

FinTech and Alternative Financing for Minority Business Enterprises

Minority Business Development Agency and Third Way

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THIRD WAY

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Foreword

The Minority Business Development Act of 2021 (Act), 15 U.S.C. § 9501 et seq. codifies the Minority Business Development Agency (MBDA) and many of its existing programs for the first time since the Agency's inception in 1969. The Act calls upon MBDA to conduct research and collect and analyze data, including data relating to the causes of the success or failure of minority business enterprises (MBEs). The Act also mandates, pursuant to 15 U.S.C. 9542(b)(1), that the Under Secretary shall "conduct a study on opportunities for providing alternative financing solutions to minority business enterprises."

Capital access has been and continues to be a top impediment to MBE growth. While there have been improvements to democratize capital over the years for all firms in the United States, MBEs still report unmet capital needs. This report focuses on a burgeoning sector of capital access that is currently considered an alternative source of capital, commonly referred to as Financial Technology (FinTech). MBDA recognizes there are many forms of alternative sources of capital, each with its own advantages. FinTech was identified as a source of alternative capital due to its ease of access to credit, speed, and more inclusive financial services accessible to MBEs, particularly for MBEs that may have been overlooked by traditional lenders.

FinTechs are growing in popularity among MBEs for multiple reasons. These reasons include, but are not limited to, MBEs having been denied capital elsewhere; the speed with which MBEs may receive a favorable credit determination; and/or a general sense from MBEs that they will have a good chance of securing FinTech financing. This report also uncovers some of the risks associated with FinTech that merit further consideration. The report includes discussion on the need to balance consumer protection while still making all viable capital sources available to historically underserved communities.

MBDA chose to take a multifaceted approach by partnering with the Third Way Institute (Third Way), a national think tank headquartered in Washington, D.C. Third Way has done extensive research and analysis of small business issues for well over a decade which has included analyzing barriers to MBE borrowers' capital access, examining government contracting and export trends, and evaluating technical assistance and training. Their contribution and collaboration strengthened this report and offers a better understanding of FinTech as an alternative source of financing for MBEs.

MBDA is embarking on a new chapter of its long and proud history to serve and support MBEs. The Minority Business Development Act of 2021 empowers the Agency to work to achieve true equity among all U.S. firms and strengthen our national economy. MBDA is committed to its mission and, together with public and private sector partners, will continue to address capital access disparity and foster new sources of alternative financing.

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Acting Under Secretary of Commerce for Minority Business Development
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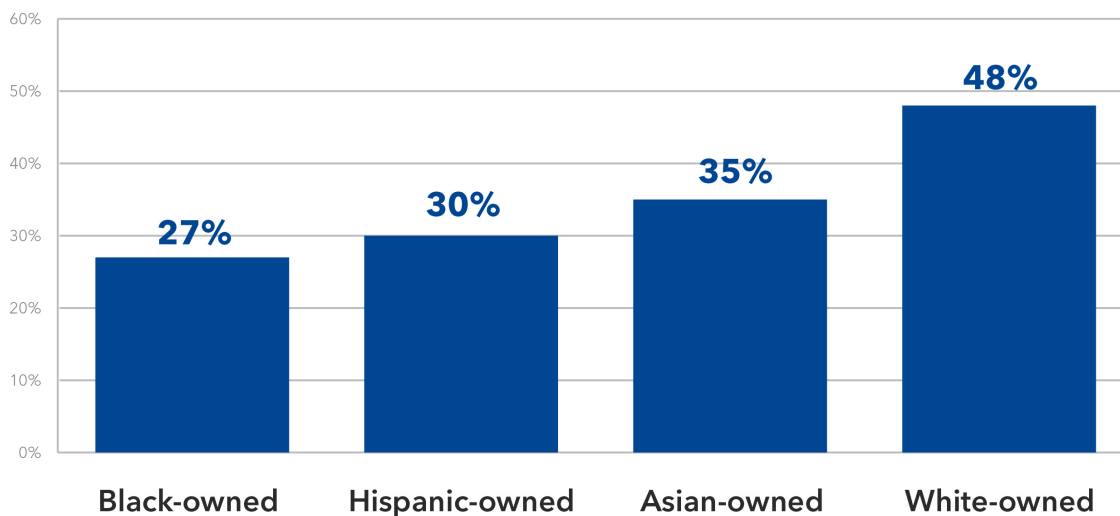
FinTech and Alternative Financing for MBEs

I. Introduction

In 2020, there were 130,367 Black-owned, 375,256 Hispanic-owned, and 607,161 Asian-owned employer businesses across the United States.¹ A year later, in 2021, there were 149,326 Black-owned, 406,086 Hispanic-owned, and 637,539 Asian-owned employer businesses.² And yet, even amid that growth, many minority groups are still vastly underrepresented as business owners in this country. The fact remains that only 2.5% of U.S. businesses with employees are Black-owned and only 6.9% are Hispanic-owned, far below their proportionate shares of the population (13.6% and 18.9% respectively).³ Further, the number of Black-owned and Hispanic-owned businesses without employees also declined below their shares of the population.⁴

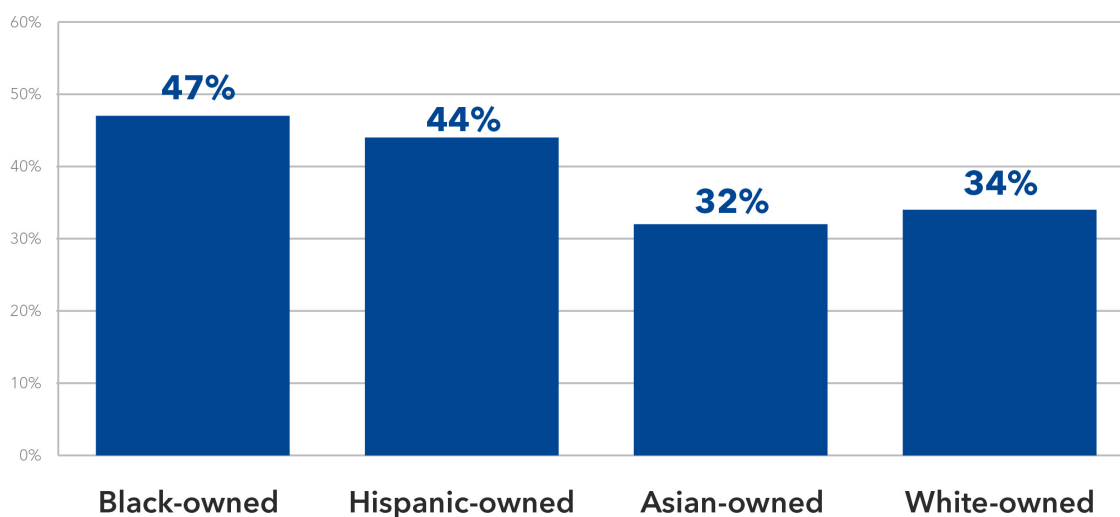
There are numerous reasons for this lack of representation among minority business enterprises, but issues surrounding capital access continually rise to the top. According to the 2022 Small Business Credit Survey from the 12 Federal Reserve Banks, business owners of color were 5-9 percentage points more likely to have applied for traditional financing in the last 12 months than their white counterparts.⁵ And yet, people of color were far less likely to receive all the financing they sought.⁶ They were also more likely to receive no financing at all.

Figure 1. Percent of Businesses Receiving All or Most of Financing Sought



Source: Board of Governors of the Federal Reserve System (U.S.). "Small Business Credit Survey: 2022 Report on Firms Owned by People of Color." Fed Small Business. <https://www.fedsmallbusiness.org/survey/2022/2022-report-on-firms-owned-by-people-of-color>. Page 15.

Figure 2. Percent of Businesses Receiving None of Financing Sought



Source: Board of Governors of the Federal Reserve System (U.S.). "Small Business Credit Survey: 2022 Report on Firms Owned by People of Color." Fed Small Business. <https://www.fedsmallbusiness.org/survey/2022/2022-report-on-firms-owned-by-people-of-color>. Page 15.

Researchers have found that long application times, delays in receiving the capital, and lower acceptance rates have encouraged small business borrowers to move away from traditional financial institutions.⁷ A 2019 report shows that during the 2000's, bank branch closures resulted in reductions in small business lending, an effect which may persist today and drive substitution toward alternative finance options.⁸ As a result of capital constraints, some entrepreneurs and small business owners have looked to alternative finance and financial technology (FinTech) solutions. These relatively new sources of capital have potential benefits but are not without significant risks that can be particularly harmful to MBEs.

In this report, we examine the FinTech landscape in the United States to give entrepreneurs, business owners, and policymakers a deeper understanding of what this sector is, how it works in practice, and both opportunities and risks in the offerings. This overview is not meant to be exhaustive, and MBEs should proceed with caution by fully understanding the terms of the finance offered and, when possible, comparing sources of capital prior to making a final decision and financial commitment. It is helpful to note the federal government has loan programs that seek to provide capital to businesses, including small or minority owned firms. A brief summary of these is provided in the Appendix section, "List of Federal Business Loan Programs."

II. The Basics

What is Alternative Finance?

Alternative finance is a sweeping term that includes financing channels, processes, and sources other than traditionally regulated banks and capital markets. Notably, these aspects refer to entities with markets and services that are distinct from enterprises such as large commercial banks, investment firms, and insurance companies.

The sector includes a diverse variety of players and offerings. This ranges from established for-profit, non-profit, and smaller-scale or mission-oriented lenders (e.g., community development financial institutions and minority-depository institutions), to nonbank financial services (e.g., pawn shops, payday lending, and check cashing), to a variety of FinTech models (e.g., crowdfunding, peer-to-peer lending), and more.

While all forms of alternative finance warrant attention, this report focuses specifically on FinTech and the intersection with MBEs.

What is FinTech?

One of the fastest-growing components of alternative finance has been the growth of FinTech firms, with lending jumping from \$121 million in quarterly originations to small businesses in 2013 to \$2 billion five years later.⁹ Yet, while FinTech is growing and evolving, so too is its definition. The Office of the Comptroller of the Currency (OCC) recognizes "FinTech firms" as "companies that specialize in offering digital financial services to consumers or enable other financial service providers to offer digital financial services used by consumers."¹⁰ The U.S. Chamber of Commerce has a definition that includes "any technology that delivers financial services through software, such as online banking,

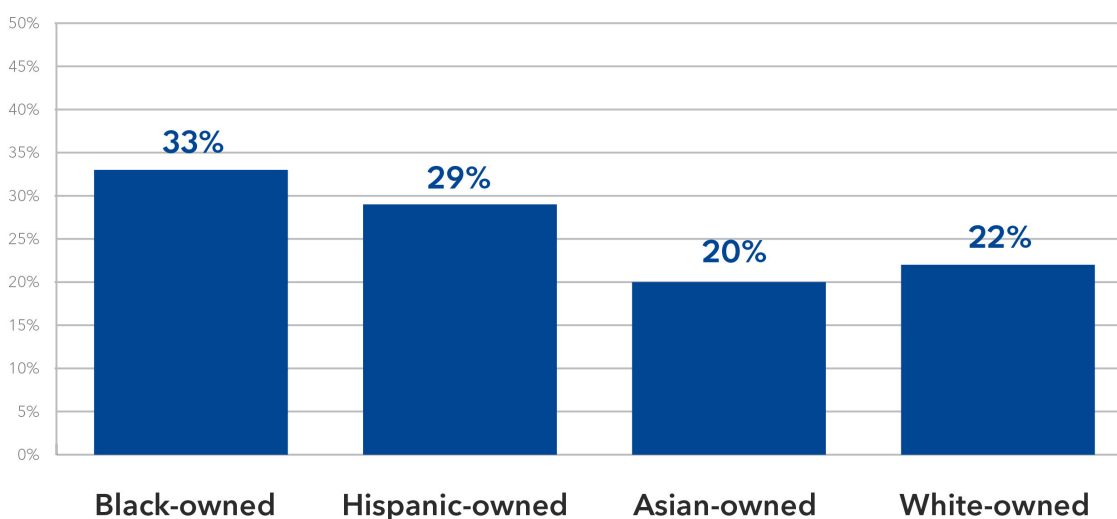
mobile payment apps, or even cryptocurrency.”¹¹ In fact, modern reference to “FinTech” includes online products and services that have emerged over the past 15-20 years, but the term encompasses banking and regulatory changes over a much longer period.¹²

Although there is not a universal definition, FinTech is unique in its **exclusive reliance on technology to directly reach and link borrowers, lenders, or investors through new or innovative business models**. Notably, it can broadly describe the industry, its firms, and/or its methods of delivering automated financial services through data-driven software applications and algorithms.

FinTechs have historically been less regulated than both community lenders and mainstream lending institutions in general. Therefore, they are able to perpetuate predatory practices in some cases without robust oversight. However, some agencies, such as the OCC, have been updating their policies regarding eligibility of FinTech organizations applying for national banking charters.¹³ Recently, the Consumer Financial Protection Bureau proposed a rule to supervise larger, nonbank companies that offer services like digital wallets and payment apps.¹⁴ Through the supervisory process, CFPB examiners can work with the company in question to fully understand and manage its risks.¹⁵

Lending to MBEs and small businesses through various forms of online, technology-driven alternative finance has become increasingly common in the United States.¹⁶ For example, according to the 2022 Small Business Credit Survey by the Federal Reserve Banks, one-in-three Black-owned employer firms applied for credit to online lenders, along with 29% of Hispanic and 20% of Asian-owned businesses.¹⁷ Online lending is also more common among non-employer firms of all backgrounds, with 32% seeking financing at online lenders compared to 22% of all employer firms.¹⁸

Figure 3. Applied for Credit with an Online Lender



Source: Board of Governors of the Federal Reserve System (U.S.). "Small Business Credit Survey: 2022 Report on Firms Owned by People of Color." Fed Small Business. <https://www.fedsmallbusiness.org/survey/2022/2022-report-on-firms-owned-by-people-of-color>. Page 16.

III. Different Models

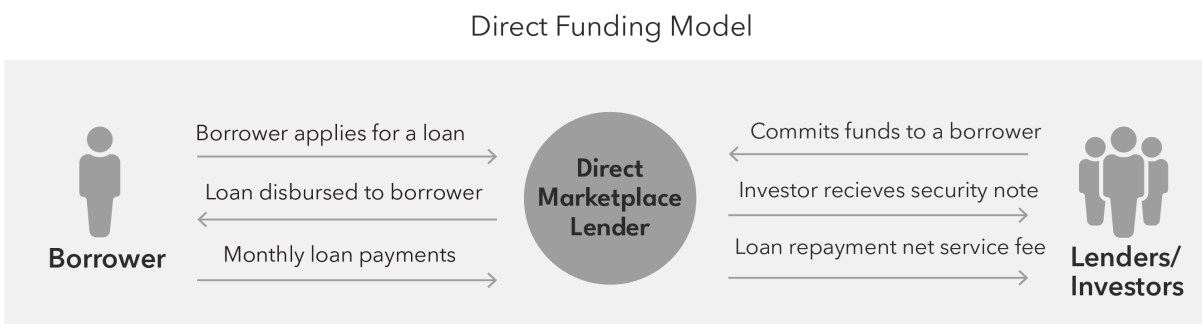
FinTech companies provide services to businesses and consumers across a diverse set of industries, from asset management and trading with robo-advisors to payment systems and decentralized financial applications on the blockchain. However, the role that financial technology firms are playing in the consumer and business lending markets has garnered special attention in recent years due to the potential benefits and risks for borrowers, as well as the accompanying regulatory challenges within the industry. In this section, we review three prevailing approaches that FinTech companies are taking to reach small business borrowers and summarize a few additional products FinTechs are deploying in the market.

Approach 1: Marketplace Lending

Direct Marketplace Lending

Marketplace lending (sometimes referred to as “peer-to-peer” or “platform”¹⁹ lending) is a form of financial technology that involves pairing borrowers and lenders through an online platform without the use of a traditional bank intermediary.²⁰ Marketplace lenders provide the infrastructure for businesses to connect with investors while shifting most or all risk of financial loss to the investor, not the marketplace lender. In this model, as pictured in Figure 4, a borrower applies for a loan through the marketplace intermediary, a group of individual or institutional investors commit funds to the borrower in the form of short-term debt, and the loan is disbursed to the borrower by the online intermediary who then collects monthly loan payments from the borrower. The marketplace lender keeps a service fee, and the investors receive a security note backed by the loan and the net loan repayment. These loans can be secured with collateral but are commonly unsecured and accept borrowers who may be considered high-risk by traditional financial institutions.

Figure 4. Illustration of Direct Funding Model



Source: Federal Deposit Insurance Corporation (FDIC). “Marketplace Lending.” Supervisory Insights, vol. 12, No. 2, Winter 2015, pg. 13-19. <https://www.fdic.gov/regulations/examinations/supervisory/insights/siwin15/siwin15.pdf>

However, marketplace lenders also present substantial risks to borrowers and investors. Users can encounter risks that endanger the security of their personal information. If the platform lender fails to sufficiently protect user data, sensitive information can be leaked and generate financial loss.²¹ Investors also need to be confident the lender and borrower can repay the guaranteed amount of the loan on time to avoid liquidity and default risks. Platform lenders themselves must be cautious to avoid insolvency risks that can arise from weakness in the platform lenders' credit scoring system—which could approve borrowers that would otherwise be denied credit.²²

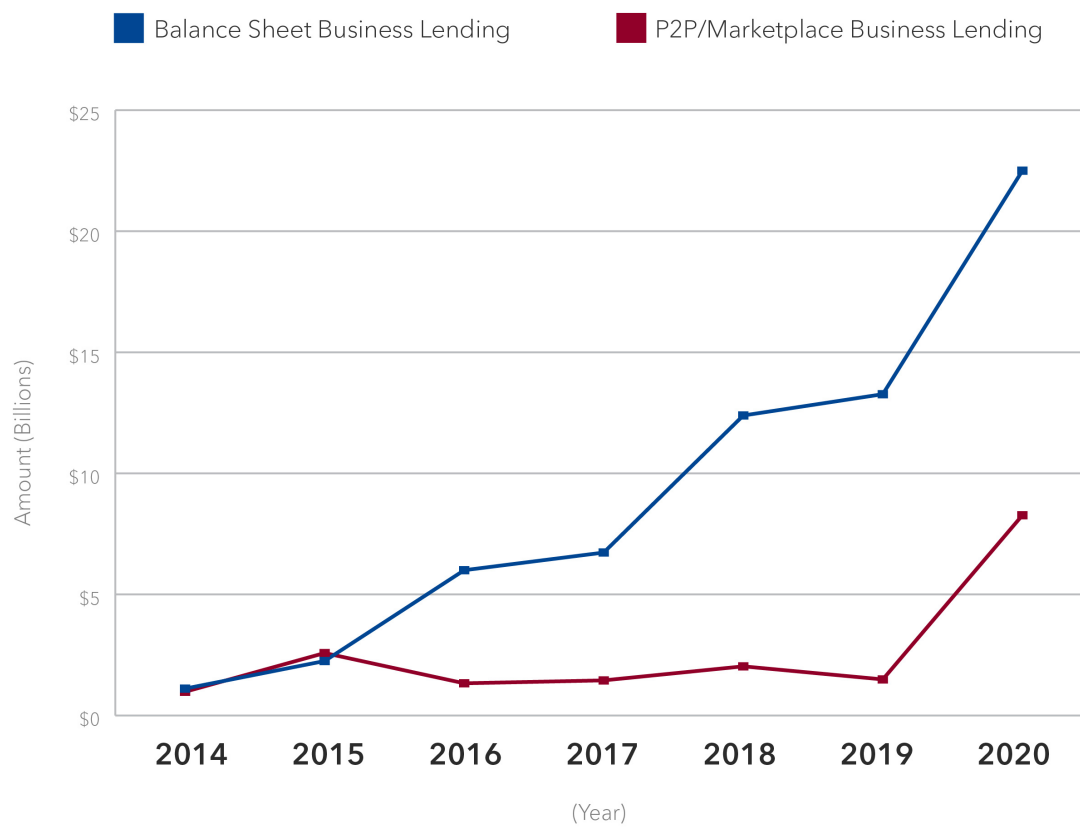
This model initially emerged as “peer-to-peer (P2P) lending,” at times also called, “loan-based crowdfunding,” with companies matching individual borrowers to individual investors. As services and products evolved, institutional stakeholders (i.e., hedge funds, pensions, and financial institutions) have become increasingly involved as investors. Therefore, “peer-to-peer” no longer accurately describes the current market segment.²³

Marketplace lending has significantly grown in the past several years. According to a study by the University of Cambridge's Center for Alternative Finance, marketplace business lenders alone disbursed over \$8.27 billion in 2020 (up from \$1.49 billion in 2019), increasing their share of the online alternative finance market to 11.2% from less than 3% in 2019.²⁴ These online platform lenders have been an attractive option for business owners in underserved communities because they tend to offer more small-dollar loans, a market segment often deemed too costly by larger financial institutions. These firms also use algorithms that provide more data points on a borrower's credit portfolio—giving non-prime borrowers who have adverse or thin credit histories a better chance at approval.²⁵

Balance Sheet Lending

Some marketplace entities, known as “balance sheet lenders,” deploy capital and retain the loan with funds from the platform lender's own balance sheet rather than securitizing the asset with an investor. In this model, platform lenders are more than mere intermediaries; rather, they originate and actively fund loans, thereby taking on the financial risk of default themselves.²⁶ Balance sheet business lending is the second largest alternative finance business model in the United States, amounting to a total volume of \$13.27 billion in 2019 and reaching \$22.5 billion in 2020.²⁷

Figure 5. Total US Volume by Debt-Model



Source: The Cambridge Centre for Alternative Finance, Cambridge Alternative Finance Benchmarks. Totals include balance sheet lending, P2P/marketplace lending, debt-based securities, and invoice trading.

Marketplace lenders share some similarities to banks and other nonbank lenders. They typically provide origination services to locate borrowers and approve or reject them based on creditworthiness; they handle payments and monitor loan performance, like most loan servicing departments at traditional banks; and they are involved in debt recovery, in the event a borrower defaults. Some online lenders may delegate part of the origination services to their bank partners, as discussed below, to shift compliance and regulatory matters to the bank.²⁸

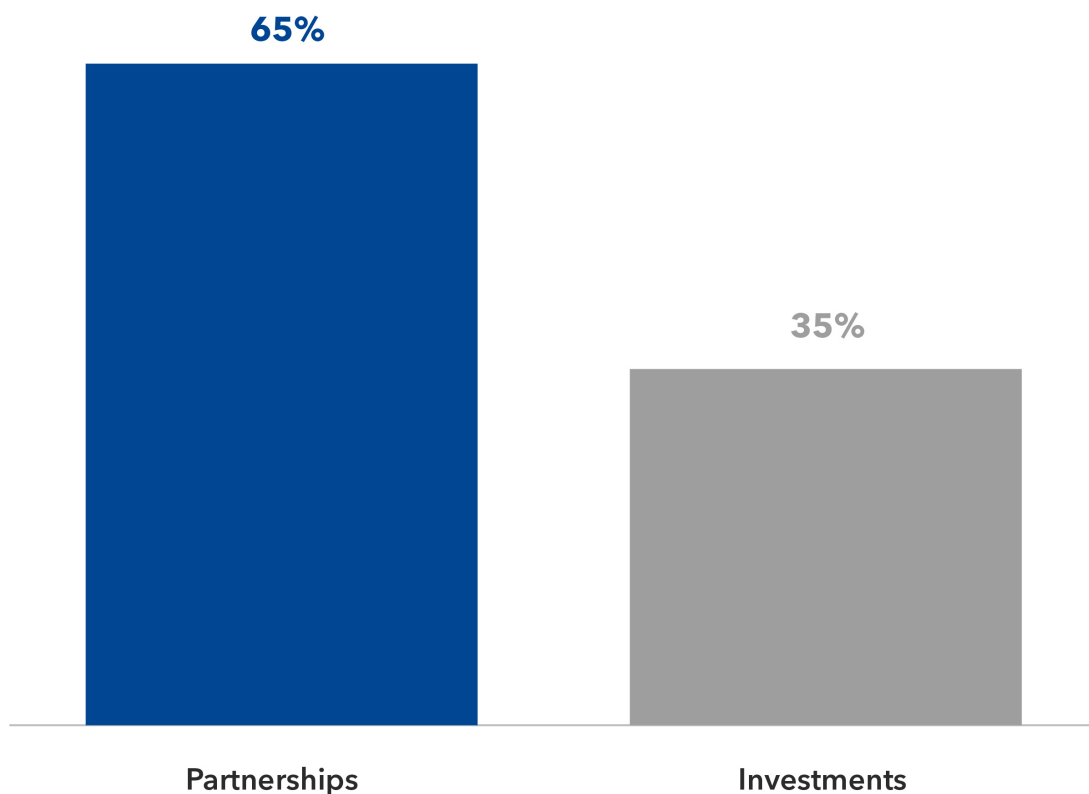
However, marketplace lenders are distinct from traditional lenders in several important ways. First, they do not have retail branches, as they operate entirely online. Second, online marketplace lenders use technology-enabled underwriting models and algorithms to automate processes such as determining credit risk. Not only do the lenders use predictive data models, like credit bureaus and cash flow or transaction data, but they increasingly are turning to less traditional information sources, like customer reviews and firmographic data. Finally, direct marketplace lenders may hold state lending licenses but are not always subject to federal banking supervisory authorities.²⁹ We explore the benefits and risks of these unique features in the following sections.

Approach 2: Bank-FinTech Partnerships

As online marketplace lenders have developed, so have their relationships with traditional financial institutions. Prompted by greater competition from FinTechs, traditional credit industries and minority-lending institutions are gradually altering their business models. Some large banks are responding by developing their own in-house FinTech methods, partnering with FinTechs, or buying them directly. According to a survey of nearly 300 U.S.-based bank and credit union executives, 65% of banks and credit unions entered into at least one FinTech partnership in the last four years.³⁰ These partnerships have grown in importance to the overall business strategy of financial institutions. In 2019, only 21% of bank and credit union executives considered FinTech partnerships a very important part of their business. Today, nearly half see it as crucial to their strategy.³¹

Figure 6. Bank-FinTech Partnership and Investment Involvement

Since the beginning of 2019, has your organization entered into any fintech partnerships or made any investments in FinTech startups?



Source: Shevlin, Ron. "The State of the Union In Bank-Fintech Partnerships." Cornerstone Advisors. <https://19538404.fs1.hubspotusercontent-na1.net/hubfs/19538404/220110%20SYNCTERA%20Bank-Fintech%20Partnerships.pdf>. Page 4.

According to the Federal Reserve, these partnerships can vary depending on the strategic objectives of the bank, but three broad categories of partnerships have emerged:

- Operational technology partnerships, wherein a financial institution deploys third-party technology to its own processes or infrastructure to improve efficiency and effectiveness.
- Customer-oriented partnerships, wherein a bank engages a third-party to enhance various customer-facing aspects of its business, and the bank continues to interact directly with its customers.
- Front-end FinTech partnerships, wherein a bank's infrastructure is combined with technology developed by a FinTech, with the FinTech interacting directly with the end customer in the delivery of banking products and services.³²

Some credit unions, nonprofit lenders, and specialist banks are also partnering with FinTechs through these different models to build on their decades of experience assisting underserved communities.³³ By using FinTech approaches and implementing appropriate compliance management systems, lenders can streamline operations, lower operating costs, and expand their marketing reach to new borrowers. Industry indicates that efficiencies from technology can also lead to improved customer service and foster new partnerships. In return, the FinTech companies receive access to a larger consumer base and a recognizable brand with an established reputation. In this model, FinTechs also may be exempt from certain state usury, money transmission, and other regulatory and licensing requirements—one key aspect that can significantly reduce the time to market for a FinTech.

However, standardization of product offerings and scalability are some challenges faced by small volume lenders such as Community Development Financial Institutions (CDFIs) in adopting FinTech.³⁴ The ability to continue offering the “high touch” assistance to borrowers with thin credit histories may sometimes be at odds with the ability to provide fast, online lending which uses a minimum of documentation and is not conducted in a face-to-face setting. Further, smaller and less-capitalized local lenders may become dependent on partnerships with FinTechs. Such partnerships can introduce risks to the lender, such as reliance on opaque proprietary algorithms, data storage issues, systems compatibility issues, and bypassing financial regulations with so-called “rent-a-charter” agreements. These can create unsafe lending practices for small businesses.

Bank-FinTech partnerships have come under the scrutiny of federal regulators in recent years. For example, one area of concern for regulators has been who qualifies as the “true lender” in partnership transactions, the bank or the FinTech, and thus who is required to have the licensed authority to institute borrowing rates, fees, and charges. Other policymakers are concerned about the risk to borrowers and the financial system of fraud, cybersecurity breaches, and identity theft.³⁵ This became a prominent issue among FinTech firms in their delivery of pandemic-era emergency financing, as we will explore below. The Federal Deposit Insurance Corporation, the Consumer Financial Protection Bureau, and the Office of the Comptroller of the Currency, among others, have all published rules seeking to resolve questions about the bank-partnership model and to add clarity to the landscape. Similarly, recent court decisions have upheld rules seeking to fill gaps in this area.³⁶ However, more regulatory certainty is still needed. We discuss these issues further in the section assessing the risks involved with alternative financing.

Approach 3: Crowdfunding

Debt-based alternative finance, like that of marketplace and balance sheet lenders, is a prominent option for small and medium-sized enterprises, but there is an increasing interest in equity-based models as a source of growth capital. In the traditional finance industry, most equity-based investments to seed or scale new businesses come from angel investors and venture capitalists. However, for MBEs, venture capital (VC) can be especially difficult to access. In 2022, Black and Hispanic entrepreneurs received just 2.5% of total venture capital investment.³⁷ Research has shown that investors from diverse backgrounds are more likely to prioritize diverse founders.³⁸ Senior investment roles in the venture capital industry have been predominately occupied by individuals from non-minority backgrounds, adversely impacting the level of VC funding that reaches MBEs.³⁹ Crowdfunding has been viewed as a way to democratize access to capital and invite a wider pool of investors to the table.

Equity-based crowdfunding has been shown to have a positive influence on the growth of small and medium-sized enterprises.⁴⁰ It allows businesses to solicit small investments from a large number of potential investors, either individuals or larger institutional organizations, through an online platform. In exchange for their capital, investors receive shares or equity stakes in the company. Crowdfunding platform firms charge service and processing fees that vary by the amount of funds raised.⁴¹ By enabling entrepreneurs to pitch business ideas and concepts directly to audiences, crowdfunding platforms aim to attract people willing to provide capital for the success of a business venture.

Equity crowdfunding is one model of securities-based crowdfunding that is subject to federal regulations and legal requirements. The adoption of crowdfunding as an alternative financing method has gained significant traction since the Securities and Exchange Commission (SEC) adopted rules which became effective in 2016. These rules are called Regulation Crowdfunding.⁴² Today, Regulation Crowdfunding allows eligible companies to raise up to \$5 million in investment capital in a 12-month period from investors online through SEC-registered intermediaries.⁴³ Since that time, the number of firms raising capital has been on the rise and the amount of capital being raised is also up more than eightfold over the six-year period.⁴⁴ In fact, as of June 2022, 160,000 workers were employed by businesses that raised funds under Regulation Crowdfunding.⁴⁵ And according to a recent SEC report, crowdfunding offerings have been a successful source of funding for women and minority founders.⁴⁶ In fact, 41% of crowdfunded companies that raised \$1 million or more in fiscal year 2022 had minority founders.⁴⁷

There are other nondilutive models of crowdfunding that allow business owners to retain control and provide investors with different monetary and non-monetary rewards. A delineation between debt-based models (i.e., marketplace and balance sheet lending) and equity-based models (i.e., equity-based crowdfunding) in the Appendix shows how these and other types of stakeholder activities are related to the types of business model categories.

Additional Alternative Finance Models

While direct marketplace lending, bank partnerships, and crowdfunding are the primary areas of FinTech lending activity, there are several other business models that finance companies are using to make capital available to consumer and business borrowers alike.

Revenue-Based Financing

For businesses that might traditionally turn to other forms of capital, like venture funding and private equity, a newer model has emerged to help founders retain ownership and secure investment for growth. Revenue-based financing (RBF), also sometimes referred to as “royalty-based investing,” is structured like a loan but is driven by a business’s recurring or predictable revenues. Investors provide capital for a percentage of the company’s ongoing total gross revenue. In this way, RBF is like debt financing because investors collect monthly payments. However, it differs from traditional lending in that collateral is not required; in essence, the company’s revenues are collateral.⁴⁸ The amount repaid each month depends on the revenue the company generates (i.e., slower months will have lower payments).

Revenue-based financing provides one path for MBEs to circumvent barriers to the venture capital market and secure nondilutive capital. Unlike venture capital funding, which is aimed at producing high-returns in exchange for a large equity stake, RBF allows business owners to divert a portion of their monthly revenue in exchange for a fixed amount of cash up front.

Merchant Cash Advance

Closely related to the royalty model of commercial financing are merchant cash advances (MCAs). With these transactions, the financing company provides the borrower with a lump sum upfront and remits payment automatically on a daily or weekly basis from the business’s debit or credit receipts. The repayment schedule is accelerated as well, typically lasting no longer than 18 months. Very little information is required to qualify for a cash advance, which typically attracts high-risk borrowers that cannot obtain capital quickly anywhere else.

On the consumer side of the market, cash advances are known as “payday loans.” These products have come under heightened scrutiny by Congress, the CFPB, and consumer advocacy groups for their pricing model that traps borrowers in a cycle of high-interest debt. Similarly, MCAs are one of the most expensive forms of financing.⁴⁹ It is not uncommon for some companies to charge factor rates equivalent to triple-digit annual percentage points (APRs). Additionally, because these products are considered commercial transactions, not loans, they will not help business owners build their commercial credit. An important concern that regulators have with MCAs and payday loans is transparency. They have observed a growing trend of small businesses bound by an unsustainable debt burden because cash advance pricing and structure were deliberately obscured.⁵⁰

Invoice Factoring and Financing

Other financing companies will purchase a firm’s outstanding invoices and issue a line of credit that is available immediately as working capital. In this method, called “invoice or accounts receivable factoring,” businesses sell their invoices at a discount and receive a percentage of it upfront while the financing company collects repayment directly from the customer. In a related model, called “invoice financing,” businesses take out a loan or line of credit and use their invoices as collateral. In either case, businesses face interest rates which may be higher than they would with traditional bank loans. Still, these options have been available for decades because of the flexibility they provide, as the amount of financing is directly linked to the value of invoices the business generates.

IV. Benefits

Many socioeconomic factors contribute to the undercapitalization of MBEs. Wealth disparities, weak or thin (or no) credit histories, racial and ethnic biases, discrimination, lack of or incomplete formal financial records, and loan denials from traditional credit sources are major barriers to affordability and access to capital for minority- and women-owned businesses. Against these barriers, FinTech has the potential to benefit MBEs in several ways.

Ease and Speed of Service

The use of artificial intelligence and algorithm-based decision-making is a key component of many online lending providers. This improves the speed at which they reach determinations about loan applications. By automating many of the services and operations that slow the traditional lending system down, like manual processing of documentation, in-person meetings, and electronic funds transfer, lenders can rapidly approve applications and deliver funds to borrowers. Businesses are then able to benefit from quickly capturing opportunities or fixing a temporary cash flow need. Additionally, because FinTechs operate entirely online, this may be encouraging to MBEs whose relationships with the traditional banking system may be minimal or non-existent.

Shorter-Term and Smaller-Sized Loans

Because the technologies underlying FinTech lenders provide such efficiency and do not require retail branches, overhead costs are less. This gives FinTech lenders the ability to offer a wide range of low-cost or no-fee services that traditional banks typically cannot because of their size. FinTechs are offering a greater variety of loan sizes at different maturity rates and have honed in on the small-dollar term loan market, which is typically too costly for large financial institutions to target.

Innovative Use of Alternative Data

As mentioned, online lenders rely on predictive modeling, algorithms, and data aggregation to make loan decisions and assess credit risk. They may focus on more than the credit bureau data that is still central to traditional lending institutions. FinTechs draw on an array of non-traditional data, including transaction data from bank accounts, customer reviews from social media, and utility payments.⁵¹ Most online lenders develop their own proprietary credit scoring model that considers many unique data points to make credit risk determinations. The use of alternative data has the potential to mitigate human bias, but as we mention below, does not completely remove concerns about discrimination and fair lending.

V. Risks

As with any new entrant into the financial system, financial technology firms and their business models are not without risks to borrowers, investors, and lenders. Specific risks include:

Lack of Transparency

A significant concern with online lending is the inconsistent, nonexistent, or weak disclosures that make it harder for borrowers to make informed decisions. Costs, terms, and conditions for specific credit products or investments from online providers may not be displayed clearly on many websites. As a result, borrowers may not fully understand the complete costs, APRs, and other terms of their financial commitment until after their applications are accepted or funded.⁵² Advertised APRs can vary widely among online lenders and often have poorly disclosed fees, special charges, strict prepayment penalties, and unfamiliar or hard-to-understand costs. This can make accurately comparing different and competing credit options very difficult.

Uncertainty About Fairness and Inclusion with AI

There is also a lot of uncertainty around proprietary algorithms used by FinTechs. Algorithms that are data-driven and rely less on direct human intervention may not necessarily be objective. Algorithms and models reflect the goals and perspectives of those who develop them as well as the data that trains them. As a result, AI tools used by FinTech firms can reflect or learn the biases of the society in which they are created. Algorithms may perpetuate harm and embed discrimination, leading to negative impacts on individuals' and businesses' access to financial services. One recent study of loans disbursed in the U.S. Small Business Administration (SBA) Paycheck Protection Program (PPP) found that automation did not necessarily mitigate bias in loan approvals. In fact, researchers found that PPP approval disparities were

similar in magnitude at traditional banks and FinTechs alike.⁵³ Though the study does not make the case that the disparities were due primarily to racial bias within the technology used at FinTechs, it does offer an explanation about potential factors that disproportionately impact minority borrowers.⁵⁴ Namely, the report highlights that automation at FinTechs can increase the scope for administrative burdens in the loan approval process, as FinTechs were generally not staffed to help borrowers navigate the complexities of the PPP application process.⁵⁵ Administrative burdens can be uniquely challenging for MBEs because they have less access to professional services, such as accountants, lawyers, and consultants.⁵⁶ As a result, this study found that automation may be ill-suited to reduce racial disparity in small business lending.⁵⁷

To appreciate the growing scope of algorithmic bias risks, it is also worth noting AI discrimination cases that do not involve business lending. There have been instances of alleged disparate impact suffered by various racial groups when using advanced algorithm-based tools and processes.⁵⁸ AI tools and models can develop analysis, arrive at conclusions, or recommend decisions that may be hard to explain. The opacity of this technology can make it harder to find and challenge inequitable and flawed algorithms before they cause significant harm.

Lack of Standardization

The rapid evolution of the FinTech market has made standardization of product offerings, who qualifies as a lender, and terminology across the sector nearly impossible. For P2P, interest rates on similar loan products can vary widely between online lenders, creating a challenge for borrowers who want to compare products and make the most informed decision. Inconsistent rates, fees, and terminology can expose small businesses to risks and potentially high costs when using some types of online financing, similar to issues identified within the lack of transparency section above.

Need for Regulatory Robustness

Depository institutions are subject to a number of federal consumer protection and transparency regulations that ensure customers are treated fairly, have equal access to credit, and receive offers that can be easily compared and understood. Because online lenders are only required to be licensed in the state they do business, if at all, current legal and regulatory protections for businesses utilizing the alternative finance industry (in this case FinTech) are fragmented. The regulatory landscape includes, but is not limited to, the potential granting of bank charters to FinTechs, licensing of FinTechs, securitization requirements, and guidelines for technology-based deposits. The rules and regulations across federal, state, and local levels can add complexity and may weaken borrower protections provided by overlapping, competing, or inconsistent regulatory authorities for alternative finance firms and credit products.

Digital Geographic Focus

Because FinTech services are heavily dependent on technology and access to the Internet, such services may not be affordable for some individuals or available in some areas. For example, lack of affordable broadband and internet connectivity can diminish opportunities for providing online services and products. Others may be constrained by their states' regulations from doing specific types of lending.⁵⁹ Thus, the range of lenders and funding options available to small business borrowers may reflect constraints on FinTech providers and potential users. This may result in fewer choices for some MBEs located in areas where alternative finance platforms are not available.

Financial System Stability

FinTechs are susceptible to changing economic conditions that could make it more difficult for marketplace-based lenders to attract both borrowers and investors, threatening their viability. Because of the rate of growth within the industry and its increasing importance to largely underserved segments of the business community, marketplace lending failures could result in a contraction of the availability of credit as well as disruptions in loan servicing.⁶⁰ This introduces new risks to the economy and could place stress on the financial system.

Data Security

FinTech companies handle vast amounts of sensitive customer information, such as financial transactions and personal identification details. The risk of data breaches and unauthorized access to this information raises concerns about identity theft, fraud, and potential financial losses.

Cases of Fraud & Risk Mitigation for Marketplace Lending

In response to the COVID-19 pandemic, Congress passed the Coronavirus Aid, Relief, and Economic Security Act which established the SBA PPP to provide financial assistance to small businesses and self-employed individuals during the economic downturn. By the conclusion of the program in 2021, the PPP provided nearly \$800 billion in low-interest loans to struggling businesses that were eligible for forgiveness if the borrower followed the program requirements.⁶¹ Unfortunately, the pandemic exposed significant vulnerabilities within the FinTech ecosystem, which proved to be the primary vehicle for malicious actors to exploit unprecedented economic uncertainty and demand on the banking system.

Early in the implementation of the program, government officials recognized the heightened risk for fraud and the lack of safeguards that could exacerbate the program's exposure. According to an investigation by the U.S. House Select Subcommittee on the Coronavirus Crisis, FinTech platforms, which had become central to facilitating loan transactions and providing relief, likely facilitated a disproportionately high number of otherwise ineligible loans through the Paycheck Protection Program.⁶² FinTech companies made around 32% of PPP loans but accounted for more than 60% of all suspicious transactions.⁶³

Due, in part, to increased user volume and rapid deployment of new digital services, numerous FinTechs that provided pandemic-era relief failed to adequately screen PPP loan applications for fraud, set up preventative measures to protect sensitive personal information, and/or to develop a robust loan servicing apparatus. This is in contrast to FinTechs that established partnerships with traditional financial institutions that made investments in fraud controls and Small Business Administration standards, which helped to mitigate the impact of bad actors.

VI. FinTech Adoption by Minority Businesses

To be sure, opportunities and risks apply differently among FinTech firms, products, and platforms. Not all FinTechs experience the same advantages and disadvantages. It is critical for MBEs to know in advance the consequences that these business models and competitive niches can have on their pursuit of financing.

While some industry advocates promote FinTech as a primary means to advance financial inclusion and access to capital for historically marginalized communities, others do not perceive FinTech as a solution due to predatory lending. The evidence is mixed on whether these technologies have been deployed to significantly address the barriers that MBEs face. A recent survey suggests that FinTech use by consumers has surpassed traditional banking, particularly in underserved communities.⁶⁴ It was found that 95% of Hispanic households and 81% of Black households use technology to manage their finances.⁶⁵ However, another survey that polled business owners of diverse backgrounds and various industries found that 41% of businesses lacked familiarity with online lenders and FinTechs.⁶⁶

During the pandemic, Black- and Hispanic-owned employer firms (33% and 29% respectively) were more likely than their White and Asian counterparts to apply for emergency funds through an online lender.⁶⁷ Yet, Black and Hispanic applicants who were approved for at least some of their requested financing report the highest levels of dissatisfaction with their FinTech lender.⁶⁸ In fact, the Federal Reserve's annual Small Business Credit Survey tracked a downward trend in satisfactory experiences at online lenders over the last four years, noting a 32-point drop in net satisfaction from 2019 to 2022. When asked why, applicants of all backgrounds reported high interest rates as their greatest challenge when working with an online lender.⁶⁹

There are significant knowledge gaps when it comes to identifying whether and which kind of FinTech products are being adopted by MBEs. Most publicly available data on the subject is collected by the U.S. Census Bureau Annual Business Survey and the Federal Reserve. These sources provide a snapshot of where businesses turn for financing, but the samples are too small to derive meaningful insights about the experience of all MBEs with FinTech products. Even so, the available information shows that in 2022, Native American employer firms were far more likely than their counterparts to apply for financing using a merchant cash advance (31%) and factoring (19%) model.⁷⁰ These alternative finance products were still less common among business owners than traditional loans and lines of credit (see chart below).

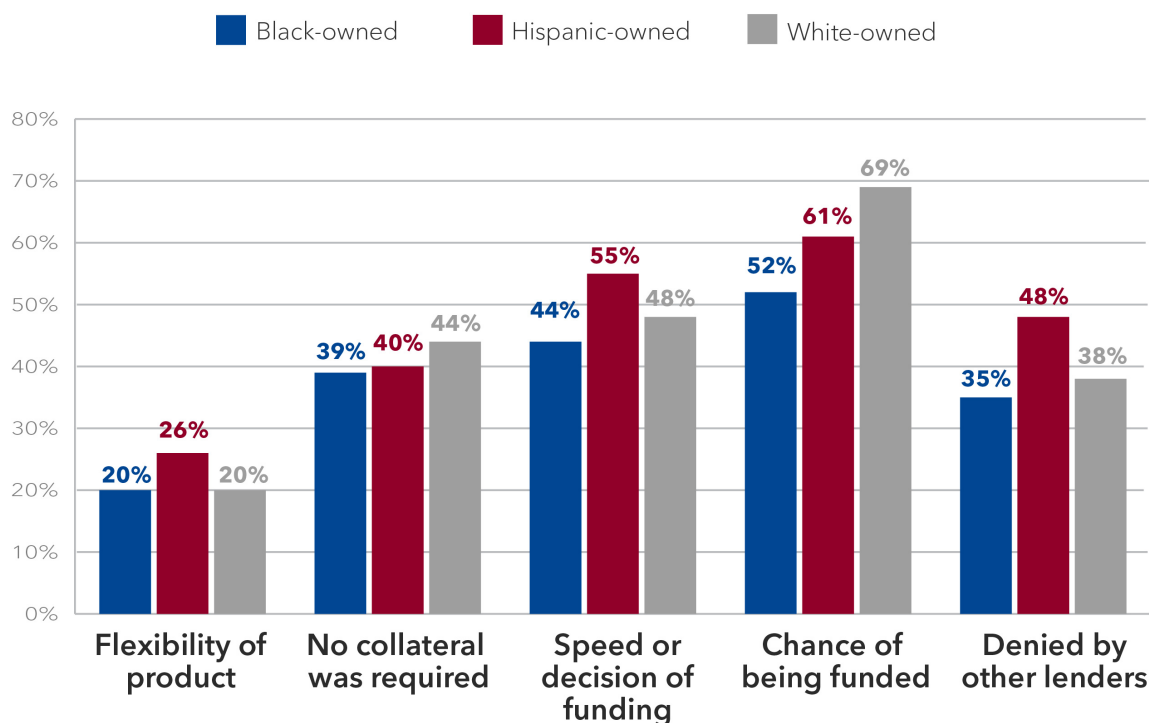
Table 1. Type of Financing and Credit Product Sought

Race / Ethnicity of Owner	Factoring (%)	Merchant Cash Advance (%)	Traditional Loan / Line of Credit (%)
Asian (not Hispanic)	5	12	57
Black or African American (not Hispanic)	2	18	69
Hispanic	3	14	69
Native American (not Hispanic)	19	31	81
White (not Hispanic)	4	9	75

Source: Board of Governors of the Federal Reserve System (U.S.). "Small Business Credit Survey: 2022 Report on Employer Firms. Fed Small Business. <https://www.fedsmallbusiness.org/survey/2022/report-on-employer-firms>.

Among nonemployer firms, the reasons some MBEs pursue financing at online lenders and FinTechs differ from their white counterparts. Hispanic firms were more likely to seek online funding after being denied elsewhere and because of the speed of credit determinations offered by FinTechs were more favorable. Black businesses felt they had a good chance at being approved with an online lender, but also noted the speed of funding decisions and the flexible collateral requirements were factors in their decision.

Figure 7. Reasons for Pursuing an Online Lender
(Nonemployer Firms)



Source: Board of Governors of the Federal Reserve System (U.S.). "Small Business Credit Survey: 2023 Report on Nonemployer Firms. Fed Small Business. <https://www.fedsmallbusiness.org/survey/2023/report-on-nonemployer-firms>.

Information about businesses that use equity-based financing is also difficult to obtain. However, we do have insight on the type of businesses offering securities under Regulation Crowdfunding. Regulation Crowdfunding was designed to help startups and small businesses raise capital by making relatively low dollar offerings of securities, featuring relatively low dollar investments by the "crowd," less costly.⁷¹ In a 2019 report, the SEC highlights the median offering was by a business which was approximately two years old and employed about three people.⁷² From the start of the program in 2016 through 2018, the average Regulation Crowdfunding offering raised \$208,000.⁷³

This profile is similar to that of MBEs, including the financing amounts sought by their businesses through other methods. Forty-five percent of Black-owned employer firms have been in business for two years or less, compared to 38% of Hispanic firms, 30% of Native American firms, and 25% of Asian firms.⁷⁴ Further, Black businesses are more likely than their counterparts to have between one and four employees.⁷⁵ MBEs also seek smaller amounts of financing at their choice of lender.⁷⁶ These similarities could indicate that crowdfunding is a valuable capital formation tool for MBEs, although further research is needed.

While FinTech developments may have the potential to expand access to capital for underserved communities, data collection could be strengthened to improve research on FinTech loan products and ensure MBEs have access to safe, affordable ways to start and grow their businesses.

VII. Considerations

The rapidly evolving financial landscape calls for new approaches to supervision and regulation. Policymakers across the federal government will have to collaborate to channel the advantages of financial innovation while minimizing the potential risks and consequences. As policymakers and industry leaders look to FinTech as one possible solution to the capital access challenges faced by MBEs, several considerations warrant careful attention and deliberation.

Data Security

More can be done to promote clear data security standards that focus on risks tailored to FinTechs' unique lending models. Companies that operate in multiple jurisdictions have increased compliance and complexity. Thus, additional consideration and guidance can provide uniformity to data security and could reduce the potential for improper handling of borrower information.

While FinTechs face data security challenges, so do individual investors and borrowers. If, for example, an individual investor is using their personal wealth to fund startups through crowdfunding, they need to know their personal risk exposure to data breaches and unauthorized access. And individual entrepreneurs and small business owners seeking funding across various FinTech platforms need to know if they face data security risks. While data on the impact specifically for MBEs is lacking, the SBA notes that small businesses broadly are especially attractive targets for cyberattacks because they often lack the security infrastructure of larger enterprises.⁷⁷ The Federal Bureau of Investigation also found that cybercrimes cost small businesses \$2.4 billion in 2021 alone.⁷⁸ As such, clear data security standards should be defined, accessible and easily implemented to the individuals on each side of a FinTech platform.

Data Use

Although big data and AI or machine learning algorithms have the potential to provide both time and monetary savings that can be passed on to borrowers, these innovations carry the risk of adding further opacity to our financial system. Alternative data sources, like bank transactions and digital footprints, can ensure credit decisions are relevant to a borrower's creditworthiness and predictive of their ability to repay. Importantly, though, the new sources of data should not exacerbate existing impediments to financial access.

Algorithms that draw on new sources of data could make adverse inferences about individuals, their identities, and demographic attributes. A recent study by the Government Accountability Office (GAO) found that certain types of alternative data can indeed be correlated with characteristics protected by fair lending laws and that its use could serve to "entrench or even worsen existing inequities in financial access."⁷⁹

The following questions can be considered when exploring how alternative data should be used in business lending:

- Does the data have a clear nexus to creditworthiness? If not, do borrowers have clarity on the data being examined and its potential impact on their credit eligibility?

- Is the data transparent and accurate?
- Do borrowers have the opportunity to review and correct the data if it is found to be inaccurate?
- Do borrowers understand what behaviors contribute or detract from their creditworthiness so they can make changes that will impact their credit record?
- Is the predictive capability of the data expected to remain consistent and reliable over time?

By coordinating with relevant federal agencies and with input from relevant stakeholders, there can be added direction to financial institutions and nonbank entities on the appropriate use of alternative data in the underwriting process. According to the GAO, federal regulators including the Federal Reserve, CFPB, National Credit Union Administration, and the OCC have issued third-party risk management guidance that discusses alternative data and are taking a “broad, principles-based approach” on this topic.⁸⁰ In addition, CFPB’s position has been that the existing regulatory framework applies regardless of the technology used, and if a firm is unable to comply with the law, it should not be using the technology.

Borrower Protection

With every introduction of a new lending product, borrowers face new risks. Some within the financial sector advocate for a platform of fundamental financing rights that, they argue, all small businesses deserve. Actors in the industry might consider the following principles to assess FinTech lending:

- **Transparent pricing and terms:** Lenders and brokers have an obligation to disclose the cost and terms of any financing so borrowers can make the best decision for their business. This information should be clear, complete, and easily comparable.
- **Non-abusive products:** Borrowers should not fear falling into predatory lending schemes and expensive cycles of borrowing. They should also be permitted to consider loan terms free from artificial pressures. When complaints arise, lenders should be responsive and address them in a timely manner.
- **Responsible underwriting:** Financing should be adapted to the borrower’s needs, repayment information should be accurately transmitted to credit bureaus, and loans should only be made if the borrower can truly afford it.
- **Fair treatment from brokers:** Brokers should be impartial and honest in all their interactions with borrowers. This may include (but not limited to) providing written information to borrowers in advance that provides transparency in all loan options, incentives, and methods of compensation.
- **Inclusive credit access:** Lenders must uphold the intent of fair lending laws and commit not to discriminate against business owners based on any protected attribute.
- **Fair collection practices:** Borrowers ought to be treated fairly and respectfully throughout a collection process with lenders abiding by the Fair Debt Collection Practices Act and presenting current and accurate information about the loan to collectors.

Marketplace Protection

From large banks to credit unions, lenders of all shapes and sizes are vulnerable to fraud. Yet, as previously mentioned, the pandemic proved that FinTech lenders make particularly easy prey for malicious actors and unscrupulous activity. To combat the fraud discovered, a large segment of which was brought about by FinTechs, two issues can be considered as potential solutions.

- Clarify responsibilities for lenders and service providers. Further guidance on what standards FinTechs and their partnered financial institutions should uphold throughout the underwriting, fraud screening, and reporting process is needed. Consistency in industry terms and definitions as well as clarity around stakeholder identification will be prerequisites to this guidance. FinTechs involved in disbursing taxpayer money, in particular, could be required to comply with rigorous anti-money laundering (AML) and Know Your Customer (KYC) standards. This can ensure money lent to small businesses is legitimate and not involved in illegal activities.
- Make licensing mandatory. FinTech entities involved in disbursing federally-backed loans and grants could be required to be registered and licensed under a special purpose charter. This license would streamline oversight by prudential regulators and ensure FinTech lenders are subject to the same rigorous standards of safety and soundness that apply to all financial institutions.

VIII. Conclusion

Fintech lenders have entered the lending market at a time when some minority business enterprises are underserved by traditional financial institutions. This provides an opportunity for FinTechs to furnish their strengths and drive the business lending industry forward. As discussed above, FinTechs are trying to fill the gap in capital access by providing fast and easy service, shorter-term and smaller capital options, and innovative use of alternative data to reach more MBEs.

However, serious questions remain about what long-term impact FinTech might have on borrowers and the financial system. It is important to consider that not all potential consequences are knowable now. It will be necessary to explore the predictive ability of alternative data sources in determining credit risk, the effect of technology-enabled systems on the financial inclusion of MBEs, rural and digitally underserved communities, and consumer protection and privacy concerns regarding data aggregation.

Additional vigilance is important in the rapidly evolving area of AI and financial technology. FinTech is no less susceptible to problems, even though it is purported to be less prone to human error or that automation necessarily brings us closer to our goal of financial inclusion. There are many instances of FinTech tools and determinations not functioning as expected, which should serve as a reminder of the potential for undesired and negative impacts. Transparency in the models that undergird these technologies is integral to avoiding discrimination and other unfair outcomes, as well as meeting disclosure obligations.

MBEs have historically faced barriers to traditional capital avenues and need to find a balance between protecting their financial interests and embracing innovation that might expand capital access and convenience. It is advisable to approach FinTech lending with caution to ensure that significant borrower and system-wide risks are mitigated.

Appendix

A delineation between debt-based models (associated with P2P) and equity-based models (associated with crowdfunding) shows how these and other types of stakeholder activities are related to the types of business model categories:

Table 2. Debt-Based Lending

Category	Business Model	Stakeholders
P2P/Marketplace Lending	Consumer Lending	Individuals or institutional funders provide a loan to a consumer borrower, commonly ascribed to off-balance sheet lending.
	Business Lending	Individuals or institutional funders provide a loan to a business borrower, commonly ascribed to off-balance sheet lending.
	Property Lending	Individuals or institutional funders provide a loan, secured against a property, to a consumer or business borrower, commonly ascribed to off-balance sheet lending.
Balance Sheet Lending	Consumer Lending	The platform entity provides a loan directly to a consumer borrower, ascribed to on-balance sheet non-bank lending.
	Business Lending	The platform entity provides a loan directly to the business borrower, ascribed to on-balance non-bank lending.
	Property Lending	The platform entity provides a loan, secured against a property, directly to a consumer or business borrower, ascribed to on-balance sheet non-bank lending.
Invoice Trading	Invoice Trading	Individuals or institutional funders purchase debt-based securities, typically a bond or debenture, at a fixed interest rate.

Securities	Debt-based Securities	Individuals or institutional funders purchase debt-based securities, typically a bond or debenture, at a fixed interest rate.
	Mini-bonds	Individuals or institutions purchase securities from companies in the form of an unsecured bond which is 'mini' because the issue size is much smaller than the minimum issue amount needed for a bond issued in institutional capital markets.
	Consumer Purchase Finance/ BNPL	A buy now/pay later facilitator to Store Credit solution.

Note: the Category box for Consumer Purchase/Finance/BNPL is shown as a blank in the original source.
Source: Ziegler, T., Shneor, R., Wenzlaff, K., Suresh, K., Paes, F. F. D. C., Mammadova, L., ... & Knaup, C. (2021). The 2nd global alternative finance market benchmarking report.

Table 3. Equity-Based Capital Raising

Category	Business Model	Stakeholders
Equity-based	Equity-based Crowdfunding	Individuals or institutional funders purchase equity issued by a company.
	Real Estate Crowdfunding	Individuals or institutional funders purchase equity or subordinated debt financing for real estate.
	Revenue/Profit Sharing	Individuals or institutions purchase securities from a company, such as shares or bonds, and share in the profits or royalties of the business.
Non-Investment-based	Reward-based Crowdfunding	Backers provide funding to individuals, projects or companies in exchange for non-monetary rewards or products.
	Donation-based Crowdfunding	Donors provide funding to individuals, projects or companies based on philanthropic or civic motivations with no monetary or material expectations.
	Crowd-led Microfinance	Interests and/or other profits are re-invested (forgoing the interest by donating) or provides microcredit at lower rates.
Other		The research team recorded volumes raised through other alternative finance models that fall outside the existing taxonomy.

Note: the Category box for Consumer Purchase/Finance/BPNL is shown as a blank in the original source.
Source: Ziegler, T., Shneor, R., Wenzlaff, K., Suresh, K., Paes, F. F. D. C., Mammadova, L., ... & Knaup, C. (2021). The 2nd global alternative finance market benchmarking report.

List of Federal Business Loan Programs

U.S. Department of Treasury

Small Business Lending Fund (SBLF)

- This program is “designed to provide capital to qualified community banks and community development loan funds (CDLFs) in order to encourage small business lending” by said banks and funds.
- <https://home.treasury.gov/policy-issues/small-business-programs/small-business-lending-fund>

State Small Business Credit Initiative (SSBCI)

- Works to “increase[e] access to capital for traditionally underserved small businesses and entrepreneurs” through “jurisdictions provid[ing] funding to small businesses through equity/venture capital programs, loan participation programs, loan guarantee programs, collateral support programs, and capital access programs tailored to local market conditions.”
- Includes two programs, the Capital Program and the Technical Assistance (TA) Grant Program. The former program supports private loans and private equity investments to underserved small businesses.
- <https://home.treasury.gov/policy-issues/small-business-programs/state-small-business-credit-initiative-ssbci>
- <https://home.treasury.gov/system/files/256/State-Small-Business-Credit-Initiative-SSBCI-Fact-Sheet.pdf>

Community Development Financial Institutions Fund (CDFI)

- Delivers resources and programs to “invest federal dollars alongside private sector capital” in order to “[serve] mission-driven financial institutions that take a market-based approach to supporting economically disadvantaged communities.”
- Program areas:
 - » Bank Enterprise Award Program: “provides awards to FDIC-insured institutions for eligible investments.”
 - » CDFI Bond Guarantee Program: “source of long-term patient capital for CDFIs.”
 - » CDFI Equitable Recovery Program: “provides grants to CDFIs to respond to disproportionate economic impacts of the COVID-19 pandemic.”
 - » CDFI Program: “provides Financial and Technical Assistance awards to CDFIs.”
 - » CDFI Rapid Response Program: “designed to quickly deploy COVID-19 relief capital to Certified CDFIs.”

- » Capacity Building Initiative: “source of training and technical assistance for CDFIs.”
 - » Capital Magnet Fund: “encourages the development of affordable housing in low-income communities.”
 - » Native Initiatives: “provides awards, training, and technical assistance to CDFIs serving Native Communities.”
 - » New Markets Tax Credit Program: “encourages economic and community development in low-income communities.”
 - » Small Dollar Loan Program: “help[s] Certified CDFIs provide alternatives to high cost small dollar loans.”
- <https://www.cdfifund.gov/>

U.S. Small Business Administration (SBA)

7(a) Loan Program

- This program “provides loan guaranties to lenders that allow them to provide financial help for small businesses with special requirements” and a maximum of \$5 million. Their loans can be used for a variety of purposes including “acquiring, refinancing, or improving real estate and buildings; short- and long-term working capital; refinancing current business debt; purchasing and installation of machinery and equipment, including AI-related expenses; purchasing furniture, fixtures, and supplies; changes of ownership (complete or partial);” or “multiple purpose loans, including any of the above.”
- <https://www.sba.gov/funding-programs/loans/7a-loans>

Certified Development Company (CDF) 504 Loan Program

- This “program provides long-term, fixed rate financing for major fixed assets that promote business growth and job creation ... through Certified Development Companies (CDCs)” which are SBA-certified and regulated partners who in turn “regulate and nonprofits and promote economic development within their communities.” These loans have a maximum value of \$5.5 million, though energy providers may be able to “receive a 504 loan for up to \$5.5 million per project, for up to three projects not to exceed \$16.5 million total.”
- <https://www.sba.gov/funding-programs/loans/504-loans>

SBA Microloan Program

- This program provides smaller microloans for \$50,000 or less that small businesses and select non-profit childcare providers may receive and use for the purposes of start up and expansion. More specific items for which these loans can be used include “working capital, inventory,

supplies, furniture, fixtures, machinery, [and] equipment,” but cannot include paying off existing debts or for the purchasing of real estate. SBA microloans are administered by designated community non-profit organizations that serve as intermediary lenders.

- <https://www.sba.gov/funding-programs/loans/microloans>

Export Loan Programs

- SBA provides three different types of loans for exporters: Export Express loans, Export Working Capital loans, and International Trade loans.
 - » Export Express loans: can be underwritten directly by lenders without prior SBA approval for up to \$500,000.
 - » Export Working Capital loans: can be applied for in advance of finalizing export sales or contracts, allowing for greater flexibility in negotiations, and can be for up to \$5 million.
 - » International Trade loans: provide “a combination of fixed asset, working capital financing, and debt refinancing with SBA’s maximum guaranty of 90% on the total loan amount” for up to \$5 million.
- <https://www.sba.gov/business-guide/grow-your-business/export-products/international-sales/sba-export-products>

Community Advantage Small Business Lending Companies (CA SBLCs)

- Community Advantage pilot loan program sunsetted last year and replaced by the launch of 143 Community Advantage Small Business Lending Companies (CA SBLCs) to provide loans to small businesses in underserved markets. This includes all 112 lenders who participated in the pilot program plus 31 additional lenders. The pilot program “was designed to connect underserved small businesses to capital by providing mission-oriented lenders access to 7(a) loans.”
- <https://www.sba.gov/partners/lenders/7a-loan-program/pilot-loan-programs>
- <https://www.sba.gov/article/2023/10/20/biden-harris-administration-expands-access-capital-underserved-small-businesses-through-mission>

Small Business Investment Companies (SBICs)

- These are licensed private equity funds which borrow “low-cost, government-backed capital” in the form of guaranteed loans from SBA in order “to invest in U.S. small businesses.”
- This program is intended “to stimulate and supplement the flow of private equity capital and long-term debt financing that American small businesses need to operate, expand, and modernize their businesses.”
- <https://www.sba.gov/partners/sbics>

Economic Injury Disaster Loan (EIDL) Program

- This program “can provide up to \$2 million of financial assistance (actual loan amounts are based on amount of economic injury) to small businesses or private, non-profit organizations that suffer substantial economic injury as a result of the declared disaster, regardless of whether the applicant sustained physical damage” through the provision of “emergency working capital to help meet necessary financial obligations the business or private, non-profit organization could have met had the disaster not occurred” and is not intended to “replace lost revenues or lost profits.”
- <https://www.govloans.gov/loans/economic-injury-disaster-loans/>
- <https://disasterloanassistance.sba.gov/ela/s/article/Economic-Injury-Disaster-Loans>

Business Physical Disaster Loan Program

- These loans are available for those in declared disaster areas whose businesses or private non-profit organizations have received physical damages to their property.
- <https://www.govloans.gov/loans/business-physical-disaster-loans/>

Military Reservist Economic Injury Disaster Loan (MREIDL) Program

- These loans are available “to provide emergency working capital to eligible small businesses to meet ordinary and necessary operating expenses that the business is unable to meet because an essential employee was to active duty in their role as a military reservist” and is not intended “to cover lost income or lost profits.”
- <https://www.govloans.gov/loans/military-reservist-economic-injury-disaster-loan-program/>

U.S. Department of Interior, Bureau of Indian Affairs, Division of Capital Investment

Indian Loan Guaranty, Insurance, and Interest Subsidy Program

- This program is intended “to help Indian-owned businesses obtain commercially reasonable financing from private sources” especially for those who “would not be able to do so otherwise” by “help[ing] secure reasonable interest rates and reduc[ing] risks for all parties involved to promote economic development on or near an Indian community’s reservation or service area.”
- <https://www.govloans.gov/loans/indian-loan-guaranty-insurance-and-interest-subsidy-program/>
- <https://www.bia.gov/as-ia/ied/division-capital-investment>

U.S. Department of Commerce, Economic Development Administration (EDA)

Revolving Loan Fund (RLF)

- RLF loans are provided by lending programs that have been capitalized or recapitalized by EDA's Economic Adjustment Assistance grants. These loans are to "service businesses that cannot otherwise obtain traditional bank financing" in order "to provide access to capital as gap financing to enable small businesses to grow and generate new employment opportunities with competitive wages and benefits" as well as to "retain jobs that might otherwise be lost, create wealth, and support minority and women-owned businesses."
- <https://www.eda.gov/funding/programs/revolving-loan-fund>

U.S. Department of Commerce, National Oceanographic and Atmospheric Administration (NOAA)

Fisheries Finance Program (FFP)

- This program "provides long-term fixed rate loans for the fishing and aquaculture industries." It specifically can be used to cover "refurbishing, modernization or purchasing of existing fishing vessels, fisheries facilities, or aquaculture facilities; harvesting privileges in federally managed limited access systems (Catch Shares); and individual fishing quota in the Northwest Halibut/Sablefish and Bering Sea/Aleutian Islands Crab Fisheries" along with the "refinanc[ing of] existing debt incurred for these purposes."
- It does not include the "financ[ing of] a vessel refurbishing project that materially increases a vessel's harvesting capacity."
- <https://www.fisheries.noaa.gov/national/funding-financial-services/fisheries-finance-program>

U.S. Department of Agriculture, Rural Development

OneRD Secured Loan Initiative

- Streamlined program for lenders to apply for funds to service loans for rural businesses and economic development projects. These four flagship loan guarantee programs include:
 - » Business & Industry Guaranteed Loan Program: "offers loan guarantees to lenders for their loans to rural businesses" which may include for-profit businesses, non-profit businesses, cooperatives, federally recognized tribes, public bodies, or individuals engaged or proposed to engage in a business.
 - » Rural Energy for America Guaranteed Loan Program: "provides guaranteed loan financing and grant funding to agricultural producers and rural small businesses for renewable energy systems or to make energy efficiency improvements."
 - » Community Facilities Guaranteed Loan Program: "provides loan guarantees to eligible lenders to develop essential community facilities in rural areas" which are "defined as a public improvement, operated on a non-profit basis, needed for the orderly development of a rural community."

- » Guaranteed Loan Program for Water and Waste Disposal: “helps private lenders provide affordable financing to qualified borrowers to improve access to clean, reliable water and waste disposal systems for households and businesses in rural areas.”
- Businesses cannot apply for these directly on their own, but rather through lenders.
- <https://www.rd.usda.gov/onerdguarantee>

U.S. Department of Agriculture, Farm Service Agency

Farm Loan Programs

- Loans may be in the form of direct or guaranteed loan programs and are primarily aimed at farmers and ranchers in their first decade of operation, though any farmer or rancher may apply for loans through FSA.
- A portion of all FSA loan programs, along with the Direct Farm Ownership Down Payment Loan program, are set aside specifically for those classified as Beginning Farmers and Ranchers (i.e., those who are in their first decade of operation).
- FSA loan programs include:
 - » Farm Operating Loans: “can be used to purchase livestock, seed and equipment” and to “cover farm operating costs and family living expenses while a farm gets up and running.”
 - » Farm Ownership Loans: “can be used to purchase or expand a farm or ranch” and “can help with paying closing costs, constructing or improving buildings on the farm, or to help conserve and protect soil and water resources.”
 - » Microloans: “designed to meet the needs of small and beginning farmers, or for non-traditional and specialty operations by easing some of the requirements and offering less paperwork.”
 - » Native American Tribal Loans: “help Tribes acquire land interests within a tribal reservation or Alaskan native community; advance current farming operations; provide financial prospects for Native American communities; increase agricultural productivity; and save cultural farmland for future generations.”
 - » Youth Loans: “a type of Operating Loan for young people between 10-20 years old who need assistance with an educational agricultural project” and are “typically ... participating in 4-H clubs, FFA, or a similar organization.”
 - » Emergency Farm Loans: “help farmers and ranchers recover from production and physical losses due to drought, flooding, other natural disasters or losses.”
- <https://www.fsa.usda.gov/programs-and-services/farm-loan-programs/index>

ENDNOTES

1. "Annual Business Survey - Company Summary: 2021 Tables (Employer Businesses)." U.S. Census Bureau. <https://www.census.gov/data/tables/2021/econ/abs/2021-abs-company-summary.html>. Accessed 27 Oct 2023.
2. "Annual Business Survey - Company Summary: 2022 Tables (Employer Businesses)." U.S. Census Bureau. <https://www.census.gov/data/tables/2022/econ/abs/2022-abs-company-summary.html>. Accessed 27 Oct 2023.
3. Horwitz, Gabe, et al. "2023 Vital Signs: The Health of Minority-Owned Small Businesses ." Alliance for Entrepreneurial Equity (AEE), www.aeequity.org/product/2023-vital-signs-the-health-of-minority-owned-small-businesses. Accessed 4 Aug. 2023.
4. "ABS Tables, Statistics for Employer and Nonemployer Firms." U.S. Census Bureau. https://www.census.gov/programs-surveys/abs/data/tables.2019.List_1428666720.html. Accessed 25 Aug 2023.
5. Board of Governors of the Federal Reserve System (U.S.). "Small Business Credit Survey: 2022 Report on Firms Owned by People of Color." Fed Small Business. <https://www.fedsmallbusiness.org/survey/2022/2022-report-on-firms-owned-by-people-of-color>. Page 10. Accessed 8 June 2023.
6. Board of Governors of the Federal Reserve System (U.S.). "Small Business Credit Survey: 2022 Report on Firms Owned by People of Color." Fed Small Business. <https://www.fedsmallbusiness.org/survey/2022/2022-report-on-firms-owned-by-people-of-color>. Page 15. Accessed 8 June 2023.
7. Mills, Karen Gordon, and Brayden McCarthy. "The State of Small Business Lending: Credit Access during the Recovery and How Technology May Change the Game." Harvard Business School: Working Paper, vol. 15, no. 004, 22 July 2014.
8. Nguyen, Hoai-Luu Q. 2019. "Are Credit Markets Still Local? Evidence from Bank Branch Closings." *American Economic Journal: Applied Economics*, 11 (1): 1-32.
9. Barkley, Brett, and Mark E. Schweitzer. "The rise of Fintech lending to small businesses: Businesses' perspectives on borrowing." Federal Reserve Bank of Cleveland. 3 April 2020. <https://www.clevelandfed.org/publications/working-paper/2020/wp-2011-rise-of-fintech-lending>. Accessed 9 Aug 2023.
10. U.S. Department of the Treasury Report to the White House Competition Council. "Assessing the Impact of New Entrant Non-bank Firms on Competition in Consumer Financial Markets." <https://home.treasury.gov/system/files/136/Assessing-the-Impact-of-New-Entrant-Nonbank-Firms.pdf>. Page 119. Accessed 8 August 2023.
11. Peek, Sean. "What Is Fintech?" U.S. Chamber of Commerce. 11 June 2020. www.uschamber.com/co/run/business-financing/what-is-fintech#:~:text=Fintech%2C%20or%20financial%20technology%2C%20is,payment%20apps%20or%20even%20cryptocurrency. Accessed 9 August 2023.
12. "Fintech: The History and Future of Financial Technology." The Payments Association. 12 Oct 2020. <https://thepaymentsassociation.org/article/fintech-the-history-and-future-of-financial-technology/>. Accessed 9 Aug 2023.
13. "Policy Statement on Financial Technology Companies' Eligibility to Apply for National Bank Charters." Office of the Comptroller of the Currency. 31 July 2018. <https://www.occ.gov/news-issuances/news-releases/2018/pub-other-occ-policy-statement-fintech.pdf>. Accessed 9 Aug 2023.
14. "The CFPB Finalizes Rule to Increase Transparency Regarding Key Nonbank Supervision." <https://www.consumerfinance.gov/about-us/blog/the-cfpb-finalizes-rule-to-increase-transparency-regarding-key-nonbank-supervision-tool/>. Accessed 5 April 2024.
15. "CFPB Invokes Dormant Authority to Examine Nonbank Companies Posing Risks to Consumers." Consumer Financial Protection Bureau. 25 Apr 2022. <https://www.consumerfinance.gov/about-us/newsroom/cfpb-invokes-dormant-authority-to-examine-nonbank-companies-posing-risks-to-consumers/>. Accessed 9 Aug 2023.

16. "FinTech - Countries with the highest Alternative Lending transaction value worldwide in 2018." Statista. July 2023. <https://www.statista.com/statistics/497241/digital-market-outlook-global-comparison-alternative-lending-transaction-value/>. Accessed 22 Aug 2023.

See also: "FinTech - Countries with the highest Alternative Lending transaction value worldwide in 2019." Statista. July 2023. <https://www.statista.com/forecasts/1012482/digital-market-outlook-global-comparison-alternative-lending-transaction-value>. Accessed 22 Aug 2023.
17. "2022 Report on Firms Owned by People of Color Based on the Small Business Credit Survey." Fed Small Business. <https://www.fedsmallbusiness.org/survey/2022/2022-report-on-firms-owned-by-people-of-color>. Page 16. Accessed 9 Aug 2023.
18. Board of Governors of the Federal Reserve System (U.S.). "2023 Report on Nonemployer Firms: Findings from the 2022 Small Business Credit Survey." Fed Small Business. <https://www.fedsmallbusiness.org/reports/survey/2023/2023-report-on-nonemployer-firms>. Page 26. Accessed 8 Aug 2023.
19. "Understanding Online Marketplace Lending." Consumer Finance Protection Bureau. 2016. https://files.consumerfinance.gov/f/201603_cfpb_understanding-online-marketplace-lending.pdf. Accessed 6 Nov 2023.
20. Herrboldt, Angela M. "Marketplace Lending." Federal Deposit Insurance Corporation. 2015. <https://www.fdic.gov/regulations/examinations/supervisory/insights/siwin15/siwinter15-article2.pdf>. Accessed 9 Aug 2023.
21. Bao, Tianzi, et al. "Throwing Good Money After Bad: Risk Mitigation Strategies in the P2P Lending Platforms." Information Systems Frontiers. 18 July 2023. <https://doi.org/10.1007/s10796-023-10423-4>. Page 4-5. Accessed 22 Aug 2023.
22. Ibid.
23. "Opportunities and Challenges in Online Marketplace Lending." U.S. Department of the Treasury. 10 May 2016. https://home.treasury.gov/system/files/231/Opportunities_and_Challenges_in_Online_Marketplace_Lending_white_paper.pdf. Page 5. Accessed 9 Aug 2023.
24. Ziegler, Tania, et al. "The 2nd Global Alternative Finance Market Benchmarking Report." University of Cambridge. June 2021. <https://www.jbs.cam.ac.uk/wp-content/uploads/2021/06/ccaf-2021-06-report-2nd-global-alternative-finance-benchmarking-study-report.pdf>. Accessed 9 Aug 2023.
25. Jagtiani, Julapa, and Catharine Lemieux. "Fintech Lending: Financial Inclusion, Risk Pricing, and Alternative Information." Federal Reserve Bank of Philadelphia. 6 July 2017. <https://www.philadelphiafed.org/-/media/frbp/assets/events/2017/consumer-finance/fintech-2017/day-1/fintech-lending-financial-inclusion-risk-pricing-alternative-information.pdf>. Page 2. Accessed 9 Aug 2023.
26. Ziegler, Tania, and Rotem Shneor. "Lending Crowdfunding: Principles and Market Development." *Advances in crowdfunding: Research and practice* (2020): 63-92. https://library.oapen.org/bitstream/handle/20.500.12657/41282/2020_Book_AdvancesInCrowdfunding.pdf?sequence=1#page=85 Accessed 9 Aug 2023.
27. Ziegler, Tania, et al. "The 2nd Global Alternative Finance Market Benchmarking Report." University of Cambridge. June 2021. <https://www.jbs.cam.ac.uk/wp-content/uploads/2021/06/ccaf-2021-06-report-2nd-global-alternative-finance-benchmarking-study-report.pdf>. Accessed 9 Aug 2023.
28. "Marketplace Lending: Fintech in Consumer and Small-Business Lending." Congressional Research Service. September 2018. <https://crsreports.congress.gov/product/pdf/R/R44614>. Accessed 9 Aug 2023.
29. Lorentz, Andrew and Kost, Thomas, Global Legal Insights, <https://www.globallegalinsights.com/practice-areas/fintech-laws-and-regulations/usa> Accessed 30 October 2023.
30. Shevlin, Ron. "The State of the Union In Bank-Fintech Partnerships." Cornerstone Advisors. https://19538404.fs1.hubspotusercontent-na1.net/hubfs/19538404/220110%20SYNCTERA%20Bank-Fintech%20Partnerships.pdf?__. Page 4. Accessed 9 Aug 2023.
31. Ibid., Page 4.

32. "Community Bank Access to Innovation through Partnerships." Board of Governors of the Federal Reserve System. September 2021. <https://www.federalreserve.gov/publications/files/community-bank-access-to-innovation-through-partnerships-202109.pdf>. Accessed 9 Aug 2023.
33. Examples include Camino Financial, Lendistry, HOPE CDFI, NAAC Finance; and Totem (a Native American-owned FinTech).
34. Northrup, Jack, Eric Hangen, and Michael Swack. "CDFIs and Online Business Lending: A Review of Recent Progress, Challenges, and Opportunities." University of New Hampshire. November 2016. <https://scholars.unh.edu/cgi/viewcontent.cgi?article=1286&context=carsey>. Accessed 22 Aug 2023.
35. "Risks and Benefits of Fintech Lending." U.S. Government Accountability Office. 23 Jan 2019. <https://www.gao.gov/blog/2019/01/23/risks-and-benefits-of-fintech-lending>. Accessed 9 Aug 2023.
36. See *California v. Office of Comptroller of Currency*, 584 F. Supp. 3d 844 (N.D. Cal. 2022); *California v. Federal Deposit Insurance Corporation*, 584 F. Supp. 3d 834 (N.D. Cal. 2022); Soukup, Andrew et al. "A Closer Look: Federal Court Upholds OCC's & FDIC's Valid-When-Made-Rules" (Covington. 14 Feb 2022) <https://www.covingtonblogs.com/2022/02/14/a-closer-look-federal-court-upholds-occs-fdics-valid-when-made-rules/>. Accessed 12 Dec 2023.
37. Davis, Dominic-Madori. "Latin American founders see VC funding drop as Investors retreat from underrepresented cohorts" TechCrunch. 28 Oct 2022. <https://techcrunch.com/2022/10/28/latinx-founders-see-vc-funding-drop-as-investors-retreat-from-underrepresented-cohorts/>. Accessed 9 Aug 2023.
See also: Davis, Dominic-Madori. "Black founders still raised just 1% of all VC funds in 2022." TechCrunch. 6 Jan 2023. <https://techcrunch.com/2023/01/06/black-founders-still-raised-just-1-of-all-vc-funds-in-2022/>. Accessed 9 Aug 2023.
38. Augustus, Imani. "Women Wanted: The Equity Gap In Venture Capital." Alliance for Entrepreneurial Equity (AEE). 22 March 2022. <https://www.aeequity.org/product/women-wanted-the-equity-gap-in-venture-capital>. Accessed 9 Aug 2023.
See also: Morgan Stanley. "Beyond the VC Funding Gap: Why VCs Aren't Investing in Diverse Entrepreneurs, How It's Hurting Their Returns, and What to Do About It." 2019. https://www.morganstanley.com/content/dam/msdotcom/mcil/Morgan_Stanley_Beyond_the_VC_Funding_Gap_2019_Report.pdf. Accessed 21 May 2024.
39. Ibid.
See also: NYC EDC. "Diversity in Venture Capital: Challenges and Opportunities for New York City. 2023 Report." October 2023. https://edc.nyc/sites/default/files/2023-10/NYCEDC_Diversity%20in%20Venture%20Capital_Report.pdf. Accessed 21 May 2024.
See also: Kauffman Fellows. "Deconstructing the Pipeline Myth and the Case for More Diverse Fund Managers." 4 February 2020. <https://www.kauffmanfellows.org/journal/the-pipeline-myth-ethnicity-fund-managers>. Accessed 21 May 2024.
40. Eldridge, D., Nisar, T.M. & Torchia, M. What impact does equity crowdfunding have on SME innovation and growth? An empirical study. *Small Bus Econ* 56, 105-120 (2021). Page 118. <https://doi.org/10.1007/s11187-019-00210-4>. Accessed 27 Oct 2023.
41. "Crowdfunding explained." European Commission. Internal Market, Industry, Entrepreneurship and SMEs. https://single-market-economy.ec.europa.eu/access-finance/guide-crowdfunding/what-crowdfunding/crowdfunding-explained_en. Accessed 27 Oct 2023.
42. See Crowdfunding, Release No. 33-9974 (Oct. 30, 2015) [80 FR 71388 (Nov. 16, 2015)].
43. "Regulation Crowdfunding." U.S. Securities and Exchange Commission. <https://www.sec.gov/education/smallbusiness/exemptofferings/regcrowdfunding>. Accessed 9 Aug 2023.
44. Robb, Alicia. "Rural Entrepreneurship and the Challenges Accessing Financial capital: An Overview of Funding in Rural America." U.S. Securities and Exchange Commission. 10 September 2021. https://www.sec.gov/files/2021_rural_report_508_compliance_final.pdf. Accessed 9 Aug 2023.

45. "Annual Report Fiscal Year 2022." U.S. Securities and Exchange Commission Office of the Advocate for Small Business Capital Formation. <https://www.sec.gov/files/2022-oasb-annual-report.pdf>. Page 73. Accessed 9 Aug 2023.
46. "Annual Report Fiscal Year 2022." U.S. Securities and Exchange Commission Office of the Advocate for Small Business Capital Formation. <https://www.sec.gov/files/2022-oasb-annual-report.pdf>. Page 74. Accessed 9 Aug 2023.
47. Ibid., Page 18
48. "Growing Your Diverse-Led Business: A Guide to Revenue-Based Financing." Founders First Capital Partners. <https://docsend.com/view/df6kqiq2k4a9na6ay>. Accessed 9 Aug 2023.
49. Kriss, Randa and Steve Nicastro. "Is a Merchant Cash Advance Right for Your Business?" Article, NerdWallet, 16 Mar. 2023. <https://www.nerdwallet.com/article/small-business/merchant-cash-advance>. Accessed 16 Aug. 2023.
50. "Record of Meeting." Community Advisory Council and the Board of Governors. 5 Oct 2018. <https://www.federalreserve.gov/aboutthefed/files/cac-20181005.pdf>. Accessed 9 Aug 2023.
51. Mills, Karen Gordon, and Brayden McCarthy. "The State of Small Business Lending: Credit Access during the Recovery and How Technology May Change the Game." Harvard Business School. 22 July 2014. https://www.hbs.edu/ris/Publication%20Files/15-004_09b1bf8b-eb2a-4e63-9c4e-0374f770856f.pdf. Accessed 9 Aug 2023.
52. Wiersch, Ann Marie, et al. "Clicking for Credit: Experiences of Online Lender Applicants from the Small Business Credit Survey." Federal Reserve Bank of Cleveland. August 2022. <https://www.clevelandfed.org/publications/cd-reports/sr-20220816-clicking-for-credit-experiences-of-online-lender-applicants-from-sbcs>. Accessed 9 Aug 2023.
53. Chernenko, Sergey, Nathan Kaplan, Asani Sarkar, and David S. Scharfstein. Applications or Approvals: What Drives Racial Disparities in the Paycheck Protection Program? National Bureau of Economic Research. April 2023. <http://www.nber.org/papers/w31172>. Page Accessed August 25, 2023.
54. Ibid, pg. 3
55. Ibid, pg. 4, 23
56. Federal Reserve Member Banks, 2022 Report on Employer Firms: Data Appendix, February 22, 2022, at https://www.fedsmallbusiness.org/-/media/project/smallbizcredittenant/fedsmallbusinesssite/fedsmallbusiness/files/2021/sbcs-employer-firms-appendix-2021.xls?sc_lang=en&hash=2A3C7FEFDF3E623AF175ADA8E2822A14
57. Chernenko, Sergey, Nathan Kaplan, Asani Sarkar, and David S. Scharfstein. Applications or Approvals: What Drives Racial Disparities in the Paycheck Protection Program? National Bureau of Economic Research. April 2023. <http://www.nber.org/papers/w31172>. Page 27. Accessed August 25, 2023.
58. Arnold, Web. "Analysis: What Lenders Should Know About AI and Algorithmic Bias." Bloomberg Law. 25 April 2023. <https://news.bloomberglaw.com/bloomberg-law-analysis/analysis-what-lenders-should-know-about-ai-and-algorithmic-bias>. Accessed 22 Aug 2023.
59. "Fintech: Overview of Innovative Financial Technology and Selected Policy Issues." Congressional Research Service. 28 April 2020. <https://crsreports.congress.gov/product/pdf/R/R46332>. Accessed 9 Aug 2023.
60. "Marketplace Lending: Fintech in Consumer and Small-Business Lending." Congressional Research Service. September 2018. <https://crsreports.congress.gov/product/pdf/R/R44614>. Accessed 9 Aug 2023.
61. "Small Business Administration: A Primer on Programs and Funding." Congressional Research Service. 27 April 2022. <https://crsreports.congress.gov/product/pdf/RL/RL33243>. Accessed 9 Aug 2023.
62. Select Subcommittee on the Coronavirus Crisis, "We Are Not The Fraud Police: How Fintechs Facilitated Fraud in the Paycheck Protection Program," Staff Report, December 2022, <https://coronavirus-democrats-oversight.house.gov/sites/democrats.coronavirus.house.gov/files/2022.12.01%20How%20Fintechs%20Facilitated%20Fraud%20in%20the%20Paycheck%20Protection%20Program.pdf>
63. Ibid., Page 16.

64. "The Fintech Effect: Fintech's mass adoption moment." Plaid. 2021. <https://assets.ctfassets.net/ss5kfr270og3/5ibllvGqujgTLronm8XgBX/19a1d7482945ddc2789a1d195dd91332/Fintech-Effect-2021.pdf>. Accessed 26 Sept 2023.
 65. Ibid.
 66. "Trust and Access to Capital." Reimagine Main Street. 19 May 2022. <https://irp.cdn-website.com/d59a11d2/files/uploaded/Survey%20Findings%20for%20Website%20vSHARE%20%281%29.pdf>. Accessed 26 Sept 2023.
 67. Board of Governors of the Federal Reserve System (U.S.). "2022 Report on Employer Firms Based on the Small Business Credit Survey." Fed Small Business. <https://www.fedsmallbusiness.org/survey/2022/report-on-employer-firms>. Accessed 26 Sept 2023.
 68. Ibid., Page 22.
 69. Ibid., Page 23.
 70. Ibid.
 71. See Crowdfunding, Release No. 33-9974 (Oct. 30, 2015) [80 FR 71388 (Nov. 16, 2015)].
 72. Regulation Crowdfunding." U.S. Securities and Exchange Commission. 18 June 2019. <https://www.sec.gov/files/regulation-crowdfunding-2019.pdf>. Page 17. Accessed 26 Sept 2023.
 73. Ibid., Page 15.
 74. "Small Business Credit Survey: 2021 Report on Firms Owned By People of Color." Fed Small Business. Federal Reserve Banks, 2021, <https://www.fedsmallbusiness.org/medialibrary/FedSmallBusiness/files/2021/sbcs-report-on-firms-owned-by-people-of-color>. Accessed 6 Sept. 2022.
 75. Ibid.
 76. "Small Business Credit Survey: 2021 Report on Firms Owned By People of Color." Fed Small Business. Federal Reserve Banks, 2021, <https://www.fedsmallbusiness.org/medialibrary/FedSmallBusiness/files/2021/sbcs-report-on-firms-owned-by-people-of-color>. Accessed 6 Sept. 2022.
 77. "Strengthen your cybersecurity." Small Business Administration. <https://www.sba.gov/business-guide/manage-your-business/strengthen-your-cybersecurity#id-why-cybersecurity-matters>. Accessed 26 Sept 2023.
 78. Clark, Peter Allen. "Cyber threats to small businesses prompt pleas to report attacks." Axios. 4 April 2023. <https://www.axios.com/2023/04/04/small-businesses-cybersecurity-attacks-cisa> . Accessed 26 Sept 2023.
 79. "Agencies Should Provide Clarification on Lenders' Use of Alternative Data." United States Government Accountability Office. <https://www.gao.gov/assets/gao-19-111.pdf>. Page 37. Accessed 9 Aug 2023.
 80. "Interagency Guidance on Third-Party Relationships: Risk Management." The Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation, and the Office of the Comptroller of the Currency. <https://www.fdic.gov/news/financial-institution-letters/2023/fil23029a.pdf>. Accessed 9 Aug 2023.
- See also: "Agencies Should Provide Clarification on Lenders' Use of Alternative Data." United States Government Accountability Office. <https://www.gao.gov/assets/gao-19-111.pdf>. Page 37. Accessed 9 Aug 2023.