenges and capacity constraints that hampered their ability to deliver.[154] As a remedy, some CDFIs and MDIs developed partnerships with fintech vendors to magnify the scale of their operations.[155] In one example, HOPE, a CDFI serving Alabama, Arkansas, Louisiana, Mississippi, and Tennessee, partnered with software platform StreetShares to increase its ability to process PPP applications quickly.[156] Texas National Bank, an MDI and CDFI serving Texas, was able to disburse more than 15,000 PPP loans through a partnership with online business loan marketplace Lendio to source applications from new clients.[157] Fintechs and mission-based lenders also jointly advocated for the SBA to prioritize non-bank lenders in later rounds of PPP.

In order to deploy billions of dollars in loans to small businesses, CDFIs also needed capital themselves. The Federal Reserve's PPP Liquidity Facility (PPPLF) dedicated $10 billion in liquidity for SBA-qualified mission-based lenders to scale to meet the needs of small businesses, as long as they had a relationship with a depository institution in the Reserve Bank system.[158] Almost overnight, the PPPLF gave some of the largest CDFIs access to the capital they would need to meet the volume of loan demand. Some high-volume mission-based lenders are held back from scaling lending because of inadequate equity, which they fundraise for with grants, loans, and equity investments. One CDFI explained, "It's not that we couldn't do a higher volume of lending previously, but we just didn't have the capital to do it." While the PPPLF was limited in scope, it demonstrated the impact of making long-term, low-cost debt available to mission-based lenders, allowing them to scale. The PPLF has raised interest among some lenders in creating a permanent federal facility.

Other pandemic-relief programs also contributed to major growth among community lenders. The Treasury Department's Emergency Capital Investment Program, designed to encourage MDIs to support small businesses and minority-owned businesses disproportionately impacted by COVID,[159] helped MDIs grow their assets by $67 billion between 2019 and 2021, or nearly 25 percent.[160] In total, pandemic-relief funding helped triple the size of CDFI assets to over $450 billion, and grow MDIs assets to over $340 billion.[161]

Racial justice initiatives starting in summer 2020 heightened the focus on credit access for minority business enterprises across the entire lending ecosystem and prompted major banks to increase their funding for CDFIs and MDIs, filling in a gap in their portfolios where they were unwilling to lend to smaller and riskier businesses themselves.[162] In 2020 alone, banks committed over $1 billion to CDFIs and MDIs.[163] Wells Fargo, Bank of America, and JPMorgan pledged $50 million each in capital, deposits, and equity investments in MDIs, along with technological and product strategy support.[164] The racial justice movement also raised the profile of CDFIs and MDIs among philanthropies, leading to substantial growth in lenders' grant revenues. The "discovery" of mission-based lenders by additional private donors and foundations led to millions in pledges and donations. At the end of 2020, CDFIs saw their non-earned revenue more than double. This included several high-profile pledges, such as the billionaire philanthropist MacKenzie Scott, who poured millions into mission-based lenders. The unprecedented interest in supporting mission-based lenders in order to increase access to capital for BIPOC entrepreneurs had lasting impacts on the landscape of mission-based lenders.

These events transformed the industry's perspectives on capital and technology by providing lending volumes and liquidity access at a scale typically unavailable to CDFIs, sparking discussions on the future of CDFI micro and small business lending programs and on supporting their capitalization, technology adoption, and growth.[165] A number of mission-based lenders established or expanded microlending programs, including broadening their product mix to offer working capital products and different repayment terms. The volume of pandemic emergency loan and grant programs, together with an influx of philanthropic support and private capital, enabled mission-based lenders to make significant investments in technology to serve small business borrowers. Among CDFI loan funds alone, unrestricted operating surplus for business lenders grew by sixfold, from $500,000 in 2019 to over $3 million in 2020.[166]

Because of their small scale, inadequate internal capacity, and resource-intensive lending approaches, many CDFIs have historically faced operating inefficiencies.[167] A small business loan at a CDFI can take between one to two months from application to close, with many manual touch points along the way by lending officers, underwriters, loan review committees, accountants, and technical assistance providers.[168] Credit policies and lending criteria frequently live offline in Excel spreadsheets and are manually reviewed against new applications.

Confronted in some cases with thousands of PPP applications, CDFIs quickly realized their manual processes were insufficient and those that could implemented software and platforms to assist in loan originations and processing.[169] As one mission-based lender put it, "We had to re-engineer the entire lending process end-to-end." Another stated, "We didn't have a choice. We went from booking a handful of loans per day to thousands. We had to automate every aspect of the workflow and streamline the entire process. It sparked a lot of creativity." Larger CDFIs that had made technology investments into loan origination platforms and automated loan processing workflows prior to COVID saw them pay off.[170] CDFIs that had purchased software and integrated it throughout originations, closing, and servicing processes were well-positioned to handle the volume of PPP loans demanded by small businesses, allowing them to manage the volume of loan applications and grow significantly.

Stakeholders refer to PPP as a watershed moment that moved CDFI technology adoption forward the equivalent of five years in just one year. Larger mission-based lenders made dramatic upgrades to their technology and internal systems through the pandemic. As a result of PPP, the CDFI sector and its supporters increased their focus on improving digital processes and technology adoption, especially lenders whose lack of internal capacity held them back from fully participating in PPP. This kicked off a host of technical assistance initiatives and discussions about increasing microlending and building the capabilities of mission-based lenders.

However, it is important to remember that the unique circumstances surrounding PPP defined much of the success of mission-based lenders during this period. The loans did not require lenders to deploy full, traditional underwriting processes as they were insulated from losses. In addition, loans were converted to grants through a forgiveness process, and the media and government were very effective at raising awareness of the loan program through public announcements amidst heightened news coverage and viewership during the pandemic. Together, these factors drove enormous loan volumes that mission-based lenders typically do not see through their own marketing and acquisitions strategies, while not requiring them to take on the financial risks of charge offs and losses. PPP did demonstrate the ability of many CDFIs to scale their loan origination capacity dramatically, and it remains to be seen whether this can be replicated with more standard lending programs.

3.2.2 Fintechs and other non-banks

The volatility sparked by the pandemic and PPP also upended the status quo for small business fintech lenders. This created particular challenges because fintechs lack deposits as a relatively inexpensive and stable source of capital and in some cases provide more expensive loans to riskier borrowers.[171] Since the fintech industry was still young in 2020, many lenders had not yet tested their underwriting models and general resiliency through a major economic crisis. Fintech lenders also rely on external funding sources like investors, who have sensitive risk appetites that shift quickly in response to macroeconomic conditions. As a result, fintechs found it difficult to continue providing liquidity as the pandemic shutdown took effect.[172]

Over the course of spring 2020, fintech small business lenders faced precipitous increases in capital costs, spikes in applicant risk, and declines in loan demand as borrowers faced business shutdowns and increasingly looked to federal stimulus packages for assistance.[173] When later PPP rounds opened more widely to non-bank lenders, fintechs such as Kabbage, Square, Lending Club, OnDeck, and PayPal Working Capital jumped in to participate, leveraging their tech-driven efficiency and scalability to process substantial loan volumes and taking advantage of access to the PPPLF to overcome their other capital constraints.[174] Many completely paused their regular small business loan offers while focusing on the rollout of PPP.[175] In the second round of PPP, fintechs provided 20 percent of all loans disbursed to small businesses.[176] Like mission-based lenders, fintechs were more likely to deploy PPP funds to underserved businesses than big banks, as they were willing to approve applicants that did not have existing relationships with them.[177]

Despite fintech participation in federal stimulus programs, the pandemic disrupted their normal lending volumes. The Federal Reserve's Small Business Credit Survey found that the volume of small businesses applying to online lenders dropped from 30 percent to 17 percent between 2019 and 2020.[178] Lenders such as Kabbage, OnDeck, and LendingClub reported significant increases in delinquencies and losses as their riskier customer segments faced business closures throughout 2020.[179] Some fintechs furloughed their employees as they scrambled to manage their finances. Both Kabbage and OnDeck were sold to large companies in 2020, resulting in shifts to their lending businesses. While details of the Kabbage transaction were not made public, OnDeck was acquired for $122 million, less than a tenth of its valuation at the time of its initial public offering.[180]

3.2.3 Banks

When the pandemic hit, medium and large banks played a significant role in offering relief to small business customers both through their own initiatives and by facilitating PPP lending. Many banks implemented customer assistance programs starting in March 2020, including temporarily allowing deferred payments without accruing interest or negative credit reporting, waiving overdraft and late fees, and pausing their collections efforts. Regulators also encouraged banks to support customers by easing requirements to allow changes in terms and policies without heightened examiner scrutiny.[181] All Big Four banks—JPMorgan Chase, Bank of America, Wells Fargo, and Citibank—along with many others, set up public-facing COVID websites sharing guidance about their internal relief programs as well as federal and state assistance.[182]

The scale of larger banks' lending and technology infrastructure together with their customer reach also meant that they were well-positioned to distribute enormous volumes of PPP loans to small businesses, particularly in the initial round of funding. Large and medium-sized banks accounted for one-third of all loans and over half of total loan volumes across the three PPP rounds.[183] Regional banks alone accounted for approximately one-fourth of all PPP loan dollars.[184] For some banks, this scale represented significant growth from their pre-pandemic small business and commercial lending portfolios. PPP catapulted regional banks' small business loan holdings by 30 percent from 2019 to 2020, to nearly $200 billion.[185] The unique speed and volume of PPP required even big banks to redeploy non-small business banking resources toward the effort. When JPMorgan Chase put up an online form to collect information from prospective small business borrowers on day one of the first round of PPP, the bank received 75,000 responses in a single hour.[186] Many bank employees were recruited from other departments to "volunteer" processing PPP loan applications on top of their regular roles.

However, particularly in initial PPP rounds large banks tended to focus on existing customers and bigger, wealthier businesses over smaller businesses from outside of their networks.[187] As a result, average loan sizes exceeded $100,000 for PPP loans disbursed by large and medium-sized banks, far above the average loan size of other PPP lenders.[188] Focusing on existing customers lowered origination costs and sped processing times, as the banks already had data about the borrowers and were receiving a flood of inquiries from customers who were fighting to keep their businesses afloat.[189] However, bank practices also provoked criticism as business owners shared stories of being turned away after receiving unclear messages from their banks about eligibility criteria. Congressional investigators found that several big banks processed large PPP loans for wealthier customers at up to four times the speed of smaller loans for smaller businesses.[190] After reports alleged that banks made billions of dollars collecting fees and interest from processing PPP loans, several lenders announced that they would reinvest PPP revenues into small business lending to underserved communities.[191]

Outside of PPP, which offered federal guarantees, banks pulled back sharply on small business lending in 2020. Many banks reduced credit lines on small business credit cards and borrowing limits on lines of credit, particularly in industries most hard-hit by COVID, such as restaurants and retail. They also quickly rolled out tighter credit policies for new borrowers that considered the industry of applicants to limit future losses.[192] There was some speculation that PPP lending would encourage banks to grant additional credit access to small businesses after the program's end, but research by the Federal Reserve found limited "stickiness" in the post-PPP relationship between banks and lending to new small business customers. After PPP loans concluded, banks' small business lending volumes receded to pre-pandemic levels.[193]

The pandemic also drove major shifts in digital adoption for large banks. Faced with social distancing and stay-at-home directives, banks directed customers to their digital tools and services to minimize branch engagement. Between March and April 2020, there was a nearly 90 percent increase in mobile banking traffic and 200 percent growth in mobile banking sign-ups in the US[194] The pandemic had a profound impact on the use of cash, and accelerated adoption of digital and contactless payments by both banks and customers.[195] Banks had to set up customer service agents to respond to calls and messages remotely while ensuring information security, which was particularly challenging as customers facing financial stress drove increased call volumes and more complex problems. When the pandemic hit, even some large banks were still limited in online small business lending operations. PPP forced them to adopt new digital loan application and originations processes, demonstrating that small business borrowers were content with online applications and document submission. Similar to the experience of mission-based lenders and community banks, the pandemic rapidly catalyzed digital transformation among big banks in areas that they had previously been hesitant to invest in.

Towards the end of 2020 and into 2021, with the immediate shock of the crisis over and pandemic relief funding disbursed to small businesses, financial conditions began to improve, and banks cautiously resumed lending. They were bolstered by sharply falling delinquency rates among small business borrowers starting at the end of 2020.[196] Small business lending volumes recovered to their pre-COVID volumes by the end of the year and even reached a 15 year high in spring 2021 as small business demand for capital remained elevated. By the middle of 2021, the net percentage of banks reporting tightening standards on small business loans had dropped for four consecutive quarters, suggesting banks' optimism about credit conditions for small business going forward.[197]

3.3 Borrower impacts

Although small business formation and the share of US GDP generated by small businesses had declined in the aftermath of the 2008-2009 Great Recession, post-pandemic trends were markedly different.[198] While smaller businesses were more likely to close in the initial lockdown, they also rebounded quickly.[199] Dun & Bradstreet's Small Business Health Index, which aggregates data on payment and credit card delinquency and credit card use, recorded that by fall 2020 small businesses had recovered to pre-pandemic levels, likely driven in large part by the sizable government relief programs.[200] By March 2021, small businesses had created 5.5 million jobs in twelve months, offsetting 60 percent of the sector's job losses from early 2020 and helping the US economy rebound from the pandemic-induced recession.[201]

BOX 5 TRACKING BUSINESS FORMATION AND CLOSURES

Limitations in available data complicate the process of tracking small business formation and closures, particularly in real time. Weekly totals on the number of applications filed for an employer identification number (EIN)—used by business entities for tax purposes—are often tracked as an early signal of small business activity.[202] The Census Bureau designates a subset of business applications as "high-propensity" applications that are more likely to turn into businesses that will employee multiple people, based on characteristics such as whether the application is filed by a corporate entity, indicates that the business is hiring employees, or provides a first wages-paid date. "High-propensity" applications also include a subset of industries that typically hire employees (e.g., retail, food services).

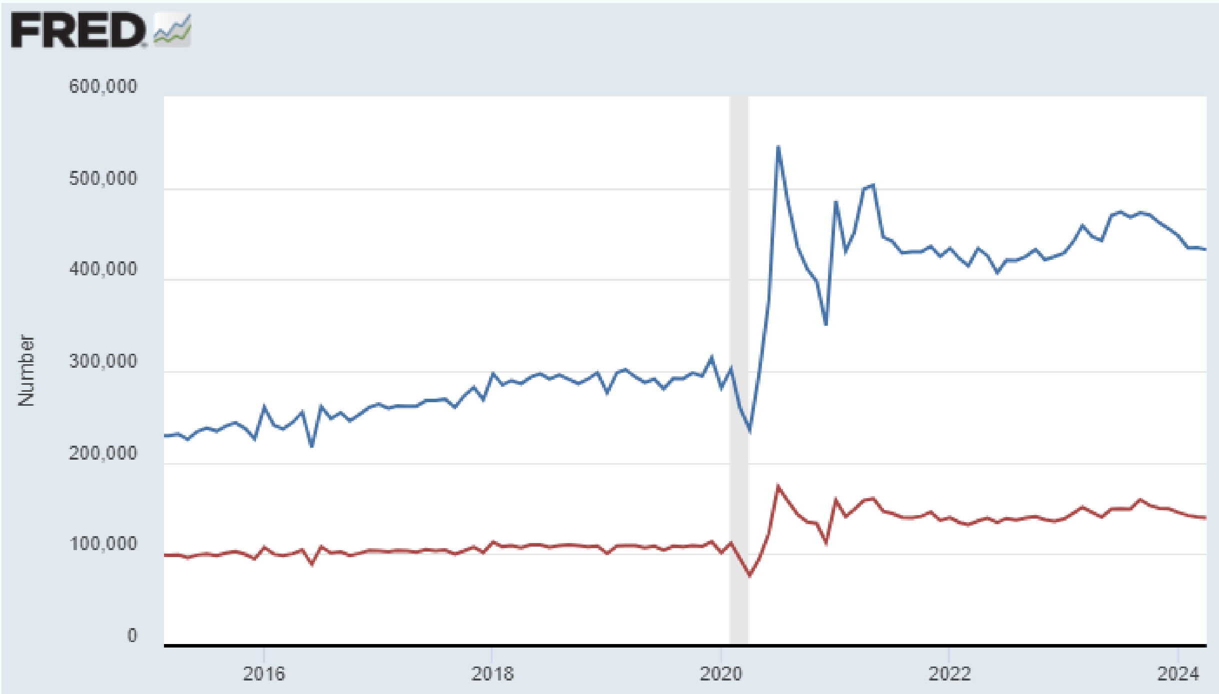
The Census Bureau uses sophisticated models to predict how many employer businesses originate from EIN applications within four and eight quarters after the EINs are issued, but data on actual business formations as evidenced by when payroll tax liabilities begin to accrue are reported on a lagged basis. As of this report's publication, actual formation data were available only through the fourth quarter of 2021.[203] While only a fraction of applications result in business formation,[204] they are a leading indicator of both interest in entrepreneurship and actual formation trends.[205] However, these sources focus on employer businesses rather than sole proprietorships, which may not require obtaining an EIN, depending on how they are structured.[206]

Bureau of Labor Statistics sources that build on the Quarterly Census of Employment and Wages are also often cited as a source of information about business formation, job creation, and closures. However, those sources exclude self-employed individuals and some non-profits.[207] In addition, some sources focus at the level of "establishments," which are typically at one physical location and engaged predominantly in one type of economic activity for which a single industrial classification is applied. Because firms can consist of multiple establishments, firm-level formations and closures are lower than changes in the number of establishments.[208]

By the end of 2021, nearly three-fourths of counties in the US had more small employer business establishments than they did before the pandemic. This is a sharp contrast to the Great Recession, five years after which only 44 percent of counties had recovered to pre-recession numbers of small businesses.[209] Monthly applications for new employer identification numbers—which are a leading indicator of small business formation—also set a 23-year record in 2021.[210]

While some sectors were hit harder than others and complete data are not yet available, business formations substantially exceeded permanent closures throughout this period. Various data sources suggest that the number of establishments that permanently closed in 2020 was roughly 200,000 higher than historical levels, but that rate was substantially better than what was expected during the initial shutdown and compared favorably to previous downturns.[211] As the total number of employer firms increased, the percentage of smaller firms with 1-4 and 5-9 employees increased, while the percentage of larger firms shrank. This dynamic appears to have been a mix of new business formation and downsizing by existing firms.[212]

FIGURE 11 BUSINESS APPLICATIONS 2015-2024



Business Applications: Total for all NAICS in the United States
High-Propensity business applications: Total for all NAICS in the United States

Figure Source: U.S. Bureau of Economic Analysis (fred.stlouisfed.org)

Note: Shaded areas indicate U.S. recessions.

The landscape of minority-owned small business ownership also expanded in the aftermath of the pandemic. There was a significant increase in Black- and Latino-owned businesses compared to White-owned businesses. Between 2019 and 2020 alone, Black- owned businesses grew by 5 percent and Latino- or Hispanic- owned businesses by 8 percent, while White-owned businesses shrunk by 1 percent.[213] By some estimates, the share of Black and Latino households who own businesses grew by approximately 50 percent between 2019 and 2022.[214] This observation suggests that many of the newly established businesses were created by entrepreneurs of color.

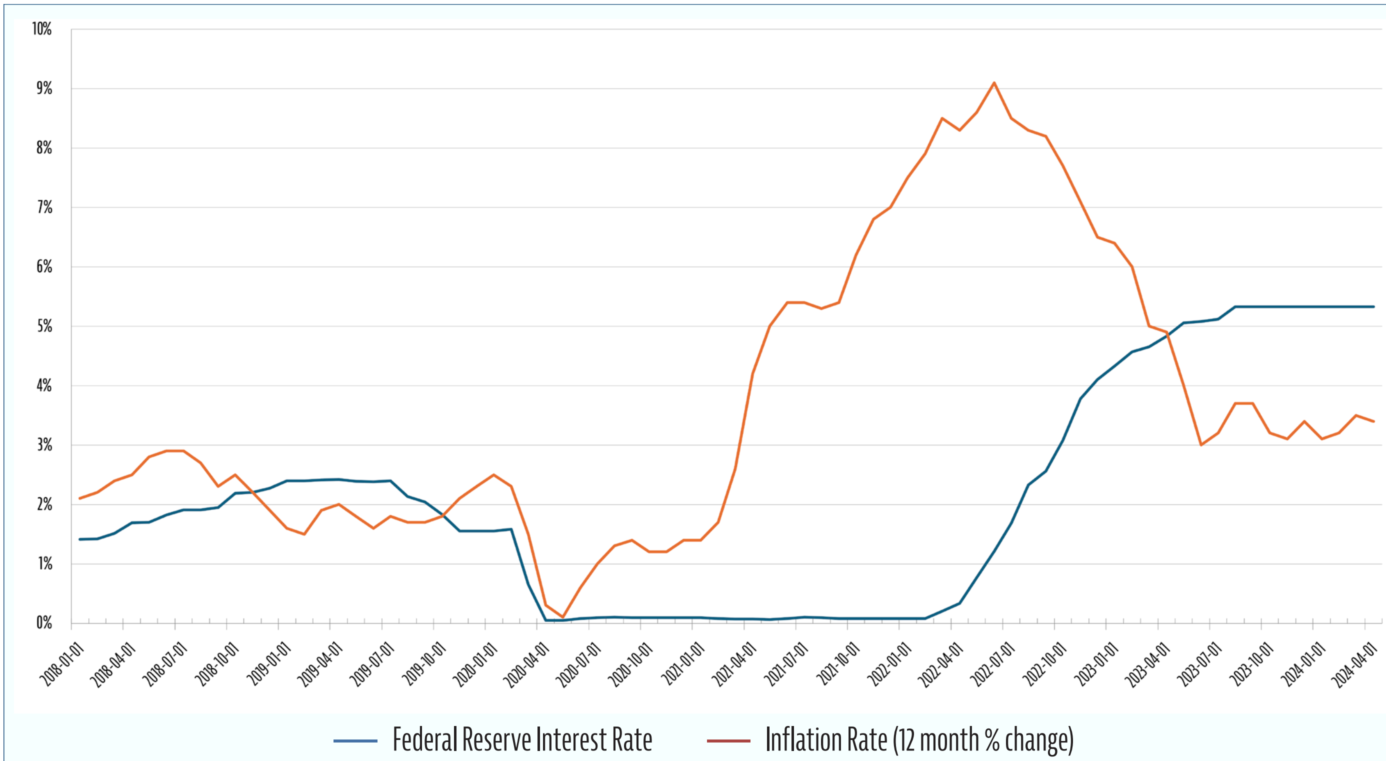
Government relief programs for both households and small businesses clearly played a significant role in these trends, with nearly 75 percent of existing small businesses applying to government relief programs during the pandemic, according to data from the Census Bureau's Annual Business Survey.[215] As COVID vaccines rolled out in spring 2021 and the third round of PPP funding ended in May, small business sentiment and demand for traditional loans began to pick up as the nation entered the second year of the pandemic.[216] By the fall, most household-focused relief and stimulus programs had concluded and focus increasingly shifted to inflation as the next big challenge facing the US economy.

4. THE BIG SQUEEZE (2022-2023)

4.1 Market dynamics & policy response

While the COVID-19 pandemic triggered a major shock to global markets, the US economy rebounded faster and stronger than expected. In 2021, the US experienced the fastest real GDP growth rate since 1984.[217] However, despite continuing signs of recovery, in the "post-pandemic" period that followed (which we define as 2022 to the present), the economy has been characterized by substantial volatility and deep uncertainty about the possibility of a second recession.[218]

FIGURE 12 CHANGES IN INFLATION AND FEDERAL RESERVE INTEREST RATES (2018-2024)



Data Source: US Bureau of Labor Statistics; Board of Governors of the Federal Reserve System

Several factors contributed to these unstable conditions, including lingering fear about COVID variants with new public health impacts, the residual effects of government pandemic relief response, supply chain disruptions, inflation, high interest rates driven by federal efforts to lower inflation, and global conflicts including Russia's invasion of Ukraine, U.S-China tensions, and Hamas's attack on Israel.

Prices for commodities began rising in 2020, driven by the pandemic's immediate disruption of global supply chains. Geopolitical events drove further increases in global prices of energy, food, and raw materials.[219] By 2022, consumer prices had jumped by over 9 percent, the largest increase in 40 years.[220] In response to high inflation, the Federal Reserve began raising interest rates to levels not seen since the dot-com boom in 1990-2000.[221] This increased the cost of capital for lenders, creating a liquidity crunch that affected lenders across all segments. While inflation rates began declining that same year, the Federal Reserve continued raising rates through July 2023 as prices for various categories of goods and services remained elevated.

At the same time, however, unemployment rates fell to 3.6 percent with continued job growth beating expectations, while labor productivity, consumer spending, and corporate profits rose significantly.[222] In 2023, continued strong labor market growth and climbing consumer wages and spending contributed to another year of high GDP growth, beating expectations in the face of interest rate hikes.[223]

FIGURE 13 THE CONFERENCE BOARD LEADING ECONOMIC INDICATOR RECESSION FORECAST

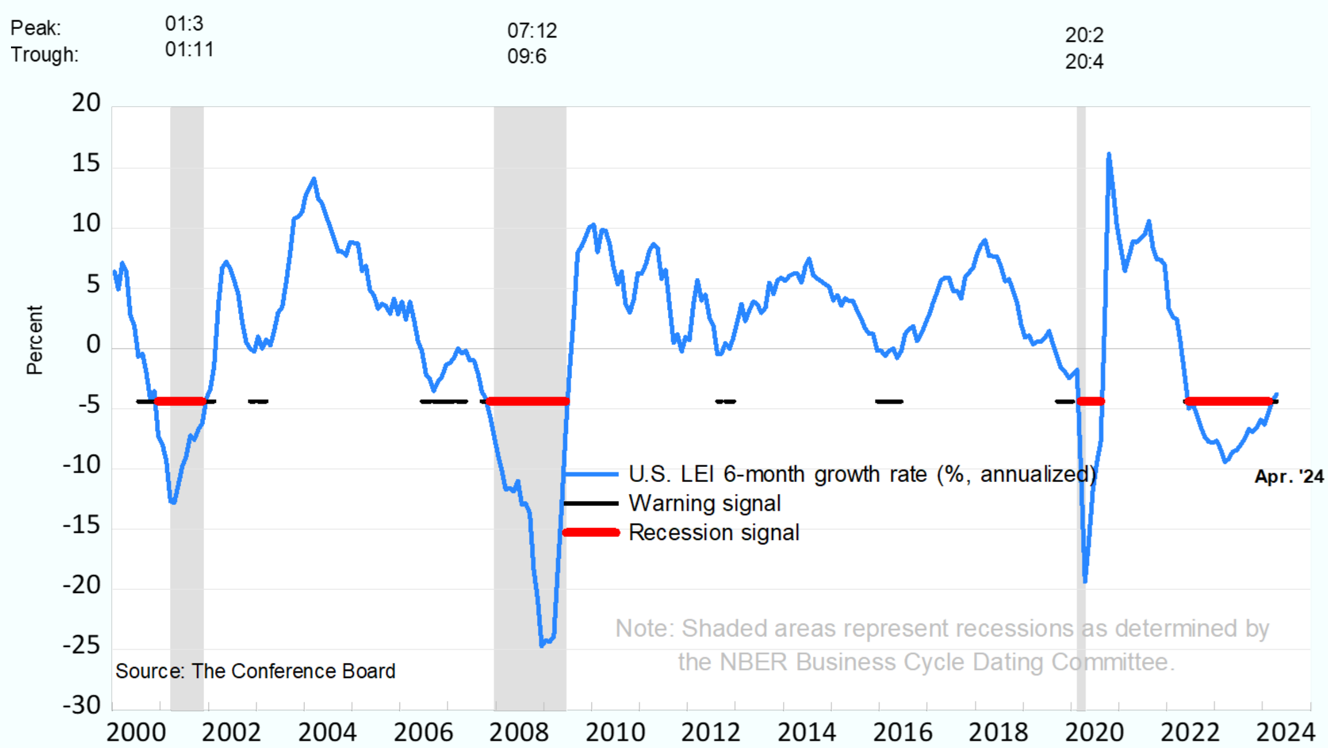


Figure Source: Conference Board

The cumulative effects of these developments have triggered substantial fluctuations in stock markets and repeated waves of concern about triggering a further recession. The three most-followed stock market indices in the US—the S&P 500, the Dow Jones Industrial Average, and the Nasdaq Composite Index—hit record highs in January 2022 but over the subsequent 12 months experienced their worst year since 2008.[224] Federal economists and major investors, as well as chief economists and business executives at large banks, issued stark warnings about a looming economic downturn.[225] A survey of CEOs by the Conference Board in August 2022 found that 81 percent expected a recession within the coming twelve months.[226] Even though the predictions did not materialize in 2022, the warnings continued through the following year. A January 2023 survey of economists by the Wall Street Journal found a 61 percent probability of recession in the following 12 months.[227] Through mid-2023, the Conference Board continued to predict an imminent recession, pointing to its Leading Economic Index continuing a two-year declining record.[228] Toward the end of 2023 and early 2024, many of these leaders began to offer a more positive outlook.[229]

The complex economic turbulence that has played out in the years following the immediate pandemic crisis has called into question the ability of traditional macroeconomic indicators to accurately assess the unique dynamics of the COVID recovery era, with lasting impacts on lender, consumer and small business sentiments.[230] Beyond the direct financial impacts of heightened inflation and interest rates on both small businesses and lenders, broader uncertainty about the economy has also affected both supply and demand in small business lending markets.

4.2 Lender impacts

4.2.1 Mission-based lenders

After pandemic relief funding waned, many mission-based lenders felt they were coming out of a "PPP hangover." The sheer volume of PPP and the speed required to get funds in the hands of borrowers, along with the influx of philanthropic capital, had upended their small business lending status quo. When government-guaranteed pandemic loan programs ended along with the PPP liquidity fund, mission-based lenders were left wondering how they could maintain and build on this momentum to continue supporting small businesses in the post-pandemic economic environment.

By some measures, mission-based lenders' balance sheets were in the best shape ever after COVID, helping to mitigate economic headwinds. Small business lenders had seen over a year of enormous growth in earned revenue, driven by higher lending volumes and income earned through their participation in government emergency programs, as well as contributed revenue from philanthropic sources. Some of the benefits of PPP were drawn out across several years after loans were originated, as lenders continued to collect fees and residuals. The largest CDFI small business lenders experienced near exponential asset growth, and smaller CDFIs saw assets grow by 40 to 50 percent.[231] Many mission-based lenders came out of the pandemic with stronger capital structures and liquidity than ever before.

The unique blended capital approach of non-bank CDFIs also helped insulate them from increasing interest rates. CDFIs typically rely on a capital stack of earned revenue, equity, philanthropic capital, and traditional debt capital. While interest rates rose to above 7 percent in 2022, CDFIs' diversified funding sources allowed them to maintain a cost of debt around 3 percent.[232] MDIs, which historically rely more on deposits as a source of capital, experienced net interest margin compression as they struggled to drive interest income against interest paid to depositors.[233] While MDIs saw huge capital infusions in 2020, as interest rates rose, they faced new competitive pressure to maintain and grow core deposits in order to leverage that capital into additional loans.[234] Some of the largest CDFI and MDI small business lenders looking to significantly scale small business lending after PPP through debt capital faced challenges with higher interest rates, as they were hesitant to pass the increased costs on to borrowers.

In the worsening economic environment, mission-based lenders also began to see deterioration in their small business lending portfolios. Starting in 2022, CDFI business lenders reported rising 30-day delinquencies, though they remained far below 2015-2019 levels.[235] In response, many mission-based lenders tightened their lending standards, though interviews with stakeholders suggest that the tightening process generally started later and was less severe compared to other lender segments. Many CDFIs had maintained large cash reserves as precautionary allowances for loan losses during the pandemic, which they subsequently began to draw from starting in 2022.

Faced with growing demand for small business products and services, many mission-based lenders have worked to manage risk in the post pandemic environment. Some believe that COVID-related funding may have masked underlying weaknesses in their portfolios and are cautious about the level of risk in new originations, fearing that they could see further portfolio deterioration over the next eighteen months.[236] New research analyzing fraud patterns in PPP loan data—including in the portfolios of some CDFIs that partnered with fintechs or ran substantial online loan operations themselves—has also heightened concerns about risk management.[237] Without government guarantees, mission-based lenders are confronted with the challenge of building out long-term sources of capital while accurately underwriting for risk and driving access to capital for underserved segments.[238] More recent anecdotal evidence suggests that raising long-term capital may continue to be a challenge for CDFIs looking to scale, as existing capital sources reach maturity or renewal. Many CDFIs will need to go out and raise more capital, but with interest rates starting at 7 percent, this may be substantially more expensive for mission-based lenders to do than in prior rounds of funding.

4.2.2 Fintechs & other non-bank lenders

Shifting market conditions in the two years post-COVID also sparked disruption among small business fintech lenders. After playing a large part in the rollout of PPP, many fintechs saw sustained low demand for small business loans, degradation in applicant quality, and heightened risk in their portfolios.[239] Portfolio quality declines started in 2022, partly driven by the effects of government relief loan programs ending and partly by inflationary pressures on borrowers, making it more difficult for them to meet payment obligations.[240] While surveys indicate that the percentage of small businesses applying to online lenders has recovered somewhat from a 2020 low, it remains far below pre-pandemic levels.[241] This may be due to the additional pressure of the higher rate environment, where borrowers are wary of higher priced loans.

At the same time, rising interest rates also led to a squeeze in online lenders' margins and reduced interest from investors.[242] One fintech lender described venture capital investors as wary of the small business market after the pandemic shocks, noting that they have moved on to areas like payments, reg-tech, and insurance. The post-pandemic period has been marked by significantly fewer IPOs and unicorn startups in small business online lending than before 2022.[243] The liquidity shortage, combined with economic volatility, led to continued consolidation in the fintech sector as a whole, with many companies shutting down or selling their business, and others forced to significantly change their business models.

Regulatory and legislative scrutiny of the sector also increased substantially. In small business lending specifically, much of this scrutiny was driven by analyses of fraud patterns in PPP lending as observers began to question choices made by both policymakers and lenders in rushing to push funding out across the three rounds of the program.[244] According to a report from the Senate Committee on Small Business and Entrepreneurship, the SBA's Office of Inspector General (OIG) reported over 100,000 leads on fraud cases, and estimates of the total scale of fraud range from $36 billion to $200 billion.[245] More broadly, in the wake of issuing new guidance on third-party relationships in June 2023, federal banking regulators have prioritized investigating "banking as a service" partnerships. Banks that partnered with fintechs made up one third of federal banking regulators' public enforcement actions in 2023, even though they only represent 3 percent of US banks.[246]

TABLE 3 NOTEWORTHY SMALL BUSINESS LENDING FINTECH EXITS POST-COVID

LENDER	PRE-2020 PERFORMANCE	POST-2020 OUTCOME
amazon lending	Amazon had been increasing lending to third-party sellers leading up to the pandemic, lending over $1 billion per year to over 10,000 sellers.[247]	In March 2024, Amazon discontinued its in-house business loan underwriting, though it will continue working with third party lenders and funders like Lendistry.[248]
ondeck	Originated over $2B in small business loans per year before COVID.[249]	Acquired by Enova in 2020 for far below market capitalization, after experiencing a sharp stock price drop.[250]
Kabbage	Originated over $1B in small business loans per year before COVID.[251]	Acquired by American Express in 2020, though its $1.3 billion small business loan portfolio stayed independent and filed for bankruptcy after the opening of federal investigations concerning PPP fraud.[252]
Funding Circle	Originated over $500M in small business loans per year before COVID.[253]	Announced in spring 2024 that it was selling its US small business lending arm after reporting growing losses.[254]

In the face of challenging conditions, some fintechs have consolidated or decided to leave the market. In fall 2023, Fundation announced a merger with the CDFI Camino Financial.[255] In early 2024, Amazon announced that it was ceasing its business financing program and Funding Circle announced that it was putting its US operation up for sale just as it was issued a license by the Small Business Administration to originate 7(a) loans, citing poor profitability.[256] It remains to be seen whether new startups will enter the market to meet the scale of demand for capital by small businesses, launching a new era of fintechs.

4.2.3 Banks

Historically, banks have tightened lending during uncertain economic conditions, instituting guardrails such as stricter lending policies and criteria, higher loan-size thresholds, and greater reliance on standardized credit reporting data, making borrowing more difficult for businesses and consumers. Following the end of the federal relief and economic recovery programs in 2021, banks faced increasing risk in their small business lending portfolios. Across the board, banks reported worsening credit quality starting in the second quarter of 2022.[257]

FIGURE 14 SMALL BUSINESS LOAN DELINQUENCIES AND DEFAULTS (2005-2024)

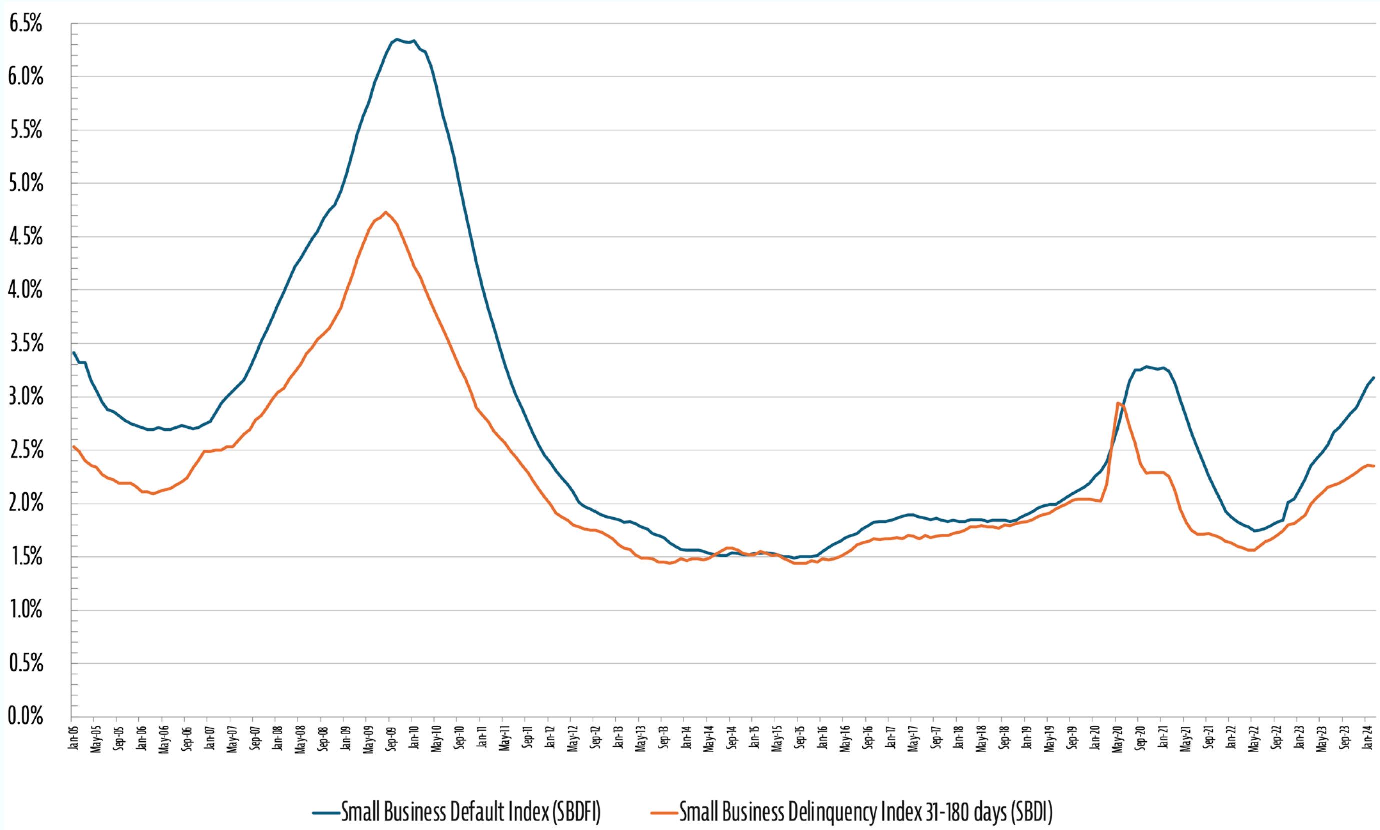


Figure Source: PayNet/Equifax

This was followed by rising delinquencies starting in October 2022, returning to pre-COVID levels by early 2023.[258] Many stakeholders believe that government relief loan programs had skewed small business loan outcomes from early 2021 through the fall of 2022, buoying borrowers' financial health and delaying the realization of losses. Increasing delinquencies raised concerns about a potential recession.

As anticipated, big banks responded by tightening their credit boxes.[259] While loan approval rates had stabilized post-2020, they began declining in 2022. Responses from the Federal Reserve's Senior Loan Officer Survey showed that lenders tightened standards for small businesses for the sixth consecutive quarter at the end of 2023, with a net 30 percent of lenders reporting tightening standards for small firms.[260] This amounted to the highest level of tightening since the initial COVID pullback and the 2008 global financial crisis.[261]

The rates of commercial lending to small firms sharply declined across US banks, reaching levels similar to those seen during the 2008 recession by mid-2023.[262] Some banks also faced liquidity challenges in the higher interest rate environment. According to the Federal Reserve's Small Business Lending Survey, in Q3 of 2023, 17 percent of small banks indicated that their small business lending volumes were constrained by their own liquidity, particularly among small and mid-sized banks.[263] It wasn't until the end of 2023 that some community banks' approval rates started to edge up again, driven by lower than expected charge-off rates and a strong economy.[264]

FIGURE 15 NET PERCENT OF DOMESTIC RESPONDENTS TIGHTENING STANDARDS FOR COMMERCIAL AND INDUSTRIAL LOANS

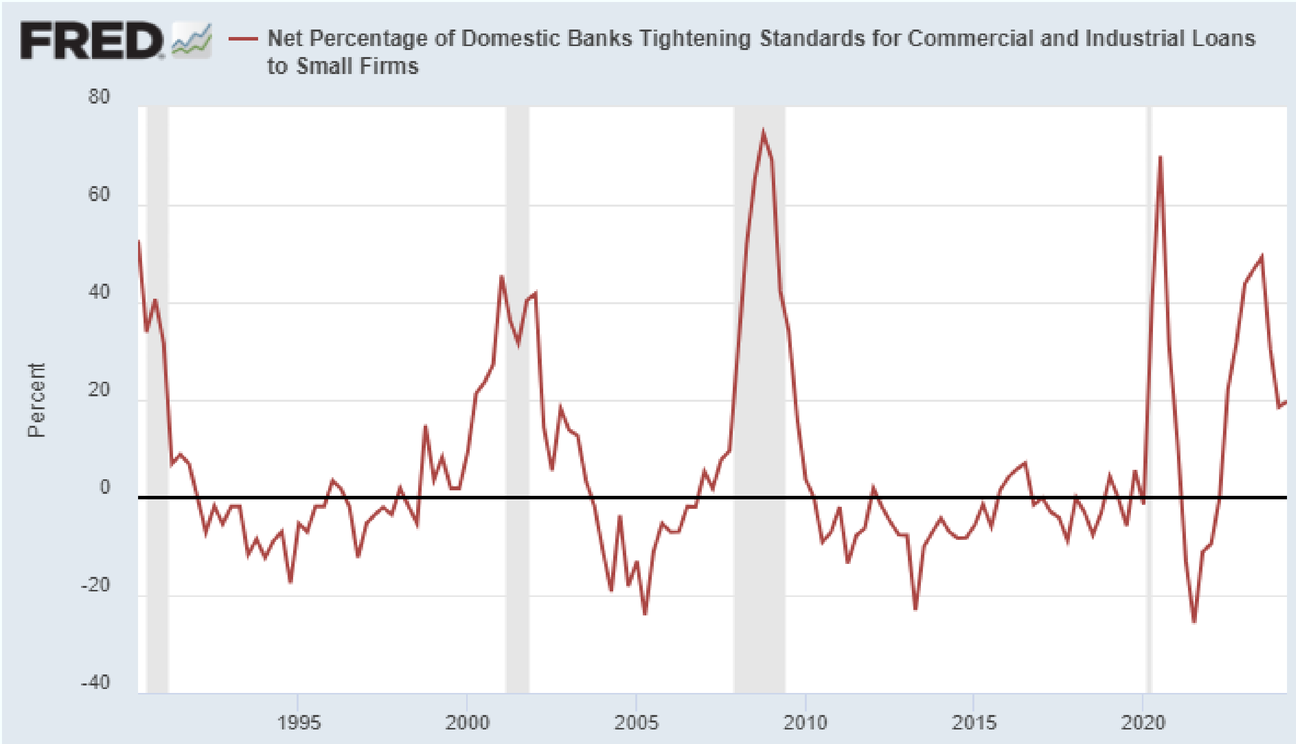


Figure Source: Board of Governors of the Federal Reserve System (US)

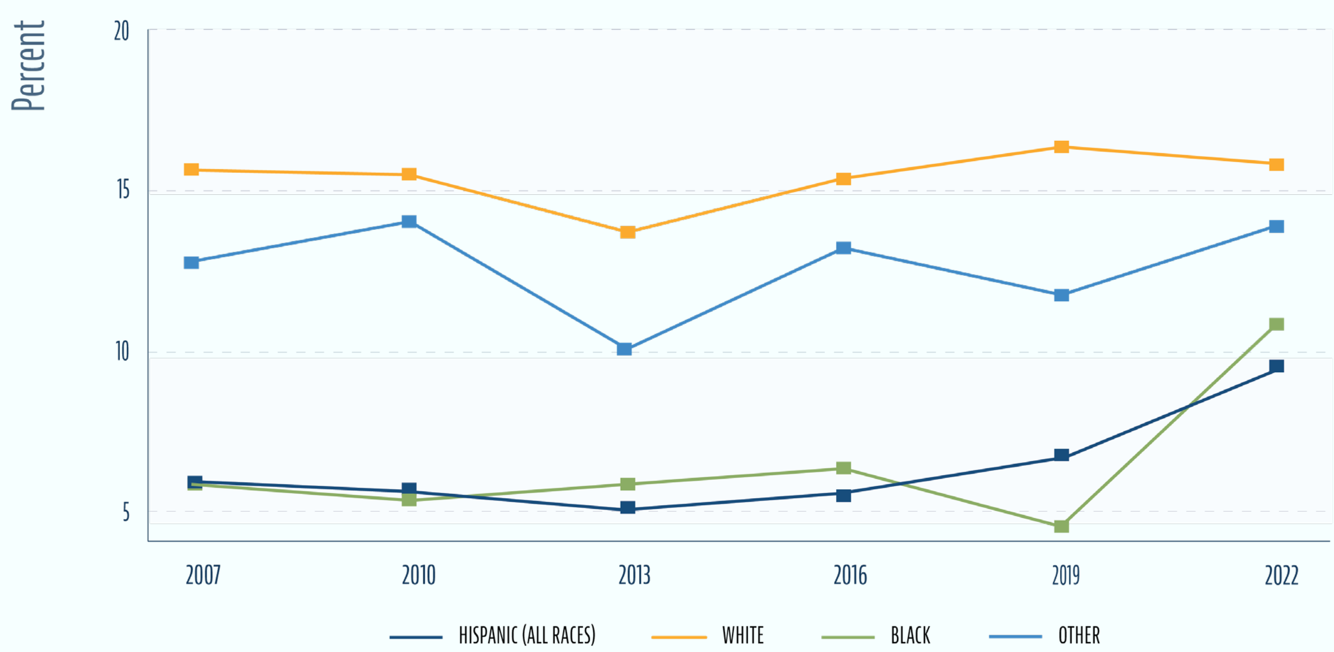
The collapse of several small and regional banks, including Silicon Valley Bank, Signature, and First Republic, in the spring of 2023 added to the uncertainty about the trajectory of the economy and set off fears of additional bank failures.[265] In addition to affecting the risk and strategy calculations of individual lenders, the crisis prompted federal regulators to reexamine their supervisory requirements for mid-sized banks that had been excluded from the oversight put in place after the 2008-2009 recession.[266] In the aftermath of the bank failures, regulators considered stricter requirements for banks with assets between $100 billion and $250 billion, particularly related to stress testing, creating additional pressure to manage risk in their portfolios and practices.[267] Uncertainty around the stability of small and regional banks also prompted changes in business deposit activity, as many companies shifted their transaction accounts from smaller to larger banks.[268] Small banks lost $108 billion in deposits in the days after the Silicon Valley Bank collapse, raising concerns about impacts to community lending and the availability of credit to small businesses in an already-tightened environment.[269]

4.3 Borrower impacts

High inflation and interest rates have had serious impacts on the nation's small businesses over the past two years, but the sector has responded with substantial resiliency in the face of financial hardships. In 2023, the Census Bureau recorded a record-breaking 5.5 million business applications—a leading indicator of business formation as discussed in Section 3.3.[270] Filings for new businesses were still about 40 percent higher that year than pre-pandemic levels[271] and remained elevated through the beginning of 2024, despite recurring skepticism about how long the surge would last.[272]

As overall business applications increased, there was also continued growth in business formation among underserved segments. According to data from the Federal Reserve's Survey of Consumer Finances, the share of Black households that own a business more than doubled between 2019 and 2022, to 11 percent, and Latino business ownership grew at the fastest pace in a decade, to 10 percent.[273] While these business ownership rates still fall below the national average of 20 percent, they represent striking progress in closing the gap to White family business ownership and signal a potential shift towards wealth-building assets for minority households.[274] Between 2019 and 2023, the growth rate of women-owned businesses was also almost 100 percent greater than that of men-owned businesses. Data from Yelp on new business listings on their review platform also suggests that racial minorities and women started small businesses at significantly higher rates in 2023 than in 2022, indicating sustained growth in pandemic-era business formation by entrepreneurs of color.[275] Between 2022 and 2023, Yelp listings of Latino-owned businesses grew by 28 percent, Black-owned businesses by 25 percent, and Asian-owned businesses by 16 percent.

FIGURE 16 HOUSEHOLD BUSINESS OWNERSHIP RATES BY RACE AND ETHNICITY (2007-2022)



Data Source: Board of Governors of the Federal Reserve System (2023).

At the same time, inflation may have impacted small businesses more severely than larger companies. As prices for goods and services rose, small businesses faced increased operational costs, including higher staffing costs due to rising wages. Their customers also experienced the pressure of higher expenses and cut back spending on non-essential categories, which further strained small businesses' already limited cash flows.[276] Some stakeholders observed that small business owners often find it challenging to pass on increased costs to customers as they fear that raising prices may force them out of business or they are not sophisticated enough to implement such changes effectively. This dynamic has likely lessened since 2022, as small businesses have had more time to adjust to these challenging conditions. Nevertheless, surveys of entrepreneurs through early 2024 identified inflation as a persistent key challenge for small businesses.[277]

Higher interest rates have also increased the cost of repaying existing loans with variable rates and raised the cost of new borrowing for businesses, which dampened demand for loans. According to a small business lending survey by the Federal Reserve Bank of Kansas City, the size of outstanding balances grew modestly at the end of 2023 but new originations have been declining for nearly two years.[278] As discussed above, early delinquencies and defaults have exceeded pre-pandemic levels. Some businesses are also facing delinquencies on pandemic-relief loans that, unlike PPP, were not subject to forgiveness. As of 2023, 28 percent of small business EIDL borrowers still reported having an outstanding balance, including more than 1 million EIDL loans under $100,000 that were past due, delinquent or in liquidation.[279] After Congressional and watchdog criticism, the Biden Administration announced at the end of the year that it would step up efforts to collect unpaid pandemic loans.[280]

Although available data on small business closures is limited, signs suggest that they have begun to increase relative to earlier in the pandemic. For instance, despite record numbers of new employer establishments in 2022 and 2023, the percentage net loss in such establishments has also been increasing. In the twelve months leading up to March 2023, net establishment losses exceeded 10 percent, the highest rate since the end of the Great Recession.[281] In addition, although small business bankruptcies initially fell during the pandemic, they have since been rising year over year since 2020, indicating that small businesses are still on a long-term road to recovery from the pandemic crisis.[282]

FIGURE 17 NFIB SMALL BUSINESS OPTIMISM INDEX

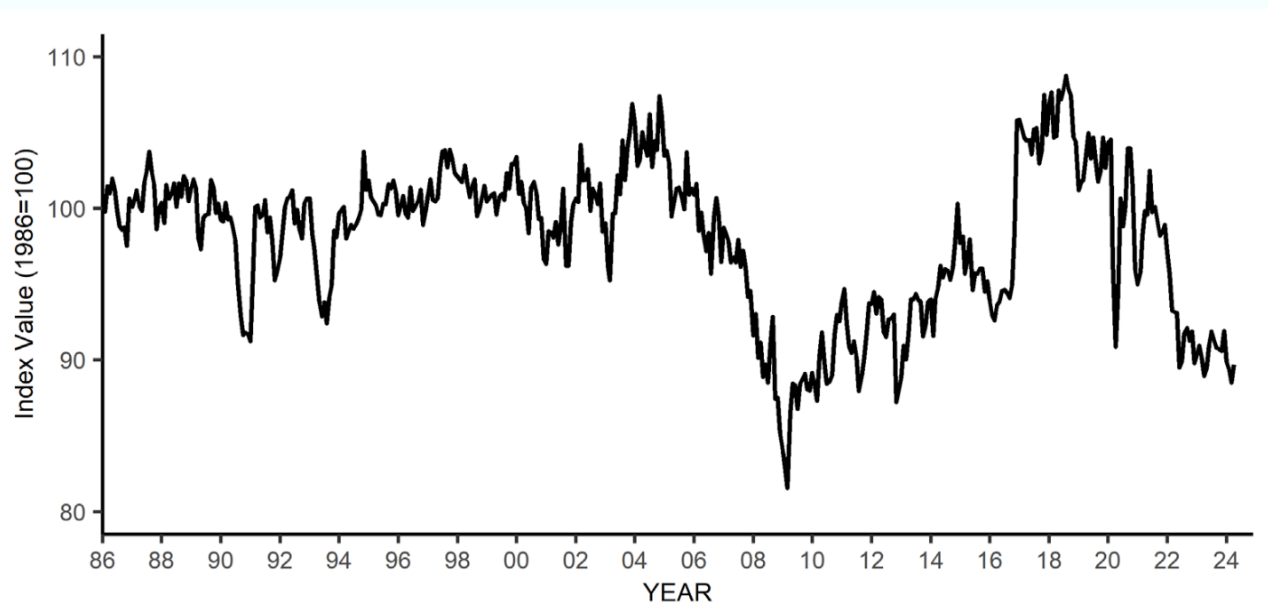


Figure Source: National Federation of Independent Business (NFIB)

Notes: Based on ten survey indicators. Seasonally adjusted (1986=100).

Faced with these financial pressures, business owner sentiments throughout this period have been mixed. Results from a PNC survey in early 2024 showed that business owner optimism reached a 22-year high, as fears of a recession began to wane.[283] By contrast, while far from the lows of the 2008 financial crisis, data from an NFIB survey of over 10,000 small businesses in March 2024 revealed declining optimism about the economy, reaching an eleven-year low before rebounding somewhat in April.[284] Results from other surveys in spring 2024 also showed some improvement in small business sentiments over 2023.[285] Like so many other stakeholders, small businesses are watching local conditions and interest rates closely for signs of stabilization and improvement.

5. SEIZING THE OPPORTUNITY AHEAD (2024+)

As small businesses and small business lenders wait for greater clarity about the direction of the economy, broader trends in technology adoption and recent public policy initiatives have created the potential to facilitate greater credit access for historically underserved entrepreneurs and younger, smaller businesses generally. Beyond simply easing current credit constraints, a soft landing for the economy would raise important questions for stakeholders about whether and how much to invest in long-term program and systems changes to small business lending going forward, relative to other organizational priorities.

This section traces both of these potential acceleration factors as well as the importance of better understanding the nature and needs of pandemic-era startups. As stakeholders begin to look beyond the current phase of continuing economic uncertainty, these issues will be critical to shaping the lending ecosystem and the impact of recent small business cohorts on wealth formation, job creation, and the broader US economy.

5.1 Continuing evolution in data and technology for small business lending

As discussed above, technology and the increasing availability of digitized banking information and other data sources played a significant role in the growth of fintech lenders in the aftermath of the 2008 financial crisis. Technology adoption further accelerated early in the pandemic as lockdowns and emergency relief funding made it necessary for both customers and lenders alike to shift financial services online.[286] Customers have become increasingly comfortable using technology to manage tasks such as applying for financial products, budgeting, investing, and online shopping. They are also more accustomed to providing financial institutions access to account data through data aggregators such as Plaid and Finicity. This is prompting banks and mission-based lenders to rethink the implications of this "open banking" system for increasing operational efficiency, reducing frictions from data intermediation, and expanding product and service offerings.[287]

The architecture for customer-permissioned data flows has continued to expand and mature over the past four years. Data sources that are transmitted through customer-permissioned channels include bank account information as well as feeds from business accounting software systems. For individual borrowers who are still hesitant to authorize electronic access to information due to privacy or other concerns, Optical Character Recognition technology is widely used to extract data from PDF bank statements or other documents, reducing the need for manual processing. As studies increasingly document the benefits of incorporating these types of alternative data sources into underwriting to extend greater credit access to underserved populations, better predict risk, and allow lenders to offer more competitive pricing, additional lenders are considering investments to facilitate use of automated data flows and technology more generally to improve the scale, inclusiveness, and efficiency of their underwriting.[288]

The Consumer Financial Protection Bureau (CFPB) is currently developing regulations to govern transfers of data from consumers' transaction and credit card accounts.[289] Although the CFPB is not addressing transfers of business account data directly, the rules may shape the practices, norms, and technological infrastructures of data providers, aggregators, and lenders and other data recipients for small business as well as consumer applications. It is also unclear whether the finalized rule would apply in cases where business lenders (such as some mission-based lenders) obtain permission to access data from entrepreneurs' personal accounts to assess their global (combined household and business) finances.

Recent interest in adopting machine learning and artificial intelligence in the lending context could accelerate interest in data and technology innovations for small business credit in the years ahead. Machine learning underwriting models can potentially detect more nuanced relationships in underwriting information than traditional statistical modeling techniques.[290] Particularly when combined with data sources that go beyond traditional credit report information, machine learning offers the potential to increase predictiveness and inclusion—though lenders, advocates, and regulators are still in the process of developing new norms to manage explainability, fairness, and performance concerns. While many fintech lenders and large banks such as JPMorgan Chase, Bank of America, Wells Fargo, and Capital One have been using machine learning models for underwriting purposes,[291] adoption is much less common among community and mission-based lenders due to resource constraints and other limitations.

5.1.1 Mission-based lenders

Mission-based lenders' data and technology adoption has shifted in multiple ways during and since the pandemic, and stakeholders are considering the extent to which further changes could advance access to capital, particularly for underserved segments. By reducing costs, technology and automation can potentially help mission-based lenders effectively serve the smaller end of the market and make the economics of lending to this segment more feasible. Lenders are also considering the extent to which technology can help them reach more underserved entrepreneurs efficiently at scale. As one stakeholder described, "The 'mission' of mission-based lenders can go much further with good technology." Some mission-based lenders are also considering the increased speed of delivering products and services through technology as a path to competing with predatory lenders, helping underserved customers avoid high-cost capital that may burden them with debt.

The technology vendor landscape in the mission-based sector has grown substantially over the last decade. Before the pandemic, few vendors catered specifically to mission-based lenders. Given the difficulty of trying to capture the nuance of their lending approaches in a single technology, there were few vendors willing to tailor solutions and pricing to this sector, and even fewer investing in end-to-end platform offerings. Some CDFIs chose to develop their own bespoke technology solutions internally. However, with more CDFIs interested in adopting technology and vendors looking to expand their customer bases, there are growing numbers of vendors that are actively seeking to serve the CDFI market at lower prices. There is also enormous diversity among technology vendors. Some vendors that serve traditional banks have begun to adapt their offerings to better serve mission-based lenders. Other vendors have emerged that focus their products specifically on the mission-based market segment. These vendors see an opportunity to capture market share among the estimated 1500 existing CDFIs, more than 600 MDI banks and credit unions, and other mission-based lenders, given the challenges those lenders have faced in finding appropriate technology solutions.[292]

The emergence of vendors that specialize in the mission-based space has also made it possible to outsource technology maintenance to these providers, reducing costs and allowing lenders to focus on their core mission. For example, some stakeholders noted that in the past, CDFIs typically had to raise funding to hire, manage, and train project teams to build a technology solution, and then raise additional funding to cover these salaries and ongoing staff training and platform maintenance. The option of outsourcing the maintenance function has the potential to concentrate resources on core mission activities. Despite growth in this space, however, mission-based lenders still report challenges finding vendors that cater to small business lending specifically.

Some mission-based lenders are also beginning to work with marketplace platforms as a means of customer acquisition across a broader geographical footprint. The role of these platforms can vary from basic lead generation to providing substantial assistance in application processing and sometimes even facilitating application of the mission-based lenders' credit criteria.

While interest in data and technology innovation has increased substantially in the mission-based sector over the past four years, stakeholders also emphasize that it is not a silver bullet. Significantly scaling mission-based lenders' operations depends on customer acquisition, capital liquidity, and other complementary systems changes in addition to technology adoption. Stakeholders also emphasize that even with substantially more efficient operations, some level of subsidy will likely always be necessary to work with the full spectrum of borrowers. Accordingly, technology initiatives frequently intersect with other mission-based lender programming. FinRegLab's next report in this series will focus in greater detail on the issues surrounding technology adoption by mission-based lenders.

5.1.2 Banks

Recent technology improvements also hold promise for banks both in facilitating closer collaboration with mission-based lenders and in expanding their direct lending programs, depending on their appetite for serving the small business market.

The emergence of small business second look loan marketplaces has created an opportunity for banks to engage with mission-based lenders beyond philanthropy. The Community Reinvestment Fund (CRF) launched Connect2Capital in 2018 as a marketplace connecting financial institutions to mission-based lenders, so that banks could refer applicants to CDFIs while maintaining a connection to these business owners for future service offers. Connect2Capital leverages a matching algorithm to pair applicants with the lenders and technical assistance providers that best fits their needs and applicant profile. US Bank was an early adopter of Connect2Capital, engaging with CRF to be part of a national referral partnership to CDFIs, but interest has grown since COVID.[293] In 2021, Connect2Capital announced that it had reached $100 million in loan volume through its platform, made to over 3,200 small businesses.[294]

There is also some interest from banks in tailoring these referral platforms for their customers. In 2022, Wells Fargo released the Small Business Resource Navigator, an internally branded version of Connect2Capital that matches small business loan applicants to CDFIs with the right product fit.[295] This allows the bank to maintain a cohesive customer experience for applicants while directing them to other lenders, built on the premise that eventually those borrowers will come back to the bank for larger loans. While it remains to be seen how well these platforms deliver on their promise to increase responsible credit access, the ability to generate substantial volume from bank referrals has the potential to address the need for marketing and lead generation that mission-based lenders need to achieve scale post-PPP.

Banks' continuing internal technology investments also have the potential to impact their direct lending programs to small businesses, depending on their business strategy. To adopt digital banking, banks have had to navigate outdated and complex legacy core systems and tech stacks that underpin their operations, hampering innovation and technology adoption.[296] Outdated systems and processes put banks behind fintechs in adapting to the speed of digital innovation after the 2008 financial crisis.[297] Yet today nearly three-quarters of global interactions with banks are taking place digitally.[298] Banks have been investing billions in digital transformation initiatives, launching mobile apps with customer-friendly features, working to increase the speed of their processes, and forming extensive partnerships with fintechs.[299]

Some banks have focused their technology adoption efforts specifically on scaling small business lending, building on the momentum coming out of PPP and other pandemic relief programs. Others have returned to pre-pandemic lending practices relying on traditional processes and channels, or have upgraded digital platforms without changing the data and models they use for underwriting or the products offered. Banks may also turn to small business technology improvements as a follow on to innovations for consumer segments that they consider to have greater revenue potential. For instance, consumer bank divisions may lead efforts to build out open banking integrations to external consumer financial accounts, but the technology applications, customer marketing, and internal regulatory and compliance processes can then be leveraged by small business lending programs to build cash-flow underwriting capabilities.

Various fintechs and vendors are also offering to partner with banks to use their platforms to develop specialized programs, such as models that can pre-screen banks' existing transaction account data to evaluate current small business customers for loan eligibility and second-look programs to further evaluate applicants who do not meet the banks' general criteria. While enforcement activity around "banking as a service" relationships has increased as discussed above, the overall dynamic between banks and fintechs has diversified to encompass a range of partnership models. As the prospect of a recession becomes less likely, banks will face decisions about whether to go beyond relaxing some of their current small business credit criteria to make further investments in data and technology adoption and to expand their basic thresholds for business age and loan sizes to better reach underserved businesses.

5.2 Policy developments

As lenders decide their appetite and capacity for small business lending in an improved economic environment, several federal initiatives have the potential to incentivize and facilitate credit access among historically underserved entrepreneurs. These include the ten-year State Small Business Credit Initiative (SSBCI), banks' Community Reinvestment Act (CRA) obligations, recent rulemakings focused on the collection and reporting of data about small business lending, and guidance to clarify the use of Special Purpose Credit Programs (SPCPs) to increase credit access for historically underserved populations. As discussed in further detail in Appendix C, while each program has potential to expand access to credit for small businesses, they also face unique implementation questions and challenges. Their net impact is therefore difficult to forecast and may vary depending on lender type and other factors.

In March 2021, Congress revived the State Small Business Credit Initiative with $10 billion in federal funding that was designed to leverage up to $100 billion from private sources to help states increase capital access for small businesses over a ten-year period. SSBCI was first developed in response to the 2008 financial crisis and passes federal funds to states to provide loans and equity capital to small businesses.[300] The program gives states the discretion to decide how funds are used and administered, which has created a fragmented landscape.[301] While banks are likely to be a primary conduit for SSBCI funds, the ability of alternative lenders such as fintechs and CDFIs to participate depends on states' implementation decisions and individual lenders' capacities and strategic decisions. Each program has its own parameters, requirements, documentation standards, and timelines, so lenders have to consider each one individually and determine whether and how they can take part. CDFIs and MDIs are seeking to participate in many states where eligibility criteria permit, but the lack of standardization across SSBCI programs has placed a burden on them. Mission-based lenders already struggle with capacity, and in order to take part in these programs and scale, they will need to adapt their products, policies, and processes for each state's program.

In October 2023, federal regulatory agencies released the final rule to modernize the Community Reinvestment Act, a 1977 law that encourages banks to meet the financial services needs of low- and moderate-income (LMI) neighborhoods. The updated CRA rule emphasizes smaller loans and investments that can have higher impact and are more responsive to the needs of LMI communities, and encourages partnerships with certified CDFIs.[302] For certain loans to small businesses that meet a size and purpose test, the regulation allows them to be considered as both community development loans and retail loans for purposes of banks' CRA examinations. However, the potential full impact of the rule is currently difficult to assess in light of industry lawsuits challenging other aspects of the new standards and staggered implementation periods through 2027.[303]

In March 2023, the CFPB issued a final rule to implement Section 1071 of the Dodd-Frank Act, which requires financial institutions to track and report demographic data on applications for business credit. The intent of the law is to drive transparency about lending to women-owned and minority-owned small businesses and to facilitate enforcement of fair lending laws. Implementation of the rule was delayed pending a constitutional challenge to the CFPB's funding structure that was rejected by the Supreme Court in May 2024, although challenges to the rule on other grounds are still pending.[304] The CFPB announced soon after the Court decision that it will extend data collection deadlines to begin between July 2025 and October 2026 for different tiers of lenders, with public release of the data to follow in subsequent years.[305]

Regulators also recently issued guidance to facilitate lenders' use of special purpose credit programs, which were first authorized by Congress through an amendment to the Equal Credit Opportunity Act (ECOA) in the 1970s. SPCPs authorize lenders to develop special pricing or underwriting requirements to extend credit to underserved groups that face barriers to credit access.[306] This includes the consideration of factors such as race, ethnicity, or religion in credit applications, allowing banks to expand fair access to credit for communities impacted by discrimination. Despite their promise, SPCPs have not been widely adopted by lenders due to uncertainty and concerns about potential fair lending challenges. However, with heightened focus on building wealth among marginalized communities, addressing financial disparities, and promoting equity and inclusion since 2020, SPCPs have received growing attention. In 2021 the CFPB issued more guidance on the requirements for a SPCP and provided examples, and in 2022 several federal agencies put out a statement encouraging lenders to consider SPCPs.[307] Several large banks including US Bank and Zions Bank now offer SPCPs targeted to underserved small businesses.[308] Recently, the Office of the Comptroller of the Currency (OCC) has been working with the American Bankers Association as part of its Project REACh initiative to compile resources and technical insights for banks and other stakeholders about SPCPs for small businesses, with the goal of encouraging more widespread adoption.[309]

As different lenders consider the potential impacts of these initiatives and the trajectory of the broader economy, they will weigh the benefits of increasing investments to facilitate greater lending to smaller, younger businesses and to historically underserved populations against other strategic priorities. In making this calculation, lenders may consider factors such as potential financial and societal benefits, the degree of financial and legal downside risks, and general capacity constraints. For mission-based lenders, for example, the availability of large amounts of federal funding for green initiatives is drawing increased attention as a potential means of accessing new sources of capital, although its impact on small businesses in particular would vary widely. For banks, continuing evolution in capital standards, competing demands for technology resources across a wide range of business lines—particularly at a time of increasing interest in adopting machine learning and artificial intelligence—and assessments of business opportunities will all help to shape these downstream decisions. The potential for competition from other strategic priorities may make it particularly important for small business stakeholders to begin mapping out potential paths forward even ahead of greater clarity about future trends.

5.3 Meeting the needs of pandemic-era businesses

As lenders consider their next steps with regard to small business lending, the unprecedented growth in entrepreneurial activity since the pandemic could also shape the future of the small business lending ecosystem. Stakeholder responses over the next few years will help determine whether the momentum in entrepreneurial activity can be sustained and deepened to translate into long-term economic growth and community development. Understanding the drivers of small business growth, the makeup of these new cohorts, and how they compare to prior generations of entrepreneurs will be crucial to assess their future capital needs and borrowing demand.

5.3.1 Growth drivers

Although the initial surge of pandemic business formation was thought to be temporary, as small businesses were reopening their doors following the spring 2020 shutdowns and laid-off employees turned to entrepreneurship and self-employment out of necessity,[310] the surge in business applications picked back up in January 2021 and has remained at elevated levels for the past three years. This trend continued even after the labor market returned to low, pre-pandemic unemployment levels below 4 percent by early 2022.[311] This indicates that other factors, such as new market opportunities, might be driving a longer-term shift beyond the immediate response to pandemic shutdowns.[312]

There is evidence that the substantial market and consumer shifts brought on by the pandemic created new business opportunities and contributed to business formation. For example, the highest numbers of new business applications have been concentrated in industries connected to pandemic-era changes to work and lifestyles, such as the adoption of remote work, online shopping, and delivery services, which have fundamentally changed how Americans engage with businesses and their communities.[313] Researchers have also noted a trend in the geography of new formations. New businesses since the pandemic have emerged primarily in the neighborhoods surrounding residential and suburban areas, and less so in core downtown areas, where they have historically been concentrated. This "donut effect" aligns the surge in business formation with pandemic-driven shifts such as the rise in remote work and migration of people away from major cities.[314] The same kinds of businesses that previously provided services in downtown areas, such as restaurants, gyms, and laundromats have also shifted to surrounding neighborhoods, in line with the changing needs of workers who spend less time near urban workplaces.

Research has also connected the rise in business formation to "job-to-job" flows, where entrepreneurs start a business from a place of employment rather than after layoffs or an extended period of unemployment. Since 2021, there has been a strong correlation between the rise in business applications and employees quitting salary or wage jobs. This suggests workers are starting their own businesses driven by market opportunities, rather than resorting to self-employment to replace lost income.[315]

5.3.2 Make-up of the new cohort of businesses

Stakeholders are also studying and debating the composition of the new businesses formed since the pandemic. While current data are limited, recent cohorts likely encompass a mixture of previous business owners rebounding from the pandemic and new entrants, as well as gig and side-hustle businesses and businesses with the potential to generate new jobs and significant growth.[316] For example, the number of Etsy sellers globally more than doubled during the pandemic, which may consist primarily of small, individual online vendors and other side hustles.[317] However, the volume of applications from businesses designated by the Census Bureau as having a "high propensity" to create substantial numbers of new jobs also increased.[318] High propensity applications account for about one-third of total new business applications.[319] The Bureau of Labor Statistics tracks the rate at which new business applications translate into actual businesses and jobs, and has shown promising signals from earlier post-2020 cohorts creating millions of jobs.[320]

Data on the makeup of these new businesses also shows substantial concentrations in innovation-intensive and technology-driven industries, such as professional and technical services.[321] This is particularly noteworthy because historically, highly innovative startups in these industries have been responsible for driving economic and productivity growth. When new innovative businesses enter the market, there is often a period of disruption and experimentation—those who effectively adopt new technologies grow and scale, leading to productivity growth in the economy.

5.3.3 Demand for capital from this cohort of businesses

Given lenders' tightening of their credit policies at multiple points since the pandemic and high interest rates over the past two years, pandemic-era startups likely relied less on credit to cover initial costs. However, stakeholders are eagerly seeking to understand their demand for credit as these businesses mature.

Some research suggests that savings from stimulus programs and unemployment insurance played a role in funding the startups.[322] Stimulus funding allowed Americans to grow their incomes and savings, creating a cushion that could provide seed funding for new businesses. The checks also provided a safety net that made it easier for people to absorb the risk of starting new businesses, which might have otherwise been more difficult to do. However, any such effects have likely waned as research shows that cumulative savings levels turned negative in late 2021 and that excess savings had been depleted by March 2024.[323]

Many business owners often start without external capital such as debt or venture funding. A 2019 study by the Kauffman Foundation found that two thirds of entrepreneurs rely on personal savings or funding from friends and family.[324] Given the high cost of capital since 2022, it would not be surprising if these new entrepreneurs were hesitant to turn to debt financing and tapped into personal funding sources. But as these businesses mature, they may be exploring new ways to secure funding. For example, according to a Goldman Sachs survey of 1,700 small businesses in April 2023, nearly 80 percent reported concern about their ability to access capital, which might signal a shift towards more demand for capital in the future.[325]

In thinking about the future prospects of these businesses, some stakeholders are drawing a comparison to the mid to late 1990s—the last time that innovation sparked significant growth in business formation in the US. In the dotcom boom of the 1990s, businesses leveraged the novelty of the internet and digital tools for productivity gains.[326] The quick growth and scaling of a small segment of innovation-intensive and technology-driven companies such as Amazon and eBay founded during this period contributed to sustained economic growth.[327] Some stakeholders are pointing to the substantial concentration of post-pandemic startups in innovation- and technology-driven industries as a potential parallel, suggesting that these businesses could have a similarly sizable impact on the economy.[328] Others have identified early signs of productivity growth among post-pandemic startups, citing the impact of recent market shifts such as the shift to remote work, the boom in artificial intelligence, and the expansion of e-commerce that could potentially alter market dynamics in the long term.[329]

The trajectory of the economy will be a critical determinant of the survival and growth of these newly formed businesses, since either continuing high inflation and interest rates or an outright recession could place significant stress on both the businesses and capital sources such as lenders. Another important factor is the extent to which lenders and investors will focus on both high-propensity and high-tech businesses with the potential for rapid growth and scale, as well as the majority of less growth-oriented but important businesses that contribute to overall economic stability. One idea circulating is the need to focus on strategies that prioritize younger businesses. Existing strategies, such as lending programs, credit policies, and regulatory policies, often focus on small businesses in general, rather than specifically targeting younger businesses. Some stakeholders are advocating for a shift toward prioritizing these younger businesses to help ensure their survival and sustain the current momentum.[330]

6. CONCLUSION

The small business sector and the lending ecosystem that supports it have been permanently impacted by the events of the last four years. Despite the permanent closing of hundreds of thousands of businesses and major consolidation in lenders, there has also been tremendous rebirth and expansion, particularly in the formation of minority business enterprises and growth in the mission-based lending sector. The choices that stakeholders make in the next few years will help to determine whether this momentum can be further sustained and deepened to make long-term improvements in credit access for younger, smaller businesses in general and for entrepreneurs of color and other historically disadvantaged groups in particular.

Improvements in data and technology for loan originations and recent government initiatives to encourage greater lending to underserved populations are encouraging steps toward meaningful change, yet the path forward is uncertain. Macroeconomic conditions and the extent to which different stakeholders are willing and able to make significant investments and maintain focus on this market niche are unclear.

Moreover, while using technology to facilitate access to more representative, insightful data and faster, more accurate decision-making is critical to improving credit access, other issues and relationships within the ecosystem are also important to address. These include such topics as whether banks will decide to expand their direct lending activities and/or referral programs to mission-based lenders, how to fund and facilitate data and technology adoption among mission-based lenders, how mission-based lenders adjust their organizations and culture as the scale of their lending programs increase, and the development of secondary markets to help lenders cycle funds to more borrowers more quickly.

Upcoming FinRegLab reports will assess the potential benefits and challenges of data and technology adoption by mission-based lenders in greater detail, including lessons learned to date from historical and current initiatives, and provide an empirical analysis of the impacts of cash-flow data on lending predictiveness and inclusion. More broadly, we are engaging with a wide range of stakeholders to assess ways that advancements in research, technology, market practice, and policy can support long-term improvements in business formation and credit access.

As critical as the last four years have been, the next four could be even more important to improving the inclusion, fairness, and efficiency of lending to younger, smaller businesses. Better meeting the capital needs of this historically unserved sector—and even more so, entrepreneurs of color and other business owners who face structural challenges in accessing credit—has the potential to unlock substantial wealth formation, job creation, community development, and growth in the broader US economy.

APPENDIX A

Glossary: Key Terms Used in the Report

Small business: Different government agencies and stakeholders use different definitions of small business in different contexts that typically consider the number of employees and annual revenue as key criteria. The most commonly used definition is a firm or enterprise with fewer than 500 employees.[331] The Small Business Administration (SBA) defines small businesses as independent businesses with fewer than 500 employees and annual revenue under $7.5M.[332] However, the SBA has also established size standard exceptions to tailor these employee and annual revenue thresholds by industry. This means for some industries, the criteria for small business varies from 100 to over 1,500 employees and from less than $1M to over $40M in annual revenues.[333] Some lenders differentiate between small business and commercial lending in their product offerings using thresholds of annual revenue, such as below and above $20M per year. Bank Call Reports and Community Reinvestment Act regulations use a loan size threshold of $1 million to differentiate between small businesses and larger companies.

Using the SBA's definition, as of 2023, there were 33.2 million small businesses in operation, representing 99.9 percent of all firms in the US.[334] Over 80 percent of these businesses are non-employers, or firms with no paid employees except the owner(s). Of the more than 6 million small businesses with employees, nearly 90 percent have fewer than twenty employees, yet they still represent over 60 million jobs.

Minority Business Enterprise (MBE): The term "minority business enterprise" has a very specific definition in the context of federal government contracting but is also often used more generally to refer to businesses that are owned by entrepreneurs of color. The formal definition focuses on a company that is at least 51 percent owned, managed and controlled by a member(s) of a qualified minority group. To be considered a member of a qualified minority group, a person must be a United States citizen who is at least 25 percent Asian-Indian, Asian-Pacific, Black, Hispanic, or Native American. Ownership by qualified minority individuals means the business is at least 51 percent owned by such individuals or, in the case of a publicly owned business, at least 51 percent of the stock is owned by one or more such individuals.[335]

Microloan / microlending: Some stakeholders use the term "microloan" to refer to loans to small businesses that have relatively small balances and that are unsecured or lightly secured. Although there is no universally accepted threshold for microloans within the industry, some stakeholders use the term to refer to loans of $50,000 or less, following the SBA's microloan program.[336] SBA microloans are often directed to support underserved communities, such as women and minority business owners. However, some lenders may classify microloans as those up to $100k.[337] Overall, our emphasis is broadly on loans at the smaller end of the scale, which are generally within this threshold.

Mission-based lender: A non-profit or for-profit lender with a mission focus, which often prioritizes social outcomes alongside or beyond traditional profit-focused lending. These include lenders such as CDFIs, MDIs, and other mission-driven lenders. Community banks, which are often defined as banks with less than $5B in assets and a small, local geographic footprint, are not always classified as mission-based lenders but may share similar characteristics and challenges.

Fintech: This term is used by many stakeholders to refer to non-bank companies that leverage technology and innovative business models to deliver financial products and services. Some fintechs have developed credit underwriting models that incorporate electronic cash-flow data and other non-traditional information sources. They operate primarily online, with automated underwriting models and no physical retail space. They can be direct lenders, keeping most loans on their balance sheets, or platform lenders, partnering with banks to originate and match loans to investors.[338]

Alternative data: Alternative and non-traditional data are broad umbrella terms that are often used to refer to any information that is not contained in traditional credit reports and/or credit applications (such as annual income). For example, the terms are sometimes used to refer to cash-flow data, although particularly in the small business credit market cash-flow statements and bank statements have frequently been required by traditional lenders.

Depending on the context, the terms may also be used to refer to items such as payment history information from specific individual sources such as landlords and utility companies that historically have not tended to report full payments history to large nationwide credit bureaus, information from a broad range of public records, on-line footprint and e-commerce information, and items such as a person's education or employment.

APPENDIX B

SBA Loan Programs During COVID-19

LOAN PROGRAM	PPP	COVID-19 EIDL	COVID-19 SBA 7(A) LOANS
PURPOSE, PRODUCT STRUCTURE, AND HISTORY	» To help businesses keep their workforce employed during the COVID-19 crisis. » Participating lenders enter into an agreement with SBA to make loans to small businesses in accordance with SBA rules, regulations, policies, and procedures for PPP. » PPP did not exist prior to the pandemic.	» Long-term, low-interest federal disaster loans designed to provide economic relief to small businesses experiencing a temporary loss of revenue due to COVID-19. » Loans made directly from SBA; must be repaid; low-interest, fixed-rate, long-term loans to help overcome the effects of the pandemic by providing working capital to meet operating expenses. » EIDL loans existed prior to the pandemic. The passage of the CARES Act made EIDLs available nationwide by providing a nationally declared emergency trigger for the EIDL Program.	» This is SBA's flagship small business loan program. It provides financial assistance to eligible small businesses for various business-related purposes such as working capital, equipment, business expansion, etc. in the form of government guaranteed loans. » Participating lenders enter into an agreement with SBA to make loans to small businesses in accordance with SBA rules, regulations, policies, and procedures. » The passage of the CARES Act provided $17 billion in relief payments for 7(a) loans, allowing the SBA to cover six months of principal, interest, and associated fees for eligible loans during the pandemic. The Act also encouraged lenders to offer payment deferments.
ELIGIBILITY	» Eligibility criteria shifted across the three rounds of PPP, but generally included small businesses, self-employed individuals, and certain non-profit organizations with fewer than 500 employees (or meeting SBA industry size standards)	» Small businesses directly affected by COVID-19 » Businesses that offer supplementary services directly related to the businesses in the declaration » Businesses that are indirectly related to impacted industries and likely to be harmed by losses	» Operating business (for-profit) » Located in the U.S. » Small under SBA size requirements » Meet SBA's business type eligibility requirements » Inability to obtain the desired credit on reasonable terms from non-Federal, non-State, and non-local government sources » Creditworthy and demonstrate a reasonable ability to repay the loan

LOAN PROGRAM	PPP	COVID-19 EIDL	COVID-19 SBA 7(A) LOANS
MAXIMUM LOAN AMOUNT	» $10 million (based on 2.5x average monthly payroll costs, with a cap of $100K annual salary per employee)	» $2 million (initially had a $10,000 emergency advance program, which ended in July 2020. SBA began approving loans greater than $500,000 on October 8, 2021).	» The traditional maximum amount is $5 million (with a maximum guarantee of 85% for loans up to $150,000 and 75% for loans greater than $150,000). » The SBA guarantee percentage for 7(a) loans increased from the traditional 75 or 85 percent to 90 percent during the pandemic. » The SBA guarantee percentage for Express Loans less than or equal to $350,000 increased from 50 percent to 75 percent. The maximum loan amount for Express Loans increased from $350,000 to $1 million and then decreased to $500,000.
INTEREST RATE; FEES; COLLATERAL; GUARANTEES	» 1% fixed for all borrowers » No collateral or personal guarantees required	» 3.75% for small businesses, 2.75% for non-profits » No fees for loans $25K or less » For loans greater than $25K, lien filing fees (usually $100) and other additional fees depending on the loan size	» Vary depending on the lender and the specific terms of the loan. Interest rates are negotiated between the borrower and the lender, but are subject to SBA maximums, which are pegged to the prime rate or an optional peg rate. Interest rates may be fixed or variable » Lenders pay an upfront fee (SBA Guarantee Fee) for each loan guaranteed but are permitted to pass the cost of the fee on to the borrower » Lenders also pay an annual service fee which they cannot pass on to borrowers
REPAYMENT TERMS	» 5 years for loans made after June 5, 2020; 2 years for loans made before that date (with the possibility of deferment) » Loan payments deferred for borrowers who apply for loan forgiveness until SBA remits the borrower's loan forgiveness amount to the lender » If a borrower does not apply for loan forgiveness, payments are deferred 10 months after the end of the covered period for the borrower's loan forgiveness (between 8 and 24 weeks)	» 30 years » Payments are deferred for the first 2 years (during which interest will accrue), and payments of principal and interest are made over the remaining loan term » No penalty for prepayment	» The shortest appropriate term, depending upon the borrower's ability to repay. The term varies, depending on the lender and the specific terms of the loan (usually up to 10 years for working capital and up to 25 years for real estate)

LOAN PROGRAM	PPP	COVID-19 EIDL	COVID-19 SBA 7(A) LOANS
LOAN FORGIVENESS	» Up to 100% of the loan can be forgiven if the funds are used for eligible expenses (e.g., payroll, rent, utilities) and the borrower maintains or rehires employees » Borrowers have up to five years from the date the SBA issued the loan number to apply for loan forgiveness, but they can only apply once they have used all the loan proceeds for which they are seeking forgiveness » 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	» No loan forgiveness, but the initial $10,000 emergency advance grant did not have to be repaid » However, payments were deferred for the first two years, with the first payments starting between October—December 2022	» No specific loan forgiveness program for SBA 7(a) loans during the pandemic, but there were other forms of debt relief/ restructuring/deferment
CURRENT STATUS	» The PPP program ended in 2021, and borrowers are now in the process of loan forgiveness or repayment	» The EIDL program is still active, providing assistance to businesses affected by disasters » COVID-EIDL has effectively ended—no longer accepting new applications as of January 2022	» SBA 7a is still an active program but the COVID provisions have expired

APPENDIX C

Recent Policy Developments

C.1 SSBCI

Coming out of the COVID-19 pandemic, Congress enacted the State Small Business Credit Initiative (SSBCI) as part of the 2021 economic stimulus legislation. SSBCI will provide $10 billion in federal funds to increase small businesses' access to credit and equity financing by catalyzing up to $100 billion in private-sector investments.[339] The US Department of Treasury will deliver the funding over the next eight years through states, territories, and eligible municipalities organizing various programs.[340]

If completed successfully, SSBCI will be the biggest infusion of government funding into small businesses to date. It is anticipated to play a critical role in developing small businesses and markets in underserved communities. However, there have been many delays in application deadlines since SSBCI was reauthorized, which is expected to extend the timeline for delivery and deployment beyond the initial estimates.[341] The program design and funding allocation has been complex and drawn out, taking more than 18 months to execute. As of December 2023, the Department of Treasury approved applications for capital access programs (CAPs), equating to over $8.2 billion in funding and disbursed $2.6 billion to jurisdictions in the first tranche.[342] Each jurisdiction can tailor their programs according to the unique needs of their communities, within the specifications of the program. Jurisdictions' plans include collateral support, loan guarantee, loan participation, and equity capital programs.[343] Implementation mechanisms and sophistication levels also differ across jurisdictions.

Most states have chosen to implement Loan Guarantee Programs or Loan Participation Programs along with SSBCI, which make it easier for mission-based lenders to participate by enabling them to sell loans off their balance sheets, freeing up additional liquidity needed to scale. SSBCI also includes the MBDA-administered Capital Readiness Program: a $125 million technical assistance program designed to help underserved entrepreneurs prepare to access SSBCI funding.[344]

The program includes funding allocation and incentives for jurisdictions to deliver funds to businesses owned and controlled by socially and economically disadvantaged individuals (SEDI). SEDI includes people historically underserved by traditional financial service providers such as people of color, people with disabilities, LBGTQI+ community, and residents of CDFI investment areas.[345] Given the recent rise in small business formation, SSBCI holds promise for increasing access to capital for traditionally underserved businesses and spurring economic growth.[346]

C.2 CFPB's Rule 1071

In March 2023, the Consumer Financial Protection Bureau (CFPB) finalized the rule to implement Section 1071 of the Dodd-Frank Act. The rule requires new, extended data collection and reporting by financial institutions on small business credit applications. If enacted, Section 1071 will have significant implications for the regulation of small business lending. The ruling mandates that covered financial institutions collect and report data on small business loan applications, including the demographics of the applicant's principal owners to assess: minority-owned business status, women-owned business status, and the ethnicity, race, and sex of the applicant's principal owners.

If implemented, the rule will create more transparency around on how banks, credit unions, online lenders, and others are serving businesses owned by people of color, women, and the LGBTQI+ community. It would also increase transparency in small business credit pricing, terms and conditions, and actions taken on applications, which could help curb overpricing, reduce abusive terms, and increase access to credit for traditionally underserved small businesses.

Although the final rule has the potential to advance inclusion in small business lending, it still faces an uncertain future.[347] The final rule's requirements are extensive, and implementation may present many operational challenges, especially to smaller lenders. It imposes substantial data reporting requirements on most lenders that extend credit to small businesses, creating additional compliance risk. Some industry stakeholders are also concerned that the potentially high cost of complying with the final rule may even increase barriers to fair lending. For small community banks in particular, the cost of establishing comprehensive compliance protocols that address the final rule may reduce their ability to lend to small businesses. Due to these reasons, industry associations have voiced strong objections to the rule as too far-reaching and burdensome.[348]

There have also been legal challenges to the constitutionality of Section 1071, and more are anticipated. On July 31, a district court in Southern Texas enjoined the CFPB from implementing and enforcing the Section 1071 Final Rule against members of the American Bankers Association (ABA) ,the Texas Bankers Association, and Rio Tinto Bank. The court has asked the U.S. Supreme Court to make a final determination on the rule. Until the Supreme Court issues a final decision, there will continue to be uncertainty regarding the status of the ruling and of CFPB's ability to conduct rulemaking .

C.3 CRA modernization

The Community Reinvestment Act (CRA) was passed by Congress in 1977 to encourage deposit-taking banks to reinvest in the communities where they operate. The law required deposit-taking banks and savings associations to provide loans and financial services to the communities in which they do business. Through the regulation, federal banking regulators assess how well deposit-taking banks are fulfilling their obligations to these communities and take that information into consideration when evaluating applications for actions such as new bank branches or mergers.[349]

In 2023, regulators enacted major updates to the CRA in an effort to modernize the ruling. The previous amendment to the regulation was made in 1995, rendering the existing iteration of the law outdated. One problem with the prior ruling was that banks continued to be evaluated for CRA based on their physical locations, despite advancements in technology and digitization over the last several decades that have made mobile and online banking more accessible and more commonly used by customers. The updated ruling took into account these kinds of trends in an effort to modernize the regulation and ensure it reflected and captured developments within the financial sector. For instance, the new ruling expanded the role of mobile and online banking, allowing for considerations of lending activities beyond banks' physical locations. Additionally, the updated ruling encourages financial inclusion from banks by introducing new assessments and incentives for expanding their community-based investment and lending activities.[350]

Although many elements of the law were updated to encourage financial inclusion, certain elements remain unchanged. While the original law relied on low-to-moderate-income (LMI) classifications, not race, to expand equitable lending, financial inclusion advocates had hoped that the revised ruling would take into account racial categories in CRA assessments, as an attempt to address existing racial disparities in wealth and access to capital. The new iteration of the regulation maintained LMI considerations in CRA assessments.[351]

However, the updated ruling emphasizes smaller loans and investments that can have higher impact and are more responsive to the needs of LMI communities such as small business loans. In fact, small business loans are one three key product lines to be evaluated under the new retail CRA assessment.[352] The recent amendment to the CRA holds a lot of promise for expanding access to capital for LMI communities and underserved businesses. The new rule was slated to go into effect starting January 2026. However, the momentum has been temporarily halted due to legal disputes surrounding the ruling.[353]

C.4 Special Purpose Credit Programs

While banks are prohibited by the Equal Credit Opportunity Act (ECOA) from using factors such as race, ethnicity, or religion in making credit decisions about an applicant, there is a special provision for Special Purpose Credit Programs (SPCPs) meant to increase access to credit to economically disadvantaged groups.[354] This allows a lender to set up a SPCP targeted to groups with a common characteristic such as race, national origin, or sex, and to use these usually-prohibited variables in approval decisions. Examples of protected classes groups include: minority residents of low- to moderate-income census tracts, residents of majority-Black census tracts, operators of small farms in rural counties, minority- or women-owned small business owners, and consumers with limited English proficiency or residents living on tribal lands.[355]

To implement a SPCP, a lender must develop a written plan that identifies the group that the program is designed to benefit and establishes procedures and standards for extending credit. The lender also has to prove that the target of the program would not qualify for products under normal lending standards or would receive less favorable terms than other applicants.[356] The lender is then allowed to modify loan standards, create new products or services, adjust terms for existing products and services, and modify policies and procedures for loss mitigation.

The ECOA specifies three types of SPCPs:

- A credit assistance program expressly authorized by Federal or state law for the benefit of an economically disadvantaged class of persons;
- A credit assistance program offered by a not-for-profit organization for the benefit of its members or for the benefit of an economically disadvantaged class of persons; or
- A special purpose credit program offered by a for-profit organization to meet special social needs, as specified by the regulations.

Although SPCPs have been allowed since 1976, they have not been widely implemented due to lenders' wariness about violating ECOA's disparate treatment rules and the Fair Housing Act as well as aversions to litigation risk.[357] To date, only a handful of banks have implemented SPCPs, and most of these have been focused on consumer mortgage products.[358] Since 2020, as attention on financial inequities among minority-owned small businesses increased, there has been some growing momentum in banks establishing SPCPs to expand credit access.

Endnotes

1 "White House: FACT SHEET."; Perry, Donoghoe, and Stephens, "Who Is Driving Black Business Growth?"; "New Business Surge."

2 "PayNet/Equifax Risk Insight Suite | Small Business Loan Performance."; "Small Business Economic Trends."; Petrik, "Small Business Confidence Improves After Debt Ceiling Scare."; Riddle, "Majority of Small Businesses Believe US Is in Recession | Reuters."

3 Howell et al., "Lender Automation and Racial Disparities in Credit Access." ; "From Pandemic to Prosperity: Bipartisan Solutions to Support Today's Small Businesses."; Autor et al., "The $800 Billion Paycheck Protection Program."; Lindsay et al., "SBA COVID-19 EIDL Financial Relief: Policy Options and Considerations."; "Small Businesses | U.S. GAO." ; "Consumer Prices up 9.1 Percent over the Year Ended June 2022, Largest Increase in 40 Years."; Bernanke and Blanchard, "What Caused the U.S. Pandemic-Era Inflation?"

4 Lucy and Ferguson, "Small Business Data Center."

5 Ibid.

6 "Frequently Asked Questions About Small Business 2023."

7 Treece, "How Small Businesses Benefit Local Economies."

8 "The Growing Market Investors Are Missing: The Trillion-Dollar Case for Investing in Female and Multicultural Entrepreneurs."

9 Perry, Donoghoe, and Stephens, "Who Is Driving Black Business Growth?"

10 "Minority Entrepreneurs—U.S. Committee on Small Business & Entrepreneurship."

11 Brown and Nichols, "Self-Employment, Family-Business Ownership, and Economic Mobility.".; Headd, "The Importance of Business Ownership to Wealth."; Cepa et al., "2023 U.S. Trends Report: Rising Financial Vulnerability in America."

12 "Wealth, Asset Ownership, & Debt of Households Detailed Tables: 2019."; Moslimani and Kochhar, "Wealth Surged in the Pandemic, but Debt Endures for Poorer Black and Hispanic Families."; Albuquerque and Ifergane, "The Racial Wealth Gap: The Role of Entrepreneurship."; Kent et al., "Examining Racial Wealth Inequality."

13 Noel, Stewart, and Wright, "The Economic Impact of Closing the Racial Wealth Gap | McKinsey."

14 Albuquerque and Ifergane, "The Racial Wealth Gap: The Role of Entrepreneurship."; Kroeger and Wright, "Entrepreneurship and the Racial Wealth Gap."

15 "Closing The Racial Wealth Gap Through Entrepreneurship—The Greenlining Institute."

16 Bradford, "The 'Myth' That Black Entrepreneurship Can Reduce the Gap in Wealth Between Black and White Families."; Kroeger and Wright, "Entrepreneurship and the Racial Wealth Gap."; Klein, "Bridging the Divide: How Business Ownership Can Help Close the Racial Wealth Gap."

17 Kroeger and Wright, "Entrepreneurship and the Racial Wealth Gap."; Farrell, Wheat, and Mac, "Small Business Owner Race, Liquidity, and Survival."; Lowrey, "Dynamics of Minority-Owned Employer Establishments, 1997–200."

18 Hwang, Desai, and Baird, "Access to Capital for Entrepreneurs: Removing Barriers."

19 FinRegLab, "The Use of Cash-Flow Data in Underwriting Credit: Small Business Spotlight."—citing Consumer Financial Protection Bureau, Key Dimensions of the Small Business Lending Landscape 10-11 (2017); Carol O'Connell, Funding for Small Businesses: How Much Working Capital is Needed to Grow Your Small Business?, Excelsior Growth Fund (Aug. 26, 2018); Meredith Wood, 5 Reasons Your Business Needs a Loan, Weebly (Apr. 20, 2015); "Lifting Barriers to Small Business Participation in Procurement."

20 Hwang, Desai, and Baird, "Access to Capital for Entrepreneurs: Removing Barriers."; "22% of Founders Rely on Friends and Family for Capital When Starting a Business, New Data from Clutch Finds."; Blanchflower and Evans, "The Role of Credit Cards in Providing Financing for Small Businesses."

21 Hwang, Desai, and Baird, "Access to Capital for Entrepreneurs: Removing Barriers."

22 "Availability of Credit to Small Businesses—October 2022."

23 "Entrepreneurship and the U.S. Economy."; Giunipero, Denslow, and Rynarzewska, "Small Business Survival and COVID-19—An Exploratory Analysis of Carriers."

24 Farrell and Wheat, "Cash Is King: Flows, Balances, and Buffer Days."

25 "Year-End Cash Flow Strategies & Spend Management | U.S. Bank."; Ahmed et al., "Filling the Gap."

26 "FDIC Small Business Lending Survey."

27 Based on interviews with lenders.

28 FinRegLab, "The Use of Cash-Flow Data in Underwriting Credit: Small Business Spotlight."

29 "2020 Report on Employer Firms: Based on the 2019 Small Business Credit Survey."

30 Hurst and Pugsley, "Understanding Small Business Heterogeneity."

31 Howell et al., “Lender Automation and Racial Disparities in Credit Access.”

32 FinRegLab, “The Use of Cash-Flow Data in Underwriting Credit: Small Business Spotlight.”

33 Ibid.

34 “The Risks and Rewards of Microlending.”; Getting Capital to Small Businesses in Low-Income Communities.

35 Mkhaiber and Werner, “The Relationship between Bank Size and the Propensity to Lend to Small Firms.”; FinRegLab, “The Use of Cash-Flow Data in Underwriting Credit: Small Business Spotlight.”

36 “Availability of Credit to Small Businesses—October 2022.”

37 “Access to Capital for Entrepreneurs: Removing Barriers, 2023 Update.”

38 FinRegLab, “The Use of Cash-Flow Data in Underwriting Credit: Small Business Spotlight.”: “In the small business context, many stakeholders also use the terms “relationship” lending versus “transactional” lending to contrast companies that tend to rely heavily on “soft” information about both the local community and the particular small business with those that rely primarily on “hard” information that can be quantified and analyzed through automated systems.”

39 Mkhaiber and Werner, “The Relationship between Bank Size and the Propensity to Lend to Small Firms.”

40 Peek, “Secured Business Loans.”

41 Ibid.

42 Chen, Hanson, and Stein, “The Decline of Big-Bank Lending to Small Business.”

43 Gopal and Schnabl, “The Rise of Finance Companies and FinTech Lenders in Small Business Lending.”

44 “Small Business Lending in the United States, 2019.” This source defined small business loans as those under $1 million.

45 “Small Business Lending in the United States, 2020.”

46 Mkhaiber and Werner, “The Relationship between Bank Size and the Propensity to Lend to Small Firms.”

47 “Availability of Credit to Small Businesses—October 2022.”

48 FinRegLab, “The Use of Cash-Flow Data in Underwriting Credit: Small Business Spotlight.”

49 “Access to Financial Services Matters to Small Businesses.”; Benzow and Esposito, “Minority- and Women-Owned Businesses Tend to Be Younger, Making Them More Vulnerable in the Coming Recession.”; Wheat, Chan, and Tremper, “Scaling to $1 Million: How Small Businesses Fare by Owner Race and Gender.”

50 Benzow and Esposito, “Minority- and Women-Owned Businesses Tend to Be Younger, Making Them More Vulnerable in the Coming Recession.”; Robb, “Access to Capital among Young Firms, Minority-Owned Firms, Women-Owned Firms, and High-Tech Firms.”

51 Lee and Black, “Small Business Development.”; Fairlie, “Immigrant Entrepreneurs and Small Business Owners and Their Access to Financial Capital.”

52 Criminal Justice Reviews for the SBA Business Loan Programs, Disaster Loan Programs, and Surety Bond Guaranty Program.; Hwang, Desai, and Baird, “Access to Capital for Entrepreneurs: Removing Barriers.”

53 “Access to Financial Services Matters to Small Businesses.”

54 “Veteran-Owned Firms.”; Sankaran and Battisto, “Financing Their Future: Veteran Entrepreneurs and Capital Access.”

55 “Data Spotlight: Challenges in Rural Banking Access.”

56 Robb, “Access to Capital among Young Firms, Minority-Owned Firms, Women-Owned Firms, and High-Tech Firms.”; “Reaching Underserved Small Businesses.”; FinRegLab, “The Use of Cash-Flow Data in Underwriting Credit: Small Business Spotlight.”

57 Benzow and Esposito, “Minority- and Women-Owned Businesses Tend to Be Younger, Making Them More Vulnerable in the Coming Recession.”; Robb, “Access to Capital among Young Firms, Minority-Owned Firms, Women-Owned Firms, and High-Tech Firms.”; Hecht, “State of Small Business Lending: Spotlight on Women Entrepreneurs.”; “Women-Owned Firms.”; “Over a Third of Female Entrepreneurs Experience Gender Bias.”

58 McGurran, “Women and Credit 2020.”; Li, “Gender-Related Differences in Credit Use and Credit Scores.”

59 Criminal Justice Reviews for the SBA Business Loan Programs, Disaster Loan Programs, and Surety Bond Guaranty Program.; Hwang, Desai, and Baird, “Access to Capital for Entrepreneurs: Removing Barriers.”

60 “Data Spotlight: Challenges in Rural Banking Access.”; Prakash, “Rural Small Businesses Earn Better Profits and More Financing vs. City Ones.”

61 “The 2024 Impact of Women-Owned Businesses.”; Perry, Donoghoe, and Stephens, “Who Is Driving Black Business Growth?”

62 “The 2024 Impact of Women-Owned Businesses.”

63 Azoulay et al., “Immigration and Entrepreneurship in the United States.”; Lee et al., “Are Immigrants More Innovative?”

64 Albuquerque and Ifergane, “The Racial Wealth Gap: The Role of Entrepreneurship.”

65 Noel, Stewart, and Wright, "The Economic Impact of Closing the Racial Wealth Gap | McKinsey."

66 Ross and Dorazio, "The Latest Poverty, Income, and Food Insecurity Data Reveal Continuing Racial Disparities—Center for American Progress."; Greig and Eckerd, "Racial Income Inequality Dynamics."

67 Chakrabarti, Emanuel, and Lahey, "Racial and Ethnic Wealth Inequality in the Post-Pandemic Era."

68 Augustus, "Five Reasons Minority Borrowers Can't Access Capital."; Toussaint-Comeau and Williams, "Secular Trends in Minority-Owned Businesses and Small Business Finance."

69 Camara et al., "Entering Entrepreneurship: Racial Disparities in the Pathways into Business Ownership."; Toussaint-Comeau and Williams, "Secular Trends in Minority-Owned Businesses and Small Business Finance."

70 Fairlie, Robb, and Robinson, "Black and White: Access to Capital among Minority-Owned Startups."

71 Robb, "Financing Patterns and Credit Market Experiences."; Simms, Fortuny, and Henderson, "Racial and Ethnic Disparities Among Low-Income Families."; Fairlie, Robb, and Robinson, "Black and White: Access to Capital among Minority-Owned Startups."

72 FinRegLab, "The Use of Cash-Flow Data in Underwriting Credit: Small Business Spotlight."

73 Hepinstall et al., "Financial Inclusion and Access to Credit."

74 "Credit Health during the COVID-19 Pandemic."

75 Ibid.

76 Hepinstall et al., "Financial Inclusion and Access to Credit."

77 FinRegLab, "The Use of Cash-Flow Data in Underwriting Credit: Small Business Spotlight."

78 "The Minority Business Development Agency."

79 Ibid.

80 Neville et al., "'Why Even Bother Trying?"; "ABS – Annual Business Survey First Look 2023 Tables."

81 Baboolall et al., "Building Supportive Ecosystems for Black-Owned US Businesses | McKinsey."; Dua et al., "COVID-19's Effect on Minority-Owned Small Businesses in the United States."; "Minority-Owned Businesses."

82 "The Minority Business Development Agency."

83 Dua et al., "COVID-19's Effect on Minority-Owned Small Businesses in the United States."; Perry, Rothwell, and Harshbarger, "Five-Star Reviews, One-Star Profits: The Devaluation of Businesses in Black Communities."; "The Tapestry of Black Business Ownership in America: Untapped Opportunities for Success."; Weaver, Klein, and Ogden, "Scaling Lending to Entrepreneurs of Color: Part II."

84 Augustus, "Five Reasons Minority Borrowers Can't Access Capital."

85 Augustus, "Five Reasons Minority Borrowers Can't Access Capital."; Baboolall et al., "Building Supportive Ecosystems for Black-Owned US Businesses | McKinsey."; Mattos and Brewster, "The Color of the Capital Gap."

86 Kroeger and Wright, "Entrepreneurship and the Racial Wealth Gap."; Yang and Kacperczyk, "The Racial Gap in Entrepreneurship and Opportunities inside Established Firms."

87 Winston, "The Contribution of Minority Business Enterprises to the U.S. Economy."

88 Golden-Vazquez, "Invest in Minority-Owned Businesses to Unlock Million Jobs and Trillions of Dollars to Our Economy."

89 "The Tapestry of Black Business Ownership in America: Untapped Opportunities for Success."; Frison et al., "Closing the Racial Wealth Gap: Restating the Economic Case."; Davies, "How Minority-Owned Businesses Can Close Racial Wealth Gaps and Rebuild the U.S. Economy."; Perry, Donoghoe, and Stephens, "Closing the Black Employer Gap."

90 Edlebi, "Research Brief: Bank Branch Closure Update."

91 Nguyen, "Are Credit Markets Still Local?"; Mitchell, Richardson, and Amani, "Relationships Matter: Small Business and Bank Branch Locations."; Wang and Wu, "Impact of Mobile Banking on Small Business Lending After Bank Branch Closures."; Toussaint-Comeau, Wang, and Newberger, "Impact of Bank Closings on Credit Extension to Businesses in Low-Income and Minority Neighborhoods."; Augustus, "Five Reasons Minority Borrowers Can't Access Capital."

92 "Nonbank Lenders and Small Business Financing."

93 Gopal and Schnabl, "The Rise of Finance Companies and FinTech Lenders in Small Business Lending." Note: research references secured loans from UCC data only, which represents 95% of SB lending volume.

94 Adams, "PayPal Swoops into Lending Markets That Banks Abandoned."

95 "2020 Report on Employer Firms: Based on the 2019 Small Business Credit Survey."

96 FinRegLab, "The Use of Cash-Flow Data in Underwriting Credit: Small Business Spotlight."

97 Muir, "Startups And Small Businesses Flock To Fintechs As Banks Flounder."; "ABS – Annual Business Survey First Look 2023 Tables."

98 Beaumont, Tang, and Vansteenberghe, “Collateral Effects.”

99 “Merchant Cash Advance Providers Banned from Industry, Ordered to Redress Small Businesses.”

100 “Fact Sheet on Section 1071 Small Business Loan Data.”

101 Misera et al., “2024 Report on Employer Firms.”

102 Beaumont, Tang, and Vansteenberghe, “Collateral Effects.”

103 Cornelli et al., “The Impact of Fintech Lending on Credit Access for U.S. Small Businesses.”

104 “Benefits and Drawbacks of Merchant Cash Advances.”

105 Jagtiani and Lemieux, “Fintech Lending: Financial Inclusion, Risk Pricing, and Alternative Information.”

106 FinRegLab, “The Use of Cash-Flow Data in Underwriting Credit: Small Business Spotlight.”

107 Beiseitov, “Small Banks, Big Impact.”; “Microfinance Impact Collaborative (MIC).”; Porterfield, “Building an Inclusive Economy Through Community-Based Financial Institutions.”

108 In early 2020, the Accion U.S. Network merged with another non-profit, Opportunity Fund, and its former U.S. affiliates rebranded under other names; “Opportunity Fund and the Accion U.S. Network Combine Efforts to Drive Small Business Access to Credit and Advisory Services in the U.S.”

109 “Scale Academy—FIELD at the Aspen Institute.”; “Microfinance Impact Collaborative (MIC).”

110 Klein and Okagaki, “The Price of Access: How Scale-Focused Microlenders Are Pricing for Growth.”

111 Abenaim, “Discover the Power of CDFI Loans.”; Wavering Corcoran, “Community Development Financial Institutions (CDFIs) by the Numbers.”; Shoulders, “CDFIs.”; Scott and Wial, “Technical Knockout: Closing the Gaps in Regional Small Business Technical Assistance Systems.”

112 Bernanke, “Community Development Financial Institutions.”

113 Open for Business: The Critical Role Of Bank And CDFI Partnerships In Reaching Diverse Communities.

114 Gopal and Schnabl, “The Rise of Finance Companies and FinTech Lenders in Small Business Lending.”

115 Bruene, “Top 33 Digital Lenders to U.S. Small Businesses (SMB).”

116 “Fintechs: A New Paradigm of Growth.”; Mills and McCarthy, “The State of Small Business Lending.”

117 de Zeeuw, “Small Business Credit Survey: Report on Minority-Owned Firms.”; “2020 Report on Employer Firms: Based on the 2019 Small Business Credit Survey.”; Battisto et al., “2019 Report on Nonemployer Firms: Based on the 2018 Small Business Credit Survey.”

118 “2020 Report on Employer Firms: Based on the 2019 Small Business Credit Survey.”

119 Giunipero, Denslow, and Rynarzewska, “Small Business Survival and COVID-19—An Exploratory Analysis of Carriers.”

120 Fairlie, “The Impact of Covid-19 on Small Business Owners.”; When governments implemented reopening policies, larger and more established businesses were more likely to have the resources to adapt to social-distancing, sanitation, and other regulations; Giunipero, Denslow, and Rynarzewska, “Small Business Survival and COVID-19—An Exploratory Analysis of Carriers.”

121 Fairlie, “COVID-19, Small Business Owners, and Racial Inequality.”

122 Fairlie, “The Impact of Covid-19 on Small Business Owners.”

123 “Bank of America Announces Additional Support for Consumer and Small Business Clients Experiencing Hardship From the Impact of the Coronavirus.”; Dixon, “List Of Banks Offering Help To Customers Impacted By The Coronavirus.”

124 “CNote | CDFIs.”; Perry Abello, “Mission-Driven Lenders Already Providing Assistance to Vulnerable Businesses During COVID-19.”

125 “SBA Debt Relief.”

126 “SBA’s Paycheck Protection Program for Small Businesses Affected by the Coronavirus Pandemic Launches.”

127 Revenue and Taxation Interim Committee, “Paycheck Protection Program Overview.”

128 “From Pandemic to Prosperity: Bipartisan Solutions to Support Today’s Small Businesses.”; Autor et al., “The $800 Billion Paycheck Protection Program.”; Lindsay et al., “SBA COVID-19 EIDL Financial Relief: Policy Options and Considerations.”; “Small Businesses | U.S. GAO.”

129 Mac and Wheat, “The Paycheck Protection Program.”; “Paycheck Protection Program: Loan Forgiveness by the Numbers.”

130 “From Pandemic to Prosperity: Bipartisan Solutions to Support Today’s Small Businesses.”

131 “Paycheck Protection Program (PPP).”

132 Autor et al., “The $800 Billion Paycheck Protection Program.”

133 Katz et al., “Small Business on the Eve of COVID-19.”

134 Balys, "CDFIs Call for $1 Billion in New CDFI Fund Grants as PPP Misses the Mark."; Baker, Judge, and Klein, "Credit, Crises, and Infrastructure: The Differing Fates of Large and Small Businesses."

135 Scott, "Minority-Owned Businesses Struggle to Access Emergency Loans."

136 "2020 Report on Employer Firms: Based on the 2019 Small Business Credit Survey."; "CDFIs Are on the Frontlines of Supporting Communities. Now They Need Our Help."; "Black-Owned Banks May Gain from Social Change."

137 "How PPP Loans Eluded Small Businesses of Color."

138 "SBA Re-Opening Paycheck Protection Program to Small Lenders on Friday, January 15 and All Lenders on Tuesday, January 19."

139 "Paycheck Protection Program (PPP) Report: Second Round."

140 For a broader critique of structural differences in approaches to federal pandemic relief for larger and smaller businesses, see Baker, Judge, and Klein, "Credit, Crises, and Infrastructure: The Differing Fates of Large and Small Businesses."

141 "Biden-Harris Administration Takes Historic Step in Expanding Access to Capital and Filling Lending Gaps in Underserved Communities."

142 Jung, "Big Business Pledged Nearly $50 Billion for Racial Justice after George Floyd's Death. Where Did the Money Go?"

143 Perry, Donoghoe, and Stephens, "Who Is Driving Black Business Growth?"; Barr and McComas, "Minority Depository Institutions: State of Knowledge, Sector Summary, Lending Activity, and Impact, 2010–2022."; Theodos et al., "Federal Small Business Supports."; Jung, "Big Business Pledged Nearly $50 Billion for Racial Justice after George Floyd's Death. Where Did the Money Go?"; "The Largest Banks Are Invested in MDIs."; "The Largest U.S. Banks Are Invested in CDFIs."

144 Yee, Tartar, and Patino, "How Fixes to Covid Relief Program Got Money to More Small Businesses."

145 Battisto et al., "Who Received PPP Loans by Fintech Lenders?"; Volker, "The Paycheck Protection Program Liquidity Facility."; Howell et al., "Lender Automation and Racial Disparities in Credit Access."

146 Howell et al., "Lender Automation and Racial Disparities in Credit Access."

147 Battisto et al., "Who Received PPP Loans by Fintech Lenders?"; Volker, "The Paycheck Protection Program Liquidity Facility."; "Some Black-Owned Businesses Are Turning To New Banks For Paycheck Protection Loans."

148 Devarajan et al., "Community Banks' Impact in the Pandemic PPP Lending Program."

149 Vasiloff, "CDFIs Outperform Other Paycheck Protection Program (PPP) Lenders."

150 Ibid.

151 Cornelli et al., "The Impact of Fintech Lending on Credit Access for U.S. Small Businesses."

152 Hanrahan and Hinton, "The Importance of Community Banks in Paycheck Protection Program Lending."

153 Williams, "PPP Winds Down with CDFIs as Top Lenders."; Williams, "Community Development Financial Institutions (CDFIs) + Supportive Policies + Capital = Responsible, Affordable Financing for Marginalized Communities."

154 Arora et al., "Technology-Led Activation of CDFIs to Enable Social Impact."

155 Brown and Urrutia, "CDFI and Fintech Partnerships: A Promising Avenue for Affordable, Fast, and Equitably Distributed Small-Business Capital."

156 Wicks and Standaert, "CDFIs' Mission-Driven Orientation Is Critical to Making Financial Technology Work for Deep South Communities."

157 Based on stakeholder interviews.

158 Eggleston, "Fed's PPP Liquidity Facility Provides CDFIs Balance Sheet Relief | St. Louis Fed."; Eberley, "Regulatory Capital Rule: Paycheck Protection Program Lending Facility and Paycheck Protection Program Loans," April 7, 2020.; "Paycheck Protection Program Liquidity Facility (PPPLF)."

159 "Emergency Capital Investment Program."

160 Barr and McComas, "Minority Depository Institutions: State of Knowledge, Sector Summary, Lending Activity, and Impact, 2010–2022."

161 Finley, "These Maps Show the Growth of CDFIs."; Barr and McComas, "Minority Depository Institutions: State of Knowledge, Sector Summary, Lending Activity, and Impact, 2010–2022."

162 Based on interviews with major banks.

163 "BPI Testimony—"The Legacy of George Floyd."

164 Wack et al., "How Banking Changed after the Killing of George Floyd | American Banker."

165 Eggleston, "Fed's PPP Liquidity Facility Provides CDFIs Balance Sheet Relief | St. Louis Fed."

166 Royles, "CDFI Loan Funds Have Emerged from the Pandemic Strong and Ready to Meet the next Challenges and Opportunities."

167 "Innovating for Inclusion: Advancing U.S. Community Development Financial Institutions (CDFIs) with Data Science."

168 Theodos, González-Hermoso, and Myczkowska, "Leveraging Technology to Scale Up Small Business Lending."

169 Based on stakeholder interviews.

170 Ibid.

171 Ben-David, Johnson, and Stulz, "Why Did Small Business FinTech Lending Dry Up During the COVID-19 Crisis?"

172 Ibid.

173 Ibid.

174 Battisto et al., "Who Received PPP Loans by Fintech Lenders?"; Baker, Judge, and Klein, "Credit, Crises, and Infrastructure: The Differing Fates of Large and Small Businesses."

175 Ben-David, Johnson, and Stulz, "Why Did Small Business FinTech Lending Dry Up During the COVID-19 Crisis?"

176 Battisto et al., "Who Received PPP Loans by Fintech Lenders?"

177 Ibid.

178 Misera et al., "2024 Report on Employer Firms."

179 Ben-David, Johnson, and Stulz, "Why Did Small Business FinTech Lending Dry Up During the COVID-19 Crisis?"

180 Khan, "Enova Completes Acquisition of On Deck Capital."

181 "Our Response to the Coronavirus Pandemic."

182 "List of Banks Offering Relief to Businesses and Retail Customers Affected by the Novel Coronavirus (COVID-19)."

183 Li and Strahan, "Who Supplies PPP Loans (And Does It Matter)? Banks, Relationships and the COVID Crisis."; Cassell, Schwan, and Schneiberg, "Bank Types, Inclusivity, and Payroll Protection Program Lending During COVID-19."

184 Covas, Gross, and Tapia, "The Importance of Regional Banks for Small Business Lending and Economic Growth."

185 Ibid.

186 "Lockdowns, PPP, Citi's Historic Move: The Year in Banking (Part 1) | American Banker."

187 McLaughlin and Davis, "JPMorgan Commercial Clients Beat Out Smaller Ones for SBA Loans—Bloomberg."

188 Cassell, Schwan, and Schneiberg, "Bank Types, Inclusivity, and Payroll Protection Program Lending During COVID-19."

189 Li and Strahan, "Who Supplies PPP Loans (And Does It Matter)? Banks, Relationships and the COVID Crisis."

190 Simon and Rudegeair, "Big Banks Favor Certain Customers in $350 Billion Small-Business Loan Program."; Ponciano, "Big Banks Prioritized Billions In PPP Funds For Wealthy Clients At The Expense Of Struggling Small Businesses, House Report Finds."; Delevingne, Quing, and Price, "U.S. Banks Sweat Regulatory Exposure from Pandemic Loans."

191 Frankel, "Banks Made Billions On PPP Loans. Learn What They're Doing With The Cash."; Duchin et al., "Concierge Treatment from Banks."

192 Buehler et al., "The New Normal for US Banks."; Panzino and Clark, "Pandemic Prompts Dip in Q4'21 Restaurant Loans."

193 Mueller and Spiegel, "Small Business Lending and the Paycheck Protection Program."

194 Sheng, "Coronavirus Crisis Mobile Banking Surge Is a Shift That's Likely to Stick."

195 "Realizing the Digital Promise: COVID-19 Catalyzes and Accelerates Transformation in Financial Services."

196 "PayNet Small Business Delinquency Index and Small Business Default Index."

197 "Availability of Credit to Small Businesses—October 2022."

198 "Facts & Data on Small Business and Entrepreneurship."

199 Fairlie et al., "Were Small Businesses More Likely to Permanently Close in the Pandemic?"

200 "Dun & Bradstreet US Economic Health Tracker."

201 Wilmoth, "Small Business Facts: Small Business Job Creation."

202 "Business Formation Statistics—Definitions."; "Business Formation Statistics—About the Data."

203 "Business Formation Statistics—Methodology."; "Business Formation Statistics, April 2024."

204 Ferguson and Cates, "New Business Applications Are Booming. Track Them by State."

205 Bayard et al., "Measuring Early-Stage Business Formation."

206 "FAQ: Form SS-4 & Employer Identification Number."

207 "BDM Overview."

208 "Handbook of Methods: Quarterly Census of Employment and Wages."

209 O'Brien, "More Physical Places of Businesses Open Now than Pre-Pandemic, Led by Sun Belt Metros."

210 "The Small Business Boom Under the Biden-Harris Administration."

211 Crane et al., "Business Exit during the COVID-19 Pandemic."; Decker and Haltiwanger, "Business Entry and Exit in the COVID-19 Pandemic."

212 Decker and Haltiwanger, "Business Entry and Exit in the COVID-19 Pandemic."

213 Perry, Donoghoe, and Stephens, "Who Is Driving Black Business Growth?"

214 Edelberg and Steinmetz-Silber, "The Changing Demographics of Business Ownership."

215 Burns, "Nearly 75% of U.S. Small Businesses Sought Help via Government PPP."

216 DeSpain and Bennett, "Small Business Lending Demand Continues to Decline."; "Economic Bulletin: Small Business at a Glance."

217 Siegel and Van Dam, "U.S. Economy Grew 5.7 Percent in 2021, Fastest Full-Year Clip since 1984, despite Ongoing Pandemic."

218 Londono, Ma, and Wilson, "Global Inflation Uncertainty and Its Economic Effects."; "Federal Reserve Economic Data (FRED)."; "Bureau of Labor Statistics."

219 Coulter and Martinez-García, "Russia's War on Ukraine Will Leave Scars on U.S., World Economies."

220 "Consumer Prices up 9.1 Percent over the Year Ended June 2022, Largest Increase in 40 Years."; Bernanke and Blanchard, "What Caused the U.S. Pandemic-Era Inflation?"

221 Adams and Katzeff, "Federal Funds Rate History 1990 to 2023."

222 Supyan, "The Economic Situation in the United States in 2022."

223 "By the Numbers: U.S. Economy Grows Faster than Expected for Year and Final Quarter of 2023."; "Ten Charts That Explain the U.S. Economy in 2023."

224 "S&P 500 Index."; Pound and Subin, "Stocks Fall to End Wall Street's Worst Year since 2008, S&P 500 Finishes 2022 down Nearly 20%."

225 Schneider and Ghosh, "Fed, Economists Make Course Correction on US Recession Predictions."

226 Görner et al., "Is a Recession Coming? How US Companies Can Prepare."; "CEO Confidence Deteriorated Further in Q3."

227 Torry and DeBarros, "Economists in WSJ Survey Still See Recession This Year Despite Easing Inflation."

228 "US Leading Economic Index Continued to Fall in April."

229 Lee, "Chase CEO Jamie Dimon and Billionaire Hedge Fund Founder Ray Dalio Admit They Got Warnings on US Economy Wrong—for Now."

230 Cowen, "What Recession? How So Many Economists Got It So Wrong."

231 "The Big Get Bigger? Growth Trends in the CDFI Industry, 2019–2021."

232 "How Has CDFIs' Cost of Debt Changed over Time, and What Might the Future Hold in a Rising Interest Rate Environment?"

233 Kline, "How Rising Rates Have Hampered Minority Banks' Quest for More Deposits."

234 Ibid.

235 "CDFI Small Business Lenders: Succeeding in the Margins by Blending Capital and Know-How."

236 "CDFI Loan Funds Financial Performance."; "Performance Still Holding Steady as CDFIs Emerge from the Pandemic yet Continue to Face a Challenging Economy."

237 Griffin, Kruger, and Mahajan, "Did FinTech Lenders Facilitate PPP Fraud?"

238 Cook, "Growth and Change at Community Development Financial Institutions."

239 Ben-David, Johnson, and Stulz, "Why Did Small Business FinTech Lending Dry Up During the COVID-19 Crisis?"; interviews with fintech lenders.

240 Tracy, "Tough Road Ahead for U.S. Fintech Lenders as Default Risk Rises."

241 Misera et al., "2024 Report on Employer Firms."

242 Au-Yeung, "Higher for Longer Interest Rates Threaten Fintech."

243 "Fintechs: A New Paradigm of Growth."

244 "COVID-19 Pandemic EIDL and PPP Loan Fraud Landscape."

245 "Small Business COVID-19 Fraud: Three Years Later."

246 Alt, "Are the Federal Banking Agencies Trying to Drive Banking-as-a-Service out of the Banking Industry?"

247 "A Glimpse Into Amazon Lending."

248 Del Rey, "Amazon Lending Will No Longer Underwrite Seller Loans."

249 "Has PayPal Eclipsed OnDeck in Small Business Loans?"

250 Khan, "Enova Completes Acquisition of On Deck Capital."

251 "Has PayPal Eclipsed OnDeck in Small Business Loans?"

252 Rocha, "Kabbage, a Bankrupt Fintech Lender, Settles PPP Fraud Case with DOJ."; Hrushka, "PPP Loan Servicer KServicing Files for Bankruptcy amid Fraud Probes."

253 "Small Business Finance Origination Figures - Loans, MCAs, LOCs, Factoring & More."

254 Gaw, "Funding Circle to Offload US Business after Losses Widen - Alternative Credit Investor."

255 "Fintech Leaders Camino Financial and Fundation Merge to Form Full Spectrum Small Business Lender."

256 Del Rey, "Amazon Lending Will No Longer Underwrite Seller Loans."; Chakravarty, "Funding Circle Gets Final Nod for SBA 7(a) Loans amid Pushback."

257 "New Small Business Lending Increases Despite Continued Constraints."

258 "Beige Book - May 31, 2023."; Sánchez and Wilkinson, "Deja Vu?"; "Small Business Lending Dips As Economic Slowdown Looms."

259 Yao and Liu, "How Covid-19 Impacts the Financing in SMEs."

260 "Equifax Main Street Lending Report—January 2024."

261 "Small Business Financing Before, During, and After the Pandemic."

262 Riddle, "US Small Business Lending Holding up despite Higher Cost of Credit."

263 DeSpain and Bennett, "Small Business Lending Demand Continues to Decline."

264 Dobbs, "Resilient Small Businesses Bolster Community Banks' Credit Quality."; "New Small Business Lending Increases Despite Continued Constraints."

265 Simon, "Banks Raise Roadblocks to Small-Business Loans - WSJ."

266 Smialek and Flitter, "Fed and Lawmakers Eye Bank Rules After Collapse."

267 Peterson and Hart, "The Silicon Valley Bank (SVB) Collapse and Implications for Business."

268 Adams and Pasic, "SVB Collapse Could Have Ripple Effects on Minority-Owned Banks."

269 Benoit et al., "Small Banks Are Losing to Big Banks. Their Customers Are About to Feel It."

270 "Business Formation Statistics Release."; "New Business Applications Reach Record 16 Million Under Biden-Harris Administration."

271 Decker and Haltiwanger, "Surging Business Formation in the Pandemic: Causes and Consequences?"; Reosti, "New Census Data Hints at Slower Pace for Small-Business Formation."; Janice C. Eberly et al., "Is the Post-Pandemic Surge in Business Dynamism Here to Stay?"

272 "Business Formation Is Booming."

273 "New Business Applications Reach Record 16 Million Under Biden-Harris Administration."; Aladangady, Chang, and Krimmel, "Greater Wealth, Greater Uncertainty.""

274 Ibid.

275 "Entrepreneurs Opened More Businesses in 2023, Setting a New All-Time High on Yelp."

276 Reagan, "Nearly All Americans Cut Spending amid Inflation: CNBC Survey."

277 "Inflation Returns as Top Business Problem on Main Street - NFIB."

278 DeSpain and Bennett, "Small Business Lending Demand Continues to Decline."

279 Misera et al., "2024 Report on Employer Firms."

280 Romm, "In Reversal, U.S. to Heighten Efforts to Collect Billions in Unpaid Covid Loans."

281 "Business Employment Dynamics: Establishment Age and Survival Data."

282 Simon, "Small Business Bankruptcies Rising at Worst Pace Since Pandemic."

283 "PNC Survey Shows Business Owner Optimism Continues to Soar Amid Improving Economic Conditions."

284 "April 2024 Report: Inflation Continues to Hinder Small Business Operations."; Petrik, "Small Business Confidence Improves After Debt Ceiling Scare."; Riddle, "Majority of Small Businesses Believe US Is in Recession."

285 "Small Business Cash Flow Trend Report"; "BofA Survey: Majority of Small and Mid-Sized Business Owners Anticipate Revenue Growth This Year."

286 Asif et al., "Financial Services Unchained: The Ongoing Rise of Open Banking."; White et al., "Financial Data Unbound: The Value of Open Data for Individuals and Institutions."

287 Ibid.

288 Cornelli et al., "The Impact of Fintech Lending on Credit Access for U.S. Small Businesses."; Jennifer Chasseur et al., "The Use of Cash-Flow Data in Underwriting Credit."

289 "Required Rulemaking on Personal Financial Data Rights: CFPB."

290 FinRegLab, "The Use Of Machine Learning For Credit Underwriting: Market & Data Science Context." The machine learning techniques and data sources used for credit underwriting are substantially less complicated than so-called "large language models" or "generative AI," which began attracting substantial public attention in fall 2022 with the release of ChatGPT, although they are still provoking substantial debates among financial services stakeholders about responsible use and legal compliance; FinRegLab, "Explainability & Fairness In Machine Learning For Credit Underwriting: Policy Analysis." Particularly given the challenges of underwriting small businesses across a wide range of industries without highly standardized data, some stakeholders have expressed interest in exploring the use of large language models to help transform less structured data into forms that would be easier for underwriting models to process and for assisting with coding tasks.

291 "Machine Learning and AI at Capital One."; "Machine Learning Center of Excellence."; Mixson, "AI Innovation at Bank of America."; Mason, "Smaller Banks Are Using AI Too."

292 Scott, Recto, and Kivell, "Sizing the CDFI Market: Understanding Industry Growth."

293 "U.S. Bank Referral Partnership."

294 Davis, "Technology Drives Opportunity as Connect2Capital Hits $100 Million."

295 "Wells Fargo Introduces Small Businesses to Alternative Options for Financing and Technical Assistance."

296 "Banking Evolution: How to Take on the Challenges of FinTech."

297 CMC Global Company Limited, "Why Most Banks Fail Digital Transformation? How to Beat the Odds."

298 "Fintechs: A New Paradigm of Growth."

299 "Accelerating Digital Transformation in Banking."

300 "State Small Business Credit Initiative."

301 Theodos et al., "Federal Small Business Supports."

302 Young, "How Will Proposed Changes to the Community Reinvestment Act Affect Lending to Historically Excluded Communities?"

303 "ICBA, Groups File Lawsuit against CRA Final Rule."

304 "CONSUMER FINANCIAL PROTECTION BUREAU ET AL. v. COMMUNITY FINANCIAL SERVICES ASSOCIATION OF AMERICA, LTD., ET AL."

305 "Small Business Lending Rulemaking."

306 "Special Purpose Credit Programs for Small Businesses."

307 Benton, "Overview of Special Purpose Credit Programs Under the Equal Credit Opportunity Act."; "Special Purpose Credit Programs."

308 "Special Purpose Credit Program Case Studies."

309 American Bankers Association, "Special Purpose Credit Programs for Small Businesses."

310 Eberly et al., "Is the Post-Pandemic Surge in Business Dynamism Here to Stay?"

311 "FRED Unemployment Rate."

312 Eberly et al., "Is the Post-Pandemic Surge in Business Dynamism Here to Stay?"; Sedlacek and Shi, "Work from Home, Business Dynamism, and the Macroeconomy."

313 Decker and Haltiwanger, "Surging Business Formation in the Pandemic: Causes and Consequences?"; Fikri and Newman, "How the Pandemic Rebooted Entrepreneurship in the U.S."

314 "More Exurban Communities Now Among Nation's Fastest Growing Places."

315 Decker and Haltiwanger, "Surging Business Formation in the Pandemic: Causes and Consequences?"

316 "New Business Surge."

317 Keynes, "How Long Can the Entrepreneurship Boom Last?"

318 Ibid.

319 "Business Formation Statistics, April 2024."

320 Eberly et al., "Is the Post-Pandemic Surge in Business Dynamism Here to Stay?"

321 Decker and Haltiwanger, "Surging Business Formation in the Pandemic: Causes and Consequences?"; Decker and Haltiwanger, "High Tech Business Entry in the Pandemic Era."; "Business Formation Statistics, April 2024."

322 Ibid.

323 Abdelrahman and Oliveira, "Pandemic Savings Are Gone."

324 Hwang, Desai, and Baird, "Access to Capital for Entrepreneurs: Removing Barriers."

325 "More Than 75% of Surveyed Small Businesses Are Worried About Access to Credit."

326 Weller, "Learning Lessons From the 1990s: Long-Term Growth Prospects for the U.S."

327 Smialek, "U.S. Economy: Has an Era of Increased Productivity Returned?"; Duplechien, "The History of Business."

328 Decker and Haltiwanger, "Surging Business Formation in the Pandemic: Causes and Consequences?"

329 Ibid.

330 Decker and Haltiwanger, "Surging Business Formation in the Pandemic: Causes and Consequences?"; "How the Pandemic Rebooted Entrepreneurship in the U.S."; Keynes, "How Long Can the Entrepreneurship Boom Last?"

331 "Availability of Credit to Small Businesses - October 2022."

332 "Frequently Asked Questions About Small Business 2023."; "Contracting Guide: Basic Requirements."

333 Hait, "The Majority of U.S. Businesses Have Fewer Than Five Employees."

334 "Frequently Asked Questions About Small Business 2023."

335 "Definition of an MBE."; "Minority Business Enterprise."; "Minority Business Enterprise - MBE Certification."

336 "Funding Program: Microloans."; Jerry Brown and Pippin Wilbers, "SBA Microloans: What They Are and How to Get One."

337 "Microlending Accelerator Program."

338 FinRegLab, "The Use of Cash-Flow Data in Underwriting Credit: Small Business Spotlight."

339 "State Small Business Credit Initiative: Capital Program Policy Guidelines."

340 "State Small Business Credit Initiative (SSBCI)."

341 "State Small Business Credit Initiative."

342 "SSBCI Quarterly Report through December 31, 2023."

343 "State Small Business Credit Initiative Fact Sheet."

344 "Biden- Harris Administration Announces Competition Winners for The Minority Business Development Agency's Capital Readiness Program."

345 Stettner, Burris, and Wellington, "SSBCI 2.0."

346 Stangler, "Is New Business Formation Still Setting Records? What Might That Mean for the Economy?"

347 "Section 1071's Murky Future."

348 Nichols, "ABA Applauds Congressional Disapproval of 1071 Final Rule."

349 "Community Reinvestment Act (CRA)."

350 "Agencies Issue Final Rule to Strengthen and Modernize Community Reinvestment Act Regulations."

351 "The Greenlining Institute Responds to Historic Community Reinvestment Act Update: New Regulations Miss the Mark on Racial Equity."; "In New CRA Rule, Regulators Miss a Once-In-A-Generation Opportunity to Address Racial Homeownership and Wealth Gaps."

352 "Community Reinvestment Act Final Rule Fact Sheet."

353 Santos Sanneh, "Banking Groups Sue Regulators to Block CRA Revamp."; Kully et al., "Federal Court Stalls Enforcement of New CRA Rules."

354 "Special Purpose Credit Programs."

355 Equal Credit Opportunity (Regulation B); Special Purpose Credit Programs.

356 Ibid.

357 Benton, "Overview of Special Purpose Credit Programs Under the Equal Credit Opportunity Act."

358 Blower, "Special Purpose Credit Programs Remain On Solid Legal Ground Despite Supreme Court's Affirmative Action Decision."

Bibliography

"22% of Founders Rely on Friends and Family for Capital When Starting a Business, New Data from Clutch Finds." Accessed May 20, 2024. https://www.prnewswire.com/news-releases/22-of-founders-rely-on-friends-and-family-for-capital-when-starting-a-business-new-data-from-clutch-finds-301148481.html.

"2020 Report on Employer Firms: Based on the 2019 Small Business Credit Survey." Federal Reserve Banks, April 7, 2020. https://doi.org/10.55350/sbcs-20200407.

Abdelrahman, Hamza, and Luiz Edgard Oliveira. "Pandemic Savings Are Gone: What's Next for U.S. Consumers?" *Federal Reserve Bank of San Francisco* (blog), May 3, 2024. https://www.frbsf.org/research-and-insights/blog/sf-fed-blog/2024/05/03/pandemic-savings-are-gone-whats-next-for-us-consumers/.

Abenaim, Henry. "Discover the Power of CDFI Loans: Community-Based Lending Solutions." *Fundingo* (blog), October 9, 2023. https://www.fundingo.com/discover-the-power-of-cdfi-loans-community-based-lending-solutions/.

"ABS – Annual Business Survey First Look 2023 Tables." US Census Bureau, 2023. https://www.census.gov/data/tables/2023/econ/abs/2023-abs-first-look.html.

"Access to Capital for Entrepreneurs: Removing Barriers, 2023 Update." Ewing Marion Kauffman Foundation, June 2023. https://www.kauffman.org/wp-content/uploads/2023/06/Access-to-Capital-for-Entrepreneurs-Report-2-June-2023.pdf.

Accion. "Opportunity Fund and the Accion U.S. Network Combine Efforts to Drive Small Business Access to Credit and Advisory Services in the U.S." Accessed May 20, 2024. https://www.accion.org/news/opportunity-fund-and-the-accion-u-s-network-combine-efforts-to-drive-small-business-access-to-credit-and-advisory-services-in-the-u-s/.

Adams, Destinee, and Amra Pasic. "SVB Collapse Could Have Ripple Effects on Minority-Owned Banks." *NPR*, March 28, 2023, sec. Economy. https://www.npr.org/2023/03/28/1165604492/svb-collapse-could-have-ripple-effects-on-minority-owned-banks.

Adams, John. "PayPal Swoops into Lending Markets That Banks Abandoned." *American Banker*, June 12, 2023. https://www.americanbanker.com/payments/news/paypal-swoops-into-lending-markets-that-banks-abandoned.

Adams, Michael, and Paul Katzeff. "Federal Funds Rate History 1990 to 2023." *Forbes*, May 20, 2024. https://www.forbes.com/advisor/investing/fed-funds-rate-history/.

Aeris. "CDFI Loan Funds Financial Performance: Back to the Future," October 16, 2023. https://www.aerisinsight.com/2023/10/16/cdfi-loan-funds-financial-performance-back-to-the-future/.

Aeris. "How Has CDFIs' Cost of Debt Changed over Time, and What Might the Future Hold in a Rising Interest Rate Environment?," July 11, 2023. https://www.aerisinsight.com/2023/07/11/how-has-cdfis-cost-of-debt-changed-over-time-and-what-might-the-future-hold-in-a-rising-interest-rate-environment/.

Aeris. "Performance Still Holding Steady as CDFIs Emerge from the Pandemic yet Continue to Face a Challenging Economy," October 17, 2022. https://www.aerisinsight.com/2022/10/17/performance-still-holding-steady-as-cdfis-emerge-from-the-pandemic-yet-continue-to-face-a-challenging-economy/.

Aeris. "The Big Get Bigger? Growth Trends in the CDFI Industry, 2019-2021," May 10, 2022. https://www.aerisinsight.com/2022/05/10/the-big-get-bigger-growth-trends-in-the-cdfi-industry-2019-2021/.

Ahmed, Usman, Thorsten Beck, Christine McDaniel, and Simon Schropp. "Filling the Gap: How Technology Enables Access to Finance for Small- and Medium-Sized Enterprises." *Innovations: Technology, Governance, Globalization* 10, no. 3–4 (July 2015): 35–48. https://doi.org/10.1162/inov_a_00239.

Aladangady, Aditya, Andrew C. Chang, and Jacob Krimmel. "Greater Wealth, Greater Uncertainty: Changes in Racial Inequality in the Survey of Consumer Finances." *Federal Reserve FEDS Notes* (blog), October 18, 2023. https://www.federalreserve.gov/econres/notes/feds-notes/greater-wealth-greater-uncertainty-changes-in-racial-inequality-in-the-survey-of-consumer-finances-20231018.html.

Albuquerque, Daniel, and Tomer Ifergane. "The Racial Wealth Gap: The Role of Entrepreneurship," March 23, 2023.

Alt, Konrad. "Are the Federal Banking Agencies Trying to Drive Banking-as-a-Service out of the Banking Industry?" *LinkedIn* (blog), April 2024. https://www.linkedin.com/posts/konrad-alt-12a7b35_are-the-federal-banking-agencies-trying-to-activity-7184219230932746240-YkVl.

American Banker. "Lockdowns, PPP, Citi's Historic Move: The Year in Banking (Part 1) | American Banker." November 29, 2020. https://www.americanbanker.com/list/lockdowns-ppp-citis-historic-move-the-year-in-banking-part-1.

American Bankers Association. "Special Purpose Credit Program Case Studies." Accessed May 28, 2024. https://www.aba.com/banking-topics/commercial-banking/small-business/special-purpose-credit-programs/case-study.

American Bankers Association. "Special Purpose Credit Programs for Small Businesses." Accessed May 28, 2024. https://www.aba.com/banking-topics/commercial-banking/small-business/special-purpose-credit-programs.

"April 2024 Report: Inflation Continues to Hinder Small Business Operations." NFIB, April 2024. https://www.nfib.com/surveys/small-business-economic-trends/.

Arora, Harish, Phillip Andriyevsky, Mariana Ippolito, and Valerie Oseguera. "Technology-Led Activation of CDFIs to Enable Social Impact." Ernst & Young, October 19, 2022. https://www.ey.com/en_us/insights/wealth-asset-management/technology-led-activation-of-cdfis-to-enable-social-impact.

Asif, Chandana, Tunde Olanrewaju, Hiro Sayama, and Ahalya Vijayasrinivasan. "Financial Services Unchained: The Ongoing Rise of Open Banking." McKinsey, July 11, 2021. https://www.mckinsey.com/industries/financial-services/our-insights/financial-services-unchained-the-ongoing-rise-of-open-financial-data.

Augustus, Imani. "Five Reasons Minority Borrowers Can't Access Capital." Third Way, September 28, 2022. https://thirdway.imgix.net/pdfs/five-reasons-minority-borrowers-cant-access-capital.pdf.

Autor, David, David Cho, Leland D. Crane, Mita Goldar, Byron Lutz, Joshua Montes, William B. Peterman, David Ratner, Daniel Villar, and Ahu Yildirmaz. "The $800 Billion Paycheck Protection Program: Where Did the Money Go and Why Did It Go There?" *Journal of Economic Perspectives* 36, no. 2 (May 1, 2022): 55–80. https://doi.org/10.1257/jep.36.2.55.

Au-Yeung, Angel. "Higher for Longer Interest Rates Threaten Fintech." *Wall Street Journal*, September 22, 2023. https://www.wsj.com/finance/banking/higher-for-longer-interest-rates-threaten-fintech-bd9ad5e9.

"Availability of Credit to Small Businesses - October 2022." Board of Governors of the Federal Reserve System, October 2022. https://www.federalreserve.gov/publications/2022-october-availability-of-credit-to-small-businesses.htm.

Azoulay, Pierre, Benjamin F. Jones, J. Daniel Kim, and Javier Miranda. "Immigration and Entrepreneurship in the United States." *American Economic Review: Insights* 4, no. 1 (March 2022): 71–88. https://doi.org/10.1257/aeri.20200588.

Baboolall, David, Kelemwork Cook, Nick Noel, Shelley Stewart, and Nina Yancy. "Building Supportive Ecosystems for Black-Owned US Businesses | McKinsey." McKinsey, October 29, 2020. https://www.mckinsey.com/industries/public-sector/our-insights/building-supportive-ecosystems-for-black-owned-us-businesses.

Baker, Todd H., Kathryn Judge, and Aaron Klein. "Credit, Crises, and Infrastructure: The Differing Fates of Large and Small Businesses." Brookings Institution, April 5, 2022. https://www.brookings.edu/articles/credit-crises-and-infrastructure-the-differing-fates-of-large-and-small-businesses/.

Balys, Mary Scott. "CDFIs Call for $1 Billion in New CDFI Fund Grants as PPP Misses the Mark." Opportunity Finance Network, April 22, 2020. https://www.ofn.org/blog/cdfis-call-1-billion-new-cdfi-fund-grants-ppp-misses-mark/.

Bank of America. "Bank of America Announces Additional Support for Consumer and Small Business Clients Experiencing Hardship From the Impact of the Coronavirus," March 31, 2020. https://newsroom.bankofamerica.com/press-releases/consumer-banking/bank-america-announces-additional-support-consumer-and-small.

Barr, Anthony, and Mac McComas. "Minority Depository Institutions: State of Knowledge, Sector Summary, Lending Activity, and Impact, 2010 - 2022." National Bankers Association, May 2023. https://21cc.jhu.edu/wp-content/uploads/2023/06/minority-depository-institutions-state-of-knowledge-sector-summary-lending-activity-and-impact-2010-2022_v2.pdf.

Battisto, Jessica, Nathan Godin, Claire Kramer Mills, and Asani Sarkar. "Who Received PPP Loans by Fintech Lenders?" *Liberty Street Economics* (blog), May 27, 2021. https://libertystreeteconomics.newyorkfed.org/2021/05/who-received-ppp-loans-by-fintech-lenders/.

Battisto, Jessica, Rebecca Landau, Scott Lieberman, and Claire Kramer Mills. "2019 Report on Nonemployer Firms: Based on the 2018 Small Business Credit Survey." Federal Reserve Bank of New York, 2019. https://www.fedsmallbusiness.org/reports/survey/2019/2019-report-on-nonemployer-firms.

Bayard, Kimberly, Emin Dinlersoz (U S. Census Bureau), Timothy Dunne (University of Notre Dame), John Haltiwanger (University of Maryland), Javier Miranda (U S. Census Bureau), and John Stevens. "Measuring Early-Stage Business Formation," March 7, 2018. https://www.federalreserve.gov/econres/notes/feds-notes/measuring-early-stage-business-formation-20180307.html.

Beaumont, Paul, Huan Tang, and Eric Vansteenberghe. "Collateral Effects: The Role of FinTech in Small Business Lending." SSRN Scholarly Paper. Rochester, NY, October 28, 2022. https://doi.org/10.2139/ssrn.4260842.

"Beige Book - May 31, 2023." Board of Governors of the Federal Reserve System, May 31, 2023. https://www.federalreserve.gov/monetarypolicy/beigebook20230531.htm.

Beiseitov, Eldar. "Small Banks, Big Impact: Community Banks and Their Role in Small Business Lending." Federal Reserve Bank of St. Louis. Accessed May 20, 2024. https://www.stlouisfed.org/publications/regional-economist/2023/oct/small-banks-big-impact-community-banks-small-business-lending.

Ben-David, Itzhak, Mark Johnson, and René Stulz. "Why Did Small Business FinTech Lending Dry Up During the COVID-19 Crisis?" Cambridge, MA: National Bureau of Economic Research, September 2021. https://doi.org/10.3386/w29205.

Benoit, David, Rachel Louise Ensign, Peter Rudegeair, and Ruth Simon. "Small Banks Are Losing to Big Banks. Their Customers Are About to Feel It." *Wall Street Journal*, March 30, 2023, sec. Markets. https://www.wsj.com/articles/small-banks-are-losing-to-big-banks-their-customers-are-about-to-feel-it-178abb47.

Benton, Kenneth. "Overview of Special Purpose Credit Programs Under the Equal Credit Opportunity Act." *Consumer Compliance Outlook: Federal Reserve Bank of Philadelphia*, no. 4 (2022). https://www.consumercomplianceoutlook.org/2022/fourth-issue/overview-of-special-purpose-credit-programs/.

Benzow, August, and Nora Esposito. "Minority- and Women-Owned Businesses Tend to Be Younger, Making Them More Vulnerable in the Coming Recession." Economic Innovation Group, April 2, 2020. https://eig.org/minority-and-women-owned-businesses-vulnerable-recession/.

Bernanke, Ben S. "Community Development Financial Institutions: Challenges and Opportunities." Global Financial Literacy Summit, June 17, 2009. https://www.federalreserve.gov/newsevents/speech/bernanke20090617a.htm.

Bernanke, Ben S., and Olivier Blanchard. "What Caused the U.S. Pandemic-Era Inflation?" Brookings Institution, June 13, 2023. https://www.brookings.edu/articles/what-caused-the-u-s-pandemic-era-inflation/.

Blanchflower, David, and David Evans. "The Role of Credit Cards in Providing Financing for Small Businesses." *LSN: Empirical Studies (Topic)*, September 18, 2009.

Blower, Brad. "Special Purpose Credit Programs Remain On Solid Legal Ground Despite Supreme Court's Affirmative Action Decision." *NCRC* (blog), September 11, 2023. https://ncrc.org/special-purpose-credit-programs-remain-on-solid-legal-ground-despite-supreme-courts-affirmative-action-decision/.

Bluefield WV Economic Development Authority. "Why Small Businesses Fail," January 1, 2020. https://www.mybluefield.org/post/why-small-business-fail.

Board of Governors of the Federal Reserve System. "Access to Financial Services Matters to Small Businesses," November 2019. https://www.federalreserve.gov/publications/files/consumer-community-context-201911.pdf.

Board of Governors of the Federal Reserve System. "Agencies Issue Final Rule to Strengthen and Modernize Community Reinvestment Act Regulations," October 24, 2023. https://www.federalreserve.gov/newsevents/pressreleases/bcreg20231024a.htm.

Board of Governors of the Federal Reserve System. "Community Reinvestment Act (CRA)." Accessed May 28, 2024. https://www.federalreserve.gov/consumerscommunities/cra_about.htm.

"BofA Survey: Majority of Small and Mid-Sized Business Owners Anticipate Revenue Growth This Year." Bank of America, May 1, 2024. https://newsroom.bankofamerica.com/content/newsroom/press-releases/2024/05/bofa-survey--majority-of-small-and-mid-sized-business-owners-ant.html.

Bradford, William D. "The 'Myth' That Black Entrepreneurship Can Reduce the Gap in Wealth Between Black and White Families." *Economic Development Quarterly* 28, no. 3 (May 28, 2014). https://doi.org/10.1177/0891242414535468.

Brown, Elizabeth, and Austin Nichols. "Self-Employment, Family-Business Ownership, and Economic Mobility." Urban Institute, May 2014. https://www.urban.org/sites/default/files/publication/33841/413134-self-employment-family-business-ownership-and-economic-mobility.pdf.

Brown, Gwendy, and Luz Urrutia. "CDFI and Fintech Partnerships: A Promising Avenue for Affordable, Fast, and Equitably Distributed Small-Business Capital." *Federal Reserve Bank - Community Development Innovation Review*, August 19, 2021. https://www.frbsf.org/research-and-insights/publications/community-development-investment-review/2021/08/cdfi-and-fintech-partnerships-a-promising-avenue-for-affordable-fast-and-equitably-distributed-small-business-capital/.

Brown, Jerry, and Pippin Wilbers. "SBA Microloans: What They Are and How to Get One." *Bankrate* (blog), June 21, 2023. https://www.bankrate.com/loans/small-business/sba-microloans/.

Bruene, Jim. "Top 33 Digital Lenders to U.S. Small Businesses (SMB)." *Fintech Labs* (blog), February 27, 2024. https://fintechlabs.com/top-28-digital-lenders-to-u-s-small-businesses/.

Buehler, Kevin, Dietz, Miklós, Marie-Claude Nadeau, Fritz Nauck, Lorenzo Serino, and Olivia White. "The New Normal for US Banks." McKinsey, May 13, 2020. https://www.mckinsey.com/industries/financial-services/our-insights/stability-in-the-storm-us-banks-in-the-pandemic-and-the-next-normal.

"Bureau of Labor Statistics," n.d. https://www.bls.gov/.

Bureau of Labor Statistics. "Business Employment Dynamics Overview." Accessed May 23, 2024. https://www.bls.gov/bdm/bdmover.htm.

Bureau of Labor Statistics. "Entrepreneurship and the U.S. Economy : U.S. Bureau of Labor Statistics." Accessed May 20, 2024. https://www.bls.gov/bdm/entrepreneurship/entrepreneurship.htm.

Bureau of Labor Statistics. "Handbook of Methods: Quarterly Census of Employment and Wages." Accessed May 23, 2024. https://www.bls.gov/opub/hom/cew/concepts.htm.

Burns, Dan. "Nearly 75% of U.S. Small Businesses Sought Help via Government PPP." Reuters, May 14, 2020. https://www.reuters.com/article/idUSKBN22Q3DT/.

"Business Employment Dynamics: Establishment Age and Survival Data." Bureau of Labor Statistics, n.d. https://www.bls.gov/bdm/us_age_naics_00_table7.txt.

"Business Formation Statistics, April 2024." US Census Bureau, May 9, 2024. https://www.census.gov/econ/bfs/pdf/bfs_current.pdf.

California Pollution Control Financing Authority. "State Small Business Credit Initiative (SSBCI)." Accessed May 28, 2024. https://www.treasurer.ca.gov/cpcfa/calcap/sb/ssbci.asp.

Camara, M'Balou, Khaing Zaw, Darrick Hamilton, and William Darity Jr. "Entering Entrepreneurship: Racial Disparities in the Pathways into Business Ownership." *Duke University*, October 2019.

Capital One. "Machine Learning and AI at Capital One." Accessed May 28, 2024. https://www.capitalone.com/tech/machine-learning/.

Cassell, Mark K., Michael Schwan, and Marc Schneiberg. "Bank Types, Inclusivity, and Payroll Protection Program Lending During COVID-19." *Economic Development Quarterly*, March 20, 2023, 08912424231163485. https://doi.org/10.1177/08912424231163485.

Cepa, Kennan, Wanjira Chege, Necati Celik, Andrew Warren, and Riya Patil. "2023 U.S. Trends Report: Rising Financial Vulnerability in America." Financial Health Pulse. Financial Health Network, 2023. https://finhealthnetwork.org/wp-content/uploads/2023/09/2023-Pulse-U.S.-Trends-Report-Final.pdf.

Chakrabarti, Rajashri, Natalia Emanuel, and Ben Lahey. "Racial and Ethnic Wealth Inequality in the Post-Pandemic Era." *Liberty Street Economics* (blog), February 7, 2024. https://libertystreeteconomics.newyorkfed.org/2024/02/racial-and-ethnic-wealth-inequality-in-the-post-pandemic-era/.

Chakravarty, Rajashree. "Funding Circle Gets Final Nod for SBA 7(a) Loans amid Pushback." *Banking Dive*, April 10, 2024. https://www.bankingdive.com/news/funding-circle-gets-final-nod-sba-7a-loans-amidst-pushback/712854/.

Chen, Brian S., Samuel G. Hanson, and Jeremy C. Stein. "The Decline of Big-Bank Lending to Small Business: Dynamic Impacts on Local Credit and Labor Markets." Working Paper. Working Paper Series. National Bureau of Economic Research, September 2017. https://doi.org/10.3386/w23843.

"Closing The Racial Wealth Gap Through Entrepreneurship - The Greenlining Institute." Accessed May 20, 2024. https://greenlining.org/2020/closing-the-racial-wealth-gap-through-entrepreneurship/.

CMC Global Company Limited. "Why Most Banks Fail Digital Transformation? How to Beat the Odds." *LinkedIn* (blog), November 27, 2023. https://www.linkedin.com/pulse/why-most-banks-fail-digital-transformation-me4rf/.

CNote. "CDFIs: America's First Responders to Economic Crisis," September 4, 2020. https://www.mycnote.com/blog/cdfis-americas-first-responders-to-economic-crisis/.

Community Development Financial Institutions Fund. "CDFI Program." Accessed May 20, 2024. https://www.cdfifund.gov/programs-training/programs/cdfi-program.

"Community Reinvestment Act Final Rule Fact Sheet." Board of Governors of the Federal Reserve System, October 2023. https://www.federalreserve.gov/aboutthefed/boardmeetings/files/fact-sheet-cra-20231024.pdf.

Community Reinvestment Fund, USA. "U.S. Bank Referral Partnership." Accessed May 28, 2024. https://crfusa.com/community-voices/u-s-bank-referral-partnership/.

Consumer Financial Protection Bureau. "Small Business Lending Rulemaking," May 22, 2024. https://www.consumerfinance.gov/1071-rule/.

Consumer Financial Protection Bureau. "Special Purpose Credit Programs." Accessed May 28, 2024. https://www.consumerfinance.gov/rules-policy/regulations/1002/8/.

"CONSUMER FINANCIAL PROTECTION BUREAU ET AL. v. COMMUNITY FINANCIAL SERVICES ASSOCIATION OF AMERICA, LTD., ET AL." Supreme Court of the United States, May 16, 2024. https://www.supremecourt.gov/opinions/23pdf/22-448_o7jp.pdf.

"Contracting Guide: Basic Requirements." Accessed May 23, 2024. https://www.sba.gov/federal-contracting/contracting-guide/basic-requirements.

Cook, Lisa D. "Growth and Change at Community Development Financial Institutions." Federal Reserve Bank of New York, May 14, 2024. https://www.federalreserve.gov/newsevents/speech/cook20240514a.htm.

Cornelli, Giulio, Jon Frost, Leonardo Gambacorta, and Julapa Jagtiani. "The Impact of Fintech Lending on Credit Access for U.S. Small Businesses." Working paper (Federal Reserve Bank of Philadelphia). Working Paper (Federal Reserve Bank of Philadelphia). Federal Reserve Bank of Philadelphia, April 2022. https://doi.org/10.21799/frbp.wp.2022.14.

Coulter, Jarod, and Enríque Martinez-García. "Russia's War on Ukraine Will Leave Scars on U.S., World Economies." Federal Reserve Bank of Dallas, May 17, 2022. https://www.dallasfed.org/research/economics/2022/0517.

Covas, Francisco, Benjamin Gross, and Jose Maria Tapia. "The Importance of Regional Banks for Small Business Lending and Economic Growth." *Bank Policy Institute* (blog), May 16, 2023. https://bpi.com/the-importance-of-regional-banks-for-small-business-lending-and-economic-growth/.

"COVID-19 Pandemic EIDL and PPP Loan Fraud Landscape." U.S. Small Business Administration, June 27, 2023. https://www.sba.gov/document/report-23-09-covid-19-pandemic-eidl-ppp-loan-fraud-landscape.

Cowen, Tyler. "What Recession? How So Many Economists Got It So Wrong." Bloomberg.Com, December 26, 2023. https://www.bloomberg.com/opinion/articles/2023-12-26/what-recession-how-so-many-economists-got-it-so-wrong.

Crane, Leland D., Ryan A. Decker, Aaron Flaaen, Adrian Hamins-Puertolas, and Christopher Kurz. "Business Exit during the COVID-19 Pandemic: Non-Traditional Measures in Historical Context." *Journal of Macroeconomics* 72 (June 1, 2022): 103419. https://doi.org/10.1016/j.jmacro.2022.103419.

"Credit Health during the COVID-19 Pandemic." Urban Institute, March 8, 2022. https://apps.urban.org/features/credit-health-during-pandemic/.

Criminal Justice Reviews for the SBA Business Loan Programs, Disaster Loan Programs, and Surety Bond Guaranty Program, Pub. L. No. 89 FR 34094, § 34094-34102 (2024). https://www.federalregister.gov/documents/2024/04/30/2024-09009/criminal-justice-reviews-for-the-sba-business-loan-programs-disaster-loan-programs-and-surety-bond.

"Data Spotlight: Challenges in Rural Banking Access." Consumer Financial Protection Bureau (CFPB), April 2022. https://files.consumerfinance.gov/f/documents/cfpb_data-spotlight_challenges-in-rural-banking_2022-04.pdf.

Davies, Nahla. "How Minority-Owned Businesses Can Close Racial Wealth Gaps and Rebuild the U.S. Economy," April 30, 2024. https://www.score.org/resource/blog-post/how-minority-owned-businesses-can-close-racial-wealth-gaps-and-rebuild-us.

Davis, Patrick. "Technology Drives Opportunity as Connect2Capital Hits $100 Million." Community Reinvestment Fund, USA, March 31, 2021. https://crfusa.com/technology-drives-opportunity-as-connect2capital-hits-100-million/.

deBanked. "A Glimpse Into Amazon Lending," 2022. https://debanked.com/2022/10/a-glimpse-into-amazon-lending/.

deBanked. "Has PayPal Eclipsed OnDeck in Small Business Loans?," April 26, 2019. https://debanked.com/2019/04/has-paypal-eclipsed-ondeck-in-small-business-loans/.

deBanked. "Small Business Finance Origination Figures - Loans, MCAs, LOCs, Factoring & More," 2023. https://debanked.com/smallbusinessfinancerankings/.

Decker, Ryan A., and John Haltiwanger. "Business Entry and Exit in the COVID-19 Pandemic: A Preliminary Look at Official Data." FEDS Notes. Federal Reserve Board of Governors, May 6, 2022. https://www.federalreserve.gov/econres/notes/feds-notes/business-entry-and-exit-in-the-covid-19-pandemic-a-preliminary-look-at-official-data-20220506.html.

Decker, Ryan A, and John Haltiwanger. "Surging Business Formation in the Pandemic: Causes and Consequences?" *Brookings Papers on Economic Activity*, September 28, 2023. https://www.brookings.edu/wp-content/uploads/2023/09/4_Decker-Haltiwanger_unembargoed.pdf.

Decker, Ryan, and John Haltiwanger. "High Tech Business Entry in the Pandemic Era." *FEDS Notes* (blog), April 19, 2024. https://www.federalreserve.gov/econres/notes/feds-notes/high-tech-business-entry-in-the-pandemic-era-20240419.html.

Del Rey, Jason. "Amazon Lending Will No Longer Underwrite Seller Loans." *Fortune*, March 7, 2024. https://fortune.com/2024/03/07/amazon-lending-loans-sellers-marketplace-discontinuing/.

Delevingne, Lawrence, Koh Gui Quing, and Michelle Price. "U.S. Banks Sweat Regulatory Exposure from Pandemic Loans." *Reuters*, October 21, 2020, sec. Business. https://www.reuters.com/article/idUSKBN2761G0/.

Deloitte. "Accelerating Digital Transformation in Banking," 2018. https://www2.deloitte.com/jp/en/pages/financial-services/articles/bk/jp-bk-digital-transformation-in-banking-global-customer-survey.html.

DeSpain, Dustyn, and Lauren Bennett. "Small Business Lending Demand Continues to Decline." Federal Reserve Bank of Kansas City, December 20, 2023. https://www.kansascityfed.org/surveys/small-business-lending-survey/small-business-lending-demand-continues-to-decline-december-2023/.

Devarajan, Abhishek Karimpuzha, Qi Wang, Qingqing Yu, Wanjing Xu, and Yixuan Cai. "Community Banks' Impact in the Pandemic PPP Lending Program." CSBS 2022 Annual Data Analytics Competition, April 2022. https://www.csbs.org/sites/default/files/2022-05/UCI%20Final%20Presentation%20Slides.pdf.

Dixon, Amanda. "List Of Banks Offering Help To Customers Impacted By The Coronavirus." Bankrate, May 14, 2020. https://www.bankrate.com/banking/coronavirus-list-of-banks-offering-help-to-customers-financial-hardship/.

Dobbs, Jim. "Resilient Small Businesses Bolster Community Banks' Credit Quality." *American Banker*, November 13, 2023. https://www.americanbanker.com/news/resilient-small-businesses-bolster-community-banks-credit-quality.

Dua, André, Deepa Mahajan, Ingrid Millán, and Shelley Stewart. "COVID-19's Effect on Minority-Owned Small Businesses in the United States." McKinsey, May 27, 2020. http://ceros.mckinsey.com/coronavirus-promo-video-desktop.

Duchin, Ran, Xiumin Martin, Roni Michaely, and Hanmeng Ivy Wang. "Concierge Treatment from Banks: Evidence from the Paycheck Protection Program." SSRN Scholarly Paper. Rochester, NY, October 28, 2021. https://doi.org/10.2139/ssrn.3775276.

"Dun & Bradstreet US Economic Health Tracker." Dun & Bradstreet, May 2024. https://www.dnb.com/content/dam/english/economic-and-industry-insight/TrackerPDF_report_May24_final.pdf.

Duplechien, Peyton. "The History of Business: American Business since 1920." *VoiceNation* (blog), March 24, 2022. https://voicenation.com/resources/a-100-year-history-of-small-business/.

Eberley, Doreen R. "Regulatory Capital Rule: Paycheck Protection Program Lending Facility and Paycheck Protection Program Loans," April 7, 2020. https://www.fdic.gov/sites/default/files/2024-03/2020-04-07-notational-mem.pdf.

Eberly, Janice C., Wendy Edelberg, John Haltiwanger, and Jón Steinsson. "Is the Post-Pandemic Surge in Business Dynamism Here to Stay?" Brookings Podcast on Economic Activity. Accessed May 23, 2024. https://www.brookings.edu/articles/is-the-post-pandemic-surge-in-business-dynamism-here-to-stay/.

"Economic Bulletin: Small Business at a Glance." Small Business Administration, June 2023. https://advocacy.sba.gov/wp-content/uploads/2023/06/Economic-Bulletin-June-2023.pdf.

Edelberg, Wendy, and Noadia Steinmetz-Silber. "The Changing Demographics of Business Ownership." Brookings Institution, April 23, 2024. https://www.brookings.edu/articles/the-changing-demographics-of-business-ownership/.

Edlebi, Jad. "Research Brief: Bank Branch Closure Update (2017 – 2020)." National Community Reinvestment Coalition, December 14, 2020. https://ncrc.org/research-brief-bank-branch-closure-update-2017-2020/.

Eggleston, Michael. "Fed's PPP Liquidity Facility Provides CDFIs Balance Sheet Relief | St. Louis Fed," February 23, 2021. https://www.stlouisfed.org/publications/bridges/volume-1-2021/fed-ppplf-cdfi-balance-sheet-relief.

"Entrepreneurs Opened More Businesses in 2023, Setting a New All-Time High on Yelp." Yelp, January 2024. https://data.yelp.com/business-openings-report-2023.

Equal Credit Opportunity (Regulation B); Special Purpose Credit Programs (2020). https://files.consumerfinance.gov/f/documents/cfpb_advisory-opinion_special-purpose-credit-program_2020-12.pdf.

"Equifax Main Street Lending Report — January 2024." Equifax, January 2024. https://assets.equifax.com/marketing/US/assets/Equifax.MainStreetLendingReport.January2024.pdf.

"Explainability & Fairness In Machine Learning For Credit Underwriting: Policy Analysis." FinRegLab, December 2023. https://finreglab.org/wp-content/uploads/2023/12/FinRegLab_2023-12-07_Research-Report_Explainability-and-Fairness-in-Machine-Learning-for-Credit-Undewriting_Policy-Analysis.pdf.

Fairlie, Robert. "COVID-19, Small Business Owners, and Racial Inequality." *NBER Reporter* 4 (December 2020).

Fairlie, Robert, Frank M. Fossen, Reid Johnsen, and Gentian Droboniku. "Were Small Businesses More Likely to Permanently Close in the Pandemic?" *Small Business Economics* 60, no. 4 (April 1, 2023): 1613–29. https://doi.org/10.1007/s11187-022-00662-1.

Fairlie, Robert W. "COVID-19, Small Business Owners, and Racial Inequality." *NBER*, January 7, 2021. https://www.nber.org/reporter/2020number4/covid-19-small-business-owners-and-racial-inequality.

———. "Immigrant Entrepreneurs and Small Business Owners and Their Access to Financial Capital." US Small Business Administration, May 2012. https://advocacy.sba.gov/wp-content/uploads/2012/05/Immigrant-Entrepreneurs-Financial-Capital-Full-Report.pdf.

Fairlie, Robert W. "The Impact of Covid-19 on Small Business Owners: Evidence of Early-Stage Losses from the April 2020 Current Population Survey." Working Paper. Working Paper Series. National Bureau of Economic Research, June 2020. https://doi.org/10.3386/w27309.

Fairlie, Robert W, Alicia Robb, and David T Robinson. "Black and White: Access to Capital among Minority-Owned Startups." NBER Working Paper Series, November 2020.

Farrell, Diana, and Chris Wheat. "Cash Is King: Flows, Balances, and Buffer Days." JPMorgan Chase Institute, September 2016. https://www.jpmorganchase.com/content/dam/jpmc/jpmorgan-chase-and-co/institute/pdf/jpmc-institute-small-business-report.pdf.

Farrell, Chris Wheat, and Chi Mac. "Small Business Owner Race, Liquidity, and Survival." JPMorgan Chase Institute, July 2020. https://www.jpmorganchase.com/content/dam/jpmc/jpmorgan-chase-and-co/institute/pdf/institute-small-business-owner-race-report.pdf.

"FDIC Small Business Lending Survey." Federal Deposit Insurance Corporation, 2018. https://www.fdic.gov/bank/historical/sbls/full-survey.pdf.

Fed Small Business. "Veteran-Owned Firms." Accessed May 20, 2024. https://www.fedsmallbusiness.org/categories/veteran-owned-firms.

Federal Deposit Insurance Corporation. "Our Response to the Coronavirus Pandemic," 2020. https://www.fdic.gov/coronavirus/.

Federal Reserve Bank of Dallas. "How PPP Loans Eluded Small Businesses of Color," November 29, 2021. https://www.dallasfed.org/cd/communities/2021/1129.

Federal Reserve Bank of Kansas City. "New Small Business Lending Increases Despite Continued Constraints," March 29, 2024. https://www.kansascityfed.org/surveys/small-business-lending-survey/new-small-business-lending-increases-despite-continued-constraints/.

Federal Reserve Bank of St. Louis. "Black-Owned Banks May Gain from Social Change," May 31, 2021. https://www.stlouisfed.org/on-the-economy/2021/june/black-owned-banks-may-gain-from-social-change.

"Federal Reserve Economic Data (FRED)," n.d. https://fred.stlouisfed.org/.

Ferguson, Stephanie, and Lindsay Cates. "New Business Applications Are Booming. Track Them by State." *US Chamber of Commerce* (blog), February 2, 2024. https://www.uschamber.com/small-business/new-business-applications-a-state-by-state-view.

Fikri, Kenan, and Daniel Newman. "How the Pandemic Rebooted Entrepreneurship in the U.S." *Harvard Business Review* (blog), January 17, 2024. https://hbr.org/2024/01/how-the-pandemic-rebooted-entrepreneurship-in-the-u-s.

Finley, James. "These Maps Show the Growth of CDFIs." *Next City* (blog), October 31, 2023. https://nextcity.org/urbanist-news/these-maps-show-the-growth-of-cdfis.

"Fintechs: A New Paradigm of Growth." McKinsey, October 24, 2023. https://www.mckinsey.com/industries/financial-services/our-insights/fintechs-a-new-paradigm-of-growth#/.

Frankel, Robin Saks. "Banks Made Billions On PPP Loans. Learn What They're Doing With The Cash." Forbes, July 10, 2020, sec. Personal Finance. https://www.forbes.com/sites/advisor/2020/07/10/banks-made-billions-on-ppp-loans-learn-what-theyre-doing-with-the-cash/.

FRED Blog. "Business Formation Is Booming," July 13, 2023. https://fredblog.stlouisfed.org/2023/07/business-formation-is-booming/.

"FRED Unemployment Rate." Federal Reserve Bank of St. Louis, n.d. https://fred.stlouisfed.org/series/UNRATE.

Frison, Lisa, Andrew Pitt, Amy Thompson, and Harold Butler. "Closing the Racial Wealth Gap: Restating the Economic Case." Citi Global Perspectives and Solutions, March 2024. https://www.citigroup.com/rcs/citigpa/storage/public/Closing-the-Racial-Wealth-Gap-Restating-the-Economic-Case.pdf.

"From Pandemic to Prosperity: Bipartisan Solutions to Support Today's Small Businesses." Bipartisan Policy Center, March 2022. https://bipartisanpolicy.org/download/?file=/wp-content/uploads/2022/03/Small-Business-Policy-Report_R01.pdf.

Gaw, Kathryn. "Funding Circle to Offload US Business after Losses Widen - Alternative Credit Investor." *Alternative Credit Investor* (blog), March 7, 2024. https://alternativecreditinvestor.com/2024/03/07/funding-circle-to-offload-us-business-after-losses-widen/.

Getting Capital to Small Businesses in Low-Income Communities. Aspen Institute, 2021. https://www.aspeninstitute.org/videos/getting-capital-to-small-businesses-in-low-income-communities/.

Giunipero, Larry C., Diane Denslow, and Ania Izabela Rynarzewska. "Small Business Survival and COVID-19 - An Exploratory Analysis of Carriers." *Research in Transportation Economics* 93 (June 2022): 101087. https://doi.org/10.1016/j.retrec.2021.101087.

Golden-Vazquez, Abigail. "Invest in Minority-Owned Businesses to Unlock Million Jobs and Trillions of Dollars to Our Economy." *Prosperity Now* (blog), May 15, 2023. https://prosperitynow.org/blog/invest-minority-owned-businesses-unlock-million-jobs-and-trillions-dollars-our-economy.

Goldman Sachs. "More Than 75% of Surveyed Small Businesses Are Worried About Access to Credit," May 16, 2024. https://www.goldmansachs.com/intelligence/pages/more-than-75-percent-of-surveyed-small-businesses-are-worried-about-credit.html.

Gopal, Manasa, and Philipp Schnabl. "The Rise of Finance Companies and FinTech Lenders in Small Business Lending." *Federal Deposit Insurance Corporation*, n.d.

Görner, Stephan, Arvind Govindarajan, Ezra Greenberg, John Kelleher, Linda Liu, Asutosh Padhi, and Zachary Silverman. "Is a Recession Coming? How US Companies Can Prepare." McKinsey, September 16, 2022. https://www.mckinsey.com/capabilities/risk-and-resilience/our-insights/somethings-coming-how-us-companies-can-build-resilience-survive-a-downturn-and-thrive-in-the-next-cycle.

Greig, Fiona, and George Eckerd. "Racial Income Inequality Dynamics." JPMorgan Chase, May 2022. https://www.jpmorganchase.com/institute/research/household-income-spending/racial-income-inequality-dynamics.

Griffin, John M., Samuel Kruger, and Prateek Mahajan. "Did FinTech Lenders Facilitate PPP Fraud?" *Journal of Finance*, August 15, 2022. https://doi.org/10.2139/ssrn.3906395.

Hait, Andrew W. "The Majority of U.S. Businesses Have Fewer Than Five Employees." *U.S. Census Bureau* (blog), January 19, 2021. https://www.census.gov/library/stories/2021/01/what-is-a-small-business.html.

Hanrahan, Margaret, and Angela Hinton. "The Importance of Community Banks in Paycheck Protection Program Lending." *Federal Deposit Insurance Corporation Quarterly* 14, no. 4 (2020). https://www.fdic.gov/analysis/quarterly-banking-profile/fdic-quarterly/2020-vol14-4/fdic-v14n4-3q2020-earlyrelease.pdf.

Headd, Brian. "The Importance of Business Ownership to Wealth." US Small Business Administration, August 2021. https://advocacy.sba.gov/wp-content/uploads/2021/08/Small-Business-Facts-Business-Owner-Wealth.pdf.

Hecht, Jared. "State of Small Business Lending: Spotlight on Women Entrepreneurs." Fundera, February 2, 2021. https://www.fundera.com/blog/the-state-of-online-small-business-lending-q2-2016.

Hepinstall, Mike, Chaitra Chandrasekhar, Peter Carroll, Nick Dykstra, and Yigit Ulucay. "Financial Inclusion and Access to Credit." OliverWyman, 2022. https://images.go.experian.com/Web/ExperianInformationSolutionsInc/%7B63ec9888-37ea-405c-b39d-7492de9143ce%7D_FINALExperian_report_14_01.pdf.

Howell, Sabrina T., Theresa Kuchler, David Snitkof, Johannes Stroebel, and Jun Wong. "Lender Automation and Racial Disparities in Credit Access." Working Paper. Working Paper Series. National Bureau of Economic Research, October 2021. https://doi.org/10.3386/w29364.

Hrushka, Anna. "PPP Loan Servicer KServicing Files for Bankruptcy amid Fraud Probes." *Banking Dive* (blog), October 5, 2022. https://www.bankingdive.com/news/ppp-loan-kservicing-bankruptcy-fraud-probes-kabbage-american-express/633405/.

Hurst, Erik, and Benjamin Wild Pugsley. "Understanding Small Business Heterogeneity." *NBER Working Paper Series*, 2011.

Hwang, Victor, Sameeksha Desai, and Ross Baird. "Access to Capital for Entrepreneurs: Removing Barriers." Ewing Marion Kauffman Foundation, April 2019. https://www.kauffman.org/wp-content/uploads/2019/12/CapitalReport_042519.pdf.

ICBA. "ICBA, Groups File Lawsuit against CRA Final Rule," February 6, 2024. https://www.icba.org/newsroom/news-and-articles/2024/02/06/icba-groups-file-lawsuit-against-cra-final-rule.

Inc.com. "Minority-Owned Businesses," April 8, 2024. https://www.inc.com/encyclopedia/minority-owned-businesses.html.

"Innovating for Inclusion: Advancing U.S. Community Development Financial Institutions (CDFIs) with Data Science." DataKind, n.d. https://www.datakind.org/wp-content/uploads/2023/10/CDFI-Landscape-Final-CDFI-Updates.pdf.

Internal Revenue Service. "FAQ: Form SS-4 & Employer Identification Number." Accessed May 23, 2024. https://www.irs.gov/faqs/small-business-self-employed-other-business/form-ss-4-and-employer-identification-number-ein/form-ss-4-employer-identification-number-ein-1.

Jagtiani, Julapa, and Catharine Lemieux. "Fintech Lending: Financial Inclusion, Risk Pricing, and Alternative Information." Federal Reserve Banks, n.d. https://www.fdic.gov/analysis/cfr/bank-research-conference/annual-17th/papers/14-jagtiani.pdf.

JPMorgan Chase. "Machine Learning Center of Excellence," n.d. https://www.jpmorgan.com/technology/applied-ai-and-ml/machine-learning.

Jung, Luisa. "Big Business Pledged Nearly $50 Billion for Racial Justice after George Floyd's Death. Where Did the Money Go?" Washington Post. Accessed May 23, 2024. https://www.washingtonpost.com/business/interactive/2021/george-floyd-corporate-america-racial-justice/.

Katz, Bruce, Kevin Gillen, Ben Preis, and Victoria Orozco. "Small Business on the Eve of COVID-19." *The New Localism* (blog), June 18, 2020. https://www.thenewlocalism.com/newsletter/small-business-on-the-eve-of-covid-19/.

Kent, Ana H., Nikki Lanier, David F. Perkis, and Claire James. "Examining Racial Wealth Inequality." Federal Reserve Bank of St. Louis, March 2022. https://research.stlouisfed.org/publications/page1-econ/2022/03/01/examining-racial-wealth-inequality.

Keynes, Soumaya. "How Long Can the Entrepreneurship Boom Last?" *Financial Times*, October 5, 2023. https://www.ft.com/content/a9b68387-db34-4c69-85d8-1d28e9930adf.

Khan, Abdullah. "Enova Completes Acquisition of On Deck Capital." S&P Global, October 13, 2020. https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/enova-completes-acquisition-of-on-deck-capital-60709613.

Klein, Joyce A. "Bridging the Divide: How Business Ownership Can Help Close the Racial Wealth Gap." The Aspen Institute, January 2017. https://www.aspeninstitute.org/wp-content/uploads/2017/01/Bridging-the-Divide.pdf.

Klein, Joyce, and Alan Okagaki. "The Price of Access: How Scale-Focused Microlenders Are Pricing for Growth." The Aspen Institute, April 2018. https://www.aspeninstitute.org/wp-content/uploads/2018/03/The-Price-of-Access-How-Scale-Focused-Microlenders-are-Pricing-for-Growth.pdf.

Kline, Allissa. "How Rising Rates Have Hampered Minority Banks' Quest for More Deposits." *American Banker*, January 9, 2024. https://www.americanbanker.com/news/how-rising-rates-have-hampered-minority-banks-quest-for-more-deposits.

Knowles, Hannah. "Number of Working Black Business Owners Falls 40 Percent, Far More than Other Groups amid Coronavirus." *Washington Post*, May 25, 2020. https://www.washingtonpost.com/business/2020/05/25/black-minority-business-owners-coronavirus/.

Kroeger, Teresa, and Graham Wright. "Entrepreneurship and the Racial Wealth Gap: The Impact of Entrepreneurial Success or Failure on the Wealth Mobility of Black and White Families." *Journal of Economics, Race, and Policy* 4, no. 3 (September 1, 2021): 183–95. https://doi.org/10.1007/s41996-021-00081-6.

Kully, Kris D., Tori K. Shinohara, Jeffrey P. Taft, Kerri Webb, and Matthew Bisanz. "Federal Court Stalls Enforcement of New CRA Rules." *Consumer Financial Services Review* (blog), April 10, 2024. https://www.cfsreview.com/2024/04/federal-court-stalls-enforcement-of-new-cra-rules/.

Lee, Kyung Min, Mee Jung Kim, J. David Brown, John S. Earle, and Zhen Liu. "Are Immigrants More Innovative? Evidence from Entrepreneurs," November 2023. https://doi.org/10.31235/osf.io/3kycm.

Lee, Lloyd. "Chase CEO Jamie Dimon and Billionaire Hedge Fund Founder Ray Dalio Admit They Got Warnings on US Economy Wrong — for Now." Business Insider, March 9, 2024. https://www.businessinsider.com/jamie-dimon-ray-dalio-us-economy-recession-predictions-wrong-wsj-2024-3.

Lee, Wonhyung, and Stephanie Black. "Small Business Development: Immigrants' Access to Loan Capital." *Journal of Small Business & Entrepreneurship* 29 (March 15, 2017): 1–17. https://doi.org/10.1080/08276331.2017.1297106.

Li, Geng. "Gender-Related Differences in Credit Use and Credit Scores." Federal Reserve Board of Governors, June 22, 2018. https://www.federalreserve.gov/econres/notes/feds-notes/gender-related-differences-in-credit-use-and-credit-scores-20180622.html.

Li, Lei, and Philip Strahan. "Who Supplies PPP Loans (And Does It Matter)? Banks, Relationships and the COVID Crisis." *NBER Working Paper Series*, December 2020. https://www.nber.org/system/files/working_papers/w28286/w28286.pdf.

"Lifting Barriers to Small Business Participation in Procurement." JPMorgan Chase Institute, December 7, 2022. https://www.jpmorganchase.com/content/dam/jpmc/jpmorgan-chase-and-co/documents/lifting-barriers-to-small-business-participation-in-procurement-brief.pdf.

Lindsay, Bruce R., Anthony A. Cilluffo, Darryl E. Getter, and Adam G. Levin. "SBA COVID-19 EIDL Financial Relief: Policy Options and Considerations." Congressional Research Service, April 18, 2023. https://crsreports.congress.gov/product/pdf/R/R47509/1.

"List of Banks Offering Relief to Businesses and Retail Customers Affected by the Novel Coronavirus (COVID-19)." Couty of Orange, California, 2020. https://workforce.ocgov.com/sites/cid/files/2020-07/Banks_Offering_Relief_COVID_19.pdf.

Londono, Juan M., Sai Ma, and Beth Anne Wilson. "Global Inflation Uncertainty and Its Economic Effects." The Federal Reserve Board of Governors, September 25, 2023. https://www.federalreserve.gov/econres/notes/feds-notes/global-inflation-uncertainty-and-its-economic-effects-20230925.html.

Long, Heather. "Small Business Used to Define America's Economy. The Pandemic Could Change That Forever." *Washington Post*, May 13, 2020. https://www.washingtonpost.com/business/2020/05/12/small-business-used-define-americas-economy-pandemic-could-end-that-forever/.

Lowrey, Ying. "Dynamics of Minority-Owned Employer Establishments, 1997–200." Small Business Administration, February 2005. https://www.govinfo.gov/content/pkg/GOVPUB-SBA-PURL-LPS95724/pdf/GOVPUB-SBA-PURL-LPS95724.pdf.

Lucy, Isabella, and Stephanie Ferguson. "Small Business Data Center," May 25, 2023. https://www.uschamber.com/small-business/small-business-data-center.

Mac, Chi, and Chris Wheat. "The Paycheck Protection Program." JPMorgan Chase, January 2021. https://www.jpmorganchase.com/institute/research/small-business/paycheck-protection-program-small-business-balances-revenues-and-expenses-weeks-after-loan-disbursement.

Mason, Thomas. "Smaller Banks Are Using AI Too," October 18, 2023. https://www.spglobal.com/marketintelligence/en/news-insights/research/smaller-banks-are-using-ai-too.

Matt. "CDFI Small Business Lenders: Succeeding in the Margins by Blending Capital and Know-How." *Aeris* (blog), August 22, 2022. https://www.aerisinsight.com/2022/08/22/cdfi-small-business-lenders-succeeding-in-the-margins-by-blending-capital-and-know-how/.

Mattos, Trevor, and Matthew Brewster. "The Color of the Capital Gap." The Boston Foundation, May 2021. https://www.tbf.org/-/media/indicators/boston-indicators-reports/report-files/capitalgap052020211458.pdf.

McGurran, Brianna. "Women and Credit 2020: How History Shaped Today's Credit Landscape." Experian, February 28, 2020. https://www.experian.com/blogs/ask-experian/women-and-credit/.

McLaughlin, David, and Michelle F. Davis. "JPMorgan Commercial Clients Beat Out Smaller Ones for SBA Loans - Bloomberg." *Bloomberg.com*, April 22, 2020. https://www.bloomberg.com/news/articles/2020-04-22/jpmorgan-commercial-clients-beat-out-smaller-ones-for-sba-loans.

"Merchant Cash Advance Providers Banned from Industry, Ordered to Redress Small Businesses." Federal Trade Commission, January 5, 2022. https://www.ftc.gov/news-events/news/press-releases/2022/01/merchant-cash-advance-providers-banned-industry-ordered-redress-small-businesses.

Mills, Karen, and Brayden McCarthy. "The State of Small Business Lending: Innovation and Technology and the Implications for Regulation." *Harvard Business School*, 2016. https://doi.org/10.2139/ssrn.2877201.

Minority Business Development Agency. "Biden- Harris Administration Announces Competition Winners for The Minority Business Development Agency's Capital Readiness Program," August 3, 2023. https://www.mbda.gov/biden-harris-administration-announces-competition-winners-minority-business-development-agencys.

Minority Business Development Agency. "The Minority Business Development Agency: Vital to Making America Great." Accessed May 20, 2024. https://www.mbda.gov/page/minority-business-development-agency-vital-making-america-great.

"Minority Business Enterprise: How to Get MBE Certification," February 8, 2022. https://fundbox.com/blog/get-certified-minority-business-enterprise/.

"Minority Entrepreneurs - U.S. Committee on Small Business & Entrepreneurship." Accessed May 20, 2024. https://www.sbc.senate.gov/public/index.cfm/minorityentrepreneurs.

Misera, Lucas, Cornelius Johnson, Jordan Manes, and Ann Marie Wiersch. "2024 Report on Employer Firms." Federal Reserve Banks, March 7, 2024. https://www.fedsmallbusiness.org/reports/survey/2024/2024-report-on-employer-firms.

Mitchell, Bruce C., Jason Richardson, and Zo Amani. "Relationships Matter: Small Business and Bank Branch Locations." National Community Reinvestment Coalition, March 2021. https://ncrc.org/wp-content/uploads/dlm_uploads/2021/03/Small-businesses-and-bank-branch-locations-FINALc-1.pdf.

Mixson, Elizabeth. "AI Innovation at Bank of America." *AI Data & Analytics Network* (blog), May 4, 2021. https://www.aidataanalytics.network/data-science-ai/articles/ai-innovation-at-bank-of-america.

Mkhaiber, Achraf, and Richard A. Werner. "The Relationship between Bank Size and the Propensity to Lend to Small Firms: New Empirical Evidence from a Large Sample." *Journal of International Money and Finance* 110, no. C (2021). https://ideas.repec.org//a/eee/jimfin/v110y2021ics0261560620302370.html.

Moslimani, Mohamad, and Rakesh Kochhar. "Wealth Surged in the Pandemic, but Debt Endures for Poorer Black and Hispanic Families." Pew Research Center, December 4, 2023. https://www.pewresearch.org/wp-content/uploads/sites/20/2023/12/RE_2023.12.04_Race-Wealth_Report.pdf.

Mueller, Jack, and Mark M. Spiegel. "Small Business Lending and the Paycheck Protection Program." *Federal Reserve Bank of San Francisco* (blog), April 10, 2023. https://www.frbsf.org/research-and-insights/publications/economic-letter/2023/04/small-business-lending-and-paycheck-protection-program.

Muir, Don. "Startups And Small Businesses Flock To Fintechs As Banks Flounder." *Forbes*, sec. Fintech. Accessed May 20, 2024. https://www.forbes.com/sites/donmuir/2023/02/01/startups-and-small-businesses-flock-to-fintechs-as-banks-flounder/.

MWBE Enterprises. "Minority Business Enterprise - MBE Certification." Accessed May 23, 2024. https://www.mwbe-enterprises.com/minority-business-enterprise-mbe-certification/.

National Community Reinvestment Coalition. "Fact Sheet on Section 1071 Small Business Loan Data," September 1, 2021. https://ncrc.org/fact-sheet-on-section-1071-small-business-loan-data/.

Neville, François, Juanita Kimiyo Forrester, Jay O'Toole, and Allan Riding. "'Why Even Bother Trying?' Examining Discouragement among Racial-Minority Entrepreneurs." *Journal of Management Studies* 55, no. 3 (2018): 424–56. https://doi.org/10.1111/joms.12319.

New Economy Initiative. "Reaching Underserved Small Businesses." Accessed May 20, 2024. https://www.neinsights.org/reaching-underserved-small-businesses/.

NFHA. "In New CRA Rule, Regulators Miss a Once-In-A-Generation Opportunity to Address Racial Homeownership and Wealth Gaps," October 24, 2023. https://nationalfairhousing.org/in-new-cra-rule-regulators-miss-a-once-in-a-generation-opportunity-to-address-racial-homeownership-and-wealth-gaps/.

NFIB. "Inflation Returns as Top Business Problem on Main Street - NFIB," January 9, 2024. https://www.nfib.com/content/press-release/economy/inflation-returns-as-top-business-problem-on-main-street/.

NFIB. "Small Business Economic Trends," October 29, 2013. https://www.nfib.com/surveys/small-business-economic-trends/.

Nguyen, Hoai-Luu Q. "Are Credit Markets Still Local? Evidence from Bank Branch Closings." *American Economic Journal: Applied Economics* 11, no. 1 (January 2019): 1–32. https://doi.org/10.1257/app.20170543.

Nichols, Rob. "ABA Applauds Congressional Disapproval of 1071 Final Rule." *American Bankers Association* (blog), December 1, 2023. https://www.aba.com/about-us/press-room/press-releases/aba-applauds-congressional-disapproval-of-1071-final-rule.

NMSDC. "Definition of an MBE," May 22, 2024. https://nmsdc.org/certifications/definition-of-an-mbe/.

Noel, Nick, Shelley Stewart, and Jason Wright. "The Economic Impact of Closing the Racial Wealth Gap | McKinsey." McKinsey, August 13, 2019. https://www.mckinsey.com/industries/public-sector/our-insights/the-economic-impact-of-closing-the-racial-wealth-gap.

"Nonbank Lenders and Small Business Financing." Bipartisan Policy Center, December 19, 2022. https://bipartisanpolicy.org/explainer/nonbank-lenders/.

O'Brien, Connor. "More Physical Places of Businesses Open Now than Pre-Pandemic, Led by Sun Belt Metros." *Economic Innovation Group* (blog), April 5, 2022. https://eig.org/more-physical-places-of-businesses-open-now-than-pre-pandemic-led-by-sun-belt-metros/.

Open for Business: The Critical Role of Bank and CDFI Partnerships in Reaching Diverse Communities. National Community Reinvestment Coalition, 2021. https://ncrc.org/open-for-business-the-critical-role-of-bank-and-cdfi-partnerships-in-reaching-diverse-communities/.

"Over a Third of Female Entrepreneurs Experience Gender Bias." HSBC Private Banking, October 1, 2019. https://www.privatebanking.hsbc.com/content/dam/privatebanking/gpb/discover/women-and-wealth/allbright/2019/AllBright%20partnership%20-%20September%202019%20-%20Shes%20the%20business%20media%20release.pdf.

Pandemic Oversight. "Paycheck Protection Program (PPP)," November 23, 2020. https://www.pandemicoversight.gov/data-interactive-tools/interactive-dashboards/paycheck-protection-program.

Panzino, Charlsy, and Robert Clark. "Pandemic Prompts Dip in Q4'21 Restaurant Loans." *S&P Global* (blog). Accessed May 23, 2024. https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/pandemic-prompts-dip-in-q4-21-restaurant-loans-68930100.

"Paycheck Protection Program Liquidity Facility (PPPLF)," June 25, 2021. https://www.federalreserve.gov/monetarypolicy/ppplf.htm.

"Paycheck Protection Program: Loan Forgiveness by the Numbers." Pandemic Response Accountability Committee, October 2, 2022. https://www.pandemicoversight.gov/media/file/ppp-loan-forgiveness-fact-sheet-october-2022-updatepdf.

"Paycheck Protection Program (PPP) Report: Second Round." Small Business Administration, May 1, 2020. https://home.treasury.gov/system/files/136/PPP2-Data-05012020.pdf.

"PayNet Small Business Delinquency Index and Small Business Default Index." Equifax, n.d. https://sbinsights.paynetonline.com/loan-performance/.

"PayNet/Equifax Risk Insight Suite | Small Business Loan Performance." Accessed May 20, 2024. https://sbinsights.paynetonline.com/loan-performance/.

Peek, Sean. "Secured Business Loans: The Pros and Cons." US Chamber of Commerce, April 22, 2023. https://www.uschamber.com/co/run/business-financing/what-is-a-secured-business-loans.

Perry Abello, Oscar. "Mission-Driven Lenders Already Providing Assistance to Vulnerable Businesses During COVID-19." *Next City* (blog), March 26, 2020. https://nextcity.org/urbanist-news/mission-driven-lenders-providing-assistance-vulnerable-businesses-covid-19.

Perry, Andre M., Manann Donoghoe, and Hannah Stephens. "Closing the Black Employer Gap: Insights from the Latest Data on Black-Owned Businesses." Brookings Institution, February 15, 2024. https://www.brookings.edu/articles/closing-the-black-employer-gap-insights-from-the-latest-data-on-black-owned-businesses/.

Perry, Andre, Jonathan Rothwell, and David Harshbarger. "Five-Star Reviews, One-Star Profits: The Devaluation of Businesses in Black Communities." Brookings Institution, February 2020. https://www.brookings.edu/wp-content/uploads/2020/02/2020.02_DevOfBizInBlackCommunities_Perry-Rothwell-Harshbarger-final.pdf.

———. "The Devaluation of Businesses in Black Communities," n.d.

Perry, Manann Donoghoe, and Hannah Stephens. "Who Is Driving Black Business Growth? Insights from the Latest Data on Black-Owned Businesses." Brookings. Accessed May 20, 2024. https://www.brookings.edu/articles/who-is-driving-black-business-growth-insights-from-the-latest-data-on-black-owned-businesses/.

Peterson, Dana M., and Hollis W. Hart. "The Silicon Valley Bank (SVB) Collapse and Implications for Business." The Conference Board, August 30, 2023. https://www.conference-board.org/publications/Silicon-Valley-Bank-SVB-Collapse-Implications-for-Business.

Petrik, Anne. "Small Business Confidence Improves After Debt Ceiling Scare." Vistage Research Center, June 29, 2023. https://www.vistage.com/research-center/business-financials/economic-trends/20230629-small-business-confidence-improves-wsj-survey/.

———. "Small Business Confidence Improves After Debt Ceiling Scare." Vistage, June 29, 2023. https://www.vistage.com/research-center/business-financials/economic-trends/20230629-small-business-confidence-improves-wsj-survey/.

Ponciano, Jonathan. “Big Banks Prioritized Billions In PPP Funds For Wealthy Clients At The Expense Of Struggling Small Businesses, House Report Finds.” *Forbes*, October 17, 2020. https://www.forbes.com/sites/jonathanponciano/2020/10/16/trump-admin-big-banks-billions-ppp-funds-wealthy-clients-at-expense-of-struggling-small-businesses-house-report/?sh=4d76aa3c730b.

Porterfield, Daniel R. “Building an Inclusive Economy Through Community-Based Financial Institutions: A Conversation with Joyce Klein and Janie Barrera.” *The Aspen Institute* (blog), February 3, 2021. https://www.aspeninstitute.org/of-interest/building-an-inclusive-economy-through-community-based-financial-institutions-a-conversation-with-joyce-klein-and-janie-barrera/.

Pound, Jesse, and Samantha Subin. “Stocks Fall to End Wall Street’s Worst Year since 2008, S&P 500 Finishes 2022 down Nearly 20%.” *CNBC*, December 30, 2022. https://www.cnbc.com/2022/12/29/stock-market-futures-open-to-close-news.html.

PR Newswire. “Fintech Leaders Camino Financial and Fundation Merge to Form Full Spectrum Small Business Lender.” September 28, 2023. https://www.prnewswire.com/news-releases/fintech-leaders-camino-financial-and-fundation-merge-to-form-full-spectrum-small-business-lender-301941227.html.

Prakash, Priyanka. “Rural Small Businesses Earn Better Profits and More Financing vs. City Ones.” Fundera, September 9, 2020. https://www.fundera.com/business-loans/guides/rural-vs-urban-business-financing.

Racial Wealth Equity Resource Center. “Business Ownership.” Accessed May 20, 2024. https://rwerc.org/resources/business-ownership/.

Reagan, Courtney. “Nearly All Americans Cut Spending amid Inflation: CNBC Survey.” *CNBC*, June 14, 2023. https://www.cnbc.com/2023/06/14/nearly-all-americans-cut-back-on-spending-amid-inflation-cnbc-survey-says.html.

“Realizing the Digital Promise: COVID-19 Catalyzes and Accelerates Transformation in Financial Services.” Deloitte, 2020. https://www.deloitte.com/global/en/Industries/financial-services/perspectives/realizing-the-digital-promise-covid-19-catalyzes-and-accelerates-transformation.html.

Reosti, John. “New Census Data Hints at Slower Pace for Small-Business Formation.” American Banker, November 15, 2023. https://www.americanbanker.com/news/new-census-data-hints-at-slower-pace-for-small-business-formation.

“Required Rulemaking on Personal Financial Data Rights: CFPB.” *Federal Register* 88, no. 209 (October 31, 2023). https://www.govinfo.gov/content/pkg/FR-2023-10-31/pdf/2023-23576.pdf.

Revenue and Taxation Interim Committee. “Paycheck Protection Program Overview.” June 16, 2021. https://le.utah.gov/interim/2021/pdf/00002631.pdf.

Riddle, Safiyah. “Majority of Small Businesses Believe US Is in Recession.” *Reuters*, August 21, 2023. https://www.reuters.com/markets/us/majority-small-businesses-believe-us-is-recession-2023-08-21/.

———. “US Small Business Lending Holding up despite Higher Cost of Credit.” *Reuters*, July 13, 2023. https://www.reuters.com/markets/us/us-small-business-lending-holding-up-despite-higher-cost-credit-2023-07-13/.

Robb, Alicia. “Access to Capital among Young Firms, Minority-Owned Firms, Women-Owned Firms, and High-Tech Firms.” US Small Business Administration, April 1, 2013. https://advocacy.sba.gov/2013/04/01/access-to-capital-among-young-firms-minority-owned-firms-women-owned-firms-and-high-tech-firms/.

———. “Financing Patterns and Credit Market Experiences: A Comparison by Race and Ethnicity for U.S. Employer Firms.” US Small Business Administration, February 1, 2018. https://advocacy.sba.gov/2018/02/01/financing-patterns-and-credit-market-experiences-a-comparison-by-race-and-ethnicity-for-u-s-employer-firms/.

Rocha, Polo. “Kabbage, a Bankrupt Fintech Lender, Settles PPP Fraud Case with DOJ.” *American Banker*, May 14, 2024. https://www.americanbanker.com/news/kabbage-a-bankrupt-fintech-lender-settles-ppp-fraud-case-with-doj.

Romm, Tony. “In Reversal, U.S. to Heighten Efforts to Collect Billions in Unpaid Covid Loans.” *Washington Post*, December 28, 2023. https://www.washingtonpost.com/business/2023/12/28/sba-eidl-loans-debts/.

Ross, Kyle, and Justin Dorazio. “The Latest Poverty, Income, and Food Insecurity Data Reveal Continuing Racial Disparities.” *Center for American Progress* (blog), December 21, 2022. https://www.americanprogress.org/article/the-latest-poverty-income-and-food-insecurity-data-reveal-continuing-racial-disparities/.

Royles, Matt. “CDFI Loan Funds Have Emerged from the Pandemic Strong and Ready to Meet the next Challenges and Opportunities.” Aeris Insight, December 31, 2022. https://www.aerisinsight.com/2023/04/19/cdfi-loan-funds-have-emerged-from-the-pandemic-strong-and-ready-to-meet-the-next-challenges-and-opportunities/.

Sánchez, Juan M., and Olivia Wilkinson. “Deja Vu? The Recent Rise in Credit Card Debt Delinquencies.” *Federal Reserve Bank of St. Louis* (blog), August 14, 2023. https://www.stlouisfed.org/publications/regional-economist/2023/aug/deja-vu-recent-rise-credit-card-debt-delinquencies.

Sankaran, Sid, and Jessica Battisto. “Financing Their Future: Veteran Entrepreneurs and Capital Access.” Small Business Administration; Federal Reserve Bank of New York, November 8, 2018. https://www.fedsmallbusiness.org/analysis/2018/financing-their-future-veteran-entrepreneurs-and-capital-access.

Santos Sanneh, Ebrima. “Banking Groups Sue Regulators to Block CRA Revamp.” *American Banker*, February 5, 2024. https://www.americanbanker.com/news/banking-groups-sue-regulators-to-block-cra-revamp.

SBA’s Office of Advocacy. “Frequently Asked Questions About Small Business 2023,” March 7, 2023. https://advocacy.sba.gov/2023/03/07/frequently-asked-questions-about-small-business-2023/.

SBA's Office of Advocacy. "Small Businesses Generate 44 Percent of U.S. Economic Activity," January 30, 2019. https://advocacy.sba.gov/2019/01/30/small-businesses-generate-44-percent-of-u-s-economic-activity/.

Schneider, Howard, and Indradip Ghosh. "Fed, Economists Make Course Correction on US Recession Predictions." *Reuters*, August 17, 2023. https://www.reuters.com/markets/us/with-gallic-shrug-fed-bids-adieu-recession-that-wasnt-2023-08-16/.

Scott, Amy. "Minority-Owned Businesses Struggle to Access Emergency Loans." *Marketplace* (blog), April 28, 2020. https://www.marketplace.org/2020/04/28/covid-19-small-business-aid-paycheck-protection-program-minority-owned-businesses/.

Scott, Chris, and Howard Wial. "Technical Knockout: Closing the Gaps in Regional Small Business Technical Assistance Systems." Initiative for a Competitive Inner City, March 2022. https://icic.org/wp-content/uploads/2022/03/Technical-Knockout_Closing-the-Gaps-in-Regional-Small-Business-Technical-Assistance.pdf.

Scott, Jacob, Maria Carmelita Recto, and Jonathan Kivell. "Sizing the CDFI Market: Understanding Industry Growth." Federal Reserve Bank of New York, August 2023. https://www.newyorkfed.org/medialibrary/media/newsevents/news/regional_outreach/2023/sizing-the-cdfi-market-understanding-industry-growth.

Sedlacek, Petr, and Chenchuan Shi. "Work from Home, Business Dynamism, and the Macroeconomy." *University of Oxford*, March 13, 2024. https://users.ox.ac.uk/~econ0506/Documents/Working/WFH_Macro.pdf.

Sheng, Ellen. "Coronavirus Crisis Mobile Banking Surge Is a Shift That's Likely to Stick." *CNBC*, May 27, 2020. https://www.cnbc.com/2020/05/27/coronavirus-crisis-mobile-banking-surge-is-a-shift-likely-to-stick.html.

Shoulders, Meco. "CDFIs: What Are They and How Do They Work? – Third Way." *Third Way* (blog). Accessed May 20, 2024. https://www.thirdway.org/memo/cdfis-what-are-they-and-how-do-they-work.

Siegel, Rachel, and Andrew Van Dam. "U.S. Economy Grew 5.7 Percent in 2021, Fastest Full-Year Clip since 1984, despite Ongoing Pandemic." *The Washington Post*, January 27, 2022. https://www.washingtonpost.com/business/2022/01/27/gdp-2021-q4-economy/.

Simms, Margaret C., Karina Fortuny, and Everett Henderson. "Racial and Ethnic Disparities Among Low-Income Families." Urban Institute, August 2009. https://www.urban.org/sites/default/files/publication/32976/411936-racial-and-ethnic-disparities-among-low-income-families.pdf.

Simon, Ruth. "Banks Raise Roadblocks to Small-Business Loans - WSJ." *Wall Street Journal*, June 1, 2023. https://www.wsj.com/articles/new-borrowing-hurdles-leave-small-businesses-in-limbo-89cf1ea3.

———. "Small Business Bankruptcies Rising at Worst Pace Since Pandemic." *Wall Street Journal*, October 1, 2023. https://www.wsj.com/business/entrepreneurship/small-busines-bankruptcy-surge-8989e665.

Simon, Ruth, and Peter Rudegeair. "Big Banks Favor Certain Customers in $350 Billion Small-Business Loan Program." *Wall Street Journal*, April 6, 2020. https://www.wsj.com/articles/big-banks-favor-certain-customers-in-350-billion-small-business-loan-program-11586174401.

Small Business & Entrepreneurship Council. "Facts & Data on Small Business and Entrepreneurship." Accessed May 23, 2024. https://sbecouncil.org/about-us/facts-and-data/.

"Small Business Cash Flow Trend Report." OnDeck & Ocrolus, Q1 2024. https://www.ondeck.com/small-business-trends.

"Small Business COVID-19 Fraud: Three Years Later." Ranking Member Minority Report. US Senate, November 14, 2023. https://www.sbc.senate.gov/public/_cache/files/0/3/03368f34-83c8-4cf4-ab36-c720dc66de5e/309F036D0446AF836D4387EBCC770A82.small-business-covid-19-fraud-three-years-later-state-of-play.pdf.

"Small Business Financing Before, During, and After the Pandemic." Bipartisan Policy Center, November 29, 2022. https://bipartisanpolicy.org/explainer/small-business-financing/.

"Small Business Lending Dips As Economic Slowdown Looms." Equifax Commercial Strategic Insights. Equifax, December 2022. https://assets.equifax.com/marketing/US/assets/equifax-strategic-insights-december-2022.pdf.

"Small Business Lending in the United States, 2019." US Small Business Administration, September 2020. https://advocacy.sba.gov/wp-content/uploads/2020/09/Report-2019-Small-Business-Lending-Report.pdf.

"Small Business Lending in the United States, 2020." US Small Business Administration, July 2022. https://advocacy.sba.gov/wp-content/uploads/2022/07/Small-Business-Lending-Research-Summary-508c.pdf.

Smialek, Jeanna. "U.S. Economy: Has an Era of Increased Productivity Returned?" *The New York Times*, February 21, 2024. https://www.nytimes.com/2024/02/21/business/economy/economy-productivity-increase.html.

Smialek, Jeanna, and Emily Flitter. "Fed and Lawmakers Eye Bank Rules After Collapse." *The New York Times*, March 15, 2023. https://www.nytimes.com/2023/03/15/business/economy/silicon-valley-bank-federal-reserve-regulation.html.

Soergel, Andrew. "More Than Half of Small Businesses Closed Temporarily Amid Coronavirus Outbreak." US News & World Report. Accessed May 15, 2024. https://www.usnews.com/news/economy/articles/2020-05-05/more-than-half-of-small-businesses-closed-temporarily-amid-coronavirus-outbreak.

"Some Black-Owned Businesses Are Turning To New Banks For Paycheck Protection Loans." *All Things Considered*. NPR, February 10, 2021. https://www.npr.org/2021/02/10/966623242/some-black-owned-businesses-are-turning-to-new-banks-for-paycheck-protection-loa.

"S&P 500 Index." MarketWatch, n.d. https://www.marketwatch.com/investing/index/spx.

"SSBCI Quarterly Report through December 31, 2023." U.S. Department of the Treasury, March 28, 2024. https://home.treasury.gov/system/files/256/SSBCI-QuarterlyReport-Mar29.pdf.

Stangler, Dane. "Is New Business Formation Still Setting Records? What Might That Mean for the Economy?" *Forbes*, March 1, 2023. https://www.forbes.com/sites/danestangler/2023/03/01/is-new-business-creation-still-setting-records-what-might-that-mean-for-the-economy/?sh=6494f3f75c70.

"State Small Business Credit Initiative: Capital Program Policy Guidelines." US Department of the Treasury, December 4, 2023. https://home.treasury.gov/system/files/136/SSBCI-Capital-Program-Policy-Guidelines.pdf.

"State Small Business Credit Initiative Fact Sheet." U.S. Department of the Treasury, June 2023. https://home.treasury.gov/system/files/256/State-Small-Business-Credit-Initiative-SSBCI-Fact-Sheet.pdf.

Stettner, Andrew, Michelle Burris, and Lee Wellington. "SSBCI 2.0: A New Capital Tool for Revitalizing and Diversifying Manufacturing." *The Century Foundation* (blog), January 21, 2022. https://tcf.org/content/report/ssbci-2-0-new-capital-tool-revitalizing-diversifying-manufacturing/.

SunWise Capital. "Benefits and Drawbacks of Merchant Cash Advances," February 10, 2024. https://sunwisecapital.com/the-benefits-and-drawbacks-of-merchant-cash-advances/.

Supyan, V. B. "The Economic Situation in the United States in 2022: Trends and Forecasts." *Herald of the Russian Academy of Sciences* 92, no. Suppl 15 (2022): S1483–87. https://doi.org/10.1134/S1019331622210201.

"The 2024 Impact of Women-Owned Businesses." Wells Fargo, 2024. https://www.wippeducationinstitute.org/_files/ugd/5cba3e_96b999d23fb04d8eb488192a179781d4.pdf.

The Aspen Institute. "Microfinance Impact Collaborative (MIC)." Accessed May 20, 2024. https://www.aspeninstitute.org/programs/business-ownership-initiative/microfinance-impact-collaborative/.

The Aspen Institute. "Microlending Accelerator Program." Accessed May 23, 2024. https://www.aspeninstitute.org/programs/business-ownership-initiative/microlending-accelerator-program/.

The Aspen Institute. "Scale Academy - FIELD at the Aspen Institute." Accessed May 20, 2024. https://www.aspeninstitute.org/programs/business-ownership-initiative/scale-academy/.

The Conference Board. "CEO Confidence Deteriorated Further in Q3," August 17, 2022. https://www.conference-board.org/topics/CEO-Confidence/press/CEO-confidence-Q3-2022.

The Conference Board. "US Leading Economic Index Continued to Fall in April," May 17, 2024. https://www.conference-board.org/topics/us-leading-indicators.

The Economics Daily: U.S. Bureau of Labor Statistics. "Consumer Prices up 9.1 Percent over the Year Ended June 2022, Largest Increase in 40 Years : The Economics Daily: U.S. Bureau of Labor Statistics," July 18, 2022. https://www.bls.gov/opub/ted/2022/consumer-prices-up-9-1-percent-over-the-year-ended-june-2022-largest-increase-in-40-years.htm.

The Greenlining Institute. "The Greenlining Institute Responds to Historic Community Reinvestment Act Update: New Regulations Miss the Mark on Racial Equity," October 24, 2023. https://greenlining.org/2023/greenlining-responds-to-historic-cra-update/.

"The Growing Market Investors Are Missing: The Trillion-Dollar Case for Investing in Female and Multicultural Entrepreneurs." Morgan Stanley, 2018. https://www.morganstanley.com/content/dam/msdotcom/mcil/growing-market-investors-are-missing.pdf.

"The Largest Banks Are Invested in MDIs." Financial Services Forum, 2020. https://fsforum.com/a/media/the-largest-banks-are-invested-in-mdis.pdf.

"The Largest U.S. Banks Are Invested in CDFIs." Financial Services Forum, 2020. https://fsforum.com/a/media/the-largest-u.s.-banks-are-invested-in-cdfis.pdf.

"The Legacy of George Floyd: An Examination of Financial Services Industry Commitments to Economic and Racial Justice," June 29, 2021. https://bpi.com/bpi-testimony-the-legacy-of-george-floyd-an-examination-of-financial-services-industry-commitments-to-economic-and-racial-justice/.

The PNC Financial Services Group, Inc. "PNC Survey Shows Business Owner Optimism Continues to Soar Amid Improving Economic Conditions," February 28, 2024. https://investor.pnc.com/news-events/financial-press-releases/detail/621/pnc-survey-shows-business-owner-optimism-continues-to-soar.

"The Risks and Rewards of Microlending," February 19, 2016. https://www.mulliganfunding.com/blog/the-risks-and-rewards-of-microlending/.

"The Small Business Boom Under the Biden-Harris Administration." The White House, April 2022. https://www.whitehouse.gov/wp-content/uploads/2022/04/President-Biden-Small-Biz-Boom-full-report-2022.04.28.pdf.

"The Tapestry of Black Business Ownership in America: Untapped Opportunities for Success." Association for Enterprise Opportunity, March 20, 2017. https://aeoworks.org/wp-content/uploads/2019/03/AEO_Black_Owned_Business_Report_02_16_17_FOR_WEB-1.pdf.

"The Use of Cash-Flow Data in Underwriting Credit: Empirical Research Findings." FinRegLab, July 2019. https://finreglab.org/research/the-use-of-cash-flow-data-in-underwriting-credit-empirical-research-findings/.

"The Use of Cash-Flow Data in Underwriting Credit: Small Business Spotlight." FinRegLab, September 2019. https://finreglab.org/wp-content/uploads/2023/12/FinRegLab_2019-09-06_Research-Report_Small-Business-Spotlight_The-Use-of-Cash-Flow-Data-in-Underwriting-Credit.pdf.

"The Use Of Machine Learning For Credit Underwriting: Market & Data Science Context." FinRegLab, September 2021. https://finreglab.org/wp-content/uploads/2023/12/FinRegLab_2021-09-16_Research-Report_The-Use-of-Machine-Learning-for-Credit-Underwriting_Market-and-Data-Science-Context.pdf.

The White House. "FACT SHEET: President Biden to Highlight How His Investing in America Agenda Has Led to a Black Small Business Boom," December 20, 2023. https://www.whitehouse.gov/briefing-room/statements-releases/2023/12/20/fact-sheet-president-biden-to-highlight-how-his-investing-in-america-agenda-has-led-to-a-black-small-business-boom/.

The White House. "New Business Surge: Unveiling the Business Application Boom through an Analysis of Administrative Data | CEA," January 11, 2024. https://www.whitehouse.gov/cea/written-materials/2024/01/11/new-business-surge-unveiling-the-business-application-boom-through-an-analysis-of-administrative-data/.

The White House. "Ten Charts That Explain the U.S. Economy in 2023," December 19, 2023. https://www.whitehouse.gov/cea/written-materials/2023/12/19/ten-charts-that-explain-the-u-s-economy-in-2023/.

Theodos, Brett, Jorge González-Hermoso, and Tola Myczkowska. "Leveraging Technology to Scale Up Small Business Lending." Urban Institute, October 2022. https://www.urban.org/sites/default/files/2023-01/Leveraging%20Technology%20to%20Scale%20Up%20Small-Business%20Lending.pdf.

Theodos, Brett, Noah McDaniel, Sophie McManus, Ellen Seidman, and Eric Weaver. "Federal Small Business Supports." Urban Institute, February 2024. https://www.urban.org/sites/default/files/2024-02/Federal_Small_Business_Supports.pdf.

Third Way. "State Small Business Credit Initiative: How It Works & Helps Minority Businesses," August 3, 2021. https://www.thirdway.org/memo/state-small-business-credit-initiative-how-it-works-and-helps-minority-businesses.

Thomson Reuters. "Banking Evolution: How to Take on the Challenges of FinTech." Accessed May 28, 2024. https://legal.thomsonreuters.com/en/insights/articles/how-to-take-on-the-challenges-of-fintech.

Torry, Harriet, and Anthony DeBarros. "Economists in WSJ Survey Still See Recession This Year Despite Easing Inflation." *Wall Street Journal*, January 15, 2023, sec. Economy. https://www.wsj.com/articles/despite-easing-price-pressures-economists-in-wsj-survey-still-see-recession-this-year-11673723571.

Toussaint-Comeau, Maude, Yi David Wang, and Robin Newberger. "Impact of Bank Closings on Credit Extension to Businesses in Low-Income and Minority Neighborhoods." *The Review of Black Political Economy* 47, no. 1 (March 1, 2020): 20–49. https://doi.org/10.1177/0034644619885343.

Toussaint-Comeau, Maude, and Victoria Williams. "Secular Trends in Minority-Owned Businesses and Small Business Finance." Federal Reserve Bank of Chicago, May 2020. https://www.chicagofed.org/publications/profitwise-news-and-views/2020/secular-trends-minority-owned-businesses-small-business-finance.

Tracy, Matt. "Tough Road Ahead for U.S. Fintech Lenders as Default Risk Rises." *Reuters*, January 13, 2023. https://www.reuters.com/markets/us/tough-road-ahead-us-fintech-lenders-default-risk-rises-2023-01-13/.

Treece, Dock. "How Small Businesses Benefit Local Economies." Business News Daily. Accessed May 20, 2024. https://www.businessnewsdaily.com/1298-small-business-good-for-economy.html.

U. S. Government Accountability Office. "Small Businesses | U.S. GAO," March 2, 2021. https://www.gao.gov/small-businesses.

US Census Bureau. "Business Formation Statistics - About the Data." Accessed May 23, 2024. https://www.census.gov/econ/bfs/about_the_data.html.

US Census Bureau. "Business Formation Statistics - Definitions." Accessed May 23, 2024. https://www.census.gov/econ/bfs/definitions.html#EIN.

US Census Bureau. "Business Formation Statistics - Methodology." Accessed May 23, 2024. https://www.census.gov/econ/bfs/technicaldocumentation/methodology.html.

U.S. Census Bureau. "Business Formation Statistics Release," May 9, 2024. https://www.census.gov/econ/bfs/current/index.html.

US Census Bureau. "More Exurban Communities Now Among Nation's Fastest Growing Places," May 16, 2024. https://www.census.gov/library/stories/2024/05/exurbs-city-population.html.

U.S. Department of Commerce. "By the Numbers: U.S. Economy Grows Faster than Expected for Year and Final Quarter of 2023," January 26, 2024. https://www.commerce.gov/news/blog/2024/01/numbers-us-economy-grows-faster-expected-year-and-final-quarter-2023.

U.S. Department of the Treasury. "Emergency Capital Investment Program," May 16, 2024. https://home.treasury.gov/policy-issues/coronavirus/assistance-for-small-businesses/emergency-capital-investment-program.

"U.S. Department of the Treasury Community Development Financial Institutions Fund." Federal Deposit Insurance Corporation, n.d. https://www.fdic.gov/resources/bankers/affordable-mortgage-lending-center/guide/part-1-docs/cdfi-overview.pdf.

U.S. GAO. "State Small Business Credit Initiative: Improved Planning Could Help Treasury Limit Additional Delays," February 2, 2023. https://www.gao.gov/products/gao-23-105293.

U.S. Impact Investing Alliance. "CDFIs Are on the Frontlines of Supporting Communities. Now They Need Our Help.," August 19, 2020. http://impinvalliance.org/news-updates/2020/8/19/cdfis-are-on-the-frontlines-of-supporting-communities-now-they-need-our-help.

US Small Business Administration. "Biden-Harris Administration Takes Historic Step in Expanding Access to Capital and Filling Lending Gaps in Underserved Communities," November 1, 2023. https://www.sba.gov/article/2023/11/01/biden-harris-administration-takes-historic-step-expanding-access-capital-filling-lending-gaps.

U.S. Small Business Administration. "Funding Program: Microloans." Accessed May 23, 2024. https://www.sba.gov/funding-programs/loans/microloans.

U.S. Small Business Administration. "New Business Applications Reach Record 16 Million Under Biden-Harris Administration." January 11, 2024. https://www.sba.gov/article/2024/01/11/new-business-applications-reach-record-16-million-under-biden-harris-administration.

U.S. Small Business Administration. "SBA Debt Relief," May 26, 2023. https://www.sba.gov/funding-programs/loans/covid-19-relief-options/sba-debt-relief.

US Small Business Administration. "SBA Re-Opening Paycheck Protection Program to Small Lenders on Friday, January 15 and All Lenders on Tuesday, January 19," January 13, 2021. https://www.sba.gov/article/2021/jan/13/sba-re-opening-paycheck-protection-program-small-lenders-friday-january-15-all-lenders-tuesday.

U.S. Small Business Administration. "SBA's Paycheck Protection Program for Small Businesses Affected by the Coronavirus Pandemic Launches," April 3, 2020. https://www.sba.gov/article/2020/apr/03/sbas-paycheck-protection-program-small-businesses-affected-coronavirus-pandemic-launches.

Vasiloff, Jennifer A. "CDFIs Outperform Other Paycheck Protection Program (PPP) Lenders." OFN (blog), June 29, 2020. https://www.ofn.org/blog/cdfis-outperform-other-paycheck-protection-program-ppp-lenders/.

Volker, Desi. "The Paycheck Protection Program Liquidity Facility." *Federal Reserve Bank of New York*, September 2021. https://doi.org/10.2139/ssrn.4155642.

Wack, Kevin, Polo Rocha, Laura Alix, Allissa Kline, and Jon Prior. "How Banking Changed after the Killing of George Floyd | American Banker." *American Banker*, May 25, 2021. https://www.americanbanker.com/list/how-banking-changed-after-the-killing-of-george-floyd.

Wang, Ye (Emma), and Shuang (Sunnie) Wu. "Impact of Mobile Banking on Small Business Lending After Bank Branch Closures." SSRN Scholarly Paper. Rochester, NY, May 4, 2024. https://doi.org/10.2139/ssrn.4638585.

Wavering Corcoran, Emily. "Community Development Financial Institutions (CDFIs) by the Numbers." Federal Reserve Bank of Richmond, 2019. https://www.richmondfed.org/-/media/richmondfedorg/community_development/resource_centers/cdfi/pdf/cdfi_report_2019.pdf.

"Wealth, Asset Ownership, & Debt of Households Detailed Tables: 2019." US Census Bureau, 2019. https://www.census.gov/data/tables/2019/demo/wealth/wealth-asset-ownership.html.

Weaver, Eric, Joyce Klein, and Tim Ogden. "Scaling Lending to Entrepreneurs of Color: Part II." The Aspen Institute, March 2023. https://www.aspeninstitute.org/wp-content/uploads/2023/03/Scaling-Lending-to-Entrepreneurs-of-Color-%E2%80%93-Strategies-and-Operational-Tactics-for-High-Volume-Originations.pdf.

Weller, Christian E. "Learning Lessons From the 1990s: Long-Term Growth Prospects for the U.S." *The New Economy* 9, no. 1 (April 10, 2002). https://www.epi.org/publication/webfeatures_viewpoints_l-t_growth_lessons/.

Wells Fargo. "Wells Fargo Introduces Small Businesses to Alternative Options for Financing and Technical Assistance," April 19, 2022. https://newsroom.wf.com/English/news-releases/news-release-details/2022/Wells-Fargo-Introduces-Small-Businesses-to-Alternative-Options-for-Financing-and-Technical-Assistance/default.aspx.

Wheat, Chris, Stacey Chan, and Nicholas Tremper. "Scaling to $1 Million: How Small Businesses Fare by Owner Race and Gender." JPMorgan Chase Institute, April 2024. https://www.jpmorganchase.com/content/dam/jpmc/jpmorgan-chase-and-co/institute/pdf/1-million-annual-revenues-as-a-small-business-milestone.pdf.

White, Olivia, Anu Madgavkar, Zac Townsend, James Manyika, Tunde Olanrewaju, Tawanda Sibanda, and Scott Kaufman. "Financial Data Unbound: The Value of Open Data for Individuals and Institutions." McKinsey, June 24, 2021. https://www.mckinsey.com/industries/financial-services/our-insights/financial-data-unbound-the-value-of-open-data-for-individuals-and-institutions.

Wicks, Pearl, and Diane Standaert. "CDFIs' Mission-Driven Orientation Is Critical to Making Financial Technology Work for Deep South Communities." *Federal Reserve Bank - Community Development Innovation Review*, 2019. https://www.frbsf.org/community-development/wp-content/uploads/sites/3/wicks-standaert-cdfis-mission-driven-orientation-is-critical-to-making-financial-technology-work-for-deep-south-communities.pdf.

Williams, Dafina. "Community Development Financial Institutions (CDFIs) + Supportive Policies + Capital = Responsible, Affordable Financing for Marginalized Communities." Opportunity Finance Network, n.d. https://cdn.ofn.org/uploads/2023/01/30181644/CDFIs-Deliver-for-Low-wealth-and-minority-communities-.pdf.

———. "PPP Winds Down with CDFIs as Top Lenders." *OFN* (blog), June 11, 2021. https://www.ofn.org/blog/ppp-winds-down-cdfis-top-lenders/.

Wilmoth, Daniel. “Small Business Facts: Small Business Job Creation.” Small Business Administration, April 2022. https://advocacy.sba.gov/wp-content/uploads/2022/04/Small-Business-Job-Creation-Fact-Sheet-Apr2022.pdf.

Winston, Ashley. “The Contribution of Minority Business Enterprises to the U.S. Economy.” Minority Business Development Agency, September 2021. https://www.mbda.gov/sites/default/files/2021-09/The%20Contribution%20of%20MBEs%20to%20US%20Economy%20Report%20%20-%20September%202021.pdf.

Wolters Kluwer. “Section 1071’s Murky Future,” October 10, 2023. https://www.wolterskluwer.com/en/expert-insights/section-1071s-murky-future.

Yang, Tiantian, and Olenka Kacperczyk. “The Racial Gap in Entrepreneurship and Opportunities inside Established Firms.” *Strategic Management Journal* 45, no. 4 (November 28, 2023). https://doi.org/10.1002/smj.3565.

Yao, Zhigang, and Yao Liu. “How Covid-19 Impacts the Financing in SMEs: Evidence from Private Firms.” *Economic Analysis and Policy*, June 25, 2023. https://doi.org/10.1016/j.eap.2023.06.036.

“Year-End Cash Flow Strategies & Spend Management | U.S. Bank,” November 16, 2023. https://spend.usbank.com/blog/closing-strong-year-end-cash-flow-strategies-monitoring-and-the-role-of-spend-management-platforms/.

Yee, Amy, Andre Tartar, and Marie Patino. “How Fixes to Covid Relief Program Got Money to More Small Businesses.” *Bloomberg.com*, August 22, 2022. https://www.bloomberg.com/graphics/2022-covid-relief-ppp-loans-small-business/.

Young, Caitlin. “How Will Proposed Changes to the Community Reinvestment Act Affect Lending to Historically Excluded Communities?” *Housing Matters: Urban Institute* (blog), June 29, 2022. https://housingmatters.urban.org/articles/how-will-proposed-changes-community-reinvestment-act-affect-lending-historically-excluded.

Zeeuw, Mels de. “Small Business Credit Survey: Report on Minority-Owned Firms.” Federal Reserve Bank of Atlanta, December 2019. https://www.fedsmallbusiness.org/reports/survey/2019/2019-report-on-minority-owned-firms.

Additional Acknowledgments

With support from:

This research initiative is funded by a grant from the U.S. Department of Commerce, Minority Business Development Agency, and support from Visa. In addition, Plaid will provide free account connectivity services to pilot programs by mission-based lenders to allow loan applicants to authorize their account data to be accessed for underwriting.

The mission of the **Minority Business Development Agency** is to promote the growth of minority business enterprises through the mobilization and advancement of public and private sector programs, policy, and research.

Visa (NYSE: V) is a world leader in digital payments, facilitating transactions between consumers, merchants, financial institutions and government entities across more than 200 countries and territories. Our mission is to connect the world through the most innovative, convenient, reliable and secure payments network, enabling individuals, businesses and economies to thrive. We believe that economies that include everyone everywhere, uplift everyone everywhere and see access as foundational to the future of money movement. Learn more at visa.com.

Plaid is a global data network that powers the tools millions of people rely on to live a healthier financial life. Our ambition is to facilitate a more inclusive, competitive, and mutually beneficial financial system by simplifying payments, revolutionizing lending, and leading the fight against fraud. Plaid works with thousands of companies including fintechs like Venmo and SoFi, several of the Fortune 500, and many of the largest banks to empower people with more choice and control over how they manage their money. Headquartered in San Francisco, Plaid's network spans over 12,000 institutions across the US, Canada, UK and Europe.

Digital version available at finreglab.org

Published by FinRegLab, Inc.

1701 K Street NW, Suite 1150
Washington, DC 20006
United States