

The State of Small Business Lending: Innovation and Technology and the Implications for Regulation

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HARVARD BUSINESS SCHOOL

THE STATE OF SMALL BUSINESS LENDING: INNOVATION AND TECHNOLOGY AND THE IMPLICATIONS FOR REGULATION

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EXECUTIVE SUMMARY

Small businesses are core to America’s economic competitiveness. Not only do they employ half of the nation’s private sector workforce – about 62 million people – but since 1995 they have created approximately 60 percent of the net new jobs in our country. Small businesses were hit especially hard by the Great Recession, accounting for over 60 percent of the total jobs lost, in part because the crisis was centered on the banking sector. Credit oriented crises are known to have a disproportionate effect on credit dependent entities such as small businesses.

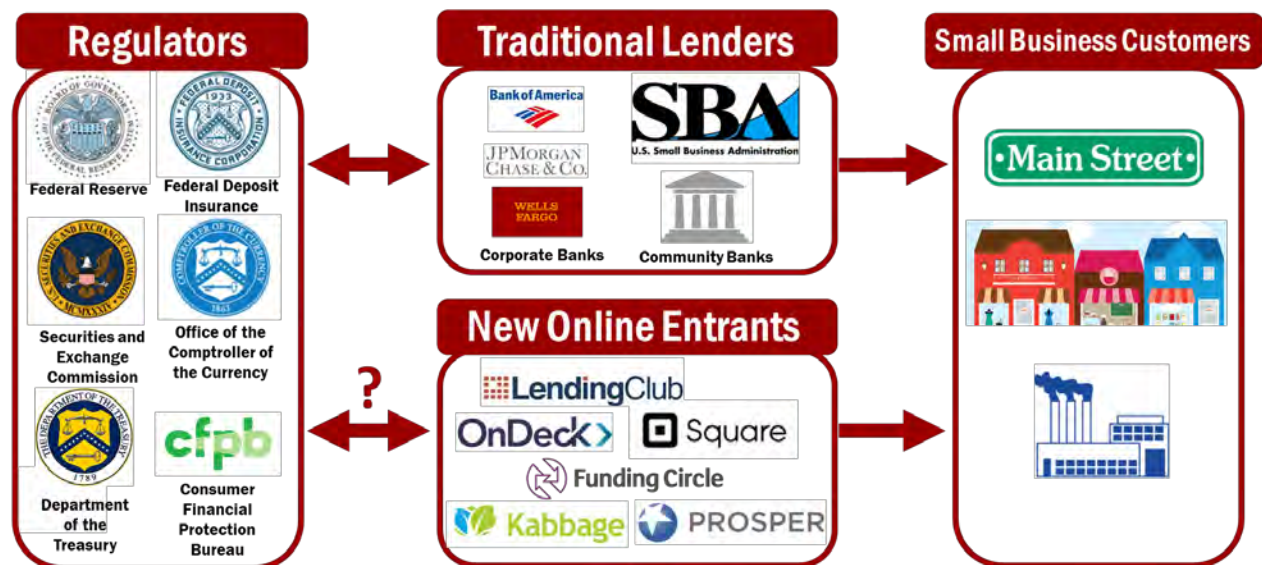
In 2014, small businesses were still struggling to recover, prompting our first HBS Working Paper: [“The State of Small Business Lending: Access to Credit During the Recovery and How Technology May Change the Game,”](#) which focused on a then controversial question: “Is there a credit gap in small business lending?”¹

One answer became clear: a gap in access to credit for small businesses did exist and was

particularly persistent in small dollar loans—those defined as under \$250,000. This finding is noteworthy, as this is the level of loan that most small businesses want; more than 70 percent of small businesses seek loans in amounts under \$250,000, and more than 60 percent want loans under \$100,000.

Not surprisingly, this was exactly the market targeted by a new set of lenders. Entrepreneurs and innovators saw the opportunity, and over the last several years have created an emerging, dynamic market of online lenders that use technology to disrupt the small business lending market. Though still small relative to the traditional bank market, these new competitors provide fast turnaround and online accessibility for customers, and use new data and credit scoring algorithms.

Over the past several years, the online lending market has exploded with rapid growth both in the proliferation of new companies and new product offerings and in terms of market



¹ Mills, Karen G., 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 No. 15-004. July 2014.
<http://www.hbs.edu/faculty/Pages/item.aspx?num=47695>

awareness and trial by small business borrowers. We call this phase the “wild west,” as companies achieved record valuations in the public markets and some voiced the expectation that the day of the traditional banks was over, as the disruptors would capture large share and dominate the small business lending market.

It appears that this initial phase of new market activity is coming to an end with problems surfacing for leading players such as Lending Club, Prosper, and OnDeck. **This paper explores the evolution of the new marketplace and describes what strategies, in the months to come, might differentiate the winners from the losers.** We believe that we are now entering Phase II of the market, which is characterized by traditional players such as large lenders and community banks beginning to develop numerous and varied partnerships with online innovators, and by the entrance of “platform” players with large established customer bases.

As the online marketplace evolves, those who succeed will be the ones who have access to low-cost capital and those who can best access and serve the small business customer—creating products that fit their needs and ensuring that small businesses find their way to the loans that work best for them. This will drive greater customer satisfaction and lower defaults, which is good for borrowers, lenders, and for small businesses’ contribution to the U.S. economy.

Another critical question is: who should regulate this new market? If these innovators are the answer to filling the small business credit gap, how do we oversee a safe and robust market for borrowers and investors, and ensure this does not become another subprime market with detrimental impact for small businesses.

We believe the time is right to define a clear path for appropriate regulatory oversight of the online lending market. This paper will describe the current regulatory environment, with its large number of agencies, each with overlapping

authority and mandates. **As a result of the “spaghetti soup” of the current regulatory environment, small business lending has in many ways slipped through the cracks.**

The emergence of “bad actors” and worrisome practices has gained the attention of a number of the regulatory bodies, many of who are actively commenting on and investigating the marketplace. **The objective of this HBS White Paper is to provide a clear and detailed set of recommendations for regulatory activity that will protect borrowers and investors in the small business online lending market, and address concerns about systemic risk, while avoiding dampening the innovation that has proven so promising for filling the gap in small business access to credit.**

This White Paper is laid out in three major sections: Chapters 1 and 2 describe the importance of small business to the U.S. economy and lay out the current state of access to credit for small businesses from traditional banks. Chapters 3 and 4 detail the fast growing new market for online lending to small business, and put forward our views on what strategies will differentiate the winners from the losers. We describe the multiple types of partnerships that are evolving between the new entrants and established players as the online market enters a new phase of its evolution.

Chapters 5 and 6 focus on the current U.S. regulatory environment and detail a **Regulatory Action Plan with six recommendations we see as the most appropriate actions necessary to create a well-functioning and robust market for small businesses to access the credit they need in order to grow and create jobs.** These chapters are summarized below:

Small businesses are critical to job creation in the U.S. economy.

Small businesses create 60 percent of all net new jobs. Small firms employ half of the private sector workforce, and since 1995 small businesses have been responsible for about 60 percent of total net job creation.

Most small businesses are Main Street businesses or sole proprietorships. Of America's 30 million small businesses, 24 million are sole proprietorships. The remaining 5.8 million small firms have employees, and can be divided up into Main Street "mom-and-pop" businesses, small and medium-sized suppliers to larger corporations, and high-growth startups.

Small businesses were hit harder than larger businesses during the 2008 financial crisis, and were slower to recover from a recession of unusual depth and duration.

Between 2007 and 2012, the small business share of total net job losses was about 60 percent. **In another troubling trend, the level of new business startups declined abruptly in the Great Recession, and has never fully recovered.** New business starts went from 525,424 in 2007 to 403,902 in 2014. And the rate of new businesses—those less than one year old—as a percent of total U.S. businesses has continued a decline that began over 30 years ago. This is concerning, as new businesses are an important source of job creation and vitality in the economy.

Bank credit is one of the primary sources of external financing for small businesses—especially Main Street firms—and is key to helping small firms maintain cash flow, hire new employees, purchase new inventory or equipment, and grow their business.

Financial crises tend to hit small firms harder than large firms. As the academic literature underscores, small firms are always hit harder during financial crises because they are more dependent on bank capital to fund their growth.

While online lenders have begun competing for small business loans, the vast majority of loans still come from banks. Small banks are a key source of loans, with 52 percent of firms applying to small banks compared to 42 percent who are applying for loans from large banks.

Small banks have a higher approval rate for small business loans, with a 76 percent approval rate versus 58 percent for larger banks. Not surprisingly, small banks therefore have the highest satisfaction ratings, with an extraordinary lender satisfaction score of 75 percent. This underscores the importance of the lending relationship and its value to small business owners.

Though some of the cyclical barriers to lending have improved during recent years, a number of structural barriers continue to impede bank lending to small businesses, including consolidation of the banking industry, high search costs, and higher transaction costs associated with small business lending.

A decades-long trend toward consolidation of banking assets in fewer institutions is eliminating a key source of capital for small firms. Community banks are being consolidated by bigger banks, with the number of community banks falling to just over 5,000 today, down from over 14,000 in the mid-1980s, while average bank assets continues to rise.

Search costs in small business lending are high, for both borrowers and lenders. It is difficult for qualified borrowers to find willing lenders, and vice versa. Federal Reserve research finds that it takes small business borrowers an average of 24 hours to research and apply for bank loans and that they often approach multiple banks during the application process.

Smaller business loans, particularly those under \$250,000, are considerably less profitable

than large business loans and are therefore less appealing to banks.

Assessing creditworthiness of small businesses can be difficult due to information asymmetry. Little, if any, public information exists about the performance of most small businesses, in part because they rarely issue publicly traded equity or debt securities. Community banks have traditionally placed greater emphasis on relationships with borrowers in their underwriting processes, but these relationships are expensive.

The data on small business credit is limited but clear signs indicate that a gap in access to credit exists – in small dollar loans.

Due to many of the structural issues described above, one would expect that the smallest of small firms would be much more likely to feel credit constraints. This divergence in credit availability was confirmed by data in the 2015 Federal Reserve survey, where micro-firms, those with revenues under \$100,000, were half as likely to receive the financing they requested than firms with over \$10 million in revenues.

In addition, approval rates for the smallest firms, those under \$100,000 in revenue, were 70 percent versus the 90 percent for the largest firms. Interestingly, there is a direct correlation between size and approval rate across all firms measured. This result is not surprising given that smaller firms are more risky and often have fewer assets with which to collateralize the loan.

Another complicating factor for small firms is that they are seeking small dollar loans. Over 70 percent of small businesses are looking for loans of under \$250,000. And more than 60 percent want loans of under \$100,000. Unfortunately, banks have more and more often turned their efforts toward the more profitable, larger loan segments, and moved away from small dollar lending.

Seeing this opportunity, a large and growing number of new online lenders and marketplaces have emerged, which have opened up new pools of capital for small businesses through greater innovation in how small business loans are evaluated, underwritten, and managed.

New online marketplaces are disrupting the traditional market for small business loans.

New tech-based alternative lenders are providing easy to use online applications, rapid loan underwriting, and a greater emphasis on customer service. Many are developing data-driven algorithms to more accurately screen creditworthy borrowers.

In the first phase of the online market growth, several models emerged and the market exploded with new entrants.

In this paper, we describe six categories of new entrants: balance sheet lenders, peer-to-peer platforms, multi-lender marketplaces, invoice and payables financing, payments/e-commerce platforms, and data providers, though the lines between many strategies are blurring. Players such as OnDeck and Kabbage started by using their own balance sheets and then began raising capital from institutional investors, including hedge funds. Peer-to-peer platforms such as Lending Club, Prosper, and Funding Circle connect capital from institutional and retail investors to interested borrowers. Multi-lender marketplaces such as Fundera, Lendio, and Intuit provide online marketplaces which connect borrowers with a range of traditional and alternative lenders.

Invoice and payables financing is a robust new category replacing traditional factoring. Small business owners often have limited cash buffers and can benefit from being able to even out their working capital cycles. Players like Fundbox, BlueVine, and NOWaccount specialize in the

receivables side, while American Express offers a new non-card product for paying vendors. It should be noted that some of these invoice products, (and some of the merchant cash advance products) are technically not loans, but provide the same liquidity function to the small business.

Powerful payments and e-commerce platforms such as PayPal, Amazon, and Square have also entered the market. With their captive customer bases and deep data on customer financial activities, these players have enormous assets which give them competitive advantages as the market evolves.

In Phase II of the market evolution, existing players are making new strategic choices including partnering with the new entrants.

Incumbent and conventional lenders have assets such as their own balance sheets and existing customer relationships that are highly advantageous. As the second phase of the market evolves, we outline four strategic choices for incumbent players to partner with or take advantage of innovations provided by the new market entrants. These include 1) arms-length activities such as referrals of small loans or rejected loans and purchasing whole loans to increase balance sheet exposure to small business lending, 2) more substantial integrations of new applications or underwriting models into an existing bank's operating and compliance systems, as we see with JP Morgan Chase and OnDeck, 3) "Go it alone" strategies as exemplified by Eastern Bank and Wells Fargo launching their own competitive products, and 4) extensive equity investment by banks in venture capital backed entrants, which are signs of what we call the "long-tail incubation" strategy, as companies such as Citibank keep an eye on innovative firms as corporate investors.

To help incumbent banks make strategic choices, we create a matrix of strategic options

defined by how much time and money the bank wishes to invest and the level of integration they are willing to take on with new online partners.

Emerging online platforms pose both challenges and potential opportunities for regulators and policymakers.

Disagreement has emerged over the appropriate level of regulation. One side of the debate cautions against regulating online small business lending too early for fear of cutting off innovation that could provide valuable products to small business owners. However, a number of bad actors and bad practices have emerged, prompting calls for regulatory action.

The current online marketplace for small business loans falls between the cracks for federal regulators.

Seven regulatory bodies are currently engaged in some aspect of the online lending market for small business loans. These include The Federal Reserve (Fed), The Office of the Comptroller of the Currency (OCC), The Consumer Financial Protection Bureau (CFPB), The Securities and Exchange Commission (SEC), The Federal Deposit Insurance Corporation (FDIC), The Federal Trade Commission (FTC), and the National Credit Union Administration (NCUA). Yet no federal regulator currently has explicit authority for the activities of the new non-bank small business lenders.

White papers and statements have been issued on this and related issues by the OCC, the FDIC and the U.S. Treasury in the past 12 months. The overlapping jurisdictions are causing concern among the industry players as to how to understand the potential for upcoming regulation, and how to respond if guidance is not uniform and coordinated. This "spaghetti soup" is further complicated by the complex set of legislative acts, such as the Truth in Lending

Act (TILA) that govern the consumer lending products, but as yet largely do not apply to small business lending.

Given this environment, we believe that there is great benefit to a clearly defined path for regulation of online lending to small business customers. The appropriate regulatory environment will need to protect both borrowers and lenders, and avoid systemic risk, while providing a robust market environment that fills the current gaps in access to credit for small businesses. Given the existing disjointed regulation, an effective and streamlined regulatory plan could net lower costs to lenders and borrowers.

Such a plan should be based on the following core assumptions:

1. **Small business owners should have the same kind of loan information available to consumers.** Many are small or sole proprietorships and don't have armies of lawyers or advisors available to them to decipher complicated offers with hidden costs.
2. **Industry should be at the table, but not in the driver's seat.** Industry efforts at self-policing, such as the 2015 announcement of a Borrower's Bill of Rights or proposed borrower disclosures such as the "[SMART Box](#)," are excellent early steps, but they will be even more effective if the industry is coordinated with high participation in the efforts, and consequences for those who do not comply.
3. **Regulation should be "smart."** Regulators should be coordinated, issuing clear, succinct, joint guidance. The reasons and principles behind each regulation should be apparent. And, going forward, their effectiveness and impact should be assessed, where possible, using data, as is the case with the United Kingdom's peer-to-peer regulations, which are now up for review and revision. Technology should also be part of the answer. A joint task force on data collection and technology, one that

includes traditional banks and online lenders, could be helpful both in reducing the costly burdens of reporting, and in identifying tools that help highlight worrisome trends or leading indicators of issues.

The critical elements of the Regulatory Action Plan (RAP) proposed in this paper fall into six categories:

1. **Create a National Non-bank Charter Option for Online Lenders.** The Internet is not bound by any one state, and the market for loans online is no exception. Creating a clear, straightforward, national non-bank charter, or even a more consistent and simplified set of state frameworks, would encourage additional innovation in the small business lending space, while bringing it under a transparent regulatory regime. The Office of the Comptroller of the Currency has indicated an interest in exploring limited purpose charters, which may be a viable solution.
2. **Set Universal Rules and Guidelines to Strengthen Borrower Protections.** An important precondition of a national charter should be the creation of new rules, universally applied, that create borrower protections for small business borrowers. Transparency is critical as small business owners navigate the new loan options. This is especially important because credit extended for a commercial purpose is not covered by the disclosure requirements of the federal Truth in Lending Act.
3. **Develop Joint Guidance on Third-Party Vendor Management.** Partnerships between banks and new entrants are already emerging, and are likely to grow, provided that regulators allow it. This can be a win-win for online lenders, banks and indeed the small business borrower that each player seeks to serve. This will require clear, consistent and non-overlapping rules from agencies regarding non-bank third parties to ensure good market practices and successful partnerships from the start.

4. **Brokers Should Respect Fiduciary Duties.**

As with mortgage brokers, and more recently with investment brokers, loan brokers offering individualized advice should act in borrowers' best interest, respecting fiduciary duties of disclosure, loyalty, and prudence. As a first step, brokers should disclose conflicts that compromise their impartiality, such as incentives from lenders to market higher-priced loans over others, and clearly break out the fees they add to loans.

5. **Shine a Light on Borrower Outcomes by Mandating Disclosure of Originations, APRs, Default Rates, and Borrower Satisfaction Across the Small Business Lending Market.**

This would entail collecting specific data from market players on their small business loan transactions, such as average APRs and default rates. This data will shed light on current practices and on the state of access to credit, deterring bad actors and reducing the risk of cumbersome regulation stifling important innovations. The Consumer Financial Protection Bureau (CFPB) already has the mandate to implement this through Dodd-Frank Section 1071.

6. **Create a National Advisory Board on Responsible Financial Innovation.**

This body would be a coordinated effort by the major federal regulators involved, including the Federal Reserve, OCC, SEC, FDIC, FTC, CFPB, and NCUA. In addition to the major federal regulators, this body should include borrower protection advocates, banks, current and former fintech executives, as well as other interested stakeholders, and be tasked with advising

regulators on policy development, research and further stakeholder engagement.

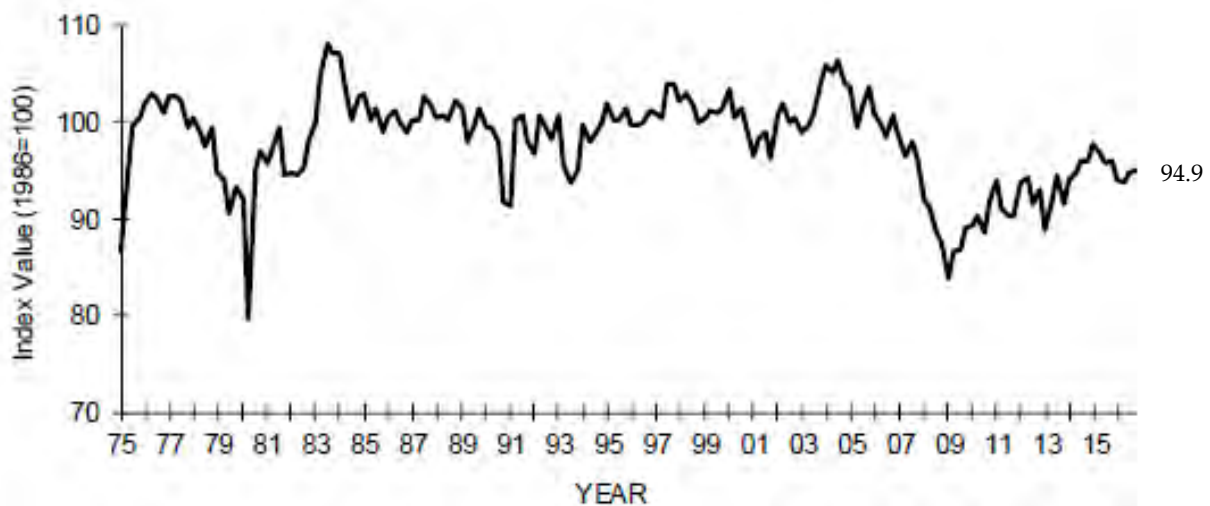
In addition, this group should look for opportunities to use technology to implement regulation in a more efficient way. This area, known as "RegTech," should be one of the core objectives of the RAP. Participants should seek out innovative ways of executing the regulatory tasks such as data collection, compliance and reporting, and disclosure that take advantage of technology, keep processes simple, and leave room for continuous improvement and innovation in the way the regulations are implemented. Efforts should be made to incorporate specific models, such as "innovation sandboxes" and Regtech solutions "sprints" or hackathons as experiments.

The ultimate aim of this paper is to underscore that coordinated regulatory and policy action is needed at the federal level to ensure a fairer and more transparent small business lending market. We believe that our recommendations will catalyze sustainable growth of online lending, while ensuring that small business borrowers are protected when seeking credit, whether online or offline. Ultimately, this will allow small businesses to do what they do best: grow their businesses, create jobs, and continue to be an important, positive force in the U.S. economy.

INTRODUCTION

The U.S. economy is at a critical juncture. Productivity has slowed, real wages are flat, and the middle class sees a future of increasing economic insecurity. Polarization is rampant in our politics and an increasing set of concerns about income inequality, race, and other disparities divide our populous. Against this backdrop, small businesses struggle to have an optimistic view. The United States has made significant progress in recovering from a financial crisis of unusual depth and duration. But, small businesses suffered deeply in the Great Recession, and have yet to get fully back on their feet. Small business optimism, as measured by the National Federation of Small Business (NFIB), still hovers around 94.9, 3.1 points below the 42-year average of 98 and more than 10 points below its all-time highs of around 105.

Figure 1: Small Business Optimism Index



Source: “Small Business Economic Trends,” NFIB, October 2016, <http://www.nfib.com/surveys/small-business-economic-trends/>. Note: Data is seasonally adjusted and is based on 1986=100.

The picture is increasingly clear that the U.S. economy faces less visible but more fundamental challenges that are holding back growth and job creation right now. These have been bubbling under the surface for decades—a series of underlying structural challenges that are undermining our ability to compete successfully in the global economy while also supporting high and rising living standards for the average American.²

Federal fiscal policy was expansionary in 2009 and 2010, and helped bring the U.S. economy back from the brink of another depression. However, more recently, federal fiscal policy has turned restrictive as Washington became focused on a rancorous debate about deficit reduction and the proper size of government. On the positive side, the federal deficit in fiscal year 2015 was 2.5 percent of GDP, down from

² Porter, Michael E., Jan W. Rivkin and Mihir A. Desai with Manjari Raman. “Problems Unsolved and a Nation Divided.” Harvard Business School. September 2016. <http://www.hbs.edu/competitiveness/Documents/problems-unsolved-and-a-nation-divided.pdf>

9.8 percent in 2009 – the most rapid deficit reduction since World War II.^{3,4} But, it is important context that even a 0.2 percentage point increase in the expected annual GDP growth would eliminate the long-run budget gap.⁵

We cannot cut our way to growth. To drive our economic competitiveness and grow our economy, the focus must turn to micro-economic strategies that help a critical part of our economy, small businesses and entrepreneurs, grow their business and create jobs.

Small Businesses Are Core to America's Long-Term Competitiveness and Job Creation

Small businesses have to be at the center of this microeconomic competitiveness strategy because they are America's job creators. The facts are that small firms employ approximately half of the private sector workforce—about 62 million people. Since 1995, small employers have created about 60 percent of all net new jobs. Small businesses are also instrumental to our innovation economy; small firms produce 16 times more patents per employee than larger firms and employ more than 40 percent of high technology workers in America.⁶

Moreover, small firms are core to America's middle class and part of the fabric of Main Streets across our country. Even though we cannot say for certain the extent to which new businesses generate middle class jobs, we do know that company founders come from the middle class themselves. According to a Kauffman Foundation study, 72 percent of entrepreneurs surveyed come from self-described middle class backgrounds, and another 22 percent reported being from “upper lower class” backgrounds.⁷ Immigrants also over-index in owning small businesses in this country and small business ownership is a major path to the American dream.⁸

Without question, both large and small businesses felt the sting of job losses during the crisis, but small firms were hit harder, and took longer to recover. Providing access and opportunity for small businesses to get the credit they need to grow is a key to strong labor market conditions and a critical component of overall U.S. growth and prosperity.

The State of Bank Lending to Small Businesses and the Focus of This Paper

³ Dunsmuir, Lindsay. “The US budget deficit to 2.5% of GDP, the lowest level since 2007.” Reuters. 2015. <http://www.businessinsider.com/r-us-fiscal-year-budget-deficit-narrows-to-439-billion-2015-10>

⁴ “Joint Statement of Jacob J. Lew, Secretary Of The Treasury, and Shaun Donovan, Director Of The Office Of Management And Budget, On Budget Results For Fiscal Year 2015,” U.S. Department of the Treasury, 2015. <https://www.treasury.gov/press-center/press-releases/Pages/jl0213.aspx>

⁵ Summers, Larry. “The Battle Over the U.S. Budget is the Wrong Fight.” Financial Times. October 13, 2013. <https://www.ft.com/content/71d7439c-31a2-11e3-817c-00144feab7de>

⁶ “Frequently Asked Questions.” Small Business Administration. March 2014. https://www.sba.gov/sites/default/files/advocacy/FAQ_March_2014_0.pdf

⁷ The Kauffman Foundation and LegalZoom. 2014. “Who Started New Businesses in 2013?” Ewing Marion Kauffman Foundation. Retrieved from: http://www.kauffman.org/~media/kauffman_org/research%20reports%20and%20covers/2014/01/who_started_new_business_in_2013.pdf

⁸ “Index of Entrepreneurial Activity: 1996-2011.” Kauffman Foundation. March 2012. http://www.kauffman.org/~media/kauffman_org/research%20reports%20and%20covers/2012/03/kiea_2012_report.pdf



In July 2014, we released our first Harvard Business School Working Paper, “The State of Small Business Lending: Access to Credit During the Recovery and How Technology May Change the Game.”⁹

This paper focused on whether there was, at that time in the recovery, a gap in small business lending. Banks were saying that there was a lack of demand, that they could not find enough qualified borrowers. At the same time, small business owners described going from bank to bank and, despite being creditworthy, being unable to get a loan.

What was the reality? Our paper found that a gap in access to credit did exist, and that it was concentrated in small dollar loans—under \$250,000, and particularly in loans under \$50,000. This finding was particularly troubling given the fact that these are the size of loans that most small businesses want.¹⁰ However, in early 2014 a new set of players was quickly emerging. Entrepreneurs had identified this gap in small business lending, and were using technology to change the game. Our paper described the early companies, such as OnDeck, Lending Club and Funding Circle, who had begun to deliver rapid credit decisions using new data sources and analytic tools, and were funding small loans in a matter of days.

In the two years since our last paper, the online loan market for small business has exploded. Today, there are hundreds of entrants, many venture backed, competing in a variety of market segments from invoice financing to merchant cash advances. These are embedded in an even more vibrant fintech sector, where technology and new approaches are being applied to consumer lending, student loans, online banking, and other financial services at a rapid rate.

In addition, the regulators have become more active in examining the online small business lending market and in showing an interest in providing a regulatory structure for the new players. Early in the emergence of the online lending marketplaces, regulatory agencies took a “wait-and-see” attitude. This was understandable given that the new players actually operate in a gray area where no current U.S. regulator has explicit jurisdiction. Since early 2015, however, the regulatory community has begun to take notice. Active exploration was initiated by the Federal Reserve (FED), the Office of the Comptroller of the Currency (OCC), the newly formed Consumer Financial Protection Bureau (CFPB), and the Department of the Treasury.

Thus, we return in this paper to reexamine the current state of small business lending with particular attention to the burgeoning new online lending market, and to provide a set of guidelines for a viable regulatory approach. The first chapter of the paper, “The State of the Small Business Economy,” revisits our earlier work and describes the importance of small firms to job creation in the United States and the current condition of small businesses in the aftermath of the recession. The second chapter, “The Gap in Small Business Access to Credit,” details the current data on lending to small businesses, the gap in small dollar loans, and the impediments for banks to improve their participation in this market segment.

The third and fourth chapters describe the new market segment of online lending to small business. In these sections, we first attempt to categorize the new ecosystem that has evolved and describe

⁹ Mills, Karen G., 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 No. 15-004, July 2014. <http://www.hbs.edu/faculty/Pages/item.aspx?num=47695>

¹⁰ “Fall 2013 Small Business Credit Survey”, Federal Reserve (New York), September 2013. <https://www.newyorkfed.org/medialibrary/interactives/fall2013/fall2013/files/full-report.pdf>

how innovation and technology has, and may in the future change the small business lending market permanently. Banking – from the perspective of a small business borrower – has not changed significantly over the past 50 or even 100 years. The new entrants are clearly disruptors from a Clay Christensen point of view, providing a significantly better customer experience- at least in terms of the rapidity of the response and ease of use.¹¹ Yet, are these new offerings really good for the small business owners? We will explore the importance of product/ customer fit and how the winners and losers in the online lending market may well be determined by their ability to help small business owners find the loan that is right for them at the time when it is right for them. We will also explore the power of incumbents and articulate the value of their assets, particularly their access to customers and those customers' data, and to low cost capital. Using a novel approach, we define framework for existing bankers and other incumbents to consider different types of strategic decisions in order to compete in this new environment, including different levels of partnerships, or independent investments in new technology.

The final two sections of this working paper ask the question, what kind of regulatory activity is appropriate for this emerging market? The current U.S. regulatory environment can be described as a “spaghetti soup,” with multiple laws and regulatory agencies having potential, but often overlapping, authorities. A major purpose of this White Paper is to codify some principles and recommendations that can drive activity by regulatory agencies and industry groups over the next several years. The emergence of the new entrants in online lending has the potential to have tremendous positive impact on small businesses. We know that capital is critical to their success and that there are structural impediments for existing players to fill the gap in access to small dollar loans. The innovation of entrepreneurs in this space has created new opportunity, but has also led to the appearance of potential “bad actors” who might take advantage of either small business borrowers, investors, or both. An effective regulatory framework that keeps the environment safe, but does not stifle innovation, will be a critical step to a successful outcome for small business, and for the U.S. economy.

¹¹ Bower, Joseph L., and Clayton M. Christensen. “Disruptive Technologies: Catching The Wave.” *Harvard Business Review* 73.1 (1995): 43-53. <https://hbr.org/1995/01/disruptive-technologies-catching-the-wave>

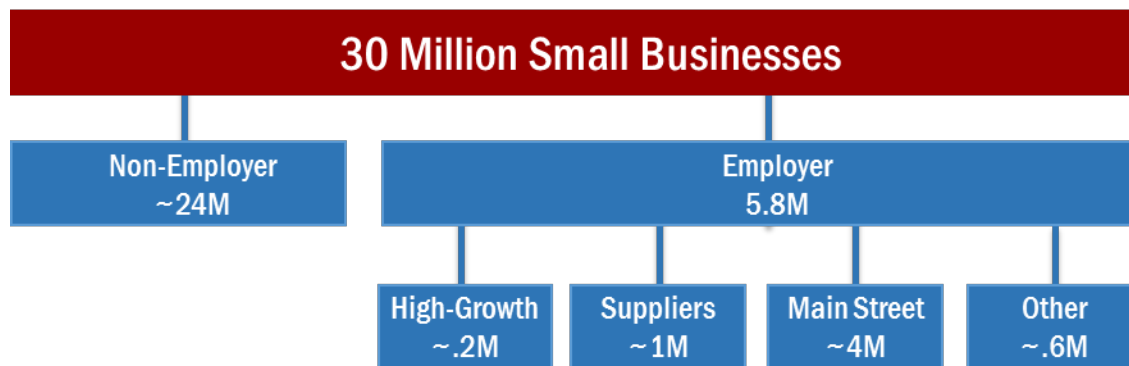
CHAPTER 1

THE STATE OF THE SMALL BUSINESS ECONOMY: PRESSURES CONTINUE

Any business with fewer than 500 employees is generally defined as a small business, an overall definition that has been adopted by the U.S. Census Bureau, the Bureau of Labor Statistics (BLS), the Federal Reserve (Fed), and the Small Business Administration (SBA). There are about 30 million small businesses in America, representing more than 99 percent of all American companies. But the reality is that not all small businesses are created equal. Most small businesses in the America are non-employer firms. The rest can be broken down into Main Street, supplier, and high-growth businesses.¹² While policymakers have often focused on high-growth and Main Street firms, new research led by Mercedes Delgado reveals the importance of supplier firms to the U.S. economy, particularly for employment and wage growth.¹³

Figure 2: Types of Small Businesses

Small Businesses by Number of Employees in U.S. (Millions)



Source: Author's analysis and data from the U.S. Census Bureau.

Note: This analysis is based on the work of Mercedes Delgado and Karen G. Mills, "A New Categorization of the U.S. Economy: The Role of Supply Chain Industries in Performance," presented at the Industry Studies Association, Minneapolis, MN, May 2016. <http://www.hbs.edu/faculty/Pages/item.aspx?num=51675>

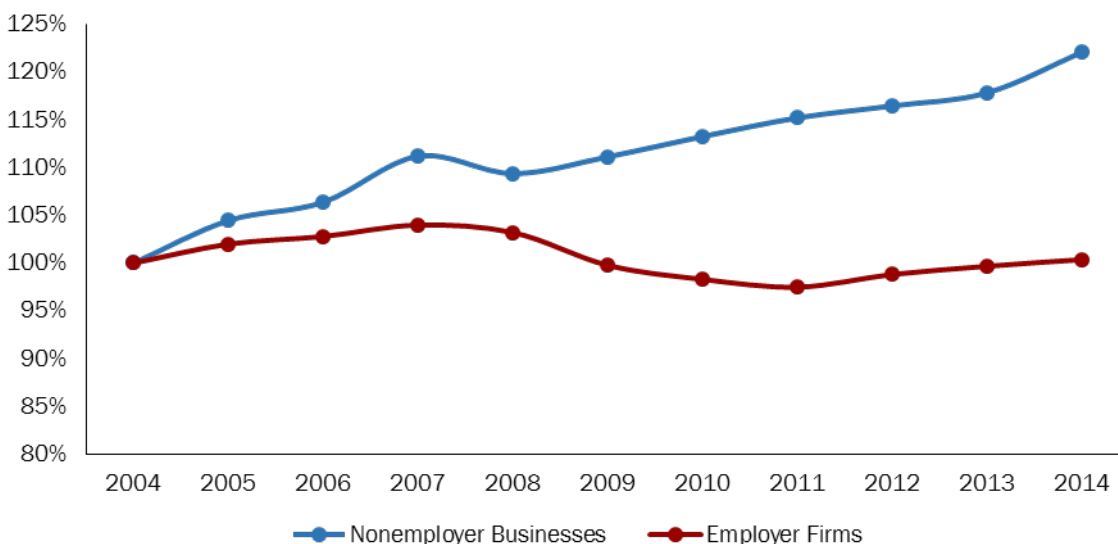
There are four distinct types of small businesses. The vast majority of America's small businesses are sole proprietorships, reflecting an array of professions from consultants and IT specialists to painters and roofers.

¹² Mills, Karen. "The 4 Types of Small Businesses, and Why Each One Matters." *Harvard Business Review*. April 2015. <https://hbr.org/2015/04/the-4-types-of-small-businesses-and-why-each-one-matters>

¹³ Delgado, Mercedes and Karen G. Mills. "A New Categorization of the U.S. Economy: The Role of Supply Chain Industries in Performance." Presented at the Industry Studies Association, Minneapolis, MN. May 2016. <http://www.hbs.edu/faculty/Pages/item.aspx?num=51675>

Non-Employer Firms. Recent research shows that the sole proprietorships are achieving record profit margins—and the number of these businesses will continue to grow as technology allows more geographic flexibility and baby boomers look to open their own firms.^{14,15,16}

Figure 3: Non-Employer Businesses Continue to Grow
 Growth Rates of Non-Employer and Employer Firms (2004-2014, Indexed to 2004)



Note: Author’s calculations of U.S. Census Bureau Business Dynamics Statistics data.

Main Street Firms. Analysis of Census Bureau data shows that there are about 5.8 million employer establishments with fewer than 500 employees. The vast majority of these establishments are modest in size, with more than one-half of them employing fewer than five employees and nearly an additional one-third employing between five and 19 employees. In fact, of the 5.8 million active employer businesses, it is estimated that about 4 million are “Main Street” or “mom-and-pop” small businesses. These are the dry cleaners, mechanics and medical clinics that form the fabric of our communities. Many of these businesses exist largely to support a family and are not principally focused on expansion. While these businesses have high churn rates—opening and closing frequently—and contribute less to net job creation than high growth businesses, they are critical to America’s middle class.

High-Growth Firms. Of the remaining small businesses, a small portion—an estimated 200,000 firms—consists of start-ups and high-growth firms who punch above their weight when it comes to job creation. While identifying high-growth firms ex ante remains difficult, recent research by Scott Stern and Jorge Guzman provides useful mechanisms for measuring entrepreneurial quality. Using new data gleaned from state business registries, Stern and Guzman were able to differentiate high-growth firms from local

¹⁴ Federal Reserve, “Report to Congress on the Availability of Credit to Small Businesses,” September 2012. <https://www.federalreserve.gov/publications/other-reports/files/sbfreport2012.pdf>

¹⁵ “Measuring the Gig Economy: Inside the New Paradigm of Contingent Work.” Staffing Industry Analysts. September 2016. https://www2.staffingindustry.com/content/download/227603/8575907/MeasuringGigEconomy_1609.pdf

¹⁶ Hathaway, Ian and Mark Muro. “Tracking the Gig Economy: New Numbers.” Brookings. October 2016. <https://www.brookings.edu/research/tracking-the-gig-economy-new-numbers/>

Main Street businesses at inception. For example, they found that firms with names that include words typically associated with high-tech clusters are 92 percent more likely to grow than firms without these words. They also found that patenting and having jurisdiction in Delaware (where corporate law is beneficial to small firms with intent to grow) each increase the probability of growth by 25 times.¹⁷ In addition, a study by economist Zoltan Acs in 2008 found that only about 3 percent of all businesses can be classified as high-growth businesses or “gazelles”, but they are responsible for 20 percent of gross job creation.¹⁸ Even after they become large, these high-growth firms have a disproportionate effect on the U.S. economy.

Supporting high-growth firms requires different policy actions than those aimed at helping Main Street or supplier firms, and those now participating as sole practitioners, often in the new “gig” economy. All are important to the economy and to sustaining and growing the middle class in this country. Thus, understanding the trajectories and health of each of these kinds of small businesses is critical for policymakers who are trying to create the conditions for U.S. economic growth.

Supply Chain Firms. Lastly, there are an estimated 1 million small businesses that are part of commercial and government supply chains. These businesses are often focused on growth, domestically or through exports, and operate with a higher level of management sophistication than Main Street firms. New research on industry categorization is able to separate and identify Supply Chain and Business-to-Consumer industries for the first time.¹⁹ This work also reveals the importance of suppliers to the U.S. economy, showing that supply chain industries have high growth in employment and wages, particularly in traded sectors. For example, average annual wages in traded supply chain service industries in 2013 were \$81,134 compared to \$47,664 for the total economy.²⁰ By layering previous categorizations onto these new supply chain categorizations, this research is better able to segment and identify the small businesses that are critical to wage and employment growth. A robust network of small suppliers is also important to the long-term competitiveness of large U.S. corporations. As Harvard Business School’s Michael Porter and Jan Rivkin have noted, strong supply chains bring “low logistical costs, rapid problem solving and easier joint innovation.”²¹ A dynamic U.S. supply chain can also be a determining factor when companies are considering moving production back to the United States or using particular regions of the country as export hubs.

This segmentation is important because each type of firm approaches their business in a different way, and each of the businesses has different capital needs.²² This is not surprising. It is logical that the financing needs would vary greatly for a “mom-and-pop” Main Street shop, a high-tech startup or gazelle, or a medium-sized business that is a supplier to a Fortune 500 corporation. But, regardless of business size or orientation, credit is critical to the ability of most small businesses to purchase new equipment or new

¹⁷ Stern, Scott and Jorge Guzman, “Where is Silicon Valley?” *Science* Vol. 347, No. 6222 (2015): 606-609.

¹⁸ Acs, Zoltan J., and Pamela Mueller. 2008. “Employment effects of business dynamics: Mice, Gazelles and Elephants.” *Small Business Economics*, 30(1): pp. 85-100.

¹⁹ Delgado, Mercedes, and Karen G. Mills. “A New Categorization of the U.S. Economy: The Role of Supply Chain Industries in Performance.” Paper presented at the Industry Studies Association, Minneapolis, MN. May 2016. <http://www.hbs.edu/faculty/Pages/item.aspx?num=51675>

²⁰ Delgado, Mercedes, and Karen G. Mills. “A New Categorization of the U.S. Economy: The Role of Supply Chain Industries in Performance.” Paper presented at the Industry Studies Association, Minneapolis, MN. May 2016. <http://www.hbs.edu/faculty/Pages/item.aspx?num=51675>

²¹ Porter, Michael and Jan Rivkin. “What Businesses Should Do to Restore U.S. Competitiveness.” *Fortune Magazine*. October 15, 2012. <http://fortune.com/2012/10/15/what-business-should-do-to-restore-competitiveness/>

²² Mills, Karen. “The 4 Types of Small Businesses, and Why Each One Matters.” *Harvard Business Review* (April 2015), <https://hbr.org/2015/04/the-4-types-of-small-businesses-and-why-each-one-matters>.



properties, expand their workforce, and fund their day-to-day operations. Some small businesses are seeking lines of credit to fund working capital as they grow or take a large order. Others are looking for long term debt to finance the purchase of a building or equipment or even an acquisition. For many early-stage or fast-growing businesses, equity capital is required to provide a strong financial foundation for the firm's future plans.

As Bill Kerr and Ramana Nanda of Harvard Business School have pointed out, the type of small business owner being examined is critical when evaluating empirical studies on financing constraints. In fact, oftentimes studies within the academic literature have produced conflicting results because they are looking at different types of small business owners—including start-ups, Main Street small businesses, and medium-sized suppliers—which operate in different credit markets and, as a result, face different types of constraints.²³

This paper focuses on access to bank capital, which is used by many of the small businesses and entrepreneurs described above, but is particularly critical for Main Street small businesses.

Small Businesses Hit Harder in Recession, Slower to Recover

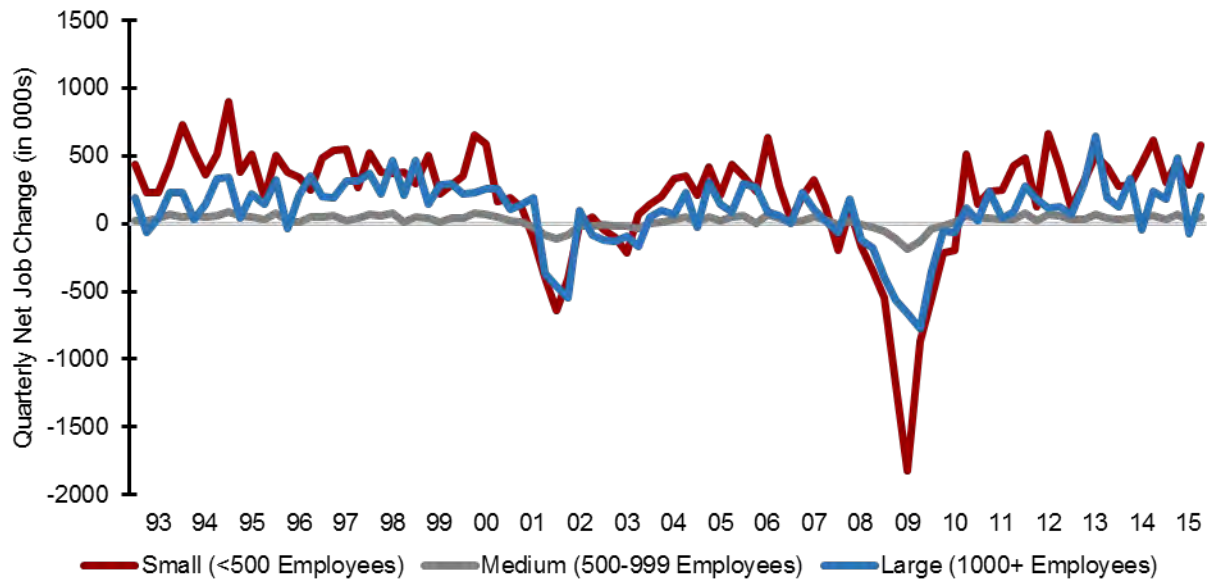
The recent economic downturn saw an unprecedented deterioration in labor market conditions. From the December 2007 start of the recession to December 2009, nonfarm payroll employment declined by about 8.7 million, a drop in levels unmatched in the entire postwar period. But, looking closer one sees that the recession's effect has not been uniform across firm size. Without question, both large and small businesses felt the sting of job losses during the crisis, but small firms were hit harder, took longer to recover, and may, even now, still be feeling the effects of the economic fallout from the last recession.

Between 2007 and 2012, the small business share of total net job losses was about 60 percent. From the employment peak immediately before the recession through March 2009 – the recession low point for private nonfarm employment – jobs at small businesses declined about 11 percent, while payrolls at businesses with 500 or more employees shrank about 7 percent, according to the Business Employment Dynamics (BED) database from the Bureau of Labor Statistics. This disparity was even more significant among the smallest of small businesses. Employment declined 14.1 percent in establishments with fewer than 50 employees, compared with 9.5 percent in businesses with 50 to 500 employees, while overall employment decreased 8.4 percent.

²³ Kerr, Bill and Ramana Nanda. "Financing Constraints and Entrepreneurship." Harvard Business School Working Paper No. 10-013. 2009. <http://www.nber.org/papers/w15498.pdf>

Figure 4: Small Firms Hit Harder in Crisis, Representing 60 Percent of Job Losses

Net Job Gains or Job Losses by Firm Size ('000 Jobs)



Source: Bureau of Labor Statistics, *Business Employment Dynamics*.

This is consistent with the economic literature that tells us small businesses are always hit harder during financial crises because they are more dependent on bank capital to fund their growth. The condition of credit markets act as a “financial accelerator” for small firms; they feel the swings up and down more acutely due to their reliance on the free flow of bank credit. One of the most influential papers to underscore this point was Gertler and Gilchrist’s 1994 study of the behavior of small and large manufacturing firms during six periods of contractionary monetary policy (in 1966, 1968, 1974, 1978, 1979, and 1988).²⁴ Their empirical analysis indicates that tight money or credit affects small and large firms differently: short-term debt at small businesses declines while short-term debt at large firms rises. Sales and inventories of small firms also decline more than that of large firms during periods of tight credit.

More recent studies have expanded upon this point. For example, Kroszner, Laeven, and Klingebiel used cross-country evidence to show that banking crises negatively affect bank-dependent firms, such as small businesses, more than they affect firms less dependent on bank finance.²⁵ Duygan-Bump, Levkov, and Montoriol-Garriga used data from the Current Population Survey, Compustat, and the National Survey of Small Business Finances and found that, as in previous recessions involving banking crises, following the crisis of 2007–09, the likelihood of becoming unemployed was greater in sectors that were more dependent on external finance, particularly bank credit. This was because, absent adequate

²⁴ Gertler, Mark and Simon Gilchrist. “Monetary Policy, Business Cycles, and the Behavior of Small Manufacturing Firms.” *The Quarterly Journal of Economics* Vol. 109, No. 2. May 1994.

²⁵ Klingebiel, Daniela, Randall S. Kroszner and Luc Laeven. “Banking Crises, Financial Dependence and Growth.” *Journal of Financial Economics* Vol. 84, No. 1. 2007.

capital to fund operations, these businesses were forced to pull back.²⁶ Furthermore, among firms dependent on banks for financing, this negative effect on employment was felt more deeply among small and medium firms, in part because of the cost associated with switching lenders when their pre-crisis lender faced financial hardship.^{27,28}

Worrisome Decline in New Startup Rate Threatens Economy

Despite the political gridlock in Washington, the importance of American entrepreneurship continues to be one of the few issues on which there is bipartisan agreement. The ability to start a business has long been part of America's national character and consciousness, and has been fundamental to the American Dream. However, there is now a consensus among mainstream economists that the rate of small business startups has been declining for a few decades, with a pronounced acceleration in this decline after 2000. In addition, as previously discussed, the recession hit small businesses particularly hard. Despite the uptick in employment and a record number of months of continuous overall job growth, the rate of startup formation has yet to recover.²⁹

Both the absolute number of startups and new firms as a percent of total firms in the economy (the startup rate) are on the decline. While the drop in the startup rate had begun prior to the recession, there has been a dramatic drop off over the past few years in startups as a proportion of all employer firms. Firms less than one year old now comprise only 8 percent of the total universe of U.S. employer firms versus 17 percent in 1977.

²⁶ Burcu Duygan-Bump, Alexey Levkov, and Judit Montoriol-Garriga. "Financing Constraints and Unemployment: Evidence from the Great Recession." *Federal Reserve Bank of Boston Working Paper No. QAU10-6*. December 2011. <https://www.bostonfed.org/publications/risk-and-policy-analysis/2010/financing-constraints-and-unemployment-evidence-from-the-great-recession.aspx>

²⁷ Chodorow-Reich, Gabriel. "The Employment Effects of Credit Market Disruptions: Firm-level Evidence from the 2008–9 Financial Crisis," *Quarterly Journal of Economics*, 2014. 129 (1), 1–59.

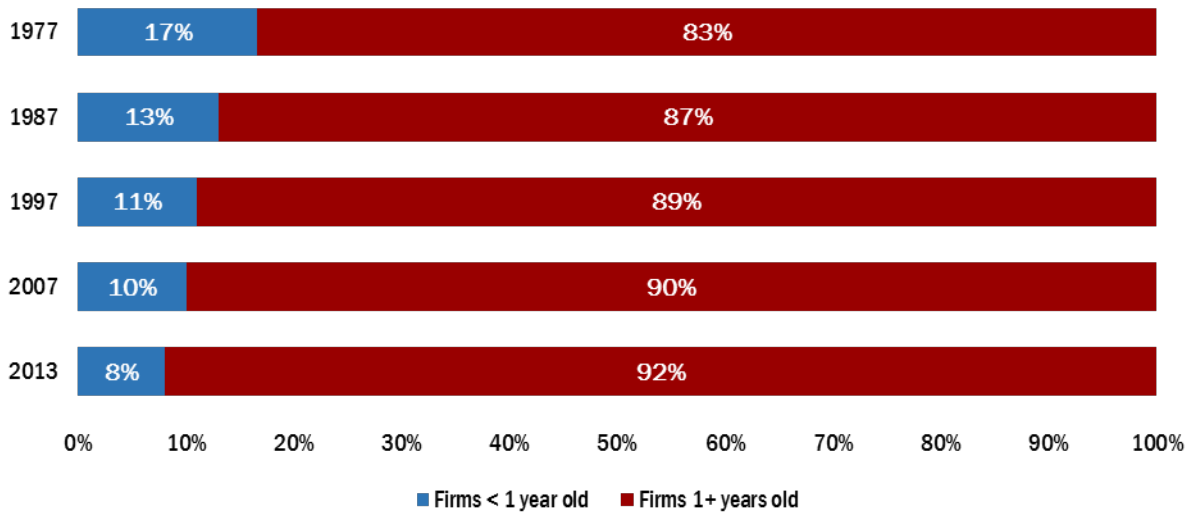
²⁸ Greenstone, Michael, Alexandre Mas, and Hoai-Luu Nguyen. "Do credit market shocks affect the real economy? Quasi-experimental evidence from the Great Recession and normaleconomic times." 2014. <http://economics.mit.edu/files/10237>

²⁹ Perez, Tom. "Indicators of a Strong, Balanced Recovery," U.S. Department of Labor Blog (August 2016), <https://blog.dol.gov/2016/08/05/indicators-of-a-strong-balanced-recovery/>



Figure 5: New Firms as a Share of Total Firms Declining Since 1977

Composition of Universe of Employer Firms: Firms <1 and Firms 1+ Years Old (Select Years)



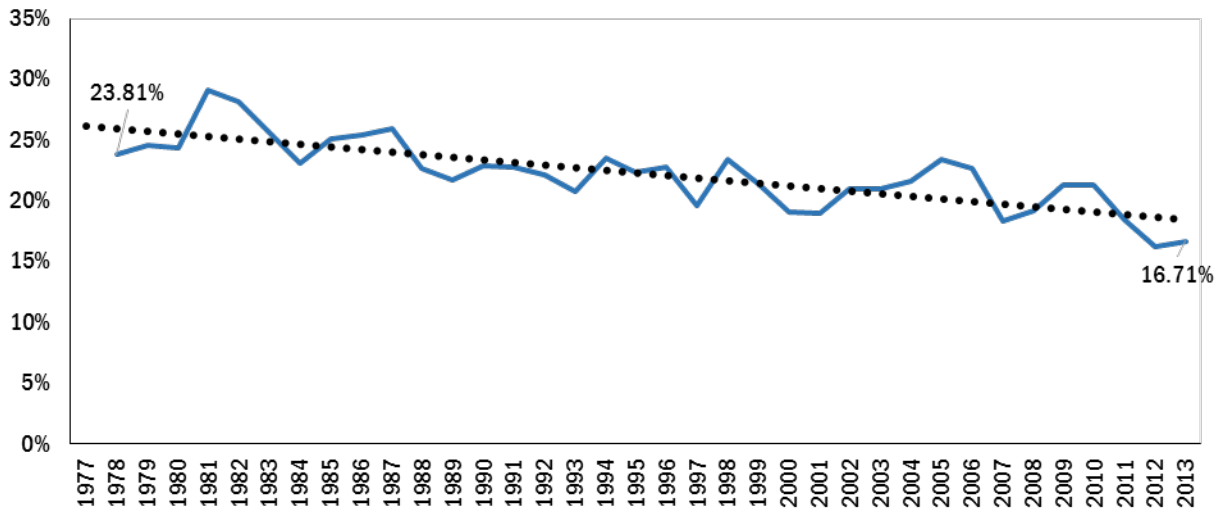
Source: Bureau of Labor Statistics, *Business Employment Dynamics*.

This trend is worrisome for several reasons. Research by John Haltiwanger and a number of other economists has shown that new and young firms are the principal sources of net job creation in the United States.^{30,31} However, the slowdown in the rate of new firm formation means that they are not generating the same number of jobs as before. The number of jobs generated by new firms declined as a percentage of all new jobs from 24 percent in 1977 to 17 percent in 2013.

³⁰ Haltiwanger, Jon, Ron S. Jarmin, and Javier Miranda. "Who Creates Jobs? Small Versus Large Versus Young." *The Review of Economics and Statistics* Vol. 95 No. 2. 2013.

³¹ Wiens, Jason and Chris Jackson. "The Importance of Young Firms for Economic Growth." *Ewing Marion Kauffman Foundation Entrepreneurship Policy Digest*. September 2015. <http://www.kauffman.org/what-we-do/resources/entrepreneurship-policy-digest/the-importance-of-young-firms-for-economic-growth>

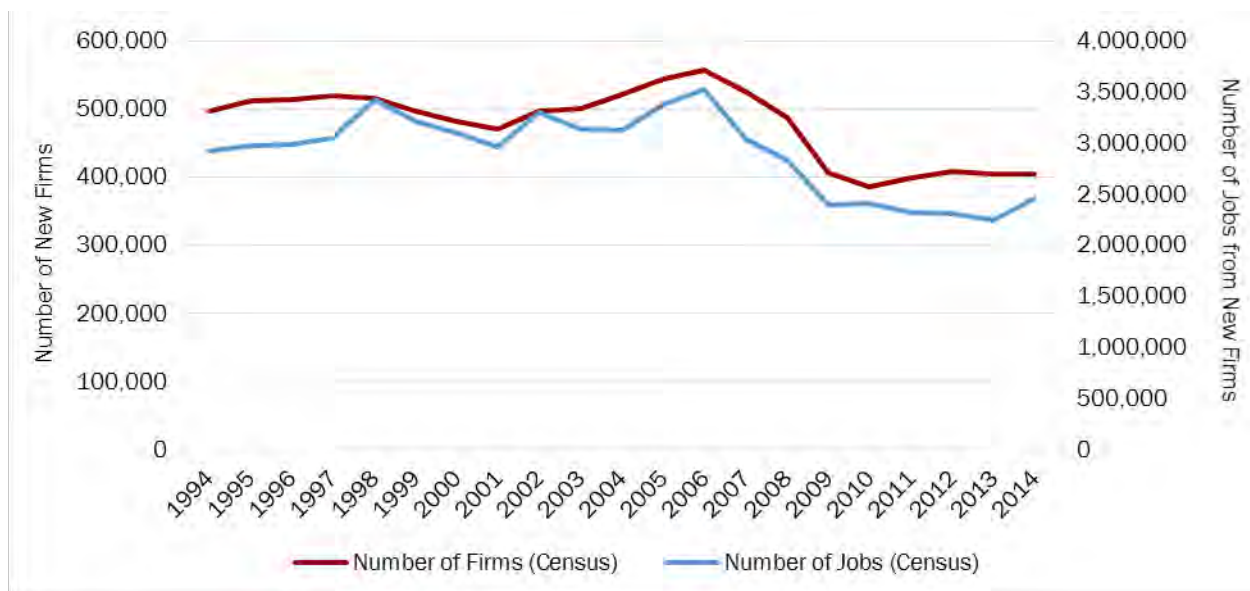
Figure 6: New Firms are Contributing Less to the U.S. Economy
 New Jobs from Firms <1 Year Old as a Percentage of All New Jobs (1977-2013)



Source: Bureau of Labor Statistics, Business Employment Dynamics.

Not surprising given these trends, actual job creation from new firms has been in secular decline since the mid-1990s. And the absolute number of new start-ups declined sharply in the Great Recession, from over 500,000 new firms per year in 2007 to under 400,000 in 2010. Despite some recovery, both the number of new firms and the employment generated by those firms remain well below pre-recession levels.

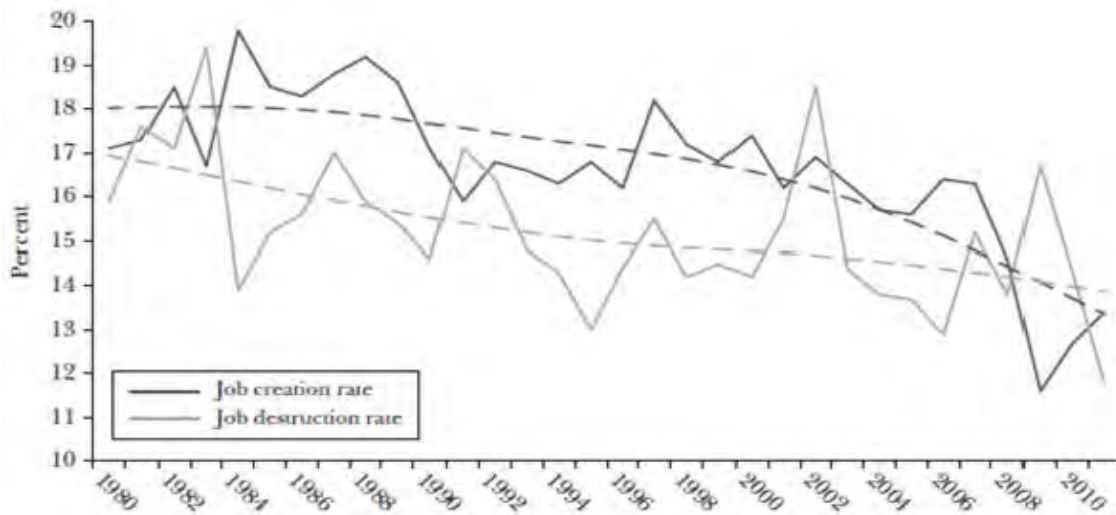
Figure 7: Decline in New Firms and New Firm Employment
 Annual Number of Firms and Jobs Created by Firms <1 Year Old (1994-2014)



Source: Bureau of Labor Statistics, Business Employment Dynamics.

An even more worrisome aspect of this trend is the overall reduction in dynamism in the U.S. economy, which results in part from this decline in entrepreneurial activity. For a period of over 30 years, we have seen a reduction in both job creation and job destruction. From the time of Schumpeter and even before, it has been understood that economic dynamism is part of a healthy process, with new ideas and energy replacing old ones, leading to increased productivity and the betterment of society.³² In fact, American entrepreneurship has been the envy of other countries as it has embodied the ability of this country to capture the benefits of new technologies and opportunities.

Figure 8: Decline in Economic Dynamism
 U.S. Annual Job Creation and Destruction Rates (1980-2011)



Source: Decker et al., “The Role of Entrepreneurship in U.S. Job Creation and Economic Dynamism,” *Journal of Economic Perspectives* 28(3), 2014.

Although there are multiple forces at work in the decline in job creation and destruction, the decline in the rate of new startups is clearly one of the forces at play. Paradoxically, this decline in entrepreneurship appears to be in direct opposition to the stories we often hear about the number and success of technology startups in Silicon Valley. The explanation stems from the earlier description of the four types of small business: only fewer than 200,000 small businesses fall into the high-growth category most associated with the recent boom in technology-driven companies. The majority of the decline is likely then occurring in the largest segment of employer firms, which we have called Main Street firms.

Despite the interesting ongoing research in this area, there is no clear explanation for the secular decline in startups in the United States.^{33,34} It is possible that the decline is simply a result of a smaller labor

³² Schumpeter, Joseph. “Creative Destruction.” *Capitalism, Socialism and Democracy*. 1942.

³³ Decker, Ryan, John Haltiwanger, Ron S Jarmin, and Javier Miranda. “The Secular Decline in Business Dynamism in the U.S.” *University of Maryland Working Paper*. June 2014. http://econweb.umd.edu/~haltiwanger/DHJM_6_2_2014.pdf

³⁴ Decker, Ryan, John Haltiwanger, Ron Jarmin, and Javier Miranda. “The role of entrepreneurship in US job creation and economic dynamism.” *The Journal of Economic Perspectives* 28(3). 2014: 3-24.

force. As baby boomers retire, there may just be fewer working-age people to start small businesses.³⁵ Researchers have also suggested that it is more difficult to start a small business due to the proliferation of big box firms. A number of factors favoring big firms – including easier access to capital and more seamless integration with global supply chains – might mean that Wal-Mart is replacing the local “mom-and-pop” grocery store.³⁶ Finally, rising levels of student debt have also likely contributed to the decline in new startups, as would-be entrepreneurs with high levels of student debt are unwilling to bear the risk of starting a business.^{37,38}

What is clear is that the continued health of the U.S. economy is at risk from the decline in startups and the decrease in dynamism. Small and new businesses face increasing pressures, even in the post-recovery period, as they struggle to get the resources they need to succeed. Access to capital is one of these critical resources. The remainder of this paper focuses on ensuring that credit is available to small businesses in ways that support their long-term health, and the related positive outlook for the U.S. economy.

³⁵ Karahan, Faith, Benjamin Pugsley, and Aysegül Sahin. “Understanding the 30-year Decline in the Startup Rate: a General Equilibrium Approach.” May 2015. http://www.iza.org/conference_files/EntreRes2015/pugsley_b22364.pdf

³⁶ Foster, Lucia, John Haltiwanger and C.J. Krizan. “Aggregate Productivity Growth: Lessons from Microeconomic Evidence” *The Review of Economics and Statistics* 88-4. 2006.

³⁷ Mills, Karen. “Being an entrepreneur: a right only for America’s well-connected?” *Fortune*. September 2015. <http://fortune.com/2015/09/17/amazon-jeff-bezos-facebook-mark-zuckerberg-fedex-fred-smith-successful-entrepreneurs/>.

³⁸ Reedy, E.J. and Arnobio Morelix (Kauffman Foundation). “Student Debt and the Millennial Entrepreneurship Paradox,” *Forbes* (September 2014), <http://www.forbes.com/sites/kauffman/2014/09/15/student-debt-and-the-millennial-entrepreneurship-paradox/#70bcf7c52f70>.

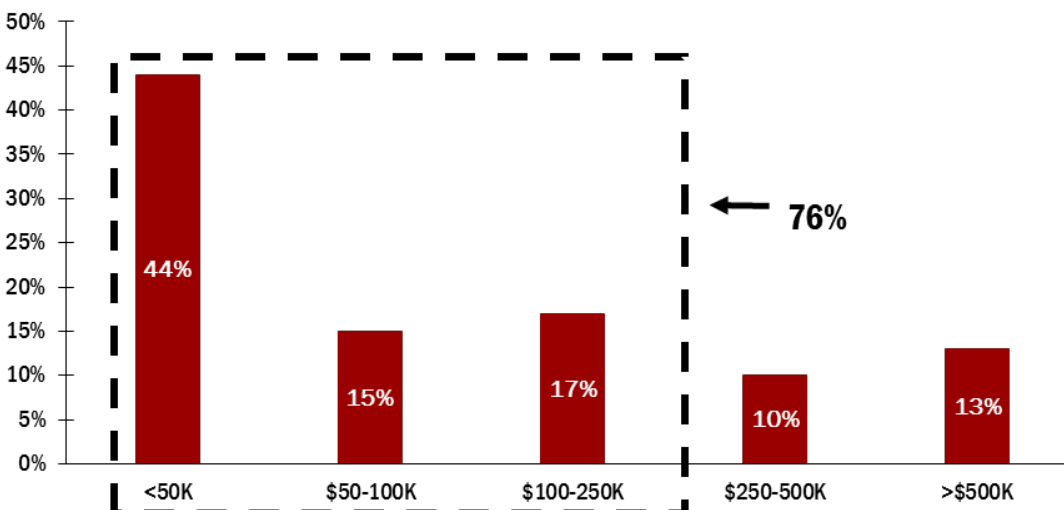
CHAPTER 2

THE GAP IN SMALL BUSINESS CREDIT: SMALL DOLLAR LOANS

Small businesses rely on credit to grow and contribute to job creation and the U.S. economy. Most small businesses, particularly the large number of Main Street businesses, have traditionally relied on banks and to a lesser extent, credit unions, as their primary source of operating and expansion capital. The Great Recession was particularly damaging to small businesses because it was a credit-driven crisis, with many banks freezing their lending and even pulling credit lines. Subsequently, the recovery was slow and bumpy for small businesses in part because of the slow recovery of banks. A great debate emerged as to whether there was a persistent gap in access to credit for small businesses. In 2013-2014, bank leaders were often quoted as saying that they were giving loans to all of the creditworthy borrowers they could find, while at the same time small businesses were going from bank to bank saying that they could not get a loan.³⁹

Our 2014 HBS White Paper explored this contradiction in depth and came to an important insight: the gap in access to credit did exist – in small dollar loans.⁴⁰ Overall, small dollar loans are generally defined as those under \$250,000, with the largest gaps coming in loans under \$50,000. Importantly, these are the size loans that most small businesses are seeking.⁴¹

Figure 9: Small Businesses Want Small Dollar Loans
Percentage of Applications from Small Businesses by Loan Size



Source: "Fall 2013 Small Business Credit Survey," Federal Reserve of New York, September 2013.

³⁹ "Jamie Dimon Dishes on Small Business Lending, Regulatory Issues." *Houston Business Journal*. February 27, 2013. <http://www.bizjournals.com/houston/blog/money-makers/2013/02/dimon-dishes-on-small-business.html>

⁴⁰ Mills, Karen G., 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 No. 15-004*, July 2014. <http://www.hbs.edu/faculty/Pages/item.aspx?num=47695>

⁴¹ "Joint Small Business Credit Survey Report, 2014." *Federal Reserve*. February 2015. <https://www.newyorkfed.org/medialibrary/media/smallbusiness/SBCS-2014-Report.pdf>

Despite continuing improvement in credit markets, traditional lending has not closed the gap in small dollar lending. This section will describe the continued reliance of small businesses, particularly the smaller Main Street firms, on bank loans as a prime source of capital, and outline the current state of the bank credit markets for small business loans.

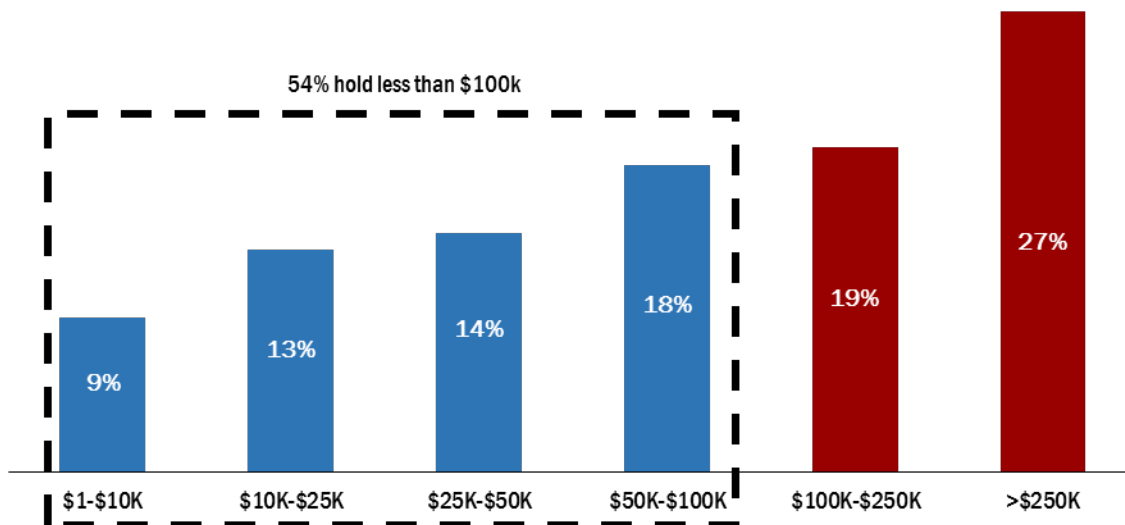
Bank Credit is Key to America's Small Businesses

Bank credit is a vital lifeline for small businesses, and often ranks as high in importance as equity from the business owner or friends and family. Unlike larger, established corporations, small businesses lack access to public institutional debt and equity capital markets. Moreover, the vicissitudes of small business profits makes retained earnings a necessarily less stable source of capital, so they become more dependent on bank credit.

Sixty-three percent of employer firms have some outstanding debt. However, most small firms hold total debt of less the \$100,000.

Figure 10: Fifty Four Percent of Small Firms Hold Under \$100K in Debt

Amount of Outstanding Debt Among Employer Firms with Debt



Source: "2015 Small Business Credit Survey," Federal Reserve, March 2016.

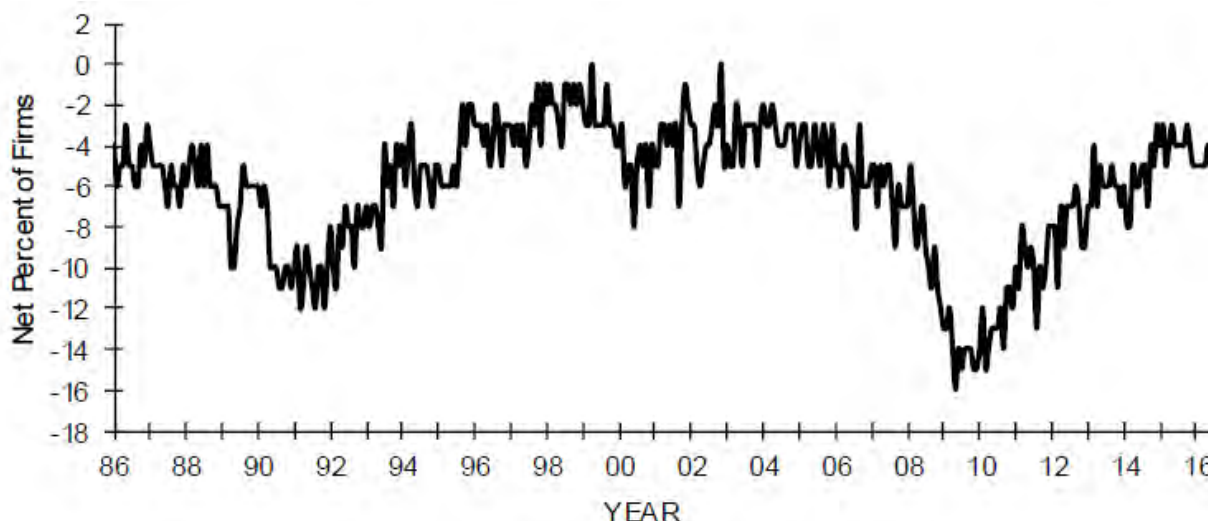
Currently, the demand for financing is rising as firms recover from the Great Recession and begin to fund expansion plans. However, there is some confusion as to the actual number of firms who are applying for credit in the United States each year. According to the 2015 Federal Reserve Small Business Credit Survey, almost half of employer firms reported applying for financing in 2015, up from just 22

percent in 2014.^{42,43} In the 2015 Bank of America Small Business owner survey, 35 percent of small business owners said they planned to apply for credit in the next 12 months, up from 24 percent in 2014, and 21 percent in 2013.⁴⁴

However, other recent surveys show that as few as 12 percent of businesses under \$10 million in revenues will seek financing in the next 12 months.⁴⁵ The broad range of estimates from surveys underlines the need for more comprehensive annual data on small business credit. Both the Federal Reserve, through increasingly comprehensive multi-region surveys, and the CFPB through the implementation of Dodd-Frank section 1071, are the likely entities to develop this critical data.

Clearly, however, small businesses are increasingly active in seeking credit over the last 12 months. This is related to the fact that according to the NFIB, credit conditions as perceived by small business owners have improved, almost to prerecession levels.

Figure 11: Small Business Credit Conditions
Loan Availability Compared to Three Months Ago (1986-2016)



Source: “Small Business Economic Trends,” NFIB, June 2016, <http://www.nfib.com/surveys/small-business-economic-trends/>. Note: Data is for the population borrowing at least once every three months.

In addition, more firms have been finding success in their search for loans, with 62 percent of firms reporting that they had received all or most of their requested financing in 2015. This is up from 51 percent

⁴² “2015 Small Business Credit Survey.” Federal Reserve Banks of New York, Atlanta, Cleveland, Philadelphia, St. Louis, Boston, and Richmond. March 2016. <https://www.newyorkfed.org/medialibrary/media/smallbusiness/2015/Report-SBCS-2015.pdf>

⁴³ “Joint Small Business Credit Survey Report, 2014.” Federal Reserve Banks of New York, Atlanta, Cleveland and Philadelphia. Updated February 2015. <https://www.newyorkfed.org/medialibrary/media/smallbusiness/SBCS-2014-Report.pdf>; Note: The Fed data from 2014 is for all firms, and asks about applications during the first half of 2014. The data from 2015 is only for employer firms, and asks about applications from 3Q14 through 3Q15.

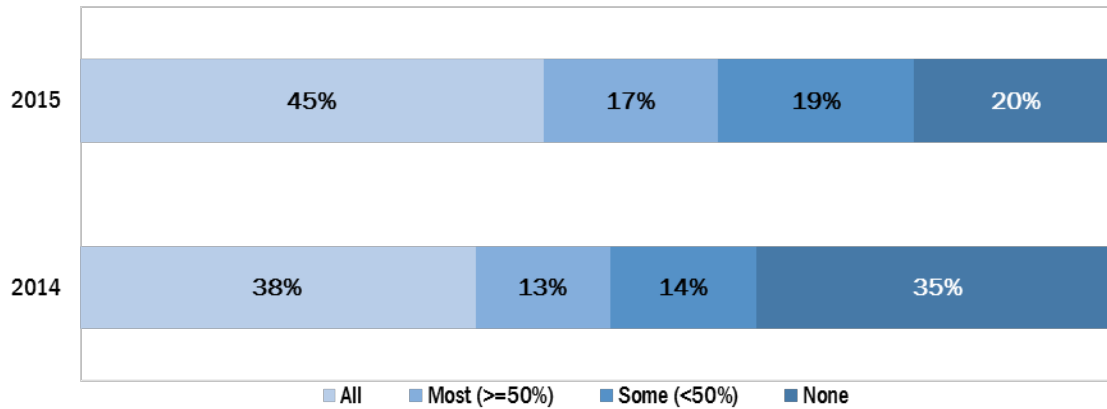
⁴⁴ “Bank of America Small Business Owner Report.” Bank of America. Fall 2015. http://newsroom.bankofamerica.com/files/press_kit/additional/Small_Business_Owner_Report_-_Fall_2015.pdf

⁴⁵ Benton, Ian and Jacob Jegher. “Build, Buy, or Partner and Beyond: How Alternative Lending is Reshaping Small Business Banking.” Javelin Advisory Services. May 2016. <https://www.javelinstrategy.com/coverage-area/%E2%80%98build-buy-or-partner%E2%80%99-and-beyond>

a year earlier.⁴⁶ It should be noted that even in the strongest credit markets, many small businesses receive none or less than 50 percent of the amounts requested. This could be because of the lack of creditworthiness of these borrowers or because of the absence of a lender willing to take on these higher-risk loans.

Figure 12: Less Than 50% of Firms Receive Full Amount Requested

Amount of Financing Approved (% of Applicants)



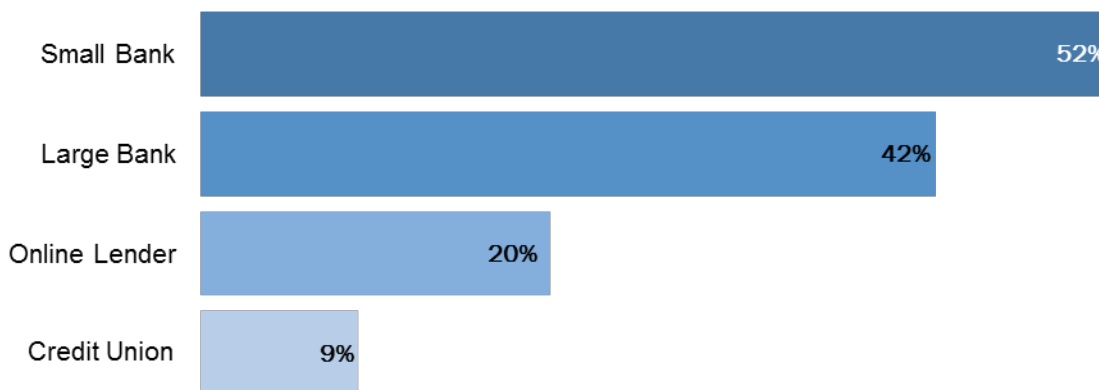
Source: “2015 Small Business Credit Survey,” Federal Reserve, March 2016.

Small Banks Play a Critical Role in Small Business Lending

Where are firms getting these loans? While online lenders have begun competing for these loans, the vast majority of loans still come from banks. Small banks are a key source of loans, with 52 percent of firms applying to small banks compared to 42 percent who are seeking financing from large banks. According to a recent Fed survey, online lenders are serving 20 percent of small firms who applied, a remarkable penetration in a very short time.

⁴⁶ “2015 Small Business Credit Survey.” Federal Reserve Banks of New York, Atlanta, Boston, Cleveland, Philadelphia, Richmond, and St. Louis. March 2016. <https://www.newyorkfed.org/medialibrary/media/smallbusiness/2015/Report-SBCS-2015.pdf>

Figure 13: 20% of Applicants Apply to Online Lenders
Credit Sources Applied To (% of Loan/Line of Credit Applicants)



Source: “2015 Small Business Credit Survey,” Federal Reserve, March 2016.

In addition, small banks are much more likely than large banks to approve loans to small businesses. Small banks have traditionally formed relationships with their small business customers, and thus have been more willing and more able to gather the information necessary to successfully underwrite these loans.

Figure 14: Loan Approval Rate by Bank Size

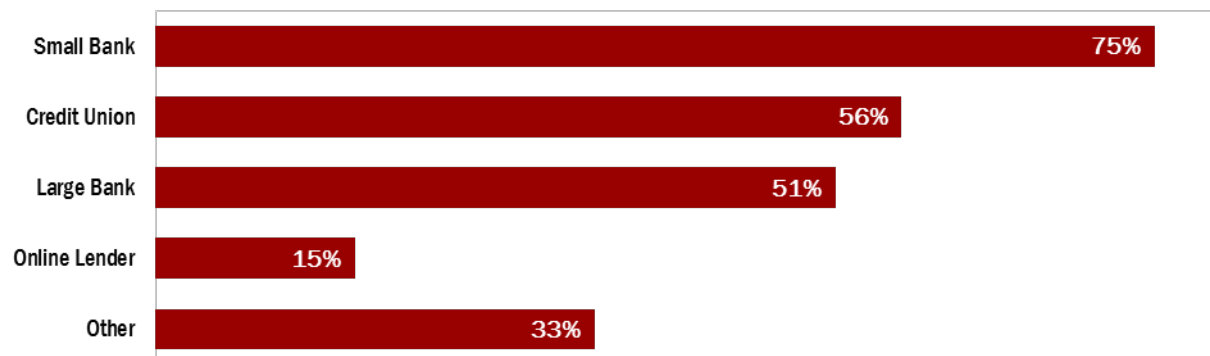
Source	Approval Rate
Large Bank	58%
Small Bank	76%

Source: “2015 Small Business Credit Survey,” Federal Reserve, March 2016.

Not surprisingly, small banks therefore have the highest satisfaction ratings, with an extraordinary lender satisfaction score of 75 percent.⁴⁷ By contrast, large banks have a satisfaction score of 51 percent and credit unions have a score of 56 percent. This underscores the importance of the lending relationship and its value to small business owners. Online lenders have low satisfaction in part due to high costs. Replicating the value of the lending relationship in creating a good customer/ product fit between the borrower and the loan they take out is currently a critical challenge for the new online entrants.

⁴⁷ This refers to the share of borrowers satisfied minus the share dissatisfied.

Figure 15: Borrower Satisfaction by Institution Type
 Lender Satisfaction Score (Percent Satisfied Minus Percent Dissatisfied)



Source: “2015 Small Business Credit Survey,” Federal Reserve, March 2016.

Data Constraints in Measuring the Credit Gap

We do not have the complete and conclusive data necessary to answer all of the questions surrounding gaps in credit access for small business. As described above, there are conflicting surveys on the percent of small businesses who are seeking loans each year. No data is collected annually on loan originations, and no systematic data collection focuses on the sources, costs, or successes of small business owners in obtaining these loans. The lack of national data on loan originations for small business is particularly troubling as there is no baseline data to determine if a small business credit squeeze is occurring in the economy. Finally, there is little demographic data on groups such as women and minority small business owners and their ability to access capital.

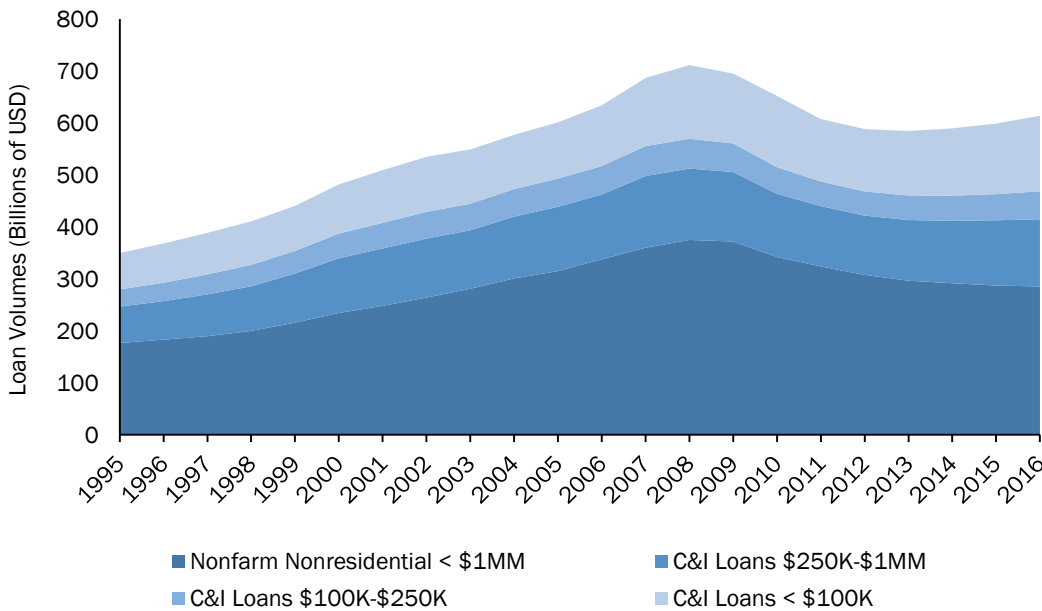
Due to these data constraints, two sources have traditionally served as the flagship indicators at the highest level of the availability or gaps in small business credit. One of the most frequently cited snapshots of small business credit markets is the Federal Deposit Insurance Corporation’s (FDIC) Call Report data. According to this data, commercial bank loans on the balance sheets of banks with principal less than or equal to \$1 million, which are often extended to small firms, declined from 2008 through 2013 and are still down almost 14 percent from their 2008 peak.⁴⁸

⁴⁸ It is important to outline some caveats on what this data is and what it is not. First, data from FDIC Call Reports is available only for the size of the loan and not for the size of the business, so small business loans are defined as business loans under \$1 million. This can be problematic when a range of larger businesses are paying down their larger loans, and the outstanding value of those loans falls below the \$1 million threshold, as they will be counted in error as small business loans. Second, this data does not measure the flow of credit to small businesses, but rather just what small business owners are actually using: for example, if a bank provides a small business with a line of credit totaling \$50,000, but a small business only draws down half of that amount, Call Report data will simply report a net credit gain of \$25,000. Third, the data only includes small business loans on the balance sheets of banks, so any small business loans, particularly SBA’s 7(a) loan products, which have been securitized and moved off the balance sheets of FDIC-insured banks, will not be counted. Lastly, this data includes debt that small businesses are drawing down from business credit cards, not just term loans or revolving lines of credit.

This is an imperfect indicator, as these loans could be small loans to larger businesses. It is also difficult to extrapolate the flows of small business loans from the balance sheet levels.

Figure 16: U.S. Lending Volumes Down Almost 14% Since 2008

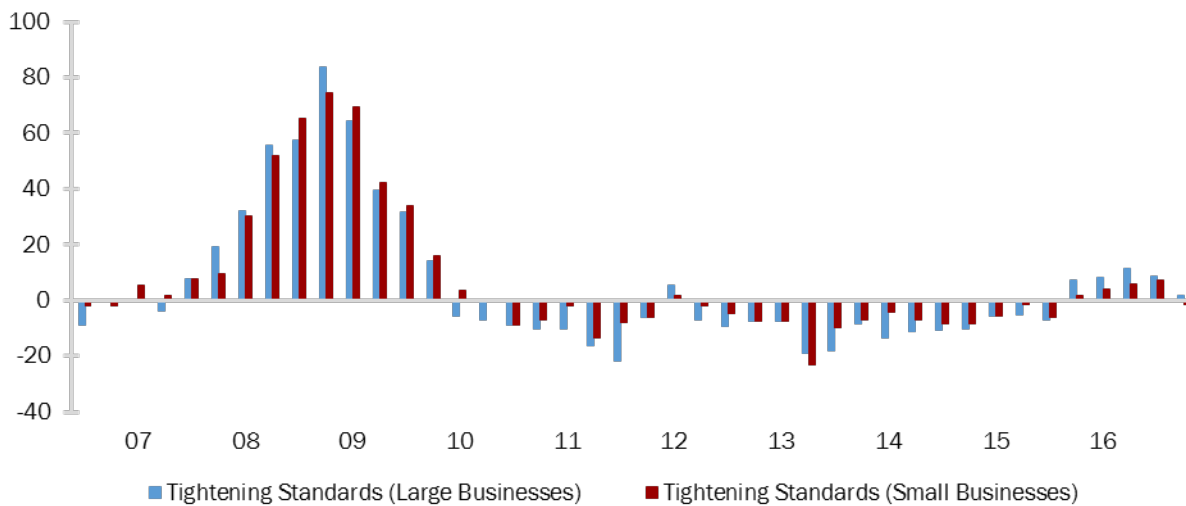
Commercial and Industrial (C&I) and Nonfarm Nonresidential Loans Under \$1 Million (1995-2016)



Source: Federal Deposit Insurance Corporation, Call Report Data. As of 2Q16.

The second measure of small business credit availability is the Federal Reserve’s quarterly Senior Loan Officer Survey (SLOS). For 13 straight quarters, from 1Q07 to 1Q10, senior loan officers reported tightening of standards, and for eight of those quarters the percentage of bankers tightening standards was in the high double-digits. In the years following the Great Recession, there has been a slow but consistent loosening of credit standards for small businesses, with the net percentage of bankers reporting that they loosened standards at either flat or positive territory through the third quarter of 2015. But, this trend saw a surprising reversal for four out of five quarters recently, with the first tightening indicated since the first quarter of 2012. It should be noted that this loan officer survey is imperfect, as it reflects the views of only 84 loan officers.

Figure 17: Banks Showed Slow Credit Loosening and a Recent Reversal
 Quarterly Percentage of Bankers Reporting Net Tightening or Loosening of Loan Conditions



Source: “Senior Loan Officer Opinion Survey on Bank Lending Practices,” Federal Reserve, *Net Tightening or Loosening of Financial Conditions for Small Businesses*.

A more precise measure of the credit gap for small business would require a more complete understanding of credit demand and an accurate measure of the actual level of loan originations. In particular, such a study would need to identify credit-constrained borrowers, specifically creditworthy borrowers who did not apply for a loan fearing denial of their application and firms who were unable to acquire the full amount of credit for which they applied. In addition, loan originations and denials would be key metrics required for the analysis. Unfortunately, this data does not currently exist.

The most comprehensive source for information about small business finances was the Federal Reserve’s Survey of Small Business Finances (SSBF), which was discontinued in 2007. However, as part of recent financial reform legislation, the gap in small business credit data was recognized and a specific provision was included to allow for more credible monitoring for small business access to bank credit. Section 1071 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank) amended the Equal Opportunity Act to entrust CFPB with requiring banks to collect and maintain certain data in connection with credit applications made by small businesses and women- or minority-owned businesses. These requirements are detailed in the later section of this paper that describes CFPB’s role in the current U.S. regulatory structure.

There is no set deadline for CFPB to implement this ruling, though CFPB initially noted that it will act “expeditiously” to develop these rules in recognition that Section 1071 is important to gain a broader understanding of the credit needs of small businesses.⁴⁹ There have already been concerns from banks, particularly regional and community banks, about the costs and paperwork required. However, the utility

⁴⁹ Consumer Financial Protection Bureau. Letter to Chief Executive Officers of Financial Institutions Under Section 1071 of the Dodd-Frank Act. April 11, 2011. <http://files.consumerfinance.gov/f/2011/04/GC-letter-re-1071.pdf>; In April 2011, CFPB issued guidance indicating that it would not enforce Section 1071 until it issued regulations on the collection of this data. Since then, the development of regulations to implement Section 1071 appeared as a “long-term action” item in the CFPB’s semiannual rulemaking agendas issued in January and July 2013, but was not mentioned in its most recent semiannual rulemaking agenda issued in December 2013.

of this information is widely recognized and, when the regulations are finalized and the data is collected, this is likely to become the seminal data set on small business credit conditions.

Cyclical Impediments to Small Business Lending

Our 2014 paper focused extensively on the cyclical barriers to small business lending that resulted from the banking crisis in the Great Recession. In 2009, the situation was quite dire for small businesses as credit markets essentially shut down for small businesses due to their dependence on banks for credit. Banks were hard hit in 2009-2010, with many facing large losses of capital due to exposure to bad mortgage and other loans. Remaining capital was required by bank examiners for reserves and this squeezed out capital available for small business loans.

At the height of the crisis, the markets for securitization even of government-secured SBA loans dried up and created a completely frozen market for small business lending in the winter of 2008-2009. Small businesses, even those in good standing, were having credit lines pulled by banks who could not afford to extend the credit due to their sudden capital constraints. The Obama Administration, and in particular the SBA, took a number of bold actions in the first quarters of 2009 that had a significant impact on unlocking these markets and making credit available. The most dramatic of these was raising the loan guarantee rate to 90 percent on the SBA's flagship 7a program and eliminating fees. This had the effect of bringing more than 1,000 banks back to SBA lending that had not made a loan since 2007, and paved the way for three record years of SBA-backed lending.

Other policy initiatives included 18 tax credits and the Quick Pay program, which paid small business contractors in 15 days, down from the previous standard of 30 days.^{50,51} These policy efforts hold many lessons for driving effective and low-cost aid to small businesses in severely credit constrained environments. The details of these policy initiatives and the results in the small business lending market are described in Appendix A.

Over the next five years, the small business lending market improved slowly, such that by the time of the 2015 surveys, many of the cyclical issues described in our last paper had receded in terms of their impact. A major remaining issue, however, is the continuing impact of regulatory costs, particularly on small and community banks.

Regulatory Overhang

While banks adjust lending standards for a number of reasons, there is some evidence that heightened scrutiny by regulators had an impact on them during and after the Great Recession. Banks have repeatedly expressed concerns about the lack of transparency and consistency of their regulatory oversight, both at the federal and state level. A number of federal regulators have broad regulatory authority over U.S. banks: the Federal Reserve (Fed), the Federal Deposit Insurance Corporation (FDIC), the Office of the

⁵⁰ Zients, Jeff. "Getting Money to Small Businesses Faster." *The White House Blog*. September 14, 2011.

<https://www.whitehouse.gov/blog/2011/09/14/getting-money-small-businesses-faster>.

⁵¹ Jacob J. Lew to Heads of Executive Departments and Agencies. September 14, 2011. *Executive Office of the President, Office of Management and Budget. Accelerating Payments to Small Businesses for Goods and Services.*

<https://www.whitehouse.gov/sites/default/files/omb/memoranda/2011/m11-32.pdf>

Comptroller of the Currency (OCC), and the Consumer Financial Protection Bureau (CFPB). Often in recent years, banks have expressed concern about the overlapping activities of regulators and conflicting guidance in their examinations. This has reportedly had a dampening effect on the willingness of banks to take risk on uncertain small business applications.

Recent research has attempted to quantify the impact of tighter supervisory standards on total bank lending. For example, increased regulation brings greater costs for banks, often with community and regional banks hit hardest. In a paper released in May 2013, economists from the Federal Reserve Bank of Minneapolis quantified the costs of increased regulation on community banks, modeling the impact of new regulatory costs as the hiring of additional staff, resulting in higher total compensation and lower profitability. The analysis found that a bank's return on assets is reduced from the addition of new regulatory officers, falling about four basis points for banks with \$500 million to \$1 billion in assets, but falling by almost 30 basis points for banks with less than \$50 million in assets.⁵²

A 2012 study by Federal Reserve economists found an elevated level of supervisory stringency during the most recent recession, based on an analysis of bank supervisory ratings. This research concludes that an increase in the level of stringency can have a statistically significant impact on total loans and loan capacity for several years—approximately 20 quarters—after the onset of the tighter supervisory standards.⁵³ This has led lawmakers and Fed Chair Janet Yellen to consider ways to mitigate the regulatory burden that small banks face, particularly given that many of these regulations were passed in order to reduce the systemic risk posed by large institutions.^{54,55} Some scholars have suggested a two-tiered system of regulation that protects the economy from speculative risks undertaken by big banks, while allowing small banks to remain viable lenders to small businesses.⁵⁶

Structural Impediments to Small Business Lending

The problems affecting small business lending are not just cyclical in character. There are deeper, more structural frictions at play that were there before the crisis, and remain growing problems today. The Federal Reserve Bank of Cleveland noted, "Small business lending has dropped substantially since the Great Recession. The factors unleashed by the financial crisis and Great Recession added to a longer-term trend. Banks have been shifting activity away from the small business credit market since the late 1990s, as they have consolidated and sought out more profitable sectors of the credit market."⁵⁷

⁵² Feldman, Ron, Ken Heinecke and Jason Schmidt. "Quantifying the Costs of Additional Regulation on Community Banks." *Federal Reserve Bank of Minneapolis*. May 30, 2013. <https://www.minneapolisfed.org/research/economic-policy-papers/quantifying-the-costs-of-additional-regulation-on-community-banks>

⁵³ Bassett, William, Seung Jung Lee and Thomas Spiller. "Estimating Change in Supervisory Standards and Their Economic Effects", *Federal Reserve Board*. August 24, 2012. <https://www.federalreserve.gov/pubs/feds/2012/201255/201255pap.pdf>

⁵⁴ Finkle, Victoria. "Lawmakers Urge Volcker Rule Clarification for Small Banks." *American Banker*. December 20, 2013.

⁵⁵ Borak, Donna. Yellen Stresses Importance of Tailored Rules for Small Banks." *American Banker*. May 2, 2014. http://www.americanbanker.com/issues/179_84/yellen-stresses-importance-of-tailored-rules-for-small-banks-1067240-1.html

⁵⁶ Wilmarth, Arthur. "Use Tiered Regulation to Preserve Small Banks, Keep Big Ones in Line." *American Banker*. April 6, 2015. <http://www.americanbanker.com/bankthink/use-tiered-regulation-to-protect-small-banks-keep-big-ones-in-line-1073578-1.html>

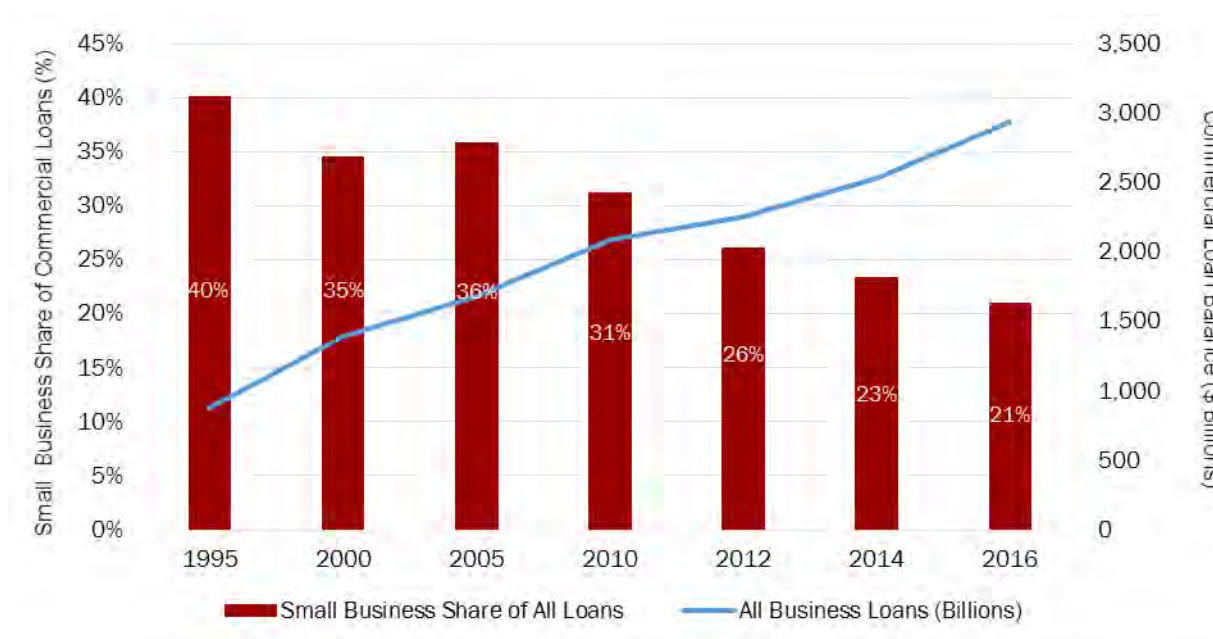
⁵⁷ "Why Small Business Lending Isn't What It Used to Be." *Federal Reserve Bank of Cleveland*. August 14, 2013. <https://www.clevelandfed.org/newsroom-and-events/publications/economic-commentary/2013-economic-commentaries/ec-201310-why-small-business-lending-isnt-what-it-used-to-be.aspx>



The remainder of this section explores the structural barriers to small business lending that were steadily brewing before the crisis, and may have been exacerbated since.

Recent declines in small business lending also reflect longer-term trends in financial markets. Banks have been exiting the small business loan market for over a decade. This realignment has led to a decline in the share of small business loans in banks' portfolios. Analysis of trends over the past decade underscores that small loans as a share of total loans on the balance sheets of banks have declined in nearly every year at least since the mid-1990s, even though the overall commercial loan balances of banks have continued to rise. The share of small business loans of total bank loans was about 40 percent in 1995, but only about 21 percent in 2016, a remarkable decline over a 20-year period.

Figure 18: Small Business Loans as a Share of Total Loans Are in Secular Decline
 Small Business Share of Loans at Banks (%) vs. Total Outstanding Commercial Loans (\$ Billions)



Source: Federal Deposit Insurance Corporation, Call Report Data. As of 2Q16. Note: This chart aggregates C&I and Nonfarm Nonresidential loans, using loans under \$1 million for the small business share. All data is from 2Q of the given year.

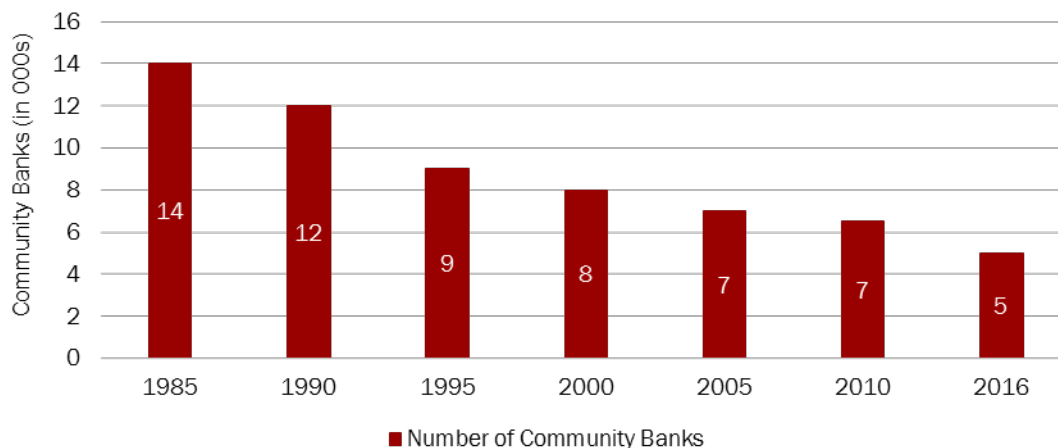
Longer-term Structural Barriers: Banking Consolidation. Another major secular trend that may be undermining small business credit access at traditional banking institutions is the decades-long consolidation in the U.S. banking sector. The number of banks and thrifts in the United States has been declining steadily for 25 years because of consolidation in the industry and deregulation in the 1990s that reduced barriers to interstate banking. There were 5,210 commercial banks last year, down from 14,507 banks in 1984.^{58,59} Accompanying this consolidation has been an increasing concentration of banking assets and loans within money centers and super regional banks. A recent report in the *American Banker*

⁵⁸ "Commercial Banks in the U.S." FRED Economic Data (St. Louis Fed). Updated August 17, 2016. <https://fred.stlouisfed.org/series/USNUM>
⁵⁹ Martin, Andrew. "In Hard Times, One New Bank (Double-Wide)." *New York Times*. August 2010. <http://www.nytimes.com/2010/08/29/business/29bank.html>

underscored this point using FDIC data, noting, “Banks with more than \$1 billion of assets increased total deposits by 6.7 percent over the last year, according to new data from the Federal Deposit Insurance Corp.

Meanwhile, depositories with less than \$100 million of assets saw their total deposits shrink by 8.7 percent between mid-2015 and mid-2016. Institutions with between \$100 million and \$1 billion of assets fared somewhat better than the smallest firms, but they still experienced a 2.6 percent decline in deposits.”⁶⁰

Figure 19: Community Banks Are Being Consolidated by Bigger Banks
Number of Community Banks versus Average Bank Assets (\$ Billions)



Source: Federal Deposit Insurance Corporation, *Community Banking Study* data.

The concentration of assets in ever-larger financial institutions is problematic for small business credit because large banks are less likely to make small loans.^{61,62} As previously noted, recent Federal Reserve data indicates that small businesses are far more satisfied with smaller banks and their loan approval rates are higher than large institutions.⁶³

Information Asymmetry. Research suggests that the structure of mega-banks and money centers is such that they have difficulties assessing risk in small business lending. Small business borrowers tend to be more “informationally opaque” than their larger counterparts and thus pose greater challenges for lenders.⁶⁴ For example, they lack as much publicly available, transparent information for lenders to review.

⁶⁰ Wack, Kevin. “Bigger Banks Are Gobbling Up a Larger Share of Deposits: FDIC.” October 3, 2016. http://www.americanbanker.com/news/consumer-finance/bigger-banks-are-gobbling-up-a-larger-share-of-deposits-fdic-1091749-1.html?utm_campaign=daily%20briefing-oct%204%202016&utm_medium=email&utm_source=newsletter&ET=americanbanker:e7783131:5059469a:&st=email&eid=94802d5a11b4e04329c2711cf44b2a77

⁶¹ Miller, Craig. “Small Banks’ Ranks Will Dwindle Without New Charters.” *American Banker*. March 20, 2012. <http://www.americanbanker.com/bankthink/small-banks-ranks-will-dwindle-without-new-charters-1047701-1.html>

⁶² *Ibid.*

⁶³ “2015 Small Business Credit Survey,” Federal Reserve Banks of New York, Atlanta, Cleveland, Philadelphia, St. Louis, Boston, and Richmond. March 2016. <https://www.newyorkfed.org/medialibrary/media/smallbusiness/2015/Report-SBCS-2015.pdf>

⁶⁴ Cole, Rebel A., Lawrence G. Goldberg, and Lawrence J. White. “Cookie Cutter vs. Character: The Micro Structure of Small Business Lending by Large and Small Banks.” *Journal of Financial and Quantitative Analysis* 39.02 (2004): 227-51.

Moreover, for many small businesses, gathering information about the firm's owner is just as important as gathering information about the firm itself.

Generally, large banks use standardized quantitative criteria to assess loan applications from small firms, whereas small banks favor qualitative criteria based on their loan officers' personal interactions with loan applicants. The differing approaches of large and community banks are confirmed by experience and in the economic literature.^{65,66,67} Williamson's theory of hierarchical control partly explains the operational differences between small and large banks with respect to lending.⁶⁸ As the size of an organization increases, it loses control between successive hierarchies and distortions may arise. Similarly, large banks typically have more branches that are more geographically dispersed than do smaller banks and, because of this, large banks need very explicit rules and underwriting guidelines to avoid distortions and to keep loan officers rowing in the same direction. As a result, large banks, especially those with greater than \$10 billion in assets, employ standard criteria, often an individual borrower's FICO score and data obtained from financial statements in the loan decision process—a "cookie-cutter approach." By contrast, small banks rely to a greater extent on information and relationship capital about the character of the borrower, a "character approach," which they use to put any numbers-based assessment of a borrowers' creditworthiness within a broader social context.

Studies by Petersen and Rajan (1994) and Berger and Udell (1995) have underscored that the informational opacity of small businesses has often given community banks an edge in small business lending, as local banks invest the time and personnel to build dense relationships with borrowers, which then makes it easier for them to assess a borrower's creditworthiness.^{69,70} Indeed, 73 percent of borrowers ask bankers or lenders for financing advice, making these sustained relationships all the more important.⁷¹ This is one reason, for example, that community banks may have lower margins, but approval rates for small business lending are significantly higher than those of large banks.⁷² Recent focus groups conducted by several Federal Reserve banks found that small business owners rely heavily on advice from their local bankers, particularly before taking on short term credit.⁷³

This difference in approach to lending has important repercussions for small business lending, and the decline in the number of community banks has meant that small businesses may be losing one of their most reliable sources of credit access.

⁶⁵ *Ibid.*

⁶⁶ Scott, Jonathan, and William Dunkelberg. "Bank Consolidation and Small Business Lending: A Small Firm Perspective." *Proceedings* (1991): 328-61.

⁶⁷ Uzzi, Brian, and James Gillespie. "What Small Firms Get Capital and at What Cost: Notes on the Role of Social Capital and Banking Networks." *Proceedings* (1999): 413-44.

⁶⁸ Williamson, Oliver E. "Hierarchical Control and Optimum Firm Size." *Journal of Political Economy*, Vol. 75, No. 2 (April 1967), pp. 123-138.

⁶⁹ Peterson, Mitchell A. and Raghuram G. Rajan. "The Effect of Credit Market Competition on Lending Relationships." Working Paper No. 4921. Cambridge, MA: National Bureau of Economic Research. 1994. <http://www.nber.org/papers/w4921.pdf>

⁷⁰ Berger, Allen and Gregory Udell. "Small Firms, Commercial Lines of Credit, and Collateral", *Journal of Business*, 351-382. 1995.

⁷¹ "2015 Small Business Credit Survey." Federal Reserve Banks of New York, Atlanta, Cleveland, Philadelphia, St. Louis, Boston, and Richmond. March 2016. <https://www.newyorkfed.org/medialibrary/media/smallbusiness/2015/Report-SBCS-2015.pdf>

⁷² "2015 Small Business Credit Survey." Federal Reserve Banks of New York, Atlanta, Cleveland, Philadelphia, St. Louis, Boston, and Richmond. March 2016. <https://www.newyorkfed.org/medialibrary/media/smallbusiness/2015/Report-SBCS-2015.pdf>

⁷³ Lipman, Barbara and Ann Marie Wiersch. "Alternative Lending Through the Eyes of "Mom & Pop" Small-Business Owners: Findings from Online Focus Groups." <https://www.clevelandfed.org/newsroom-and-events/publications/special-reports/sr-20150825-alternative-lending-through-the-eyes-of-mom-and-pop-small-business-owners.aspx>

Longer-term Structural Barriers: Search Costs. Historically, it has been difficult for even qualified borrowers to find willing lenders. Research from the Federal Reserve Bank of New York finds that small business borrowers often spend almost 25 hours of their time on paperwork for bank loans and approach multiple banks during the application process.⁷⁴ In the past, successful applicants for bank loans would wait weeks or, in some cases, a month or more for the funds to actually be approved and available. Some banks have even refused to lend to certain types and businesses within particular industries (for example, restaurants).

These frictions lead to high search costs, particularly in the current banking environment. In the past, local community lenders knew the potential borrowers on Main Street personally. And small businesses had ongoing relationships with these banks, reducing search costs and increasing the likelihood of success, often doing business on a “handshake.” The structural change in the banking market described earlier has reduced the number of community banks and increased the time, cost, and complexity of the search process to successfully obtain a small business loan. As we will see in the next section, online marketplaces and technology enhanced solutions provide an alternative to traditional banking due in no small part to more rapid and lower-cost search processes.

Longer-term Structural Barriers: Transaction Costs. The process of underwriting small business loans is often inherently inefficient. Moreover, the reality is that transaction costs associated with underwriting small loans are high, as processing a \$50,000 loan costs nearly as much as processing a \$1 million loan, but with less profit.

As Diamond underscored in the academic literature, lenders, at their core, are intermediaries that assess information about a borrower to allocate financial resources to their most productive ends.⁷⁵ Access to detailed, verifiable information about a borrower is therefore critical for lenders to assess creditworthiness and decide which borrowers to lend to and at which interest rates. Information about small business borrowers is particularly important because small business lending is an inherently riskier exercise than large business lending. For example, small businesses are much more sensitive to swings in the economy, have higher failure rates, and have fewer assets to put against or collateralize for loans.

This problem is often further confounded by the fact that the operating performance, financials, and growth trajectory of small businesses are generally opaque. Little, if any, public information exists about the performance of most small businesses because they rarely issue publicly-traded equity or debt securities. Many small businesses also lack detailed balance sheets, use sparse tax returns, and keep inadequate income statements. The informational opacity of small businesses further adds to the riskiness of small business lending, making it difficult for bankers to determine a creditworthy borrower from a non-creditworthy borrower.

Why Do Small Firms Seek Loan Capital?

⁷⁴ “Fall 2013 Small Business Credit Survey.” Federal Reserve Bank of New York. September 2013.
<https://www.newyorkfed.org/medialibrary/interactives/fall2013/fall2013/files/full-report.pdf>

⁷⁵ Diamond, Robert. “Financial Intermediation and Delegated Monitoring.” *The Review of Economic Studies*. 1983.

Small businesses seek loan capital for a wide variety of reasons. Most small businesses are using the proceeds of their loans generally to fund cash flow needs and grow operations. Other surveys also show that 20 percent of small business owners use the new funds to market their business or expand into a new product or service.⁷⁶

Figure 20: Small Businesses Use Loans to Grow Their Businesses
 Percentage of Total Small Businesses Surveyed

Use of Proceeds	Percent of Small Businesses
Expand Business/New Opportunity	61%
Operating Expenses	37%
Refinance	24%
Other	15%

Source: “2015 Small Business Credit Survey,” Federal Reserve, March 2016.

Note: These percentages add up to more than 100%, as many small businesses state more than one use for the loan proceeds.

Loan capital is used to start businesses in less than 20 percent of the cases. Instead, for start-up capital, most entrepreneurs rely on personal or family capital, or in some cases home equity loans. According to a recent Wall Street Journal analysis of U.S. Census data, more than 60% of firms less than two years old used personal or family savings to start their business.⁷⁷ Venture capital funds only a tiny percent of start-ups, those with very high-growth potential and the ability and willingness to attract high risk capital.

Most small businesses have bank relationships, particularly lines of credit to manage the uneven nature of their cash flows. The recent JP Morgan Chase Institute report “Cash is King: Flows, Balances and Buffer Days,” tracked the daily cash flows of over 600,000 businesses and found that cash inflows are very close to cash outflows, with little margin for error if inflows are delayed, and little room for large or lumpy outflows. In fact, the median small business holds only 27 cash days in reserve. Thus, small businesses are often seeking financing because they don’t have enough of a cash buffer in their business to handle the bumpy cash flow conditions they face.

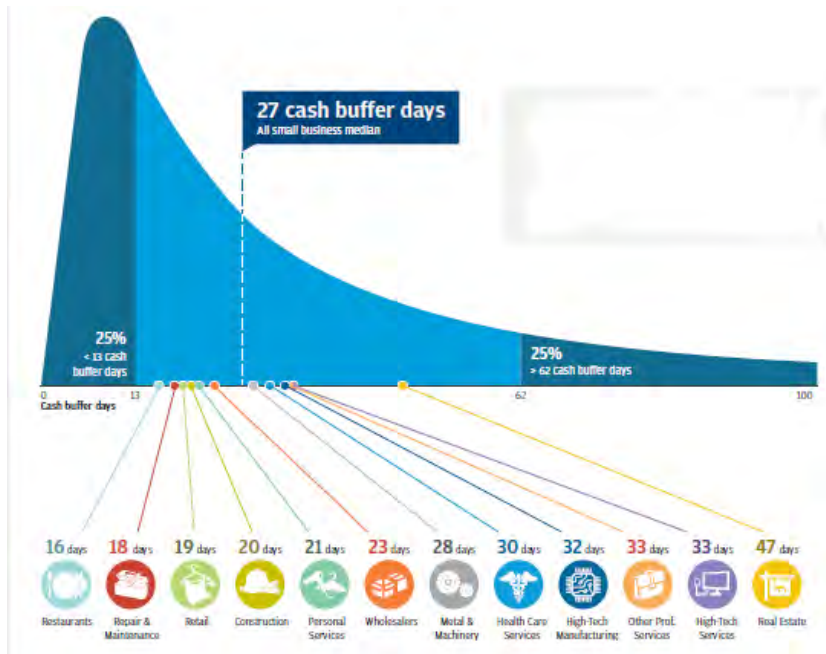
⁷⁶ “Bank of America Small Business Owner Report.” Bank of America. Fall 2015.

http://newsroom.bankofamerica.com/files/press_kit/additional/Small_Business_Owner_Report_-_Fall_2015.pdf

⁷⁷ Simon, Ruth and Paul Overberg. Funding Sources Shift for Startups. Wall Street Journal. Sept. 28, 2016.

<http://www.wsj.com/articles/funding-sources-shift-for-startups-1475095802?tesla=y>

Figure 21: The Median Small Business Holds 27 Cash Buffer Days in Reserve



Source: “Cash is King: Flows, Balances, and Buffer Days: Evidence from 600,000 Small Businesses,” JPMorgan Chase and Co. Institute, September 2016.

Small Businesses Use a Variety of Loan and Financing Products to Solve Their Capital Needs

Multiple kinds of loans have traditionally been available to small businesses. Merchant cash advances (MCAs) are a means of receiving quick cash in a crunch, primarily for businesses whose cash flow comes primarily from credit and debit card sales. They are also unsecured (and often are not technically loans), and are generally reclaimed from pledging a percentage of future sales receipts. Term loans are commercial loans with a fixed time period, generally used to finance equipment, real estate, or working capital. Receivables financing is a form of financing by which a small business sells or pledges its accounts receivable to a third-party and is paid a certain percentage of the invoices immediately, in exchange for the third-party assuming the risk of non-payment. This is also sometimes known as factoring. Other options for small business owners include business or personal credit cards, and bank lines of credit designed to balance out uneven cash flow patterns.

Small Business Administration (SBA) loans can be many of the above types, including term loans and lines of credit. They are granted by SBA-authorized lenders who receive a government guarantee for a portion of the loan as incentive to back a small business that would otherwise be deemed too much of a risk. The policy objective is to provide access to credit to small businesses who are good borrowers, but who, due to failures in the market, cannot otherwise get loans. The SBA guarantee program played a critical role in the 2009 credit crisis, supporting more than \$30 billion of annual loan volume that would not have otherwise been made during the recovery. (See Appendix A for a description of the SBA loan program and other government activity to support small business in the recovery.) SBA has a portfolio of nearly \$100 million of guarantees, and continues to support access and opportunity for small businesses who might not otherwise qualify for loans.

Figure 22: Multiple Small Business Loan Products Exist in the Marketplace That Meet Different Needs



Source: Fundera Inc., September 2016.

In general, the amount and duration of the loan should be designed to match the uses of the proceeds. Short-term loans are generally appropriate for seasonal businesses or holiday inventory purchases. Longer, multi-year term loans are designed to finance equipment or real estate purchases, assuming that the increased revenues from the added capacity will pay off the loan over time. Problems arise when the loan type or duration does not match the use of proceeds. A short-term loan used to finance a piece of equipment can come due before the business has realized the cash needed to pay it off—leading to a default. Thus, customer/product fit — being sure each small business gets the loan that is right for them — is critical to the success of both the lender and the borrower.

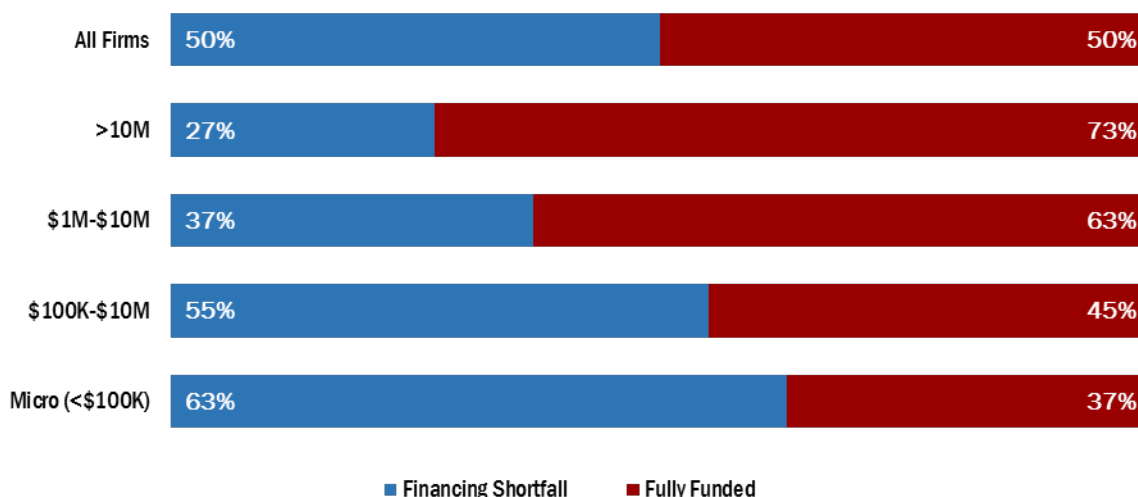
Access to credit is more difficult for smaller firms and those seeking smaller loans

The smallest of small firms are much more likely to feel credit constraints. This divergence in credit availability was confirmed by data in the 2015 Federal Reserve survey, where micro-firms -- those with revenues under \$100,000 -- were half as likely to receive the financing they requested than were firms with over \$10 million in revenues.⁷⁸

⁷⁸ “2015 Small Business Credit Survey.” Federal Reserve Banks of New York, Atlanta, Boston, Cleveland, Philadelphia, Richmond, and St. Louis. March 2016. <https://www.newyorkfed.org/medialibrary/media/smallbusiness/2015/Report-SBCS-2015.pdf>

Figure 23: Microbusinesses Have the Greatest Unmet Need

Percent of Loan Applicants Receiving Full Funding Versus Those Funded Partially or Not at All



Source: “2015 Small Business Credit Survey,” Federal Reserve, March 2016.

In addition, approval rates for the smallest firms, those under \$100,000 in revenue, were 70 percent for some financing, with only 37 percent receiving the full amount requested, versus the largest firms at 96 and 73 percent respectively. Interestingly, there is a direct correlation between firm size and approval rate for all size of firms surveyed. This result is not surprising given that smaller firms are more risky, more likely to fail, and often have fewer assets with which to collateralize the loan.

Figure 24: Approval Ratings for Small Firms

Small Business Loan Application Approval Rate by Size of Firm

Annual Revenues	<\$100K	\$100K-\$1M	\$1M-\$10M	>\$10M
Share Receiving Some Financing	70%	79%	92%	96%
Share Receiving Full Amount Requested	37%	45%	63%	73%

Source: “2015 Small Business Credit Survey,” Federal Reserve, March 2016.

Smaller firms have more trouble accessing credit from both large and small banks than do larger firms. This disparity is also true across many types of products, including lines of credit as well as traditional term loans.

Figure 25: Approval Rate by Select Source and Type of Loan/Line of Credit
 Percent of Applicants Receiving at Least Some Credit

Size of Firm	All Firms	Micro (<\$100K)	\$100K-\$1M	\$1M-\$10M	>\$10M
Large Bank	58%	33%	49%	72%	88%
Small Bank	76%	60%	69%	88%	96%
Business Loan	69%	54%	65%	81%	92%
Line of Credit	71%	55%	65%	82%	91%

Source: “2015 Small Business Credit Survey,” Federal Reserve, March 2016.

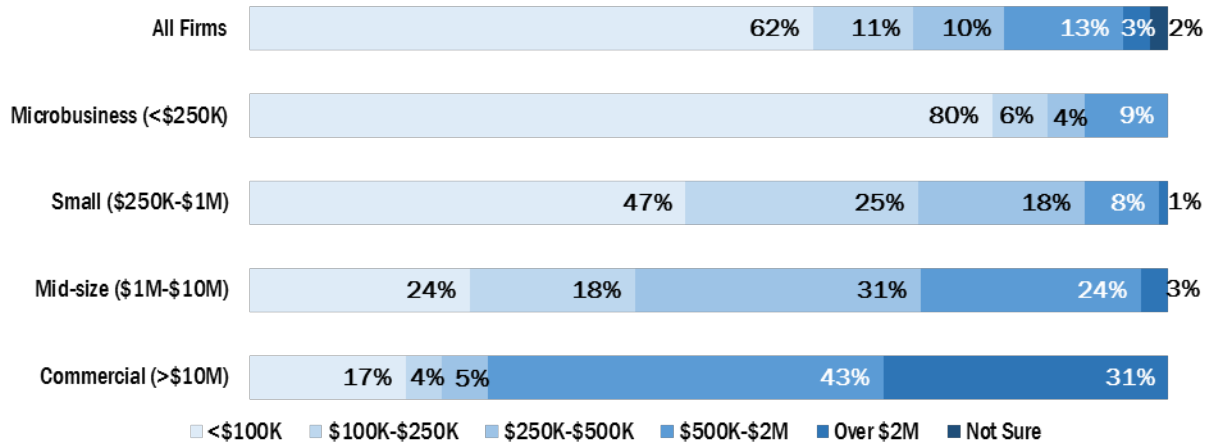
Small Firms Want Small Dollar Loans

Another complicating factor for smaller firms is that they tend to be looking for smaller dollar loans, which are less profitable for banks. Banks, even small banks, have traditionally underwritten loans based on personal underwriting decisions. These have a relatively fixed cost; it takes approximately the same amount of effort to assess a \$100,000 loan as it does a \$1 million loan, perhaps more. This has made many banks that rely on personal underwriting reluctant to make loans under a certain dollar cut off—often \$100,000 or \$150,000 -- as these loans are not profitable given their cost structure.

The heterogeneity across small firms, together with widely varying uses of borrowed funds, has impeded the development of general standards for assessing applicants for small business loans and has made developing a low-cost way of evaluating such loans relatively difficult. Many large lenders have relied on credit-scoring to maintain risk-averse and time-efficient lending practices, which has hurt many small businesses that could prove credit-worthy in other ways. In addition, relying solely on personal credit scores of a business owner has proven to be a poor predictor of performance. Bank of America, which used credit scoring extensively to make a high volume of loans of less than \$150,000 through 2007, suffered significant losses in the recession and eventually exited that market segment due in part to poor loans underwritten largely based on credit score data.

Thus, banks have more often turned their efforts toward the more profitable larger loan segments, and moved away from small dollar lending. Unfortunately, these are the loan levels that most small businesses are looking for. Over 70 percent of small businesses are looking for loans of under \$250,000. And more than 60 percent want loans of under \$100,000.

Figure 26: Small Businesses Want Small Dollar Loans
 Percentage of Applications from Small Businesses by Loan Size⁷⁹

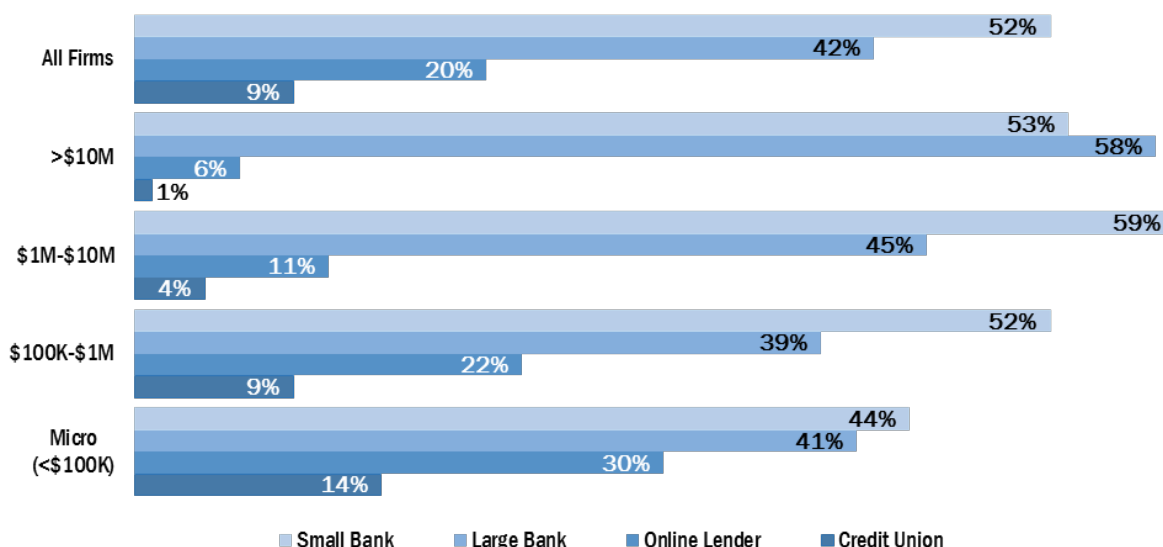


Source: “Joint Small Business Credit Survey Report, 2014,” Federal Reserve, February 2015. Note: Values may not sum to 100% due to rounding.

Smaller firms and small businesses seeking loans under \$250,000 are therefore most affected by the structural pressures of the current small business credit markets. Given the gaps in the current availability in credit, it is no wonder that the penetration of the new online lenders is highest among the micro-firms, with more than 30 percent of firms under \$100,000 in revenues turning to online sources for their credit needs. This is in contrast with the larger firms, those over \$10 million in revenue. The penetration of online lenders among these firms is only 6 percent, with 58 percent of their credit needs being met by large banks.

⁷⁹ 2014 data from the “Joint Small Business Credit Survey Report” by the Federal Reserve (New York, Atlanta, Cleveland, and Philadelphia) indicates that 72% of small businesses seeking financing in the first half of 2014 sought loans under \$250k, closely aligned with the chart above.

Figure 27: Credit Sources Applied to by Size of Firm
 Percent of Loan/Line of Credit Applications



Source: “2015 Small Business Credit Survey,” Federal Reserve, March 2016

The Emergence of Online Lenders Reflects the Small Dollar Loan Credit Gap

The analysis of current credit markets confirms the findings of our 2014 paper that a gap in access to credit continues to exist – in the small dollar loans to small firms. Although cyclical pressures have dissipated from the Great Recession, structural impediments, particularly in terms of the pressures on smaller and community banks have remained or been exacerbated by regulatory costs. The information opacity and greater credit risk of smaller firms makes them less attractive to larger banks who have a hard time creating cost-effective standard ways of underwriting small dollar loans and loans to smaller firms. These forces combine to make small loans less profitable or unprofitable to traditional lenders given their processes and cost structures.

However, as banks of all sizes have moved away from small firms and small dollar loans, new entrepreneurs have entered the field and used innovative approaches to fill the gap. The new online entrants have used technology to create easy-to-use applications and credit algorithms that use additional data to rapidly decision loans. This has created a better customer experience, vastly reducing search costs for small businesses. Although it remains to be proven, the new credit processes are not only quick and low cost, but they arguably use more relevant and timely cash flow data from a small businesses’ own bank account and credit card activity to make more nuanced credit decisions.

The next section will describe in detail the current state of the online lending market, which has evolved rapidly in the last several years, and assess how effectively it is meeting the needs of small businesses that face a gap in access to credit.

CHAPTER 3

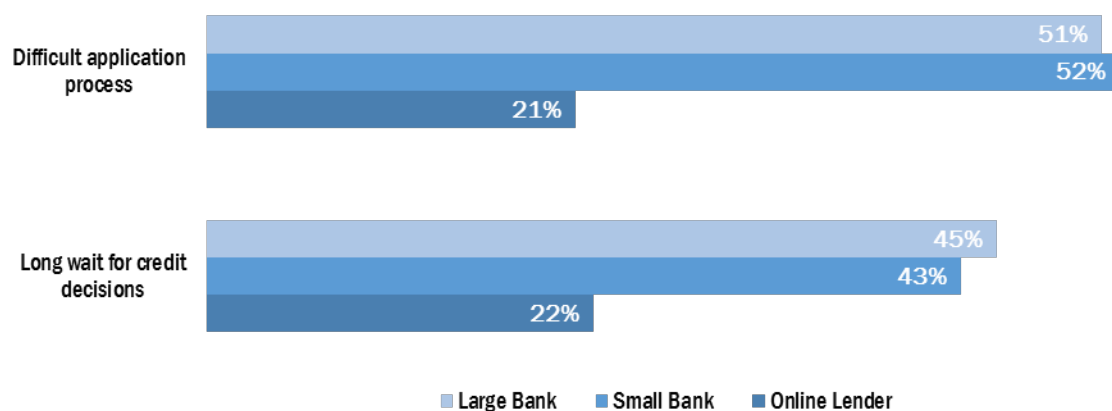
HOW TECHNOLOGY HAS CHANGED THE GAME: NEW ENTRANTS AND THEIR INNOVATIONS

Bank credit is the principal source of outside capital for small businesses, as we discussed in the previous section of this paper. However, in many ways the way small businesses get bank loans has not changed dramatically in 50 or even 100 years. Small businesses in the past, and even today, have depended on a relationship with a local bank or bank branch for their business needs. For loans, most small businesses still go from bank to bank, filling out applications and submitting significant amounts of paperwork in a process that takes 24 to 34 hours according to a recent Federal Reserve survey.^{80,81} The personal underwriting process is largely paper-intensive and manual, often done with the aid of excel spreadsheets, and there is a reliance on personal credit scores, particularly in the larger banks. The response times are slow, often several weeks and even months until borrowers are approved or denied.

Small businesses express dissatisfaction with the traditional loan process, citing the difficult application process and long waits for credit decisions as key issues for almost half of successful applicants.

Figure 28: Borrowers' Reasons for Dissatisfaction by Lender Type

Percent of Employer Firms Dissatisfied with Lender



Source: "2015 Small Business Credit Survey," Federal Reserve, March 2016.

However, with the recent entry of online lending, technology has begun to change the game for how small businesses access capital in the United States and around the world.

The State of the Online Lending Market

⁸⁰ "Joint Small Business Credit Survey Report, 2014." Federal Reserve Banks of New York, Atlanta, Cleveland and Philadelphia. Updated February 2015. <https://www.newyorkfed.org/medialibrary/media/smallbusiness/SBCS-2014-Report.pdf>

⁸¹ "Fall 2013 Small Business Credit Survey." Federal Reserve Bank of New York. September 2013. <https://www.newyorkfed.org/medialibrary/interactives/fall2013/fall2013/files/full-report.pdf>

The entrance of alternative lenders attempting to fill the market gap in small dollar loans began as early as the late 1990s with the introduction of merchant cash advances, and later short-term loans, by CAN Capital, which was a pioneer in the provision of small business credit online. The market has evolved with the arrival of players like OnDeck, Kabbage, Funding Circle, and others in the latter part of the 2000s, with technology playing a key role in rapid loan underwriting using new data sources, such as current bank account information and real-time cash insights.

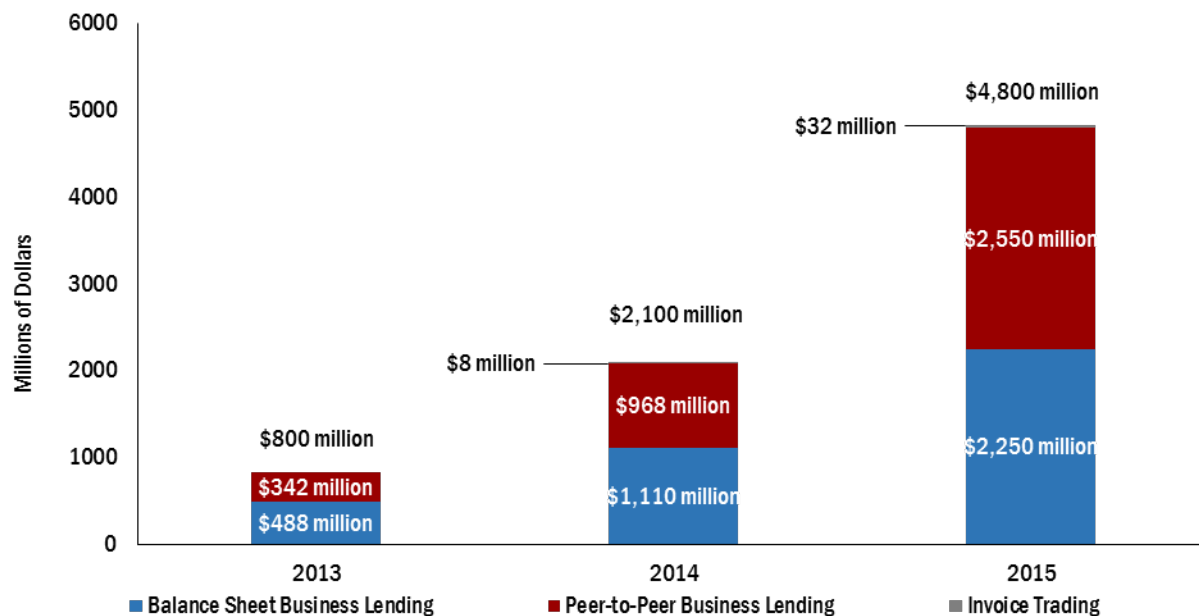
Lending Club and Prosper brought a new approach by creating platforms for peer-to-peer lending, initially focusing on consumer loans. However, interest quickly turned to the small business market, particularly with the success of Funding Circle, first in the U.K. and then by acquisition in the United States. LendIt, the first online lending conference, went from 359 attendees in 2013 to 977 in 2014 and over 3,500 in 2015.

As the market grew, the number of new firms entering the space multiplied quickly, spurred on by high interest from the venture capital community, and large inflows of capital for loans provided by investors who were attracted by the higher interest rates of these products versus low yields available elsewhere in the market. These factors fueled explosive growth in the sector and led us and others to call the environment of this period from 2014 through early 2016, the “wild west.”

It is difficult to estimate the size and impact of the new entrants in the small business lending sector, given the lack of data collection on loan origination in the U.S. market overall. Best estimates of the annual originations for the online space in 2015 are around \$5 billion, growing 120-150 percent year over year.⁸²

⁸² Author's analysis and data from “Breaking New Ground: The Americas Alternative Finance Benchmarking Report.” Cambridge Centre for Alternative Finance. 2016. https://www.jbs.cam.ac.uk/fileadmin/user_upload/research/centres/alternative-finance/downloads/2016-americas-alternative-finance-benchmarking-report.pdf

Figure 29: Alternative Lending to Small Businesses is Growing Across North America
Alternative Lending to Small Businesses in North America (2013-2015)



Source: Author’s analysis and Cambridge Centre for Alternative Finance data.

Balance sheet lending to small businesses, such as from players like OnDeck and CAN Capital, originally dominated online small business lending. But, peer-to-peer lending by players like Lending Club and Funding Circle has grown to be on par with the size of many balance sheet lenders, though momentum has slowed recently.

The market is expected to continue to grow rapidly, given strong early penetration among small business borrowers. Approximately one-in-six small businesses considering a loan will apply to an online lender, according to recent industry research. This is in the range of recent Federal Reserve survey data that showed the figure at 20 percent.⁸³ This is a surprisingly high rate for products that are so new to the market, and likely reflects the lack of credit available in the small dollar and small loan segment described in the last chapter, combined with the much greater ease of the online application process.

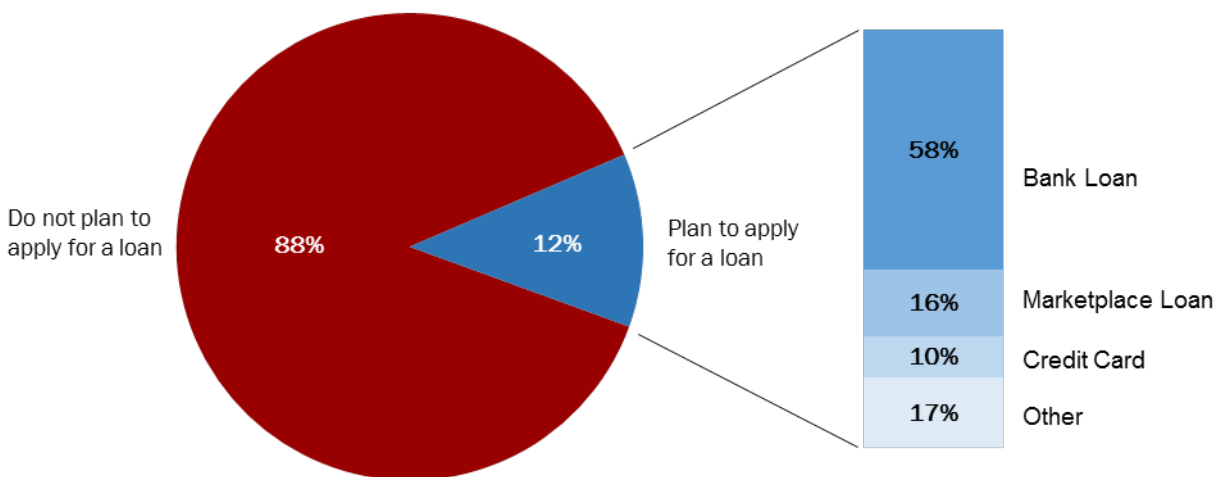
It also seems that these lenders are having an economic impact. Online small business lender OnDeck reported in its 2015 economic impact study that its loans had helped create \$11 billion in additional economic output and 74,000 jobs.⁸⁴ Moreover, they are reaching communities where banking has taken a hit. According to new research by Usman Ahmed and others, between October 2014 and March 2015, 25 percent of PayPal Working Capital (PPWC) loans went “to the 3 percent of counties that have lost 10 or

⁸³ “2015 Small Business Credit Survey,” Federal Reserve Banks of New York, Atlanta, Cleveland, Philadelphia, St. Louis, Boston, and Richmond. March 2016. <https://www.newyorkfed.org/medialibrary/media/smallbusiness/2015/Report-SBCS-2015.pdf>

⁸⁴ Mueller, Jackson. “Data Delivers: Non-Bank Small Business Lenders Make an Impact.” Milken Institute. October 12, 2016. <http://www.milkeninstitute.org/blog/view/1100>

more banks since the financial crisis.” In these same counties, loan recipients saw increases in PayPal sales rise by 22.4 percent compared to just 1.72 percent nationally over the same period.⁸⁵

Figure 30: 16% of Small Businesses Applying for Loans Plan to Use Alternative Lenders
Planned Sources of Funding for Small Businesses, Next 12 Months



Source: “Build, Buy, Partner, and Beyond: How Alternative Lending is Reshaping Small Business Lending,” Javelin Advisory Services, May 2016.

Evolving Market Share in Small Business Lending

Absent market-wide data on small business lending, it is difficult to assess the degree to which online lenders are growing the overall pie for small business lending, or how much they are taking share directly from incumbents. However, a survey of studies conducted to date as well as ad hoc information from particular banks, suggests that both are happening.

Small business online lenders represented \$4.6 billion in 2014 issuance, or 2.1 percent of the total market, by Morgan Stanley’s estimate. Their analysis expects issuance to expand at a 47 percent CAGR through 2020, primarily through creation of new credit rather than taking share from incumbents. By 2020, Morgan Stanley forecasts online lenders reaching \$47 billion, or 16 percent of total U.S. small and medium enterprise (SME) approvals. Of this, they estimate that 13.7 percentage points are likely to be driven by credit expansion, while the remaining is likely to be share shift from incumbents (representing ~4.6 percent share loss for the banks).⁸⁶

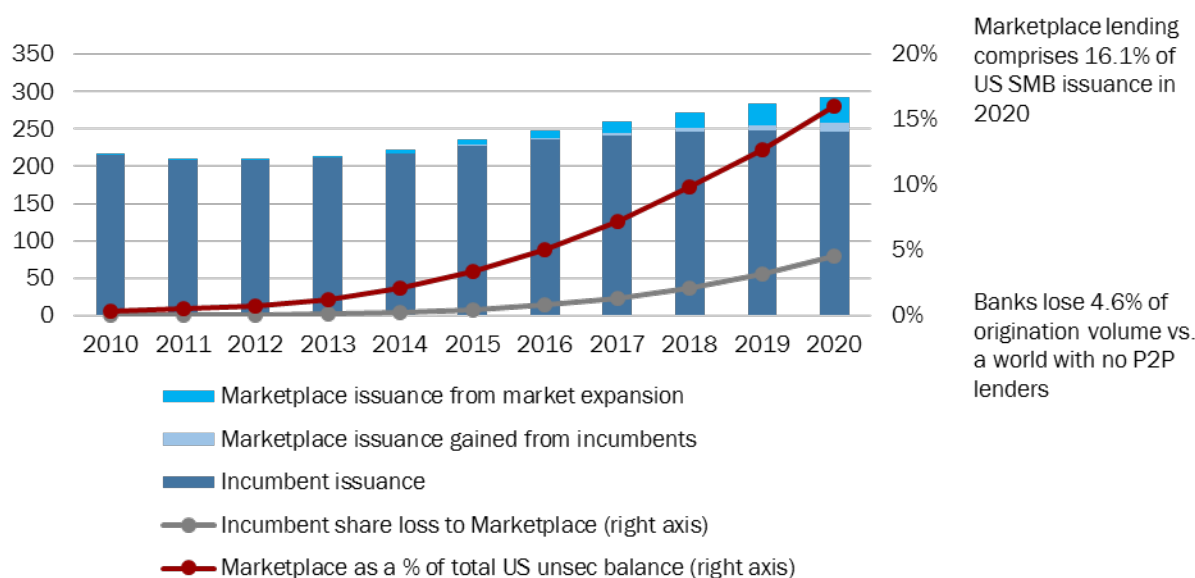
⁸⁵ Usman, Ahmed et al. “Filling the Gap: How Technology Enables Access to Finance for Small- and Medium-Sized Enterprises.” *Innovations* Vol. 10, No. 3/4. 2015.

⁸⁶ “Global Marketplace Lending: Disruptive Innovation in Financials.” Morgan Stanley. May 2015. <http://bebeez.it/wp-content/blogs.dir/5825/files/2015/06/GlobalMarketplaceLending.pdf>

The aggregate value of (\$1 million and smaller-sized) commercial and industrial loans outstanding to SMEs from depository lending institutions was \$298 billion in September 2014. Oliver Wyman estimates that there is additional SME demand for credit of \$80 to \$120 billion that is currently not being met by traditional loan providers, as banks in aggregate have been shifting loan activity away from SMEs and toward more profitable avenues. As online lenders expand the credit box and reduce the cost of serving the smallest loans, some of the small loan credit gap will be served and market expansion will occur.

These projections are consistent with the thesis of our 2014 HBS Working Paper which described a gap that has existed for some time in small dollar loans in the small business lending market. New volume delivered by the innovators could, by the Morgan Stanley estimates, close this gap by as much as \$50 billion dollars in loan assets in the time period ending in 2020. However, in many cases it is important to underscore that banks and online lenders are actually not in competition: as Morgan Stanley’s estimates highlight, online lenders are often extending credit to small businesses which banks have either ignored or do not wish to serve.

Figure 31: Small Business Marketplace Lending is Continuing to Grow
U.S. Total Small Business Loan Issuance, Billions of Dollars



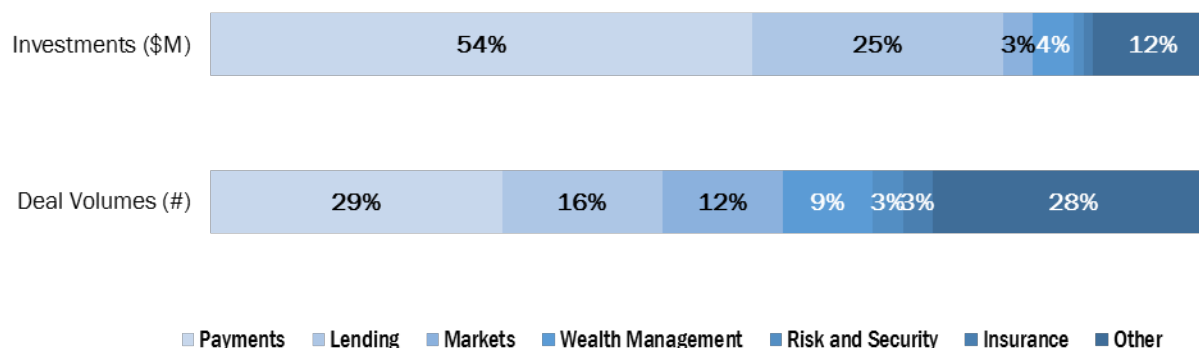
Source: *Global Marketplace Lending: Disruptive Innovation in Financials*, Morgan Stanley, May 2015.

Venture Capital has Funded Recent Fintech Growth

The growth in the online lending market has been fueled by the entry of hundreds of new competitors over the last two years. The extraordinary energy behind these new entrants has been fueled in part by the resources and focus provided by investors, particularly the venture capital community. Investments in financial technology or “fintech” have become one of the largest sectors for venture investors in the United States, with investment levels nearly tripling over the last several years reaching almost \$10 billion invested in 2014 in almost 500 deals. Nearly a quarter of the investment was in online

lending, though lending to consumers and other sectors such as student loans made up a significant part of this interest, in addition to lending to small businesses.

Figure 32: Online Lending Takes 25% of U.S. Venture Capital Investments
Fintech Deals and Investments in the U.S. by Segment (2014)



Source: Skan, Julian, James Dickerson and Samad Masood, *“The Future of Fintech and Banking: Digitally Disrupted or Reimagined?”* Accenture, 2015.

In the New York fintech sector alone, 85 deals were done in 2014 with lending representing 21 percent of the investments. Many of these investments were made by banks and financial institutions to be sure they were engaged in the cutting edge fintech technologies.

Online Investing is Also Seeing Growth Globally

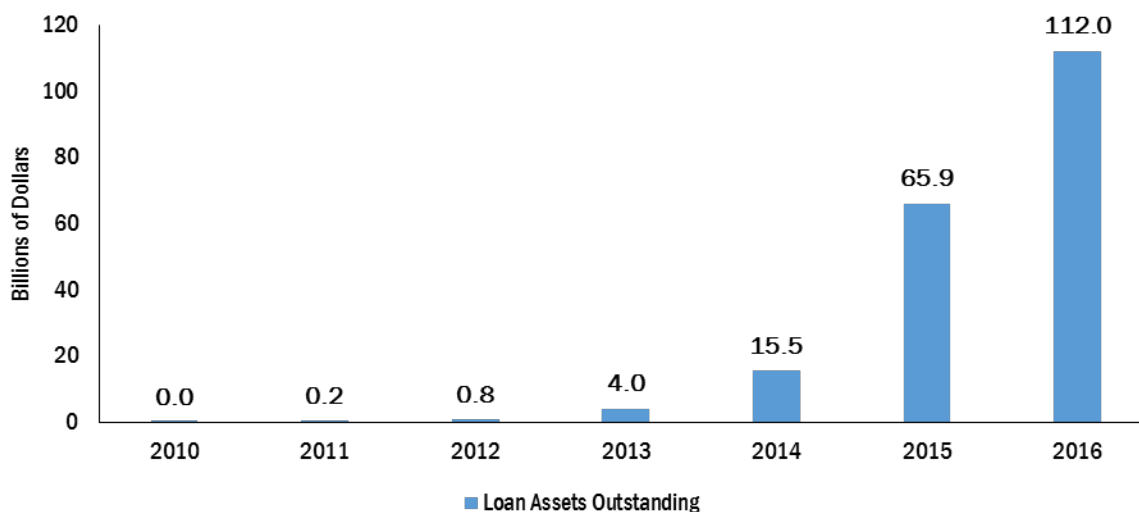
Globally, the online small business market is also gaining traction. China is by far the largest and most active market, while the United Kingdom is the most advanced in terms of its regulatory framework. Europe and Australia are seeing growing activity. Significant interest exists in emerging markets, where both financial players and NGOs are exploring the implications – in terms of opportunities and risks – of these lending innovations for traditionally-underserved financial markets.

China. China is the largest market in terms of current loans outstanding, significantly ahead of the U.S.⁸⁷ In 2015, Chinese online lenders had an outstanding loan balance of \$66 billion, an enormous increase from \$4 billion outstanding in 2013.⁸⁸ Chinese online lending companies have also seen very high valuations in 2016, with Ant Financial (an Alibaba affiliate that runs its online financial services provider,

⁸⁷ “Breaking New Ground: The Americas Alternative Finance Benchmarking Report.” Cambridge Centre for Alternative Finance. 2016. https://www.jbs.cam.ac.uk/fileadmin/user_upload/research/centres/alternative-finance/downloads/2016-americas-alternative-finance-benchmarking-report.pdf; Chorzempa, Martin. “P2P Series Part 1: Peering Into China’s Growing Peer-to-Peer Lending Market.” June 27, 2016. <https://piie.com/blogs/china-economic-watch/p2p-series-part-1-peering-chinas-growing-peer-peer-lending-market>
⁸⁸ Chorzempa, Martin. “P2P Series Part 1: Peering Into China’s Growing Peer-to-Peer Lending Market.” June 27, 2016. <https://piie.com/blogs/china-economic-watch/p2p-series-part-1-peering-chinas-growing-peer-peer-lending-market>

Alipay) valued at \$60 billion and online lender Lufax valued at \$18.5 billion.^{89,90} CreditEase, a company started by Tang Ning in the mid-2000s has over 40,000 employees and has raised \$86 million in a NYSE IPO.

Figure 33: Chinese Peer-to-Peer Lending Market Large and Growing Rapidly
 Chinese Peer-to-Peer Lending Volumes, Billions of Dollars (2010-2016)



Source: Author’s analysis and Chorzempa, Martin. “P2P Series Part 1: Peering Into China’s Growing Peer-to-Peer Lending Market.” Peterson Institute for International Economics. June 27, 2016. <https://piie.com/blogs/china-economic-watch/p2p-series-part-1-peering-chinas-growing-peer-peer-lending-market>. Note: Original data sourced from Online Lending House and updated as of October 2016. RMB to dollars conversion calculated using exchange rate of 1 RMB = 0.15 USD.

One major reason for the enormous penetration of online lenders in China is that traditional lenders have primarily been focused on large infrastructure development projects rather than small business lending. In addition, 75 percent of China’s population has little or no access to mainstream banking institutions, creating an enormous gap in the lending market.⁹¹ A loose regulatory environment has also contributed to the growth of alternative lending China.

In some ways, the Chinese market holds important potential lessons for U.S. regulators. Tight control of the banking environment by the Chinese government over decades led to a severe gap in access to capital for many of China’s consumers and small businesses. The introduction of peer-to-peer lending powered by online technology was perfect for the pent up demand, and lending took off in a largely unregulated environment. This all came to a head in 2015 with over 1,000 firm failures and fraudulent platforms, including the blow up of the Ezubao Ponzi scheme which is estimated to have taken in over \$7

⁸⁹ Russell, Jon. “Ant Financial, the Alibaba affiliate that operates Alipay, raises \$4.5B at a \$60B valuation.” TechCrunch. 2016. <https://techcrunch.com/2016/04/25/ant-financial-the-alibaba-affiliate-that-operates-alipay-raises-4-5b-at-a-60b-valuation/>

⁹⁰ Wildau, Gabriel. “Chinese P2P lender Lufax valued at \$19bn in latest funding round.” Financial Times. 2016. <https://www.ft.com/content/7270594e-bdc6-11e5-a8c6-d663d6d4b>

⁹¹ Jones, Jason. “China is the Biggest Market in Fintech – the World Just Doesn’t Know it Yet.” Lend Academy. 2016. <http://www.lendacademy.com/china-fintech-market/>

billion from over 900,000 investors. Not surprisingly, there are signs that China's central bank is considering increased regulation, with Governor Zhou Xiaochuan saying he plans to maintain "great vigilance" over alternative lenders.^{92,93}

United Kingdom. The online small business lending players have also made major inroads in the U.K. In the United Kingdom, four banks account for over 80 percent of small business lending. During the Great Recession, credit in the United Kingdom froze and small businesses suffered deeply as a result. This led to a concerted effort by the U.K. government to identify and support new providers of small business credit. In a highly focused set of activities, the coalition government leadership developed a coordinated base of support to develop new institutions, new regulations and a new regulator with a specific responsibility to increase the competition in the provision of credit to small business.

Three important decisions that occurred have been the creation of the British Business Bank (BBB) to add additional funding sources, the positioning of the Financial Conduct Authority (FCA) as the regulator with oversight of the behavior and stability of firms, and legislative actions taken by HM Treasury around peer-to-peer lenders. In addition, the FCA required the collection of quarterly data on loan origination and loan stocks, including metrics on costs and defaults in order to better track the availability of credit and the progress of market reforms. Self-regulation has added further disclosure standards to this regime.

A focus on innovation has been a fundamental part of U.K. actions. An early sign of this favorable view toward innovative firms and solutions was an interest in working with new online entrants such as the peer-to-peer lender, Funding Circle. As part of a competitive process the BBB has, among other programs, invested capital through Funding Circle and other loan providers, in order to increase the sources of credit available to small businesses in the U.K. marketplace.

As part of the efforts to encourage innovation, the FCA has specifically encouraged new types of capital and financial service providers to contact the agency for guidance on how to enter the U.K. market. The FCA also announced a "regulatory sandbox" that allows new entrants to apply to operate under time limited authority to prove the effectiveness of new concepts. Many of the U.K. innovation activities have strong lessons for regulatory reforms in the United States and are further detailed in Appendix B.

In the United Kingdom, alternative lending business loan volumes in 2015 totaled 1.3 billion pounds but constituted less than 3 percent of gross bank lending to small businesses.⁹⁴ The U.K. market is unique in that individual investors continue to provide a significant part of the investment capital, constituting a real peer-to-peer environment. In contrast, in the United States, individuals have been largely supplanted by institutional investors such as hedge funds and banks.

Perhaps due in part to the focused efforts of the U.K. government on developing new funding sources for the small business sector following the economic crisis, peer to peer small business lending in

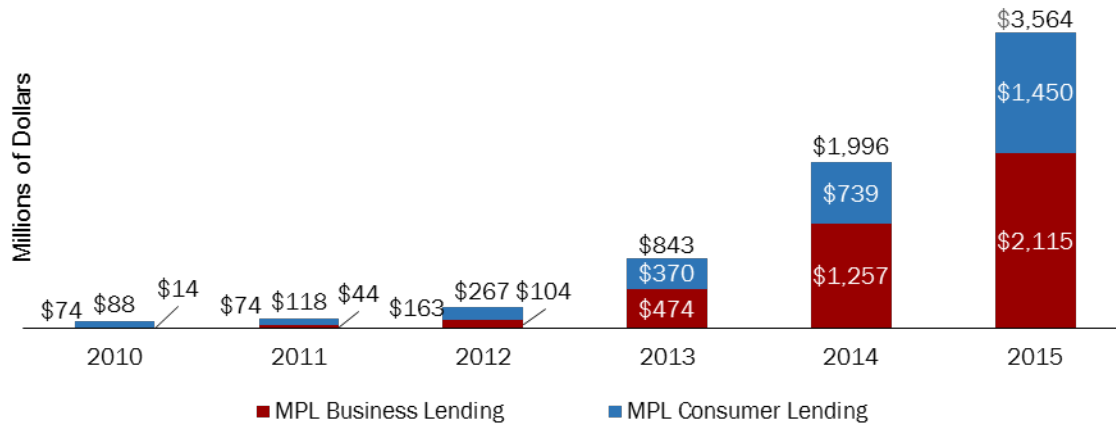
⁹² Ngai, Joseph Luc, John Qu and Nicole Zhou. "What's Next for China's Booming Fintech Sector?" McKinsey. 2016. <http://www.mckinsey.com/industries/financial-services/our-insights/whats-next-for-chinas-booming-fintech-sector>

⁹³ Meola, Andrew. "China just hinted it could increase fintech regulation." *Business Insider Intelligence*. June 29, 2016. <http://www.businessinsider.com/china-just-hinted-it-could-increase-fintech-regulation-2016-6>

⁹⁴ "Small Business Finance Markets 2015/16." *British Business Bank*. <http://british-business-bank.co.uk/wp-content/uploads/2016/02/british-business-bank-small-business-finance-markets-report-2015-16.pdf>

the U.K. actually exceeds consumer peer to peer lending, with \$2.1 billion in loans originated to small businesses online versus \$1.5 billion to consumers.

Figure 34: U.K. Marketplace Lending Volumes are Large and Majority Goes to Business
U.K. Marketplace Lending Annual Loan Volumes, Millions of Dollars, 2010-2015



Source: “Marketplace Lending – A temporary phenomenon? An analysis of the UK market,” Deloitte, 2016.

The Rest of Europe. The rest of Europe is quite a bit smaller in terms of business loan volume at only \$126 million Euros as of 2015.⁹⁵ However, like in the United Kingdom, European Union regulators have signaled an openness to industry growth with the Second Directive on Payment Services, which forces banks to share certain data with third-party vendors.⁹⁶

The Ecosystem of the Online Lending Market

The small business online lending market has evolved rapidly over the past two years, and is in the midst of continuing evolution. In trying to provide a current snapshot of the market, we have defined six distinct segments. Three of these: balance sheet lenders, peer-to-peer lenders, and multi-lender marketplaces were identified in our [2014 HBS White Paper](#). They continue to form the basic foundation of today’s market, though the strategies of a number of participants are converging. In addition, we have created a separate segment for the invoice and payables financing companies, which is proving to be a highly successful segment, taking the place of past companies who provided factoring services. The fifth segment is the current group of platforms and providers of payment services. These players, such as Square, PayPal, and Amazon, already provide services to a large number of small business customers,

⁹⁵ “Marketplace Lending – A temporary phenomenon? An analysis of the UK market.” Deloitte. 2016.

<https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/financial-services/deloitte-uk-fs-marketplace-lending.pdf>; Note: Data originally sourced from Liberum AltFi Volume Index Continental Europe, AltFi Data, as of 22 February 2016.

⁹⁶ “The Second Payment Services Directive (PSD2) A briefing from Payments UK.” Payments UK. 2016.

<http://www.paymentsuk.org.uk/sites/default/files/PSD2%20report%20June%202016.pdf>

which gives them an existing base to which they can market product lines and expand strategies in the lending space as they move forward. The final category is data providers such as Equifax, FICO, PayNet, and even Intuit. These companies facilitate the new lending activity with access to new data sources and insights. In addition to these six segments, we also discuss alternative ways to look at this ecosystem, such as segmenting the lenders by product.

Figure 35: Small Business Alternative Lending Ecosystem



Source: Author's analysis and Mueller, Jackson. "U.S. Online, Non-Bank Finance Landscape. Milken Institute Center for Financial Markets. 2016. <http://assets1b.milkeninstitute.org/assets/PDF/Online-Non-Bank-Finance-Landscape.pdf>

Online Balance Sheet Lenders. The first wave of tech-based alternative lenders, including companies like OnDeck which opened in 2007 and Kabbage which opened in 2011, were originally called "online balance sheet lenders" because they lent money directly from their balance sheet and held the risk. Over the past two-to-three years, however, leaders in this space, have developed a more hybrid model which includes raising lower-cost funds through a large variety of new capital structures, including warehouse lines, credit facilities, and loan syndication and securitization, as well as connecting institutional investors with borrowers directly. These facilities have transferred some the risk of certain loan pools to third party investors, including credit hedge funds. Some players in this segment focus on shorter-term, lower-dollar loans, sometimes in the form of merchant cash advances (which may not technically be considered loans). Costs vary but often exceed 25 percent APR. These entities have tended to have the highest costs for borrowers and to lend to the riskiest credits.

Peer-to-Peer Transactional Marketplaces. The peer-to-peer (P2P) model was established in the U.S. in the consumer lending market by two companies, Lending Club and Prosper, which were originally

peer-to-peer platforms that took money from investors and matched it with borrowers seeking a loan. As P2P small business lending evolved in the United States, the market became dominated by institutional investors. Funding Circle, originally a dominant U.K. P2P small business lender grew swiftly in the United States, primarily offering 1-5 year term loans averaging \$120,000. Lending Club, which went public in 2014, at a \$8.5 billion valuation suffered significant setbacks in 2016 and replaced its CEO due to improprieties in its disclosures to investors.⁹⁷

Multi-Lender Marketplaces. Another emerging online segment in small business lending is “multi-lender marketplaces”, in which small business borrowers can comparison shop among a range of loan products. The loan products in these marketplaces are offered by a wide variety of sources, from alternative lenders to conventional banks. Some of the most prominent of these players include Fundera and Intuit QuickBooks Financing. These online marketplaces are mitigating one of the biggest problems borrowers and lenders face—search costs.

Following the lead of other sectors like travel and mortgage lending, borrowers can shop across a broad range of lenders—including community and regional banks, online lenders, and others—as well as across a range of a products—including short- and medium-term loans, SBA loans, merchant cash advances, credit and charge cards, equipment leasing loan products and factoring. Typically, marketplaces earn revenue by charging a small fee, paid by the lender, on top of the loan if the borrower gets funded and accepts the terms of a loan through the platform. Increasingly, these platforms are also working with traditional banking players, particularly community banks, in ways that include encouraging these bankers to send small business borrowers whom they cannot fund to the marketplace.

Payments / Ecommerce Platforms. One of the most powerful emerging segments in the online lending market is the entrance of existing payments or ecommerce platforms into the small business lending space. These entrants, like Square, PayPal, and Amazon, are offering loan products through their existing customer channels. These entrants have the advantage of a large base of significant, existing customer relationships. Due to these relationships, payment networks and platforms can reach borrowers at a low cost via an already-established, trusted channel of communication. And, they have significant transactional information that give them valuable credit insights. Given these assets, it is likely that these payments and other platforms will continue to gain traction in the online small business lending market.

Invoice and Payables Financing. Invoice financing is a process by which businesses can improve their cash flow by receiving payment up front for outstanding customer invoices. Given the limited cash buffer of many small businesses, this can be a useful tool.⁹⁸ On the other side of the equation, payables financing provides a loan to small businesses to help them pay their own suppliers more quickly, thereby allowing them to deliver on customer orders.⁹⁹ An important player in this space is American Express, who is expanding its payments services to include loan products to pay vendors that will not take credit cards.

⁹⁷ Williams-Grut, Oscar. “After Firing Its CEO, Lending Club Is Facing a Crisis.” *Inc.* May 17, 2016. <http://www.inc.com/business-insider/inside-lending-club-scandal.html>

⁹⁸ “Cash is King: Flows, Balances, and Buffer Days: Evidence from 600,000 Small Businesses.” JPMorgan Chase and Co. Institute. September 2016. <https://www.jpmorganchase.com/corporate/institute/document/jpmc-institute-small-business-report-exec-summary.pdf>

⁹⁹ Prosser, Marc. “The difference between purchase order financing and invoice factoring.” *The Business Journals.* September 15, 2015. <http://www.bizjournals.com/bizjournals/how-to/funding/2015/09/difference-po-order-financing-invoice-factoring.html>

Not only do tools like invoice financing and payables financing help to manage cash flow, but they can also help small businesses grow. Recent work by Jean-Noel Barrot and Ramana Nanda studied the Obama administration's 2011 QuickPay initiative, which accelerated payments by federal government agencies to their small business contractors. Barrot and Nanda found that by paying firms just 15 days earlier, "payroll increased 10 cents for each accelerated dollar, with two-thirds of the effect coming from an increase in new hires and the balance from an increase in earnings."¹⁰⁰ This research points us to the potentially dramatic effects that access to early payment from customers can have on small business growth.

Data Providers. Alternative lending applies new, potentially more scalable underwriting practices that enable non-bank lenders to widen their scope of customers. Much of their new underwriting models rely on access to alternative data sources. Instead of just evaluating bank statements and tax returns, lenders like Fundbox and Bluevine underwrite customers simply by evaluating their QuickBooks, Xero, or FreshBooks data. Direct access to a borrower's accounting software allows a potential lender to track a borrower's financial activity in real time, which is helpful for underwriting purposes, as well as providing early warning signals of the borrowers' financial health.

Companies like PayPal and Square can proactively extend credit offers to their customers by analyzing patterns in their cash flow. Positioned in the middle of every transaction, these companies assume less risk on the repayment side. Services like Intuit Account Aggregation, Yodlee, and even an API the IRS has made public all accelerate the time to underwrite and help democratize access to actionable data.

To a lesser extent, social media and online activity on marketplaces can also be used to better understand borrowers' financial health, though the predictability of this data is unproven over time. For example, a business with high ratings from a large number of customers may be a good risk, even if it's only been in business for one or two years. Moreover, strong activity on sites like PayPal or Ebay can suggest a healthy cash flow.

Many of these data providers focus on simplifying online lenders' applications by allowing a borrower to simply authorize access to online tools, which then digitally transmit data on a borrowers' creditworthiness and financial health directly to the lender in seconds. The result, then, is that the future of underwriting could be as simple as proliferation of registration APIs between the lender and data partners, and allowing a customer to authorize a lender's access to data controlled by the data partner.

In addition, lenders are increasingly using alternative data sources to verify borrowers' information. In October 2016, TransUnion launched an exchange where lenders can share data in real time about who is seeking loans, for the purpose of detecting multiple applications. Also in October 2016, LendingClub, OnDeck, Prosper Marketplace and other firms joined a consortium created by ID Analytics LLC to similarly detect multiple loan applications. These partnerships are driven in part by the desire to thwart a practice known as "loan stacking." According to research from credit-reporting firm TransUnion, on an average day, about 4.5% of people who take an unsecured personal loan go back for seconds at other lenders later that day. Loan stacking activity more than doubled from 2013 to 2015. According to the report,

¹⁰⁰ Barrot, Jean-Noel and Ramana Nanda. "Can Paying Firms Quicker Affect Aggregate Employment?" Harvard Business School Working Paper 17-004. 2016. http://www.hbs.edu/faculty/Publication%20Files/17-004_7d723b4c-8b48-4bee-8340-7508c169a2e9.pdf

borrowers who take out a second loan within 15 days are four times as likely to be later identified as fraudsters. A third loan makes borrowers 10 times as likely to be frauds.¹⁰¹

Online Lenders by Product

Another way to categorize online lenders is by the products they offer. Initially, many online lenders are primarily engaged in one or just a few specific product offerings, and tend to stay focused on that particular set of activities. The following chart breaks out the current ecosystem of online lenders by the products they offer.

Figure 36: Small Business Lenders by Product



Source: Fundera Inc., August 2016.

Loan Products Vary Dramatically in Cost and Time to Funding

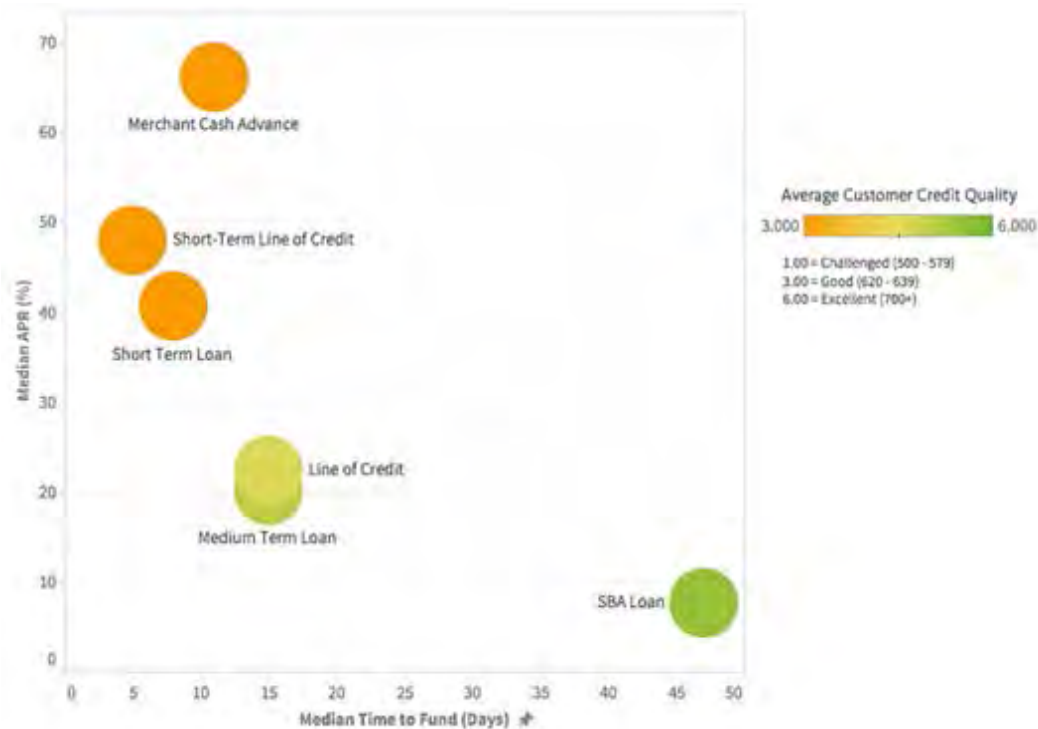
The cost of loan products from the new online lenders varies greatly. With a high credit rating a small business might pay 10 percent APR or even less, particularly if they are willing to wait up to 45 days

¹⁰¹ Demos, Telis. "Borrower or Fraudster? Online Lenders Scramble to Tell the Difference." Wall Street Journal. October 27, 2016. <http://www.wsj.com/articles/borrower-or-fraudster-online-lenders-scramble-to-tell-the-difference-1477580637>

for funds. SBA products are the lowest cost, and are available to borrowers with credit scores above 650. However, funding takes a long time—up to 45 days, compared to funding as fast as under 5 days for some short term lines of credit. As would be expected in risk adjusted pricing, borrowers with weaker credit pay more. However, many of the short-term products, including merchant cash advances, have are very high cost. When calculated as an APR, these products cost between 35 and 70 percent.

Figure 37: Rates and Time to Funding Vary Dramatically by Product on Fundera’s Credit Marketplace

Small Business Loan Products by APR, Time to Fund, and Borrower Credit



Source: Fundera, Inc. Note: All calculations are based on an actual sample of anonymized Fundera data. Some filtering was conducted to remove incomplete entries and product categories with insufficient volume.

Serious concerns have been raised about the high cost of the short-term products now being offered. Providers of the loans and some borrowers explain that the APR is an annual cost and overstates the actual expense, or dollar cost, of a loan that is only in place for three-to-six months. These loans can be valuable to buy inventory for the holiday season or bridge a seasonal cash shortage. Others have raised concerns that costs at this level are very hard for a small business to manage in a profitable way. A small business needs to have an opportunity to use the cash to generate a very high return in a very short period of time with some certainty, or they risk the consequence of being unable to repay and potentially losing their business.

Regulatory reforms addressed in this paper will have an important role in resolving some of these concerns. However, in all cases, to minimize defaults it is important that all small businesses understand in a clear fashion the product obligations they are committing to take on, including exactly how much they are paying.

CHAPTER 4

WHO WILL BE THE WINNERS AND THE LOSERS: STRATEGIC ADVANTAGES OF INCUMBENTS VERSUS NEW PLAYERS

The rapid growth of the new online sector and the attraction of customers “faster-than-expected” have not escaped the notice of the established banks. Over the past two years, banks have moved from observation to experimentation and active engagement. An increasing number are forming partnerships with these new entrants that may well define how the credit needs of the small business sector are met in the future.

In this section, we evaluate the strategic landscape in small business lending and possible choices for existing small business lenders amidst the rise of online lenders and online credit marketplaces. Key to assessing the strategic implications of the rise of online lending is just how innovative — and indeed irreproducible — online lenders' business models really are.

The first section seeks to assess to what extent online lenders are growing the pie of overall small business lending, versus taking share from incumbents. The second highlights the key drivers of competitive advantage in small business lending, and seeks to compare the strengths and weaknesses of banks and online players with respect to each driver. The third section describes the strategic opportunities that banks could pursue in response to the rise of online lending, focusing on incumbents' potential options to buy, build and partner with online lenders.

Growing the Pie or Taking Share?

As highlighted in the prior section of this paper, small business online lenders represented \$4.6 billion in 2014 issuance, or 2.1 percent of the total market, by Morgan Stanley's estimate. Their analysis expects issuance to expand at a 47 percent CAGR through 2020, primarily through creation of new credit rather than taking share from incumbents. By 2020, Morgan Stanley forecasts online lenders reaching \$47 billion, or 16 percent of total U.S. small and medium enterprise (SME) approvals. Of this, they estimate that 13.7 percentage points are likely to be driven by credit expansion, while the remaining is likely to be share shift from incumbents (representing ~4.6 percent share loss for the banks).¹⁰²

Nonetheless, a major concern of bankers at a recent bank conference was that online lenders are taking share from incumbents, and banks need a viable strategy. At Boston-based Eastern Bank, which currently has more than \$10 billion in assets and approximately 100 branches across New England, 5 percent of business customers are making payments to an online lender and the rate has been doubling annually.¹⁰³ This prompted Eastern to develop and launch its own online product this year. Regions Bank found that nearly a quarter of its existing customers which had searched for a loan in the past year had evaluated loan options at online lenders.

Market growth of online lending is indeed accelerating. Shortly into 2016, OnDeck reported that

¹⁰² “Global Marketplace Lending: Disruptive Innovation in Financials.” Morgan Stanley. May 2015. <http://bebeez.it/wp-content/blogs.dir/5825/files/2015/06/GlobalMarketplaceLending.pdf>









¹⁰³ Sparks, Evan. “How to Understand and Partner with Marketplace Lenders.” ABA Banking Journal. February 2016. <http://bankingjournal.aba.com/2016/02/how-to-understand-and-partner-with-marketplace-lenders/>

it had passed the milestone of \$4 billion loans originated. That is a remarkable achievement, as it took OnDeck 80 months, or about six years and eight months, to reach \$1 billion in loans, 10 months to reach \$2 billion in loans, seven months to reach \$3 billion in loans, and just five months to reach \$4 billion in loans. Overall, it appears that there is room for market expansion as online lenders begin to serve the needs of small businesses for small dollar loans and fill the credit gap described earlier, which could expand the market by as much as \$100 billion. Share loss by banks will depend in large part on their strategic responses, particularly partnership activities discussed later in this chapter.

Drivers of Competitive Advantage in Small Business Lending

Next, we turn to determining who has competitive advantage given emerging market dynamics in small business lending. We identify five key factors that drive competitive advantage in small business lending and comparing incumbent banks with online players on each driver: 1) borrower acquisition; 2) borrower experience and satisfaction; 3) customer and product mix; 4) costs of funds; 5) cost of underwriting, operating, and regulatory compliance. Differentiation on each of these segments will determine which players are best positioned to capture money and mindshare from borrowers over the coming years, and inform how respective players should respond to one another. We are indebted to a number of industry experts for insights developed in this section, including Frank Rotman and Nigel Morris at venture capital firm QED, and Peter Carroll at Oliver Wyman, and their recent report “The Brave 100: The Battle for Supremacy in Small Business Lending.”

Figure 38: Incumbents and Disruptors Both Have Advantages and Disadvantages

		Borrower Acquisition	Borrower Experience and Satisfaction	Customer and Product Mix	Cost of Funds	Cost of Underwriting, Operating, and Compliance
Incumbents		✓	✗	?	✓	✗
		Own borrower relations via extensive retail deposit network	Significant amount of paperwork, no online application	Mature, stable businesses with highly diverse customer mix	Reliable, cheap, and diverse funding sources through retail deposits	Manual process, expensive retail footprint, limited use of deposit data
						
Disruptors		✗	✓	?	✗	✓
		No in-built customer base	Seamless user-interfaces built for all screens and entirely paperless	Potential for adverse selection given lack of customer diversification	Largely dependent on institutional investors	Automated, data-driven algorithms using alternative data
						
						
						

Source: Author's analysis and "The Brave 100: The Battle of Supremacy in Small Business Lending." QED Investors and Oliver Wyman. 2015.

Borrower Acquisition. Although in today's world, finding a small business loan can be as simple as seeing an ad for a lender on Facebook or Google, spending less than 30 minutes applying, and being presented with loan options within minutes, hours or a few days, that is not the reality for the vast majority of small business borrowers. Most borrowers begin their credit search with a bank.¹⁰⁴ As a result, banks have a formidable competitive advantage on borrower acquisition, with existing borrower bases of customers with deposit accounts and other products. Online lenders and credit marketplaces, by contrast, have little brand awareness among borrowers and are forced to compete with one another as well as banks for a customers' mindshare. A survey conducted by Javelin highlights that the primary business banking relationship remains heavily tied to basic deposit and savings accounts, with 64 percent and 62 percent of

¹⁰⁴ "2015 Small Business Credit Survey." Federal Reserve Banks of New York, Atlanta, Boston, Cleveland, Philadelphia, Richmond, and St. Louis. March 2016. <https://www.newyorkfed.org/medialibrary/media/smallbusiness/2015/Report-SBCS-2015.pdf>

small businesses holding checking and savings accounts, respectively, at their primary bank.¹⁰⁵ The result is that finding small business borrowers can be costly for online lenders. One good piece of news for online lenders in the borrower acquisition space is that a recent J.D. Power study found that 73% of fast-growing businesses are considering alternative lenders.¹⁰⁶ However, for all of the reasons mentioned above, banks retain the advantage on this important driver.¹⁰⁷

Generally speaking, online players turn to three acquisition channels: (1) direct marketing and sales, (2) strategic referral partners and (3) third-party advisors. Indirect channels such as third-party brokers are generally the most expensive, followed by direct channels such as online advertising, and then followed by strategic partner referrals. All told, borrower acquisition costs constitute about 25 percent of revenue at some of the largest lenders according to Moody's.¹⁰⁸ A review of annual reports from OnDeck and Lending Club, the only two publicly-traded online lenders with small business loan exposure, shows that sales and marketing efforts were among the largest operating expenses for both lenders, at about 21 percent and 40 percent of gross revenue in 2015, respectively.¹⁰⁹ On a per loan basis, average costs to acquire a customer are estimated to be \$2,500 to \$3,500 per loan.¹¹⁰ Contrast this to current all-in costs that banks face to acquire, underwrite and service a loan, and the magnitude of the disadvantage become clear: in a recent Consumer Bankers Associations research publication, larger banks reported an average total cost of \$3,200 and an average marginal cost of \$1,600 per new loan. The highest reported total and marginal costs were \$7,000 and \$5,000, respectively.¹¹¹

Direct marketing includes online advertising, direct mail, outbound calling, social media and other online marketing channels. This channel may also include an internal sales force, which responds to inbound inquiries from potential customers, and assists customers throughout the loan application process. In the online marketing channel, the final cost per booked loan can be \$1,800+, due to significant competition for Google keywords such as "small business loan" and "business credit," which can cost \$30 to \$50 per click. Conversion rates, which are driven by applications, approvals and close rates, tend to be low through this channel for a host of factors, including modest click-through rates and the heterogeneity of businesses searching these terms, many with no immediate intent to apply for a loan.¹¹²

¹⁰⁵ Schwanhausser, Mark. "Small Business Demands Better Banking Tools." *Javelin*. December 1, 2015.

<https://www.javelinstrategy.com/coverage-area/small-business-demands-better-digital-banking-tools>

¹⁰⁶ "Despite High Satisfaction, Many Fast-Growing Small Businesses Consider Switching Banks, J.D. Power Study Finds." J.D. Power. October 27, 2016. PR Newswire. <http://www.prnewswire.com/news-releases/despite-high-satisfaction-many-fast-growing-small-businesses-consider-switching-banks-jd-power-study-finds-300352270.html#continue-jump>

¹⁰⁷ "The Brave 100: The Battle of Supremacy in Small Business Lending." QED Investors and Oliver Wyman. 2015.

http://qedinvestors.com/wp-content/uploads/2015/10/The-Brave-100-The-Battle-for-Supremacy-in-Small-Business-Lending_vf.pdf

¹⁰⁸ "Online Marketplace Lending Partnerships Can Benefit Lenders and Small Businesses; Pitfalls Remain for A Nascent Industry." Moody's Investors Service. August 31, 2016. <https://www.scribd.com/document/322668581/Marketplace-Lending-Partnerships>

¹⁰⁹ OnDeck Capital Inc. Report to the Securities and Exchange Commission. Form 10-K. 2015. <http://d11ge852tjjqow.cloudfront.net/CIK-0001420811/2e36150d-a925-4b94-ad17-1d111b90ba94.pdf>; "Lending Club Reports Fourth Quarter and Full Year 2015 Results and Announces \$150 Million Share Buyback." PRNewswire. February 11, 2016. <http://www.prnewswire.com/news-releases/lending-club-reports-fourth-quarter-and-full-year-2015-results-and-announces-150-million-share-buyback-300218747.html>

¹¹⁰ Myers, Chris. "For Alternative Lenders To Be Successful, Differentiation Is Key." October 2015. *Forbes*.

<http://www.forbes.com/sites/chrismyers/2015/10/15/for-alternative-lenders-to-be-successful-differentiation-is-key/#722f3110207e>

¹¹¹ "The Brave 100: The Battle of Supremacy in Small Business Lending." QED Investors and Oliver Wyman. 2015.

http://qedinvestors.com/wp-content/uploads/2015/10/The-Brave-100-The-Battle-for-Supremacy-in-Small-Business-Lending_vf.pdf

¹¹² Fundera analysis and "The Brave 100: The Battle of Supremacy in Small Business Lending." QED Investors and Oliver Wyman. 2015.

http://qedinvestors.com/wp-content/uploads/2015/10/The-Brave-100-The-Battle-for-Supremacy-in-Small-Business-Lending_vf.pdf



Strategic partnerships entail a small-business-focused bank, brand or service provider offering privileged access to their small business customers through a referral partnership. In general, if a strategic partner refers a customer that takes a loan from an online credit marketplace or lender, the latter pays a fee to the former based on the amount of the funded loan.

The final channel is third-party advisors, including online credit marketplaces such as Fundera and Intuit Quickbooks Financing, accountants, and independent sales organizations (ISOs) such as offline loan brokers. Microbusinesses with fewer than \$100,000 in revenue are the most likely to seek advice from loan brokers, with 22 percent highlighting this channel as a “top source of financing advice” versus 15 percent of all small business borrowers, according to a 2015 report from the Federal Reserve.¹¹³ Loan brokers have historically been the largest driver of loan originations in online small business lending and, while some players have dramatically reduced exposure to this channel, it remains a significant driver of origination volume today. Brokers originate as much as three-quarters of loan originations at some of the leading online lenders, such as CAN Capital, and at least a fifth at OnDeck.¹¹⁴ This channel is often the most expensive acquisition channel for lenders.

While an online credit marketplace such as Fundera charges lenders a success-based fee of 3 to 5 percent of the funded loan, which is generally not passed onto a borrower, offline loan brokers can charge fees that range from 10 to 20 percent of a funded loan. In one instance reported by Bloomberg in August 2014, a business borrowing \$50,000 over six months would pay back \$65,500, with the broker getting \$8,500. In this instance, the 17 percent fee was more than the lender would make on the loan, and about six times what brokers earn on typical SBA-backed loans.¹¹⁵

Being a publicly traded company, OnDeck provides more transparency than most of the online small business lenders on its acquisition channels. The company’s 2015 annual report indicates that over three-quarters (79.5 percent) of OnDeck’s loan originations was driven by direct marketing and strategic partnerships in 2015, up from a little over half (54.4 percent) in 2013.¹¹⁶ This shift has been driven by year-over-year growth of 91 percent in 2015 and 227 percent in 2014 of loan transactions attributable to direct marketing. OnDeck’s move toward direct and partner channels represents a dramatic shift, as nearly half (45.6 percent) of OnDeck’s loans were sourced through what the company calls its “funding advisor” channel, which includes third-party loan brokers, in 2013 but as much as three-quarters of originations were derived from this channel in 2012. Part of this effort has been driven by an increased focus on strategic partnerships, examples of which include decline partnerships between OnDeck and BBVA. Importantly, with the shift in its mix, OnDeck has reduced its borrower acquisition costs, while improving conversion, with originations growing 62 percent year-over-year in 2015.¹¹⁷

¹¹³ “2015 Small Business Credit Survey.” Federal Reserve Banks of New York, Atlanta, Boston, Cleveland, Philadelphia, Richmond, and St. Louis. March 2016. <https://www.newyorkfed.org/medialibrary/media/smallbusiness/2015/Report-SBCS-2015.pdf>

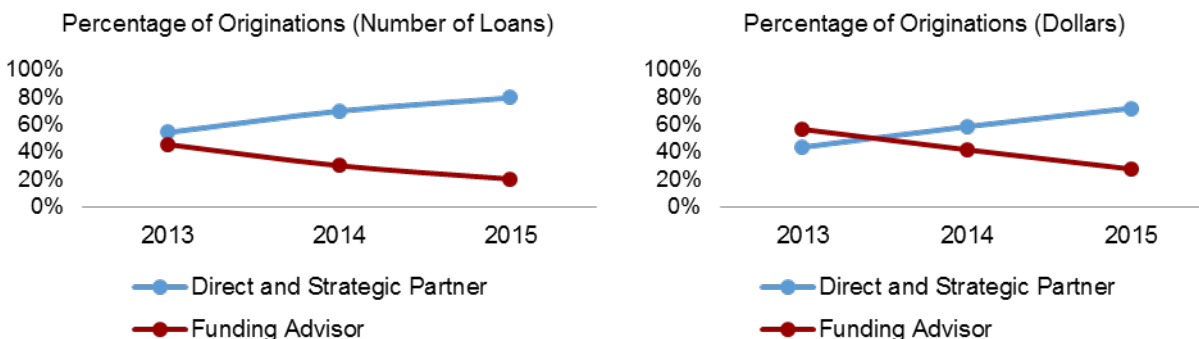
¹¹⁴ Rapp, Eric, Chuck Wellamann and Kathy Tillwitz. “CAN Capital Funding LLC Series 2014-1.” DBRS. October 2014. <http://dailyfunder.com/CANCapital-DBRS-securitization.pdf>

¹¹⁵ Clark, Patrick. “Forget the Algorithms. Get Me a Loan Broker!” Bloomberg. April 4, 2014. <http://www.bloomberg.com/news/articles/2014-04-03/alternative-lenders-still-rely-on-loan-brokers>

¹¹⁶ OnDeck Capital Inc. Report to the Securities and Exchange Commission. Form 10-K. 2015. <http://d11ge852tjjqow.cloudfront.net/CIK-0001420811/2e36150d-a925-4b94-ad17-1d111b90ba94.pdf>

¹¹⁷ OnDeck Capital Inc. Report to the Securities and Exchange Commission. Form 10-K. 2015. <http://d11ge852tjjqow.cloudfront.net/CIK-0001420811/2e36150d-a925-4b94-ad17-1d111b90ba94.pdf>

Figure 39: OnDeck’s Borrower Acquisition Channels (2013-15)



Source: OnDeck Capital Inc. Report to the Securities and Exchange Commission. Form 10-K. 2015.

Borrower Experience and Satisfaction. A lender’s ability to capture mindshare and money among small businesses is defined by a host of drivers that can be grouped under a customer’s user experience as well and overall satisfaction. Customer experience is defined by the ease of the credit application process, and time to funding. Customer satisfaction runs a bit deeper, being driven by price and term, amount approved relative to the business opportunity, and trust of the provider. We explore competitive advantage of each below.

1. Application process and time to funding. When small business owners are asked for the “primary reason for not applying” for a loan, only 5 percent cite “search too difficult” as the primary deterrent from applying. This suggests that small businesses genuinely in need of capital do what it takes to complete the loan regardless of the difficulty of the process. That being said, discussions with small business borrowers, as well as surveys of the broader small business population, bear a common theme: finding a small business loan is needlessly time-consuming. Indeed, the process of obtaining a small business loan is complex at best, and bewildering at worst. Consider the elements of the process: the time and energy required to navigate the labyrinth of lenders; differentiating between at least 12 different types of credit product, each with varying use cases; filling out three-inch thick loan applications; compiling and submitting supporting documentation, such as bank statements and tax returns, most of which is done manually; and making sense of how loan offers stack up on features like price and terms. The process is often so complex that a survey conducted by Federal Reserve Bank in 2013 found that borrowers spent an average of 22 to 34 hours for profitable and unprofitable firms, respectively, and 26 hours for all firms on average.

Figure 40: Small Business Borrowers' Search Costs and Actions



Source: "Fall 2013 Small Business Credit Survey," Federal Reserve Bank of New York, September 2013.

In addition to the time and paperwork, as well as the rejection rates associated with applying to a bank, the interface also impacts the customer experience. As a 2015 report from Oliver Wyman underscored, if an application process requires too many fields, asks the applicant to find and submit many pieces of documentation, and delivers an answer back to the applicant in an unknown period of time, prospective borrowers may abandon the process in search of credit elsewhere. To that end, banks—or any lender, for that matter—are not immune to what the same Oliver Wyman report dubbed the "shopping-cart dilemma" that has faced e-commerce retailers since the dawn of the internet—that is, "if the checkout process is too complex or has too many steps, customers tend to abandon their shopping carts."¹¹⁸

While borrower-facing digital DNA varies widely across banks, (with the nation's largest banks such as Capital One, Chase, Bank of America and Wells Fargo faring among the best), this is generally a driver on which alternative lenders differentiate themselves. Banks rely almost exclusively on retail branches, banker-to-customer contact, and manual processes. They have only limited digital presence. In fact, about 56 percent (3.8 million) of America's 6.8 million micro and small businesses with less than \$10 million in revenue indicate that online services fall short at their primary financial institution.¹¹⁹ This is problematic for incumbent banks because small business customers increasingly expect a multi-screen approach to interacting with their financial services provider, with optionality across smart phones, tablets and computers. In the same survey just noted, Javelin found that micro and small businesses rely heavily

¹¹⁸ These businesses indicated desire to use an online service that provides a consolidated view of company finances and enables them to invoice customers, monitor payments, manage cash flow, pay suppliers, and process payroll, among other features. "The Brave 100: The Battle of Supremacy in Small Business Lending." QED Investors and Oliver Wyman. 2015. http://qedinvestors.com/wp-content/uploads/2015/10/The-Brave-100-The-Battle-for-Supremacy-in-Small-Business-Lending_of.pdf

¹¹⁹ Schwanhauser, Mark. "Small Business Demands Better Banking Tools." Javelin. December 1, 2015. <https://www.javelinstrategy.com/coverage-area/small-business-demands-better-digital-banking-tools>

on online banking, as more than 8-in-10 last logged on within the past seven days, including 42 percent that accessed online banking in the past day.¹²⁰

To be sure, as web-first companies, online players understand this, and have designed their customer experience with the efficiency small businesses seek. Instead of 24 hours of paperwork, completing an application takes only minutes. Instead of pen and paper, modern web and mobile interfaces reduce the approval turnaround time from three months to three days, and in some cases three minutes. In instances where customers want to evaluate all of their options and compare prices in one place, small business owners can now turn to multi-lender marketplace sites for a convenient, one-stop shop experience that mirrors the ease of Kayak or others in the travel industry.

Both banks and online players invest considerable resources in their customer support functions, with varying degrees of online support combined with phone-based assistance. However, for online lenders, this customer support is defined as an essential part of the product, not an incremental cost center or a “nice to have,” as it impacts the customer experience and creates stickiness with the online platform.

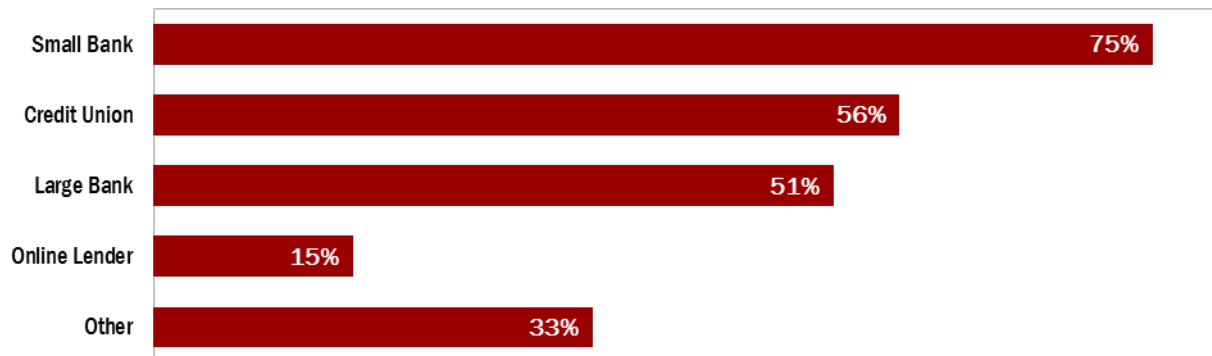
2. Overall Satisfaction: Approval Rates and Price. As discussed earlier, small business loan applicants’ efforts in applying for loans are often met with rejection, meaning borrowers have to apply to multiple lenders on their own to hedge against the likely chance of being declined at a discrete lender. Approval may also be only the first hurdle, at least when compared to the amount of funding sought by the small business borrower. As described in Chapter 2, a 2015 survey by the Federal Reserve found that only 50 percent were approved for the “full amount of financing,” with 14 percent approved for “most,” 18 percent for “some,” and 18 percent for “none.” Microbusinesses, which are businesses with less than \$100,000 in revenue, had the largest unmet need, with 63 percent receiving less financing that sought. But, online lenders are filling part of this gap, with approval rates that run as high as 80 percent. ADD Footnote to Fed survey.

Beyond approval rates, that same Federal Reserve survey found that even among approved firms satisfaction rates varied widely across lenders. At least half of applicants approved for financing from banks or credit unions were satisfied with their experience, with small banks as clear standouts at 75 percent satisfaction, likely due in no small part to small banks’ historical focus on relationship banking and embedded relationships in borrowers’ communities.

¹²⁰ Schwanhausser, Mark. “Small Business Demands Better Banking Tools.” Javelin. December 1, 2015. <https://www.javelinstrategy.com/coverage-area/small-business-demands-better-digital-banking-tools>

Figure 41: Borrower Satisfaction by Institution Type

Lender Satisfaction Score (Percent Satisfied Minus Percent Dissatisfied) Among Employer Firms

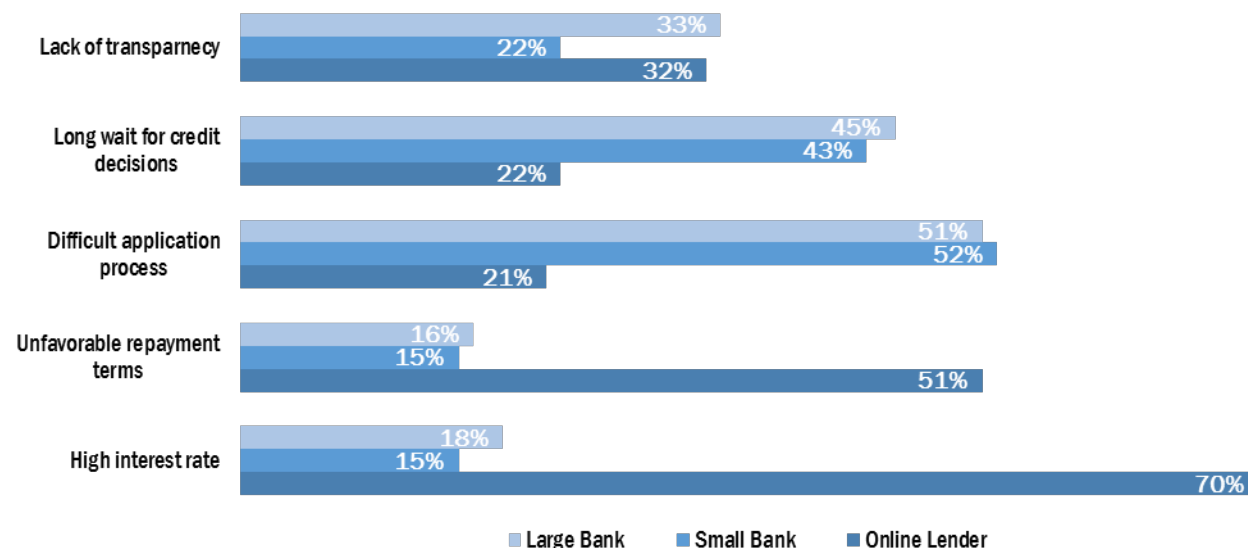


Source: "2015 Small Business Credit Survey," Federal Reserve, March 2016.

Transparency issues were cited across all lenders, with 31 percent of firms who were dissatisfied with their experience pointing to a lack of transparency. But, in keeping with online lenders' focus on a seamless customer experience, these lenders fare best on time to approval and application process, but tend to have the weakest overall satisfaction score, with the share of those satisfied with an online lender versus those unsatisfied coming in at just 15. Dissatisfied firms reported concerns with high interest rates and unfavorable repayment terms.

Figure 42: Borrowers' Reasons for Dissatisfaction by Lender Type

Percent of Employer Firms Dissatisfied with Lender



Source: "2015 Small Business Credit Survey," Federal Reserve, March 2016.

The Fed survey did not break out performance on a per-lender basis, but satisfaction rates are likely to vary widely. Publicly available data from OnDeck, shows a net promoter score of 76 in their direct channel in 4Q15. This score measures customer loyalty and is a widely used index ranging from negative 100 to positive 100. OnDeck notes in its 2015 annual report, "Our score places us at the upper end of customer satisfaction ratings and compares favorably to the average Net Promoter Score of nine (9) for national banks, 19 for regional banks and 46 for community banks."¹²¹

Customer and Product Mix. There are a large number of new players in the online lending marketplace with a broad array of products. Some of the new product offerings have unique elements, particularly in the segment of invoice and payment financing. Most others, however, are terms loans and lines of credit that largely parallel products that have traditionally been offered by banks and other lenders. Specific product innovation is focused largely on the convenience provided by the automated technology. There is also a larger array of customers being attracted to the new online marketplace, given their focus on smaller dollar loan amounts and widening the credit box.

¹²¹ OnDeck Capital Inc. Report to the Securities and Exchange Commission. Form 10-K. 2015. <http://d1lge852tjjqow.cloudfront.net/CIK-0001420811/2e36150d-a925-4b94-ad17-1d111b90ba94.pdf>

Given this backdrop of product and customer heterogeneity, we believe one of the critical elements for success is customer/product fit – being sure lenders have the right mix of customers and products, and at the base of that, being sure the small businesses get the loans that are right for them. The critical elements of the fit are the right loan size, duration and cost. This is a difficult challenge given the different types of small businesses described in Chapter 1. A small business operating on Main Street might need a short term loan to buy inventory for the holiday season. A supplier might need a longer term loan to buy equipment for an expansion. Many businesses do not have a clear idea of their cash flow or loan needs and the entrepreneurs by nature often have an optimistic view of their ability to make their business successful enough to repay the borrowing.

Against this backdrop, the new online lenders are offering a variety of new products, often at costs that can be much higher than those offered in the past by traditional banks.

Figure 43: Online Lender Product Offerings on Fundera’s Credit Marketplace



Source: Fundera Inc., September 2016.

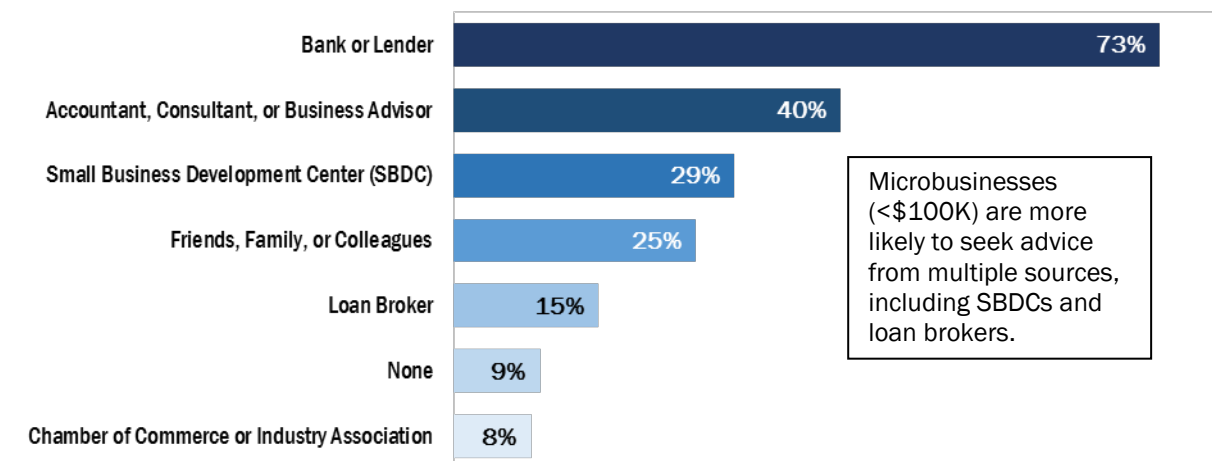
In the past, matching the borrower with the right loan product was part of the personal underwriting process. In a face-to-face conversation with a banker, the small business owner described his or her needs and plans for repayments and often went through an advisory process that helped them get the amount and duration of a loan that met the requirements of their business and their plans. While there is less of an opportunity for the kind of personal relationship or face-to-face interaction that traditional banks employ to underwrite loans, online lenders have found technology-enabled ways of mitigating, and indeed systematizing, this issue. Online lenders generally rely on risk-based pricing methods.

Risk-based pricing is the process of pricing a loan, generally an interest rate to the borrower, to reflect the perceived risk and often the cost of acquiring, underwriting and servicing that particular borrower. The basic concept is quite simple-the higher the risk, the higher the rate; the lower the risk, the lower the rate. Many banks do not engage in risk-based pricing, in part because they lack of sophisticated algorithms to facilitate risk-based pricing, and in part because they choose to focus on the highest quality customers, with super-prime credit scores and outstanding debt service capacity. The reliance on risk-based pricing enables online lenders to build a more diverse credit portfolio, including low-, medium- and

high-risk customers, and better enables them to provide credit to borrowers while respecting their credit needs, eligibility and the likelihood of acceptance of certain products.

Figure 44: Small Businesses Use Banks as Main Source of Financing Advice

Top Source(s) of Financing Advice (% of Applicants)



Source: “2015 Small Business Credit Survey,” Federal Reserve, March 2016.

Cost of Funds. How lenders source their capital to lend, and how much compensation capital providers require, is a key driver of competitive advantage for any lender. Cost of funds is driven by the interest expense, fees and amortization of deferred issuance costs that a lender incurs in connection with making loans. It is often conveyed as “cost of funds rate,” which is calculated as a lender’s funding cost divided by their average of the funding debt outstanding at the beginning of a quarter and at the end of that quarter.

A bank’s cost of funds for short-term loans is determined by two sources of funding. The first is the Federal Reserve’s discount rate, which is charged to commercial banks on loans received from their regional Federal Reserve Bank’s lending facility; it currently sits at about 1 percent. Banks’ costs of funds are further supported by retail deposit bases, which offer access to additional quick, stable and inexpensive sources of capital. By contrast, online lenders bear costs of funds that are significantly higher than those of a traditional bank. Established online players bear cost of funds of 5-to-8 percent. Less established alternative lenders bear a cost of funds that can run as high as 15 percent. (The exception to those with high cost of funds are the ecommerce platforms and payment processors who tend to generate low-cost cash in the base businesses.)

In theory, the cost of funds rate will come down over time as players scale and prove their model. For example, OnDeck’s cost of funds has fallen significantly as its business has scaled, falling from 10.8 percent in 2013 to 5.8 percent in 2015.¹²² The result is that, particularly in the early years, online players

¹²² OnDeck Capital Inc. Report to the Securities and Exchange Commission. Form 10-K. 2015. <http://d11ge852tjjqow.cloudfront.net/CIK-0001420811/2e36150d-a925-4b94-ad17-1d111b90ba94.pdf>

may charge borrowers higher interest rates on loans in order to cover their cost of funds, making it nearly impossible to compete directly with banks on cost alone.

Importantly, the search for yield by institutional investors has been accelerating growth in marketplace lending. While marketplace lending started off as “peer-to-peer,” with mainly retail lenders making loans to consumers on lending platforms, increasingly, funding in the United States, the United Kingdom, China, and Australia comes mainly from institutional lenders. The increasing scale and track record of the platforms enabled institutional capital to flow in, aided by attractive yields.

Online marketplace lending whole loans emerged as an attractive investment for investors searching for diversification and high yield.¹²³ Increased investor demand stimulated the market for securitization of whole loans issued by online marketplace lenders, with the first unrated securitization transaction pricing in 2013 and first rated securitization transaction pricing in 2014. Direct lender and platform, consumer and small business online marketplace lenders alike are securitizing portfolios of loans as sources of funding. By the end of 2015, the total volume of securitization reached over \$7.0 billion, with over 40 transactions since 2013.¹²⁴

In an effort to diversify funding sources, some online marketplace lenders are forming internal hedge funds and registering affiliated entities as investment advisors to buy a company’s own loans or participate in securitizations. For example, Lending Club and SoFi each have launched funds to create additional sources of capital to originate loans. The emergence of technology platforms such as Orchard, which allow institutional investors to connect to multiple marketplace platforms, along with companies such as PeerIQ, which provide tools to analyze, access, and manage risk in marketplace investments, will continue to increase the level of comfort that large institutions have in marketplace lending.

Cost of Underwriting, Operating, & Compliance

1. Cost of Underwriting. Underwriting is the process a lender uses to evaluate a borrower and decide if it is going to offer a loan. After poor experiences with underwriting by FICO scores in the years leading up to the Great Recession, banks have largely abandoned automated underwriting and reverted to manual underwriting. Banks often underwrite based on evaluating bank statements, tax returns, balance sheets, income statements, and credit reports with a pen, pencil, calculator, and spreadsheet. A final decision is often made after visiting the borrower’s place of business, particularly for larger bank and SBA loans. They tend to have higher costs from personnel and their retail footprint.

Online marketplace lenders use electronic data sources and technology-enabled underwriting models to automate processes such as determining a borrower’s identity or credit risk. The data sources used to determine a borrower’s credit risk, for example, usually include traditional underwriting statistics (e.g., income and debt obligations), but also often include real-time business accounting, payment and sales history, online small business customer reviews, and other non-traditional information. Lenders

¹²³ “Opportunities and Challenges in Online Marketplace Lending.” U.S. Department of the Treasury. May 10, 2016. <https://www.treasury.gov/connect/blog/Documents/Opportunities%20and%20Challenges%20in%20Online%20Marketplace%20Lending%20v%20Revised.pdf>

¹²⁴ “PeerIQ Marketplace Lending Securitization Tracker: 1Q 2016.” PeerIQ. April 3, 2016. [http://www.peeriq.com/assets/PeerIQ%20MPL%20Securitization%20Tracker%20\(1Q2016\).pdf](http://www.peeriq.com/assets/PeerIQ%20MPL%20Securitization%20Tracker%20(1Q2016).pdf). Note: total excludes transactions of securitized loans originated online by banks and CDFIs.

like Fundbox and BlueVine underwrite customers simply by evaluating their QuickBooks, Xero, or FreshBooks data. In general, alternative lenders typically rely on cash flow analysis to gain insight into creditworthiness with much of the data coming directly from sources like a merchant statement or a borrower's checking account. Companies like PayPal and Square can proactively extend credit offers to their customers by analyzing patterns in their cash flow. Positioned in the middle of every transaction, these companies assume less risk on the repayment side. Services like Intuit Account Aggregation, Yodlee, and even an API the IRS has made public, which helps verify that the business exists, all accelerate the time to underwrite and deliver more uniform access to actionable data.

Interpreting cash flow data, including Demand Deposit Account (DDA) or checking account data, to infer creditworthiness is a major innovation brought by online lenders. Banks have only recently started to realize the potential of this approach. Banks could have formidable advantages if they can better tap DDA data, given that they have such data on every small business customer which has a deposit account with them. The result is that the cost to a bank of accessing and analyzing all that data will be marginal and highly scalable. In addition, by assessing credit-worthiness using DDA data, banks could pre-approve their customers for lending products, with near-zero cost of acquisition. After all, the bank already owns the customer and the relationship.

As QED and Oliver Wyman's recent report underscores, banks vary greatly in productivity but the applications handled per full-time employee range around a mid-point of about 100 to 125 loans per year.¹²⁵ If the all-in cost is \$100,000 for such an employee, the costs translate to around \$1,000 per loan just for marginal employment cost. These larger banks report approval rates in the 40 to 75 percent range, and net booked rates (on approved loans) in the 50 to 80 percent range.¹²⁶ These approval and final close rates for banks raise the net cost per booked loan significantly. The high cost of personal underwriting is one reason banks have moved away from smaller dollar loans, as it is hard to make them profitably. The cost advantage in underwriting is clearly with the automated process.

While data-driven algorithms may expedite credit assessments and reduce costs, they also carry the risk of disparate impact in credit outcomes and the potential for fair lending violations. Importantly, applicants currently do not have the opportunity to check and correct data potentially being used in underwriting decisions.¹²⁷ The combination of data-driven underwriting, automated and online operations, a lack of legacy systems, has allowed online marketplace lenders to make real-time changes to algorithms and third-party arrangements. However, both the credit models and business models established by online marketplace lenders remain untested through a full credit cycle. Online marketplace lenders have demonstrated their ability to improve operational efficiencies, but neither the durability of technology-driven operations and credit underwriting, nor the sustainability of investor demand for loans, have yet been tested during a downturn in the credit cycle.

¹²⁵ "The Brave 100: The Battle of Supremacy in Small Business Lending." QED Investors and Oliver Wyman. 2015. http://qedinvestors.com/wp-content/uploads/2015/10/The-Brave-100-The-Battle-for-Supremacy-in-Small-Business-Lending_vf.pdf

¹²⁶ "The Brave 100: The Battle of Supremacy in Small Business Lending." QED Investors and Oliver Wyman. 2015. http://qedinvestors.com/wp-content/uploads/2015/10/The-Brave-100-The-Battle-for-Supremacy-in-Small-Business-Lending_vf.pdf

¹²⁷ "Opportunities and Challenges in Online Marketplace Lending." U.S. Department of the Treasury. May 10, 2016. <https://www.treasury.gov/connect/blog/Documents/Opportunities%20and%20Challenges%20in%20Online%20Marketplace%20Lending%20vRevised.pdf>

2. Cost of Account Management and Servicing. For incumbent banks expense associated with ongoing loan monitoring and collections can be formidable due to the need to meet existing regulation and compliance standards as well as the lack of an automated payment system. For online players, lack of scale is a major factor in their costs. An Oliver Wyman study cited the example of one of the bigger short-term lenders as spending tens of millions of dollars annually on systems and people to support a portfolio of around 20,000 active loans. The net cost per loan runs well into the thousands of dollars per customer. This means that many of the new players have a current disadvantage that should lessen over time and eventually disappear if they can scale their businesses into the hundreds of thousands of customers. And, there are new players that have nearly no incremental servicing costs because their customers are already on-boarded, monitored and serviced through their core systems, particularly the point of sale merchants such as Amazon, AvidXchange, and Square.

3. Cost of Regulatory Compliance. Lastly, the cost of regulatory compliance impacts both types of players, though it impacts incumbent banks to a far greater degree. Indeed, banks representing 80 percent of banking assets in the U.S. are subject to stress testing, among other new provisions. Yet, the regulatory gaps may be closing soon. Indeed, initially, new non-bank entrants have been viewed as having an advantage due to the fact that they often fell outside of federal banking compliance requirements. However, S&P has noted that it was concerned about “the unproven ability and capacity to comply with new and ongoing regulatory and legislative requirements” for the marketplace lending industry. It also expressed concerns about the quality and consistency of the underwriting processes, along with the robustness of the underlying data that the platforms collect and maintain. Given the increasing number of partnerships between incumbents on new entrants, many online lenders are already becoming subject to third party compliance audits. In Chapter 6, we explore a recommended regulatory action plan for the small business lending sector and note that compliance costs should be built into the operating models of the new entrants from the start, in order to automate the regulatory compliance activity and keep costs as low as possible.

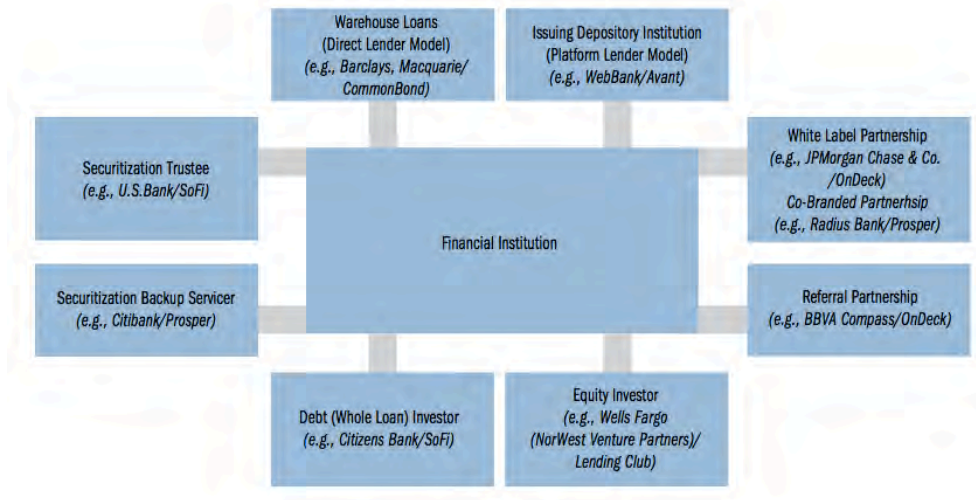
Banks and Online Lenders: Options for Strategic Responses

Online lending has emerged during a highly favorable credit environment and an unprecedented period of sustained economic growth, leading some skeptics to argue that online lenders are a flash in the pan with untested underwriting models, fickle capital bases and little brand stickiness among borrowers. We see the new entrants as game changers, altering for the long term the dynamics of the small business market. The market is only in its early stages of evolution, yet online lenders are already growing the overall pie of small business lending as well as taking share directly from incumbent banks. From their strong initial reception, it is likely that many of the innovations introduced by online lenders to the small business lending market – including, for example, data-driven loan underwriting, speedier responses, a customer friendly, online user experience, and wider credit boxes, will become mainstays of the market.

We have largely come to the end of the first phase of the market, in which observers saw the new entrants as largely dominating and replacing the activity of the existing lenders. The next phases of the evolution of the small business lending market will depend largely on the competitive responses of the banks and other lending incumbents. Banks looking to compete with online lenders will need to solve their own “build, buy or partner” equation or risk missing out on revenue opportunities, and possible cannibalization of their built-in customer base. A host of financial institutions have already begun explore active fintech strategies spanning lending, as well as payments, asset management and other sectors.

Going forward, banks looking to respond to the rise of online lenders have multitude options. One option set was described in the Treasury Department’s May 2016 report, which lists the ways in which financial institutions are choosing to partner with online lenders.

Figure 45: Financial Institutions Interactions with Online Marketplace Lenders



Source: “Opportunities and Challenges in Online Marketplace Lending,” U.S. Department of the Treasury, May 2016.

We classify the potential option set before banks by highlighting the strategic rationale and goals of each partnership, while also underscoring the benefits and risks of each approach. As banks move beyond a “no, because” mentality in favor of a “yes, if” approach to online lending, we see four broad strategies, each with their own option set, which banks could pursue to either compete or collaborate with emergent players—and in some cases do both simultaneously.

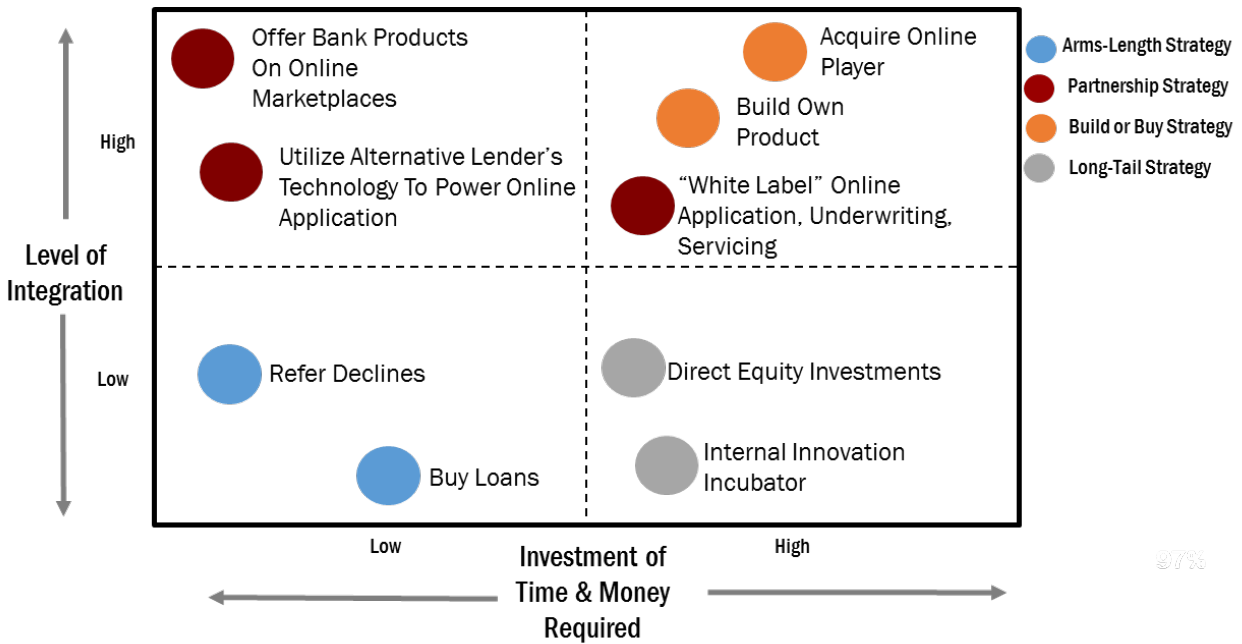
1. **Strategic Partnership Strategy.** These partnerships are among the most promising for banks, offering a chance to work with online credit marketplaces and lenders to strengthen and improve existing business models, without dismantling existing business models altogether. These partnerships include making the bank’s small- and medium-sized business (SMB) product line available through an online credit marketplace such as Fundera, utilizing an alternative lender’s technology to power an online application, or utilizing an alternative lender’s technology to power an online application, as well as the underwriting and servicing of the loan, in effect white labeling the online lender’s offering.
2. **Arms-Length Partnership Strategy.** These partnerships are more limited than those noted above, requiring less investment by the incumbent bank. The goal is not to build out a new product offering, expand a bank’s customer base or credit box, but rather complement the bank’s current business model. Revenue achieved through these partnerships may end up being more limited and ancillary relative to the bank’s core revenue. These partnerships include buying loans originated on an alternative lender’s platform, and routing declined loan applicants to an alternative lender or credit marketplace.

3. ***Long-tail Incubation Strategy.*** These partnerships include corporate venture capital and attempts by incumbents to incubate startups within a larger company. This option has become increasingly popular among large financial institutions as a means of testing startup ideas to uncover potential synergies with existing business lines, and/or generating attractive investment returns.
4. ***Build or Buy.*** A “build” strategy requires no partnership at all, and instead, seeks to establish a foothold in online lending for banks entirely through internal efforts. “Building” can include creating an online application, as well as potentially utilizing data sources on which online lenders have relied, to better underwrite borrowers. This option is the most expensive and time-consuming. A related strategy is to acquire an existing online player. To date, few such acquisitions have occurred in part because banks have been concerned about the regulatory costs and challenges of making the acquired entity fully compliant with the bank’s oversight requirements. However, as more online players evolve into attractive acquisition targets, the benefits of purchasing should outweigh partnering, and we can expect more acquisitions in this space.

We outline these strategies in a matrix that arrays them along two attributes: the closeness of the relationship between the partners in terms of control of the technology and operations, and the investment of time and money required. As one would expect, the complementary strategies, where a bank aligns with an online lender to purchase loans or refer customers, requires the least time and money, and results in low integration of the parties and their processes. Sustaining partnerships with greater levels of coordination on applications and underwriting are more in the upper left quadrant. The option of go-it-alone or purchasing an online lender provides an integrated solution for a large investment in time and money.



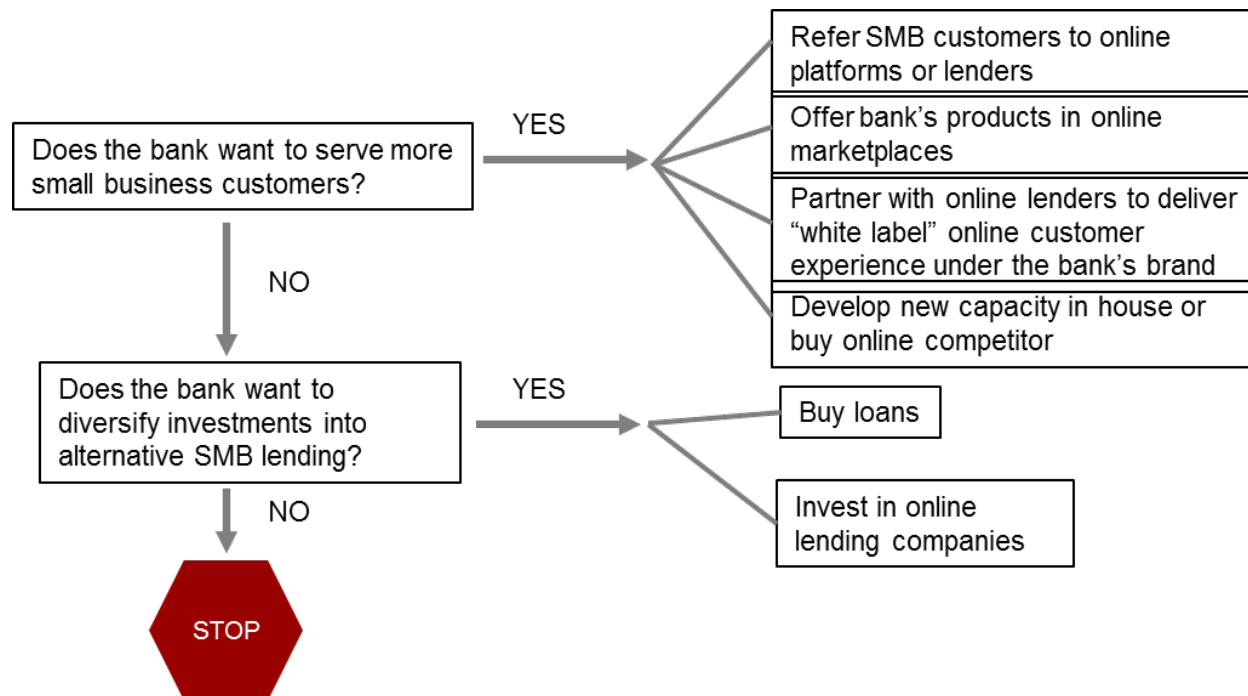
Figure 46: Banks and Incumbent Lenders: Options for Strategic Responses



Source: Author's analysis.

At this time it is not clear that there is a single winning strategy, or that there may ever be a single winning strategy. Instead, the appropriate path depends on the objective of the bank or incumbent player and the amount they are willing to invest in pursuing this market segment. To find the right path, a bank may want to ask itself a series of strategic questions as outlined in the following sections:

Figure 47: Strategic Decision Framework for Banks and Incumbent Lenders



Source: Author's analysis.

Strategic Partnership Strategy

These partnerships are among the most promising for banks, offering a chance to work with online credit marketplaces and lenders to strengthen and improve existing business models, without dismantling existing business models altogether. These partnerships include making the bank's small- and medium-sized business (SMB) product line available on an alternative lender's platform, utilizing an alternative lender's technology to power an online application, or utilizing an alternative lender's technology to power an online application, as well as the underwriting and servicing of the loan, in effect white labeling the online lender's offering.

1. Making the Bank's SMB Product Line Available on an Online Credit Marketplace. There are incremental partnership opportunities that banks can pursue which largely sustain the bank's core business model. Chief among these options is to begin offering the bank's small business product lines through online credit marketplaces such as Fundera and Intuit's Quickbooks Financing. These online small business loan marketplaces, described in Chapter 3, are rarely direct lenders; rather, they focus on simplifying the process of applying for a loan and providing a multitude of credit options from a large number of lenders of all types in order to serve the widest possible market of borrowers. Banks can choose to make any and all of their small business product lines, including term loans, SBA loans, lines of credit, credit cards and charge cards, available to small businesses in a highly targeted way through an online credit marketplace.

Examples of banks pursuing this option include Celtic Bank and LiveOak bank, both of which are traditional bank lenders that have chosen to offer SBA product on Fundera's marketplace platform. However, to date alternative lenders have tended to dominate online credit marketplaces for a few reasons.

First, online credit marketplaces by definition attract borrowers interested in applying for loans online. While online small business loan applications are a defining feature of alternative lenders, very few banks have created their own online small business applications, making it more difficult to offer their products through an online marketplace. Second, a core competitive advantage of online credit marketplaces is demystifying the loan application process, making it simpler, user-friendly and fast. Achieving these features depends in part on having deep technological integrations with lenders. For example, Fundera uses an application program interface (API) with virtually every online lender, which can digitally and securely send that lender a borrower's application information within seconds. Few banks have been willing to invest in the technological capabilities required to build these APIs and integrate with online credit marketplaces.

This approach is changing, however, and we believe it will continue to do so. This option enables a bank to significantly widen access to small business borrowers, beyond those with a depository relationship with the bank. This in turn creates a new opportunity for a bank to cross-sell a new customer not simply on the product offered through the marketplace, but also on building a depository relationship. Moreover, offering a bank's small business credit products through a marketplace can be thought of as a highly targeted new marketing channel for desired bank customers. In fact, online credit marketplaces tailor applicants sent to lenders based on the credit box – in effect, the borrower eligibility criteria – that lenders wish to work within. As a result, banks can tailor which customers they wish to target with their product set based on a range of criteria, including credit score, geography, industry, revenue, among other variables. Lastly, there is significant benefit to the small business customer, as it would ensure that when borrowers are turning to an online credit marketplace to evaluate the full range of credit options available to them, they are also seeing which bank products are available to them.

Ultimately, pursuing this option requires banks to evaluate answers to three core questions: (1) Does the bank want to make their small business product set available to non-bank customers? (2) Does the bank wish to increase its small business loan originations while remaining within its existing credit box? and (3) Does the bank have the resources, including time and capital, to invest in technology required to integrate with an online credit marketplace? If the answers are positive, the online marketplace option has limited drawbacks.

2. Utilizing an alternative lender's technology to power an online application. Simultaneous to partnering with an online credit marketplace, banks may choose to partner with an existing online lender to digitize their application process by creating a fully online front-end application, collecting all application information and documentation that the bank requires to decision a small business loan. This digital application could either be used to target existing bank customers, or as a means of attracting non-bank customers who are looking for loans online. In practice, the digital application is entirely branded by the bank in question, despite leveraging the online lender's technology.

In combination with this digital application, banks will need a backend customer relationship management (CRM) tool to manage and disseminate borrowers' information and documentation received via this online application. There are two possibilities here. First, the bank could outsource the backend CRM tool to the online lender, which would use a version of its own CRM tool. Second, the bank could integrate directly with the bank's internal systems for pipeline management, underwriting, and servicing.

This approach has many benefits. First, creating an online application improves a bank's user experience by providing flexibility to small business borrowers to apply online. The appeal of an online

application should not be underestimated as small business owners are becoming increasingly more comfortable shopping and comparing loan options online. In addition, digitizing loan applications decreases a bank's dependency on paper documentation while also reducing the time required by a borrower to complete a loan application. Moreover, offering a streamlined online application, alongside the assistance and guidance of a banker that a borrower already trusts, can be a powerful combination.

This approach introduces only marginal new risks to an existing bank's business model as it does not require the bank to fundamentally alter its underwriting or servicing process. Nonetheless, risks involved include the need to deploy resources for thorough compliance and diligence of the online lender's application, given that through this partnership the online lender is a third-party vendor of the bank. It also could expose the bank to working with a competitor that may currently be, or may seek to be, developing products that compete directly with those of the bank.

3. Utilizing an alternative lender's technology to power online applications, underwriting, and servicing. In a more integrated extension of this partnership approach, an alternative lender can power a digital application and use the application information and documentation to underwrite and eventually service a small business loan. In this case, an alternative lender would provide access to their proprietary technology for pricing and underwriting decisions as well as for servicing, though branding could still be that of the bank. Under this arrangement the capital is deployed by the bank.

This option has been referred to as "lending as a service" or in some instances as "white labeling." It has the benefits of delivering a full online customer experience, and allowing a bank to use state of the art technology for underwriting and servicing without the development costs. However, given third party rules and bank regulations, significant compliance activity is required to be sure that the combined activities meet the bank and its regulators' oversight standards. One example of this white label approach is the recently implemented Chase-OnDeck partnership, where the bank handles marketing and holds the loans on its balance sheet, and loans are made fully under the Chase brand while OnDeck receives origination and servicing fees for underwriting (under a jointly built model), servicing, and customer service. Extensive compliance integration was also required as this partnership was brought to market.

A major hurdle to this partnership structure is that no alternative lender has weathered a downturn so the new entrant's underwriting and portfolio performance is untested for economic duress. Ultimately, pursuing this option requires banks to evaluate answers to a number of core questions: (1) Does the bank wish to provide a digital loan application to small business customers? (2) Does the bank wish to lend to non-bank as well as bank customers? (3) Does the bank trust an alternative lender's underwriting criteria, which can be significantly different than a traditional bank's criteria? and (4) Can the bank find a partner that it believes has long-term viability and a commitment to the partnership strategy, and who can meet the bank's own compliance requirements?

Arms-Length Strategy

These arrangements are more limited than those noted above, requiring less investment by the incumbent bank, but can be highly complementary to the bank's current business model. These partnerships include buying loans originated on an alternative lender's platform, and routing the bank's declined loan applicants to an alternative lender.

1. Routing declined loan applications to an alternative lender. A further option banks could pursue is a marketing channel for online small business lenders to the bank's existing small business customers. In this scenario, banks would attempt to lend to a small business borrower. Applicants who meet the bank's eligibility criteria would receive loan offers from the bank in question. Applicants who do not meet the eligibility criteria of the bank in question, and are instead declined, would then be passed onto an online lender for further consideration. The online lender can either underwrite and approve the borrower, or reject the applicant outright.

Banks should consider this option if they want to provide more options to customers that would be ineligible for a bank product; increase revenue through referral fees from an alternative lender; do not want to expand their credit box, but want to provide a service to depository customers; and trust the customer experience, rates, and servicing provided by an alternative lender.

In theory, this type of arrangement leverages the strengths of both parties and works to mitigate their inherent weaknesses. The banks have low-cost access to existing customers, low cost of funds and ready access to the businesses' direct deposit data in electronic form. But the alternative lenders provide the new credit risk analysis expertise and platforms that can handle various loan structures, as well as riskier loans.

However, this option has risks to consider. In particular, banks risk losing control over the customer experience, since arrangements typically require a full customer handoff to the online partner. While many of the newer lenders in the space have products with pricing that would pass banks' brand reputation risk tests, there are some which offer much higher cost alternatives. In addition, banks risk introducing their customer to a company that could eventually develop more directly competitive products or fund future loans as the company grows.

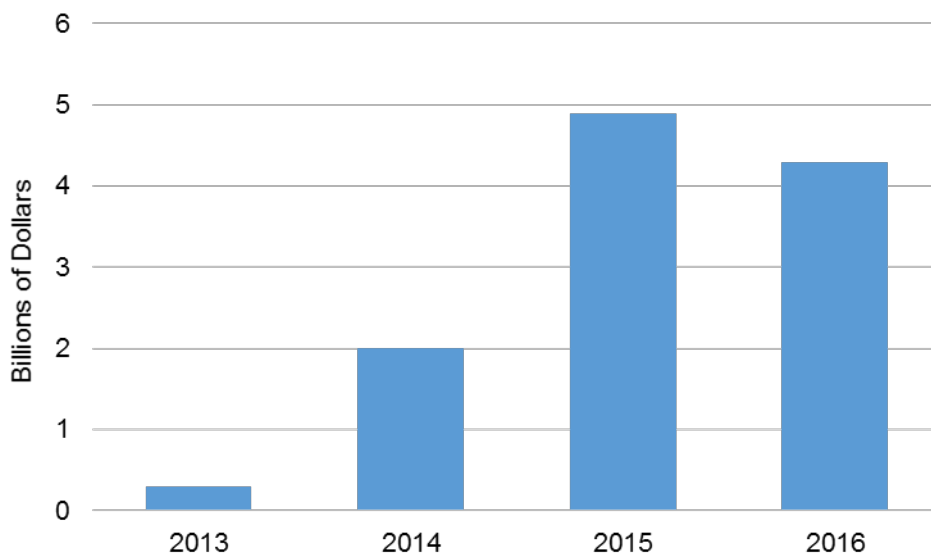
In addition, execution and alignment are the keys to a good partnership arrangement and banks often struggle with both. Systems integration projects never get completed as promised, and as a result the customer and data hand-off processes suffer. Due to these considerations, only limited progress has been made. In the U.K. where referrals of rejections are now being mandated, the experiences gained by banks may spill over into the U.S. and generate greater activity of this kind in the future.

2. Buying loans originated on an alternative lender's platform. A large part of alternative lenders' success hinges on their ability to tap the securitization market, as they need to access reasonably priced debt in order to keep expanding. Banks have emerged as buyers of these assets, as partnership through acquisition of an online lender's loan assets by traditional banks has become increasingly popular. Banks should only consider this option if they are looking to put more balance sheet capital to work, have carefully evaluated the investor purchase agreement, and have thoroughly vetted an alternative lender's underwriting criteria.

Banks, particularly small and regional banks in the United States, are redeploying their customers' deposits into a higher-yielding asset. One industrial bank with which Morgan Stanley recently spoke had 10 percent of its assets in marketplace notes. Several banks have also signed framework agreements with leading platforms to buy a significant quantity of the highest-grade notes. Some examples of cooperation include Santander buying loans in the United States and referring declined SME customers to P2P lenders in the United Kingdom; RBS referring declined SME customers in United

Kingdom; BBVA Compass buying OnDeck’s small business loans; Citi Community lending, Union Bank, Titan Bank and Congressional Bank all buy loans through the Lending Club platform.

Figure 48: Online Loan Securitization
 Billions of Dollars, 2013-2016 (Year-to-Date)



Source: Abramowicz, Lisa and Rani Molla. “The Online Lending Obstacle Course.” Bloomberg. August 3, 2016. <https://www.bloomberg.com/gadfly/articles/2016-08-03/online-lenders-tackle-securitization-obstacle-course>. Note: Original data collected by PeerIQ.

This option poses a range of benefits to the bank. First it allows a bank to delineate the characteristics of loans to which they are and are not interested in being exposed. In addition, it affords the potential to earn attractive returns on balance sheet capital while also diversifying investments across geography, industry, loan size and risk profile.

And, it can also be more cost-effective for incumbent banks. Indeed, this option can strengthen the risk-reward tradeoff between offering a product directly to a borrower, and thereby incurring all of the origination, underwriting, and servicing costs associated with that product, versus outsourcing those costs directly to an alternative lender. As a bank executive at Titan Bank, an \$80 million-asset institution in Mineral Wells, Texas which was the first bank to acquire loans from Lending Club, recently remarked, “Lending Club has also funded several loans for customers for which we didn't have a product set up, like a three-year unsecured installment loan.”¹²⁸ While in theory, the bank could offer the same product, it more cost effective to partner with Lending Club.

However, it is not without limitations. First and foremost being the difficulty in assessing risk, as alternative lenders are less likely to share the details of their proprietary underwriting technology with bank partners. Moreover, lack of historical data on alternative lenders’ performance means limited access

¹²⁸ Crosman, Penny. “Banks Conspicuously Scarce in Supercharged Online Loan Field.” American Banker. January 22, 2016. <http://www.americanbanker.com/news/bank-technology/banks-conspicuously-scarce-in-supercharged-online-loan-field-1072302-1.html>

to data on how these investments will fare in a downturn. To counter this challenge, some banks have established their own algorithms to evaluate the loans that alternative lenders are underwriting and evaluate which loans the bank wishes to fund.¹²⁹

Long-Tail Partnership Strategy: Hedge Against Disruption by Investing in and Incubating Emerging Players

Large companies have long sensed the potential value of investing in external start-ups. As Berkeley's Chesbrough underscores, corporate venture capital tends to have two overriding goals.¹³⁰ The first is strategic, with investments geared toward increasing the sales and profits of the corporation's core business by identifying and exploiting synergies between the established corporate parent and the emerging venture. In theory, by using a portion of retained earnings to invest in promising startups, large companies can test ideas at scale and uncover synergies between more nimble upstarts and existing business lines.

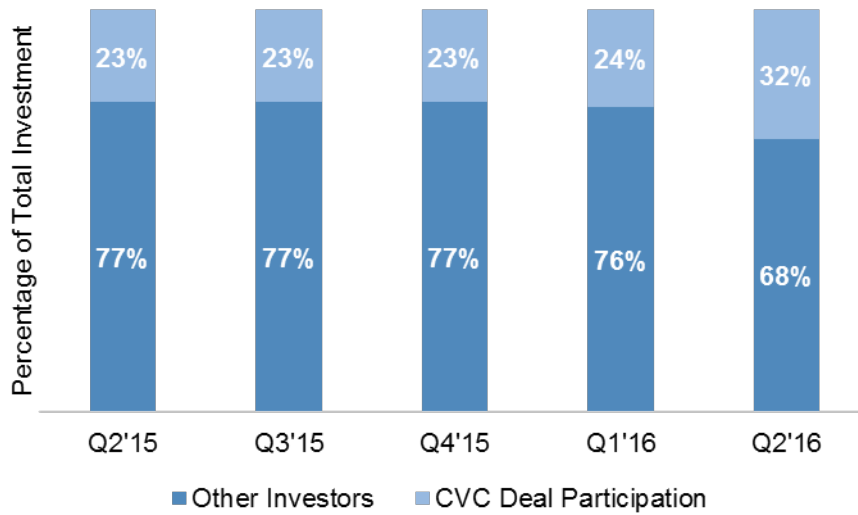
The second dimension is financial, with investments geared toward generating attractive investment returns. Under this approach, the corporate venture capitalist seeks to do as well as or better than private venture investors by deploying superior knowledge of the industry and technology, a strong balance sheet, and its ability to be a patient investor. Moreover, the company's brand may have a powerful signaling effect about the quality of the start-up to potential customers, suppliers and indeed other investors, which can redound to the benefit of the original investor.

Regardless of goals and orientation, investing equity capital in emerging players has become an increasingly popular strategy for large financial institutions to hedge against disruption, including across payments, asset management and online lending. While venture capital investments are down recently, the share of the pie coming from corporate venture capital sources, such as those funded by banks, increased to the highest point on record, according to data compiled by KPMG and CB Insights. In 2Q16, North America accounted for over half of fintech funding globally (\$1.3 billion). Corporate participation in North American venture-backed fintech deals rose to a 5-quarter high, reaching 30 percent in 2Q16, compared to 24 percent in 2Q15. Banks and corporations helped push financial technology start-up funding to an all-time high in 2Q16.

¹²⁹ Crosman, Penny. "Banks Conspicuously Scarce in Supercharged Online Loan Field." *American Banker*. January 22, 2016. <http://www.americanbanker.com/news/bank-technology/banks-conspicuously-scarce-in-supercharged-online-loan-field-1072302-1.html>

¹³⁰ Chesbrough, Henry W. "Making Sense of Corporate Venture Capital." *Harvard Business Review*. March 2002. <https://hbr.org/2002/03/making-sense-of-corporate-venture-capital>

Figure 49: CVC Participation in North American Deals to VC-Backed Fintech Companies

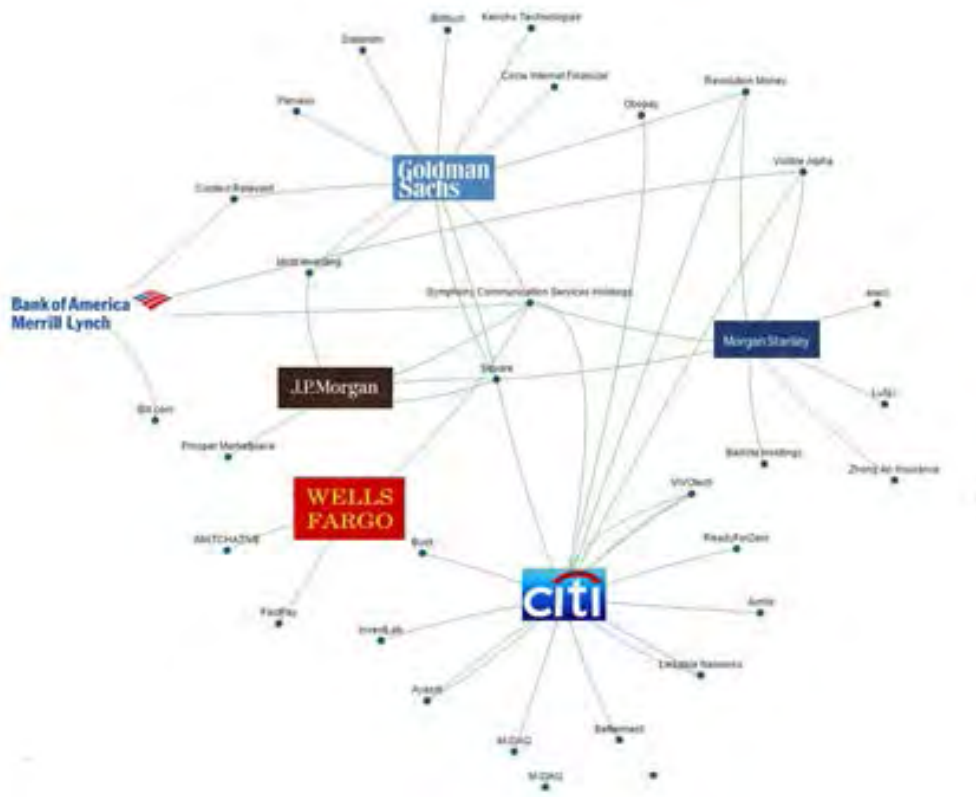


Source: "The Pulse of Fintech, Q2 2016." Global Analysis of Fintech Venture Funding. KPMG International and CB Insights (data provided by CB Insights). August 17, 2016.

With 11 fintech investments between the second quarter of last year and this year, Goldman Sachs is the most active bank investor. Santander and Citigroup follow with seven investments each. Citigroup's fintech portfolio is the largest of all banks, with 13 start-ups backed from 2011 through 2015, followed by Goldman Sachs with 10 startups backed; and JPMorgan Chase with five startups backed.¹³¹

¹³¹ "The Pulse of Fintech, Q2 2016." Global Analysis of Fintech Venture Funding. KPMG International and CB Insights. August 17, 2016. <https://assets.kpmg.com/content/dam/kpmg/xx/pdf/2016/08/the-pulse-of-fintech-q2-report.pdf>

Figure 50: Fintech Investments
Major Bank Fintech Investment Map Since 2009



Source: “Here’s Where 6 Banking Giants Are Placing Their Bets On FinTech Startups.” CB Insights. July 14, 2015. <https://www.cbinsights.com/blog/major-banks-fin-tech-startup-investment-trends/>

While corporate investors will likely continue to invest in fintech in order to drive their own internal innovation and ability to compete with non-traditional market entrants, the strategy can be a risky one.

Build or Buy Strategy

Banks have two final options to pursue in response to the rise of online lenders, to either acquire an existing player or to build rival products internally. Acquiring an online lender outright has been an option that retail banks have not generally pursued to date, in part because of the regulatory and integration costs, and the high equity values of current fintech players. Partnerships, such as JP Morgan Chase and OnDeck’s, may be viewed as lower cost options to gain full access to innovative technology without the expenses of the purchase. The bank that comes closest to transforming through acquisition is SunTrust, which bought online lender FirstAgain in 2012, integrated its platform with the bank’s core

system, and relaunched the business as LightStream, a division of the bank, in 2013.¹³² Ellspermann said SunTrust bought FirstAgain for "the outstanding technology we've put in place, with a loan system specifically developed for lending over the internet directly to consumers. Perhaps Lending Club's and Prosper's were as well, but a lot of the traditional banks were not, that's one good reason SunTrust decided to acquire our business." As more of the small online players mature, we should expect more acquisition activity, particularly if growth capital from venture investors becomes scarce.

Finally some banks may choose to pursue an online lending strategy entirely on their own through internal development. Because the innovation is essentially an online translation of existing loan activity, even a small bank, if determined, can translate their application and underwriting to a customer friendly online solution. A good example is Eastern Bank, where CTO Dan O'Malley successfully developed an internal solution that is currently operating successfully.

Another example of a bank offering its own product to compete directly with online lenders is Wells Fargo's FastFlex. The Wells Fargo product ranges from \$10,000 to \$35,000, is funded as soon as the next business day, which is days or in some cases weeks faster than other Wells Fargo loan offerings, with a weekly repayment schedule. It represents a test of whether the bank can develop its own technology to compete with Silicon Valley firms. Wells launched the product in May 2016, initially just for Wells Fargo customers of at least a year. It is expected to expand the offering to noncustomers early next year, although it is not clear if its standards will be higher than online lenders. The bank spent about nine months from the conception of the idea to piloting it in August. It tapped more than 50 people across the bank working on operations, credit risk, digital and innovation, among other areas.

While it remains to be seen how much banks adopt from the platforms and processes of marketplace lenders, it need not be that one player has to win for another to lose. The markets at play are significant, with a highly heterogeneous population of small businesses and a diverse array of products on offer. Moreover, customer needs differ wildly. Some borrowers put a premium on the relatively frictionless experience that alternative lenders provide, but others value their relationships with banks and will still choose to use their bank for certain lending products.

What is clear is that in this second phase of the transformation of the online lending market, existing players need to be experimenting with new ways of integrating technology into their lending activity. The new standards of customer experience require a more accessible loan application and a more responsive turnaround time at a minimum. Underwriting innovations are yet unproven, but new data sources based on more timely cash flow activity seem likely to provide more predictive models. Banks, as we have shown, can make different strategic choices depending on the level of investment and integration of new activities that they are willing to undertake. However, active engagement of the leadership in these strategic questions is essential if a lender wants to compete in the small business lending market of the future.

¹³² Crosman, Penny. "Banks Conspicuously Scarce in Supercharged Online Loan Field." *American Banker*. January 22, 2016. <http://www.americanbanker.com/news/bank-technology/banks-conspicuously-scarce-in-supercharged-online-loan-field-1072302-1.html>

CHAPTER 5

THE CURRENT U.S. REGULATORY ENVIRONMENT: SPAGHETTI SOUP

The alternative lending market fills an important gap in access to credit for small businesses. However, the generally unsupervised nature of the alternative small business lending market creates issues of oversight and concerns about predatory lending. Thus, the key is to regulate in such a way that preserves the opportunity for innovation by alternative lenders and their potential partners, but makes it difficult for would-be predatory lenders and other “bad actors” to gain a foothold in the online lending space. This will help to ensure that responsible lenders can compete and expand access to credit. Responsible regulation in this segment needs to have three primary components: borrower protection, investor protection, and mitigation of systemic risk. All of this should be done with the underlying goal of promoting economic growth and related employment. Regulation of both lenders and brokers is required in order to ensure these protections and mitigate risk. We will discuss specific recommendations in the next chapter, but first it is important to understand who has regulatory authority in online lending and how small business lending has, in many aspects, fallen through the cracks.

Who Controls What in Small Business Lending?

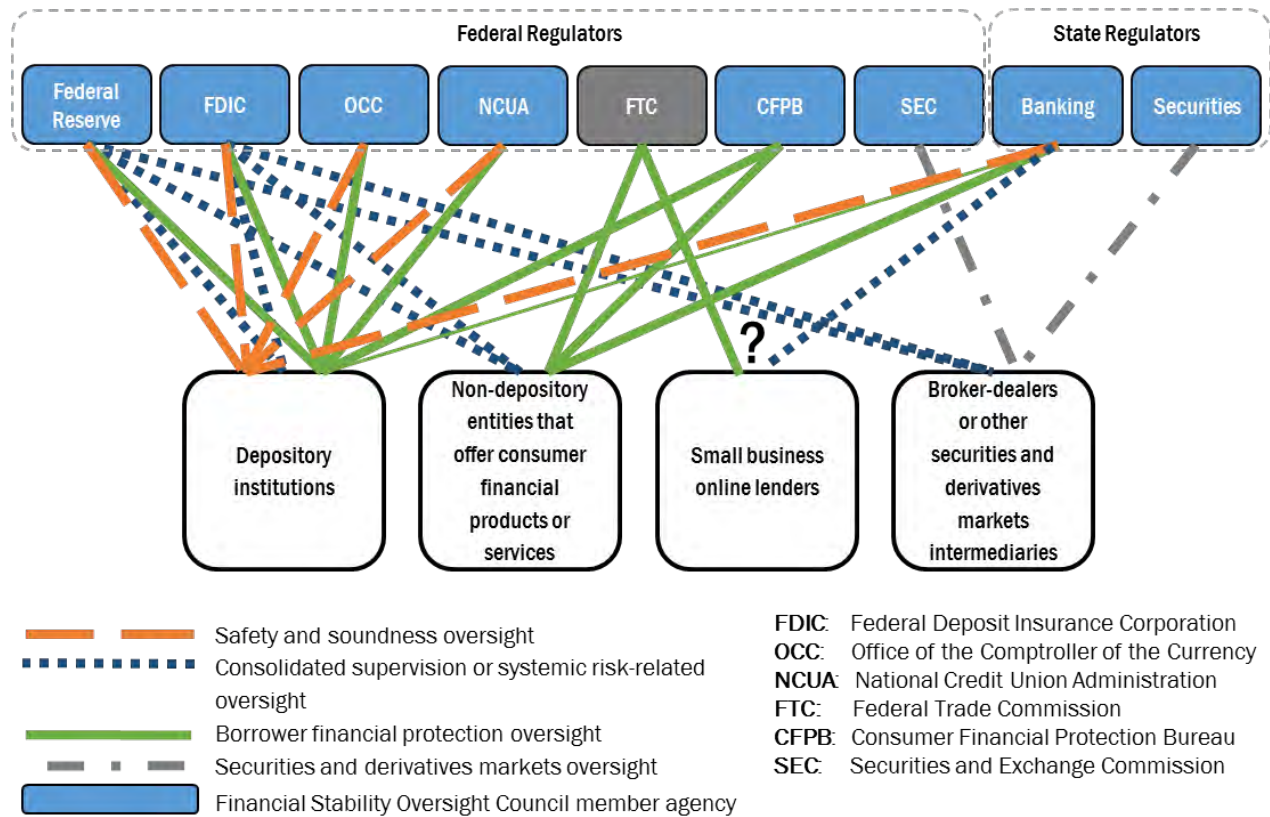
There are at least six federal agencies that have some kind of regulatory authority over traditional lenders to small businesses, such as large banks, community banks and credit unions. In addition, the Securities and Exchange Commission (SEC) oversees the securitization activities of loans and related market based activities. Each individual state also has its own banking and securities oversight. This has resulted in a “spaghetti soup” of regulation, often with overlapping and sometimes conflicting requirements.

There is fairly universal agreement on the nature of this problem. According to a recent report of the Government Accountability Office (GAO), the current regulatory structure, despite some strengths, “has created challenges to effective oversight. Fragmentation and overlap have created inefficiencies in regulatory processes, inconsistencies in how regulators oversee similar types of institutions, and differences in the levels of protection afforded to consumers. GAO has long reported on these effects in multiple areas of the regulatory system.”¹³³

Despite the large number of regulatory players and the recent focus on consumer protection, it appears that when it comes to small business lending, the new online entrants, in many instances, fall through the cracks. No federal agency explicitly has the authority to regulate their activities, partly because they are not themselves a bank or credit union, though some act through banks or other partners. Most of the authority given to regulators to protect borrowers explicitly refers to consumer loans, not small business or other commercial loans, leaving small business borrowers largely unprotected.

¹³³ “Financial Regulation: Complex and Fragmented Structure Could Be Streamlined to Improve Effectiveness.” United States Government Accountability Office. February 2016. <http://www.gao.gov/assets/680/675400.pdf>

Figure 51: Small Business Online Lending Falls Through the Regulatory Cracks



Source: Author’s analysis and GAO-16-175, “Financial Regulation: Complex and Fragmented Structure Could Be Streamlined to Improve Effectiveness,” March 2016.¹³⁴

The remainder of this section will describe the regulatory authority of the major players and the most critical pieces of legislation that currently govern lending practices. This will provide a description of the gaps in the regulation of online business lending and provide some important context for the regulatory recommendations to follow in the final chapter.

Regulators Have Overlapping Authority

Given the numerous regulators who are involved in some fashion in the small business lending space, it is worth clarifying the regulatory authority of multiple agencies, including: the Office of the Comptroller of the Currency (OCC), the Federal Reserve (Fed), the Consumer Financial Protection Bureau (CFPB), the Federal Deposit Insurance Corporation (FDIC), and the Securities and Exchange Commission (SEC). In addition, the Federal Financial Institutions Examination Council (FFIEC), which serves as an

¹³⁴ For more on this, see Neiman, Richard and Mark Olson. “Dodd-Frank’s Missed Opportunity: A Road Map for a More Effective Regulatory Architecture.” Bipartisan Policy Program. April 2014. <http://cdn.bipartisanpolicy.org/wp-content/uploads/sites/default/files/BPC%20Dodd-Frank%20Missed%20Opportunity.pdf>

interagency body that attempts to promote uniformity in financial regulations, may have a role to play in ensuring coordinated regulation of the small business alternative lending market.

Consumer Financial Protection Bureau (CFPB). CFPB opened its doors in 2011. It was created through the Dodd-Frank Act in the wake of the economic crisis, with the mission of monitoring consumer financial markets, including industries such as student loans, retail mortgages, and consumer credit cards. CFPB has jurisdiction over a wide range of financial products and regulatory schemes to ensure that the marketplace works for both lenders and borrowers—but only consumer-borrowers. This means that many of its regulations, including those related to providing borrowers with standardized and understandable information about the terms of their loans (such as APR, repayment terms, etc.), do not apply to small business loans.

Despite these limitations on the scope of CFPB’s regulatory authority, it does have a potential role to play in small business lending. While originally conceived as a consumer-oriented body, CFPB was given authority to oversee data collection on small business loans under the Dodd-Frank Act Section 1071.

In Section 1071, the CFPB is required to gather and review data on small business lending, particularly data on loan originations, which does not currently exist. As described in earlier chapters, the best available data on small business lending comes from Federal Reserve surveys and from FDIC call reports which track loan assets (below \$1 million in amount) on the books of banks. The collection of data on loan originations from small business borrowers is a top priority in order to ensure that policymakers and others can monitor access to credit for this segment.

In addition, Dodd-Frank Section 1071 focuses on gathering information related to fair lending practices, with particular attention to the goal of ensuring that minority-owned and women-owned small businesses receive equal access to credit.

Required information under this provision includes:

- The number of the application and the date on which the application was received
- The type and purpose of the loan or other credit being applied for
- The amount of the credit or credit limit applied for, and the amount of the credit transaction or the credit limit approved for such applicant
- The type of action taken with respect to such application, and the date of such action
- The census tract in which is located the principal place of business of the women-owned, minority-owned, or small business loan applicant
- The gross annual revenue of the business in the last fiscal year of the women-owned, minority-owned, or small business loan applicant preceding the date of the application
- The race, sex, and ethnicity of the principal owners of the business
- Any additional data that the Bureau determines would aid in fulfilling the purposes of this section

Despite an initial statement from the CFPB that it would act “expeditiously” to develop these rules, there has been no progress in the five years since the passage of the law. A heavy consumer-oriented rule-making agenda took priority, and push back from banks may have delayed the data collection activity.

Now, however, the CFPB had recognized that the need for their action is overdue and issued a statement in February 2016 calling implementation a “near-term priority.”¹³⁵

Given the importance of this data and the extensive requirements described in the section, the best course of action is for the CFPB to act expeditiously on data collection that can be implemented quickly in a Phase 1 effort. Loan origination data by size of loan is already collected by both online and bank lenders and could be reported to the CFPB without extensive incremental effort. This effort could begin immediately and would provide important facts for monitoring the small business lending market in general and the small loan segment in particular.

Several other data categories are also priorities, including the amount of the loan applied for and the amount received, the pricing of the loan and its purposes. Online lenders may be the place to begin, as most or all of this information is currently collected, though not all is reported. Working through the details of the reporting definitions and formats could be done with a pilot of willing industry participants and then rolled out to traditional banks and others in the community.

The fair lending practices data on loans to women- and minority-owned business depends, importantly, on agreement on ownership definitions. There is precedent that this can be done in the small business contracting arena, and though it is more complex, the information is at the heart of the fair lending practices legislation, and will be important to identify gaps in access to credit that could be vital to the economic health of the country.

The critical path forward is to implement the total small business data collection effort immediately, beginning with the loan origination data by size of loan. Too often, government implementation is delayed by tackling the entire problem in one gulp, whereas innovators have shown us that incremental approaches allow quick wins and rapid learning from market participants. We believe that a multi-phase approach – in which basic data on originations, defaults, and pricing is collected first – would be the best way to move forward. These lessons should inform the game plan for the CFPB’s near term steps in making progress on small business lending data collection. The utility of this information is widely recognized, and when the data is collected, it is likely to become the seminal data set on small business credit conditions, an important foundation of regulatory activity and a way to expose market concerns and even “bad actors.”

Office of the Comptroller of the Currency (OCC). As an independent bureau of the U.S. Department of the Treasury, the OCC “charters, regulates, and supervises all national banks and federal savings associations as well as federal branches and agencies of foreign banks.”¹³⁶ By contrast, the Federal Reserve and FDIC each regulate state-chartered banks of certain types.¹³⁷ OCC regulators are on site at about 1,500 national banks and federal thrifts.

¹³⁵ Lampe, Donald et al. “CFPB Poised to Expand Regulation to Small Business Lending: Expect the Unexpected.” Morrison Foerster. May 24, 2016. <https://media2.mofo.com/documents/160524cfpbpoisedtoexpandregulation.pdf>

¹³⁶ “About the OCC.” Office of the Comptroller of the Currency. Accessed August 19, 2016. <http://www.occ.gov/about/what-we-do/mission/index-about.html>

¹³⁷ “What is the Fed: Supervision and Regulation.” Federal Reserve Bank of San Francisco. <http://www.frbsf.org/education/teacher-resources/what-is-the-fed/supervision-regulation/#Supervision>

The OCC has taken an active interest in online lending, publishing a white paper in March 2016 on responsible innovation and setting forth guiding principles for regulation. In it, the OCC suggested that it might update or provide more specificity on its previous third-party risk management guidance, in order to provide clarity on standards for partnerships between banks and online lenders.¹³⁸ Third-party guidance refers specifically to the ability of OCC examiners to assess a bank's relationship with brokers, payment processors, and any other entity (either by contract or not) to determine whether these relationships threaten the safety and soundness of the bank itself. Specifically, the examiners may look at the bank's risk management strategies and may even examine the operations of the third-party vendor, if necessary.¹³⁹

In a follow up, the OCC released a second announcement in October 2016, setting out a specific framework for an Office of Innovation. The specific actions mainly involve the assignment of personnel in several offices to advise banks on innovative strategies and third party arrangements they may want to pursue. The announcement also calls for greater interagency collaboration, but stops short of suggesting a whole-of-government approach or joint guidance.¹⁴⁰ Given that the next phase of alternative lending will include partnerships with traditional lenders, clear and non-overlapping guidance on third-party activities is critical.

Overall, the OCC has shown thoughtful leadership in recognizing that innovation in this marketplace is helpful and should not be stifled by excessive regulation. The OCC has indicated a possible interest in offering national charters for nonbank entities, which would be an important mechanism to bring non-bank lenders under a uniform federal regulatory governance structure. This idea will be discussed further in the next chapter as part of the recommended regulatory action plan.

Federal Reserve (Fed). The Fed also has a potential role to play. Over the past year the Fed has expressed significant interest in the alternative lending sector. In a speech in September 2015, Fed Governor Lael Brainard specifically addressed small business online lending:

"Another important set of concerns are focused on the small business borrowers who may be considering online alternative loans. Some have raised concerns about the high APRs associated with some online alternative lending products. Others have raised concerns about the risk that some small business borrowers may have difficulty fully understanding the terms of the various loan products or the risk of becoming trapped in layered debt that poses risks to the survival of their businesses. Some industry participants have recently proposed that online lenders follow a voluntary set of guidelines designed to standardize best practices and mitigate these risks. It is too soon to determine whether such efforts of industry participants to self-police will be sufficient. Even with these efforts, some have suggested a need for regulators to take a more active role in defining and enforcing standards that apply more broadly in this sector."¹⁴¹

¹³⁸ "Third-Party Relationship." OCC Bulletin 2013-29. October 30, 2013. <https://www.occ.gov/news-issuances/bulletins/2013/bulletin-2013-29.html>

¹³⁹ "Description: Risk Management Guidance." Office of the Comptroller of the Currency Bulletin 2013-29. October 30, 2013. <https://www.occ.gov/news-issuances/bulletins/2013/bulletin-2013-29.html>

¹⁴⁰ "Recommendations and Decisions for Implementing a Responsible Innovation Framework." Office of the Comptroller of the Currency. October 2016. <https://www.occ.gov/topics/bank-operations/innovation/recommendations-decisions-for-implementing-a-responsible-innovation-framework.pdf>

¹⁴¹ "Community Banks, Small Business Credit, and Online Lending." Board of Governors of the Federal Reserve System. September 30, 2015. <https://www.federalreserve.gov/newsevents/speech/brainard20150930a.htm>

The Fed's duties around banking including promoting the stability of the financial system and containing systemic risks, promoting the safety and soundness of individual institutions, and promoting consumer protection and community development through supervision and examination.¹⁴² The Fed's Division of Banking Supervision and Regulation does this through oversight of the following organizations: U.S. banking holding companies, foreign banking organizations operating in the United States, and state-chartered member banks of the Federal Reserve System.¹⁴³

In addition, the Fed has an important role in the small business lending market related to its mandate to understand and monitor market conditions. In a welcome set of activities, an increasing large number of regional Federal Reserve banks have begun coordinated surveys on small business lending. These surveys, such as the 2015 Small Business Credit Survey: Report on Employer Firms conducted by the Federal Reserve Banks of New York, Atlanta, Boston, Cleveland, Philadelphia, Richmond, and St. Louis, can be instrumental in filling an important data gap left by the suspension of the highly valuable Survey of Small Business Finances, which was last conducted in 2003.^{144,145,146}

Currently, the Fed has indicated that it may engage in the online space, and is holding a conference titled, "Financial Innovation: Online Lending to Households and Small Businesses" in December 2016, designed in part to highlight and encourage research in this space.

Federal Deposit Insurance Corporation (FDIC). The FDIC exercises primary regulatory authority over state-chartered banks that are not members of the Federal Reserve System.¹⁴⁷ As with the OCC, the FDIC seems to have taken an interest in the marketplace lending space, issuing a Financial Institutions Letter in November 2015 that discussed third-party risk. In July 2016, the FDIC went a step further and issued proposed examination guidance around third-party lending, writing that "Examiners will conduct targeted examinations of significant third-party lending arrangements and may also conduct targeted examinations of other third parties where authorized. Reviews should be of sufficient scope and frequency to assess the level of risk posed to the institution by the third-party arrangement, whether the risk is appropriately managed by the institution, and whether the third party is appropriately implementing agreed-upon policies and procedures and is in compliance with guidance, regulations, and laws applicable to the activities it performs on the institution's behalf."¹⁴⁸

No indication has been given on how the FDIC third party reviews would be coordinated with those of other regulatory agencies.

¹⁴² "About the Federal Reserve System." Board of Governors of the Federal Reserve System. Last updated August 23, 2016. <https://www.federalreserve.gov/aboutthefed/structure-federal-reserve-system.htm>

¹⁴³ "Banking Supervision and Regulation." Board of Governors of the Federal Reserve System. Last updated October 3, 2016. <https://www.federalreserve.gov/econresdata/bsrstaff.htm>

¹⁴⁴ "Joint Small Business Credit Survey Report, 2014." Federal Reserve Banks of New York, Atlanta, Cleveland, and Philadelphia. February 2015. <https://www.newyorkfed.org/medialibrary/media/smallbusiness/SBCS-2014-Report.pdf>

¹⁴⁵ "2015 Small Business Credit Survey." Federal Reserve Banks of New York, Atlanta, Boston, Cleveland, Philadelphia, Richmond, and St. Louis. March 2016. <https://www.newyorkfed.org/medialibrary/media/smallbusiness/2015/Report-SBCS-2015.pdf>

¹⁴⁶ "2003 Survey of Small Business Finances." The Federal Reserve Board. <https://www.federalreserve.gov/pubs/oss/oss3/ssbf03/ssbf03home.html>

¹⁴⁷ "Who is the FDIC?" Federal Deposit Insurance Corporation. <https://www.fdic.gov/about/learn/symbol/>

¹⁴⁸ "Examination Guidance for Third-Party Lending." Federal Deposit Insurance Corporation. July 29, 2016. <https://www.fdic.gov/news/news/financial/2016/fil16050a.pdf>

Securities and Exchange Commission (SEC). The SEC has the critical oversight role in protecting investors in the market for small business loan securities. The SEC oversees public entities in the small business lending market, and provides supervision to securitization markets and to new securities such as closed end funds that invest in peer-to-peer loans.¹⁴⁹ In general, the existing SEC oversight mechanisms are broad enough to have appropriate oversight over the new notes and securities offered by online lenders. Current SEC activities are focused on monitoring the activities of online lenders who are raising capital in various securities markets with a particular eye to investor protections and disclosures. It is important to note that state-level regulators also have purview when it comes to securities markets.

Federal Trade Commission (FTC). The FTC was created by the Federal Trade Commission Act, signed into law in 1913. The Act outlaws unfair methods of competition and unfair business practices that affect commerce generally, including lending to consumers and small businesses. Of particular importance is the Credit Practices Rule that the FTC has adopted to protect consumers against abusive terms and conditions in credit contracts.

Marketplace lenders must confirm that the loan agreements used to document their loans to borrowers conform to these provisions. The FTC has also taken an interest in alternative lending, again focused primarily on consumer issues. As FTC Chair Edith Ramirez stated at an FTC Marketplace Lending forum in June 2016, “In light of the FTC’s broad jurisdiction over non-bank financial entities and our decades of experience enforcing consumer lending laws, we want to ensure that consumers are treated fairly when they navigate this changing landscape. This includes ensuring that the same protections consumers have in traditional lending contexts also apply to marketplace lending.”¹⁵⁰

Federal Financial Institutions Examination Council (FFIEC). The FFIEC is an interagency council with the goal of prescribing “uniform principles, standards and report forms for the federal examination of financial institutions.”¹⁵¹ The FFIEC standardizes these principles and requirements across the Fed, FDIC, OCC, NCUA, and CFPB, among others. Given the “spaghetti soup” of regulation we have discussed in this section, we encourage the FFIEC to vigorously take on the important role of coordinating standards and reporting requirements across agencies, in order to encourage accurate reporting while minimizing compliance costs and to promote efficient and effective regulation of small business alternative lending.

Laws Governing Online Small Business Lending

As with the spaghetti soup of regulators, there is also much confusion around the specific laws from which regulatory authority is derived. Therefore, it is also worth clarifying the laws that may or may not govern regulation on the marketplace lending space, including: Truth in Lending Act (TILA), Equal Credit Opportunity Act (ECOA), Fair Debt Collection Practices Act (FDCPA), Fair Credit Reporting Act (FCRA), the FTC Act and state-level Usury Laws and Securities Laws.¹⁵²

¹⁴⁹ One such example is Stone Ridge Funds in Milwaukee, WI, <http://stoneridgefunds.com/>.

¹⁵⁰ “Opening Remarks of FTC Chairwoman Edith Ramirez FinTech Forum Series: Marketplace Lending.” June 9, 2016. https://www.ftc.gov/system/files/documents/public_statements/956043/ramirez_-_fintech_forum_opening_remarks_6-9-16.pdf

¹⁵¹ “FFIEC Council.” Federal Financial Institutions Examination Council. Last modified August 3, 2016. Accessed August 19, 2016. <https://www.ffiec.gov/>

¹⁵² Appendix A in “Opportunities and Challenges in Online Marketplace Lending.” U.S. Department of the Treasury. May 10, 2016. <https://www.treasury.gov/connect/blog/Documents/Opportunities%20and%20Challenges%20in%20Online%20Marketplace%20Lending%20v%20Revised.pdf>

Truth in Lending Act (TILA). Enacted in 1968 and subsequently revised¹⁵³, the federal “TILA” and its implementing of Regulation Z exists to “safeguard the consumer in connection with the utilization of credit by requiring full disclosure of the terms and conditions of finance charges in credit transactions or in offers to extend credit.”¹⁵⁴ This act, and the acts which amended or added to its provisions, attempt to prevent abuses in consumer credit, particularly by requiring disclosures to borrowers of price and terms, and some uniformity in how lenders disclose features of loans to borrowers.

For example, it requires lenders to provide borrowers with standardized and understandable information, such as annual percentage rates (APRs), concerning certain terms and conditions of their loans, as well as certain changes that lenders choose to make regarding loan products. As it relates to marketplace lending, TILA disclosure requirements apply to any advertising, or loan documentation, provided by any funding bank or the licensed operator as the lender of each loan.¹⁵⁵ For example, websites are considered advertising, and thus loan operators such as Lending Club and Prosper must comply with TILA’s advertising requirements. TILA further permits consumer borrowers to assert claims for TILA violations, including against a lender as well as any assignees of a loan, such as a licensed operator or an investor in the case of marketplace lending.¹⁵⁶ However, critically, TILA applies solely to consumer loans. It does not apply to commercial loans (except for credit cards or in the case that the small business owner takes out a personal loan and uses it to finance their business).

Equal Credit Opportunity Act (ECOA). Enacted in 1975, and subsequently amended in 1977, 1988 and 1991, the ECOA puts forth a borrower’s right to non-discrimination in credit access. ECOA’s purpose is to require financial institutions and other firms engaged in the extension of credit to “make credit equally available to all creditworthy customers without regard to sex or marital status.” Moreover, the statute makes it unlawful for “any creditor to discriminate against any applicant with respect to any aspect of a credit transaction (1) on the basis of race, color, religion, national origin, sex or marital status, or age (provided the applicant has the capacity to contract); (2) because all or part of the applicant’s income derives from any public assistance program; or (3) because the applicant has in good faith exercised any right under the Consumer Credit Protection Act.” Unlike TILA, the ECOA does apply to small business lending.¹⁵⁷

ECOA creates some important questions for potential regulation of new online lenders. Given their innovative use of new data for credit assessment, concerns will arise that perhaps in an unintentional manner, the new algorithms will create unfair or discriminatory access to credit because of the ways in which the predictive data are correlated with potentially discriminatory attributes. While not without debate, ECOA has been interpreted to prohibit disparate impacts and not merely intentional

¹⁵³ Effective 1969; amended by Unsolicited Credit Card Act, effective 1970; amended by the Truth in Lending Simplification Act, effective 1982; amended by the Home Equity Loan Consumer Protection Act, effective 1989; amended by the Fair Credit and Charge Card Disclosure Act, effective 1989; amended by the Home Ownership and Equity Protection Act, effective October 1995

¹⁵⁴ “GoTrack.” <https://www.govtrack.us/congress/bills/90/s5>

¹⁵⁵ The predominant consumer internet platform structures provide that the operator (such as Lending Club or Prosper) will purchase and take assignment of each borrower loan from the funding bank using funds received from the issuance of the related platform notes or from outside investors. Each operator and its funding bank need to ensure that the disclosures made to borrowers contain the information and are made in the format that the TILA requires.

¹⁵⁶ Chapman & Cutler. “The Regulation of Marketplace Lending: A Summary of the Principal Issues.” (2015): 219-49.

<https://www.aba.com/Tools/Offer/Document/ChapmanRegulationofMarketplaceLendingWhitePaper040815.pdf>

¹⁵⁷ Gordon, Michael E. and Franca Harris Gutierrez. “The Future Of CFPB Small Business Lending Regulation.” Law360. May 19, 2016.

<http://www.law360.com/articles/797135/the-future-of-cfpb-small-business-lending-regulation>



discrimination. Regulators such as the Fed and the CFPB, who are charged with understanding credit models, have begun to focus on how to maintain transparency into these new underwriting models. In addition, a second question arises with regards to transparency and how borrowers will know what data matters in their credit assessment and how to act to improve their credit ratings in the event of credit denials. Concerns about fair lending are particularly important to the CFPB as they develop their plans to begin to implement data collection under Dodd-Frank Section 1071.

Fair Debt Collection Practices Act (FDCPA). Enacted in 1978 and amended in 1986, the FDCPA governs any third-party debt collection agents or servicers that a lender employs, requiring them to adhere to certain measures when trying to collect overdue payments from delinquent borrowers.

Fair Credit Reporting Act (FCRA). Enacted in 1971, and subsequently amended in 1978, 1989, 1992, and 1994, the FCRA amended the Federal Deposit Insurance Act to require insured banks—that is, banks insured by the Federal Deposit Insurance Corporation (FDIC)—to notify consumers of the name and address of credit reporting agencies whose reports were used as a basis for adverse credit decisions. Specifically, credit bureaus must disclose to consumers the nature and substance of information in their credit bureau records; to reinvestigate disputed information and make corrections as appropriate; and to allow consumers to file their explanations if reinvestigations fail to resolve disputes.

State Securities Laws. State securities laws, sometimes known as “Blue Sky” laws, require all securities issuers to register in every state in which they publicly sell the securities (unless they qualify for an exemption). As a result, many states have balked at the lack of verified borrower information provided by online lenders, and therefore have denied them the ability to sell securities to retail investors or have limited their investor pool.¹⁵⁸

State Usury Laws. Intended to protect borrowers, usury laws limit the amount of interest that can be charged on a loan. In the United States, every state has the ability to set separate interest rate caps by passing their own usury laws.¹⁵⁹ While consumer usury laws are widespread, small business usury laws are relatively few.

The Depository Institutions Deregulation and Monetary Control Act of 1980 (DIDA) allows federally-insured state-chartered banks to use the interest rate limit imposed by their home state rather than the limit imposed by the state in which the loan is made.¹⁶⁰ The National Bank Act (NBA) extends this more broadly to all national banks. However, a recent federal appeals court decision, *Madden v. Midland*, held that the National Bank Act does not preempt state interest rate caps once a national bank sells the loan to a third-party.^{161,162} This has created uncertainty for holders of bank-originated assets, including marketplace lenders who originate loans through a bank. Indeed, the decision broke with a

¹⁵⁸ *Ibid.*

¹⁵⁹ “Usury Laws.” Investopedia. <http://www.investopedia.com/terms/u/usury-laws.asp>

¹⁶⁰ Chapman & Cutler. “The Regulation of Marketplace Lending: A Summary of the Principal Issues.” (2015):219-49. April 2015. <https://www.aba.com/Tools/Offer/Document/ChapmanRegulationofMarketplaceLendingWhitePaper040815.pdf>

¹⁶¹ “Who to Watch as Regulators Size Up Online Lending.” *American Banker*. August 2016. http://www.americanbanker.com/gallery/who-to-watch-as-regulators-size-up-online-lending-1090752-1.html?utm_medium=email&ET=americanbanker:e7395034:5059469a&utm_source=newsletter&utm_campaign=daily%20briefing-aug%2016%202016&st=email&eid=94802d5a11b4e04329c2711cf44b2a77

¹⁶² “McHenry Introduces Fintech Bills.” U.S. Congressman Patrick McHenry. July 12, 2016. <http://mchenry.house.gov/newsroom/documentsingle.aspx?DocumentID=398260>

long-standing doctrine that a loan originated by a bank that was “valid when made” does not lose its preemption status when the loan is sold to a nonbanking entity. The U.S. Solicitor General, in a joint brief with the OCC, called the decision “incorrect,” but argued that the Supreme Court should not hear the case, given the possibility that Midland Funding (the third-party holding the loan) might win the case upon remand.¹⁶³ In June 2016, the Supreme Court indeed declined to hear the case.

More broadly, because online lenders have no federal regulator or national charter authority, they face a series of difficult decisions if they hope to make loans nationally, about whether to comply with varying and sometimes burdensome standards in every state, or partner with banks like WebBank, which allow them to make national loans. This dilemma is not ideal from either the industry standpoint or the regulatory standpoint. In the next chapter, we will discuss one possible solution by way of a limited purpose charter option.

¹⁶³ “The Solicitor General Weighs in on *Madden v. Midland*.” *Pepper Hamilton LLP*. May 25, 2016.
<http://www.pepperlaw.com/publications/the-solicitor-general-weighs-in-on-madden-v-midland-2016-05-25/>

CHAPTER 6

RECOMMENDED REGULATORY ACTION PLAN

Regulators have thus far permitted small business lending, whether online or offline, to flourish with minimal oversight, particularly when compared to the level of existing borrower protections put in place for consumer, student and mortgage lending. Several developments through 2016 suggested that might be changing, spurred in part by the rapid growth of online business lending. At least six regulatory bodies plus the U.S. Treasury Department have begun evaluating the online lending market for small business loans, and a number of industry trade associations have been formed. Some banking groups have expressed interest in streamlining and clarifying existing oversight to more easily partner with the new fintech entrants.

Recent election results will, of course, likely change the landscape in ways that are not fully visible. In particular, legislative efforts to repeal or modify the Dodd-Frank Act are likely to be under strong consideration. We believe that this legislative activity represent a critical opportunity to act on the regulatory actions recommended in this paper.

An overriding goal of this paper, and indeed the regulatory actions proposed herein, is to ensure that small businesses have access to the capital that they need to grow their businesses and create jobs. The earlier chapters outlined the bank lending markets for small business and highlighted a significant gap for bank loans under \$250,000. We then chronicled the entrance of innovative companies in online lending, who have used technology to offer new products and fast turnaround to small businesses, with the vast majority of these new entrants seeking to meet demand for business loans under \$250,000. On the whole we view the emergence of online lending as a watershed moment in the growth of the small business lending market overall, with significant potential to open up new pools of capital for America's small businesses. That being said, ensuring continued growth of this sector necessitates putting transparency, fairness and accountability front and center, and reining in bad actors. Our recommendations seek to walk the fine line of delineating commonsense safeguards that would empower borrowers to make informed decisions, while ensuring that any new rules which are written do not create burdensome oversight that starves innovation.

Current Status of Regulation on Small Business Lending

In the wake of recent interest in small business lending by multiple regulators, white papers and statements have been issued by the OCC, the FDIC and the U.S. Treasury in the past 12 months, and fintech conferences have been convened by a number of players including the Fed, SEC, OCC and Treasury. The overlapping jurisdictional questions are raising concern among the industry players as to who will act to oversee them, and how to respond if guidance is not uniform and coordinated. There is also fear among industry players that increased scrutiny could lead to regulations that stymie innovation.

The "spaghetti soup" of multiple regulators is further complicated by the fact that credit extended for a business or commercial purpose, by both banks and nonbanks, is not covered by several of the federal and state consumer protection laws that govern the provision of credit in the mortgage, student loan, credit card and personal loan sectors of U.S. financial services. In addition, online small business lenders are not chartered by any federal agency, and are governed instead by a fragile latticework of state-by-state

oversight. Most states currently provide little oversight of any kind, specifically on borrower protections for small businesses seeking credit.

It is true that light-touch regulation can benefit lenders as well as borrowers. Since online lenders are less encumbered by rules, they have experimented with more creative, automated underwriting techniques that allow them to make faster lending decisions. They have extended credit to a broader range of borrowers than traditional players and in so doing utilized the seamless user interfaces that are hallmarks of Silicon Valley. But limited regulatory oversight has not been entirely benign. As evidence, one need only look to the proliferation of loan brokers with high and generally undisclosed fees, and inadequate or nonexistent disclosure of price and terms at lenders.^{164,165} Some practices, such as brokers that present themselves as impartial but take incentives to market certain lenders over others, resemble behavior seen in the run-up to the financial crisis.¹⁶⁶

It is important to highlight that while the impetus for our paper has been the rise of online lending, and the need to ensure that growth occurs in a way that is sustainable, many of the recommendations we highlight deserve market-wide implementation. For example, if we are to truly empower small business borrowers, credit disclosures should be universally applied to new entrants as well as to traditional players such as banks.

As we described above, this broad implementation is particularly important given that small business lending falls through the cracks of existing borrower protection rules. The lack of small business borrower protections is an overall shortfall of the regulatory system, which has been built on a bias that commercial credit need not be regulated to the same extent as consumer credit, given that businesses tend to be more sophisticated than consumers. While that perspective has some truth to it, notably for medium-sized businesses, it is less convincing when one considers that the vast majority of small businesses seeking credit are looking for loans under \$250,000, with most looking for loans under \$100,000. Many of these businesses are no more trained in the nuances of loan documents than everyday consumers, and as a result deserve basic borrower protections.

Problems in Small Business Lending

A number of specific issues have begun to be observed in the online lending market, causing concern among regulators, policymakers, consumer protection advocates and industry participants. Some of these practices parallel the “four D’s” of predation -- deception, debt traps, debt spirals and discrimination -- that CFPB Director Richard Cordray has sought to end in other sectors, such as the mortgage, student loan and payday consumer loan sectors. For example, some worrisome practices that industry practitioners, consumer protection advocates and regulators have highlighted to us include:

¹⁶⁴ Farmer, Liz. “Are Predatory Business Loans the Next Credit Crisis?” May 2015. *Governing*. <http://www.governing.com/topics/finance/gov-predatory-business-loans-crisis.html>

¹⁶⁵ McCarthy, Brayden. “It’s Time To Rein In Shady Small Business Loan Brokers.” *Forbes*. September 17, 2014. <http://www.forbes.com/sites/groupphink/2014/09/17/its-time-to-rein-in-shady-small-business-loan-brokers/#1b7cb26972b7>

¹⁶⁶ Faux, Zeke. “Wall Street Finds New Subprime With 125% Business Loans.” May 22, 2014. *Bloomberg*. <http://www.bloomberg.com/news/articles/2014-05-22/wall-street-finds-new-subprime-with-125-business-loans>

High Costs. The APRs of some newer financing products can run well above 50 percent, and can reach as high as 300 percent.^{167,168} The arguments made for this pricing are that the products are appropriately priced for risk, or that their shorter term duration and repayment cycles make annualized depictions of price such as an APR an inaccurate representation of the true cost of the loan. In any number of cases, these loans are benefiting small businesses, and credit products need not be predatory simply because they bear high APRs. However, higher-priced credit products bear risks, and raise the burden of ensuring that borrowers are fully empowered to understand the true and total cost of these products, and compare costs across products from multiple lenders in an apples-to-apples manner.

Double Dipping. Borrowers in a cycle of repeat borrowing can become more profitable to the lender through a practice known as “double dipping,” a process of partially double-charging a borrower with additional fees when their loan is renewed before the term of the original loan is complete. It is an important question to consider, for example, whether or not borrowers deserve better disclosures on the refinancing and renewal policies of lenders before they take out their first loan. This can be important when borrowers are looking for a financing product which they may seek to renew multiple times, as opposed to a financing product which is intended to meet a one-off need. In instances where borrowers are looking for repeat financing, there may very well be products which seem more expensive than others as a first loan, but when measured against renewal policies are actually less expensive in the longer-term.

Hidden Prepayment Charges. Unlike traditional amortizing bank term loans, the financing charges of some newer short-term products are fixed, and are not subject to early repayment. In some instances, these lenders offer a modest discount on the total cost of the loan for early repayment, though even with this modest discount, borrowers are still subject to unearned interest charges. Some industry players have gone as far as to call these charges “prepayment penalties.” While this practice may not in and of itself be predatory, it is nonetheless important that borrowers genuinely understand that there is no incentive for early repayment at the time they take out the loan. If disclosures are sufficient, and borrowers understand the true and total cost which they must repay, they are better empowered to make informed choices, and personal responsibility must play a role.

Misaligned Broker Incentives. Small business loan brokers often earn the highest fees for referrals to the most expensive products. More anecdotally, we have seen marketing material and loan documentations from offline loan brokers which indicate fees can run as high 15 to 20 percent. These fees are rarely, as far as we can tell, broken out or itemized by the loan broker or lender. “It’s a direct parallel to what happened in the subprime mortgage space,” said Mark Pinsky, as chief executive officer of Opportunity Finance Network, the trade association of community development financial institutions.¹⁶⁹

Stacking. Brokers seeking additional fees, and the borrower’s own desire for more capital than a single lender will provide, can lead to “stacking,” in which multiple lenders layer financing on top of each

¹⁶⁷ Note: sample includes many borrowers seeking to refinance their expensive loans. See “Unaffordable and Unsustainable: The New Business Lending on Main Street.” Opportunity Fund. May 2016. http://www.opportunityfund.org/assets/docs/Unaffordable%20and%20Unsustainable-The%20New%20Business%20Lending%20on%20Main%20Street_Opportunity%20Fund%20Research%20Report_May%202016.pdf

¹⁶⁸ Clark, Patrick. “How Much is Too Much to Pay for a Small Business Loan,” May 16, 2014. Bloomberg. <http://www.bloomberg.com/news/articles/2014-05-16/how-much-is-too-much-to-pay-for-a-small-business-loan>

¹⁶⁹ *Ibid.*



other. Stacking can be difficult for lenders to prevent. In the same way that it can be difficult for a mortgage lender to prevent a borrower from maxing out their credit cards days after receiving their mortgage, it can be difficult for an online lender—or bank, for that matter—to prevent a borrower from taking out multiple additional loans from other lenders, even if that practice may be a violation of the borrower’s loan agreement with their lender. Indeed, many online lenders are willing to take second, third and even fourth positions behind an original lender. In theory lenders could police this by better monitoring the debits and credits coming out of a borrower’s bank account on an ongoing basis, as well as by better reporting among lenders to business credit bureaus.

Time Is Right for Rational Regulatory Oversight

It is an appropriate time for federal and state regulators to weigh in with appropriate oversight. But what should that response look like? We believe that there is great benefit to a clearly defined path for the regulation of online lending to small business customers. We have taken on the task of providing such a plan in this paper. Through our interactions and conversations with regulators and industry participants, we have codified a set of assumptions, principles, and recommended actions that we believe should become the regulatory priorities, and coordinate and guide the activities in this space in the coming time.

Core Principles that Should Drive Regulators’ Actions

Markets tend to be more nimble and reactive to borrowers’ needs than regulators. In a perfect marketplace, regulation of small business credit would be entirely unnecessary. This was certainly the argument in the run-up to the last financial crisis, where it was assumed that the “invisible hand” of the market and self-policing could handle the task alone. But the aftermath of the crisis taught us that independent oversight must exist alongside financial innovation. The key to effective regulation and supervision is to maintain as much of the benefits of the free market innovation as possible, providing stability and rules of the road for competitors to grow and prosper, and ensuring customers are served and protected. We suggest the following principles for expanding the regulatory architecture to cover small business borrowers.

1. **Recognize that small business borrowers are often the same as consumers.** An individual who takes out a loan for a house or a car receives the benefits of numerous consumer protection regulations, including standardized term disclosure through the Truth in Lending Act; if that same person wants to take out a loan for their business, they lose that protection without suddenly gaining insight into business lending. However, in practice there is often limited distinction between a small business borrower seeking credit online and a consumer. As recent online focus groups conducted by the Fed showed, small business borrowers had distinct limits in their abilities to understand loan costs and structures.¹⁷⁰ Yet in the current federal regulatory architecture around lending, small business owners and consumers are treated quite differently. Importantly, this principle should not be misconstrued to assume that regulators should simply apply consumer protection laws to small business loans. Indeed, there are nuances in the provision of small business credit, including myriad more credit products that are available to small businesses than are available to consumers, which would not allow a cookie cutter approach.

¹⁷⁰ Lipman, Barbara and Ann Marie Wiersch. “Alternative Lending Through the Eyes of ‘Mom & Pop’ Small-Business Owners: Findings from Online Focus Groups.” Federal Reserve Bank of Cleveland. August 25, 2015. <https://www.clevelandfed.org/newsroom-and-events/publications/special-reports/sr-20150825-alternative-lending-through-the-eyes-of-mom-and-pop-small-business-owners.aspx>

2. **Go beyond industry-driven self-policing efforts.** We believe that industry-driven self-regulation is both necessary and worthwhile. However, we also believe that self-policing by itself is insufficient to rein in predatory actors. Prudent regulation is still warranted. After all, only regulation can compel every lender and broker to treat borrowers fairly. Absent universal standards, it is considerably more difficult for lenders and brokers to take the high road when competing with irresponsible players. Responsible lenders should not have to choose between a race to the bottom on borrower protection standards and surrendering market share.
3. **Be deliberate, thoughtful and coordinated -- with one another in Washington, but also among states.** Our current regulatory system has also been an unnecessary burden on the growth of fintech players and on banks who try to partner with them. No single federal regulator has authority to oversee business lending. Instead, there is a spaghetti soup of at least seven agencies with overlapping jurisdictions and purviews. This leaves online small business lenders to be governed by an expensive and time-consuming patchwork of state oversight, often with inconsistent rules that can confine online lending to state-by-state silos, undermining what is an otherwise national market for credit. Better coordination is pivotal.
4. **Where possible develop broad principles, not restrictive rules.** Because the financial markets are complex and interrelated it is critical to understand and appreciate the unintended consequences of actions. In this vein, instead of regulating what is approved and what is forbidden, perhaps regulators should, wherever possible, lay out broad but well-defined principles that businesses are expected to follow. Broad principles may be preferable to restrictive rules particularly given that we do not yet know all that technology and innovation will be able to bring to lending. To be sure, as Larry Summers has previously noted, “We do know this, and it’s a good law for thinking about the world, whether you’re thinking about the arrival of financial crises or you’re thinking about the dissemination of technologies, we know that things take longer to happen than you think they will and then they happen faster than you thought they could. That’s the way it was with the housing bubble collapsing. That’s the way it was with the pervasiveness of the personal computer. That’s the way it was with the Internet becoming part of the fabric of all of our daily lives, and that will be the way it is with respect to the next set of innovations.”¹⁷¹ Hard and fast rules could inhibit, rather than enable, future innovations to take hold. Moreover, promulgating bright lines rules at a time when innovation is rapidly transforming how borrowers apply for and get credit may be counter-productive given that hard and fast rules may not be able to keep up with the wave of innovation being brought by new fintech players.
5. **Engage industry in the process.** Bring industry to the table, and keep them in continuous dialogue, but don’t let them take hold of the driver’s seat. Encourage industry-driven efforts to self-police, with appropriate enforcement mechanisms. The online industry has already shown willingness to self-regulate with efforts such as the Small Business Borrower’s Bill of Rights and the [SMART Box](#) model disclosure initiative.¹⁷²

¹⁷¹ Summers, Lawrence S. “New Lending for a New Economy.” *Lendit Conference*. April 15, 2015. New York, NY. <http://larrysummers.com/2015/04/15/new-lending-for-a-new-economy-2/>.

¹⁷² “Borrower Bill of Rights.” *Fundera*. <https://www.fundera.com/resources/policy/borrower-bill-of-rights>; “SMART Box.” *Innovative Lending Platform Association*. <http://innovativelending.org/smart-box/>

6. **Appreciate and promote a goal of both protecting and serving the needs of small business borrowers.** The mandate of U.K. regulators to increase competition has allowed them to lead in the development of “innovation sandboxes” and other regulatory structures designed to encourage the market to develop new products and solutions that serve customers.
7. **Be data-driven.** Regulators should allow new firms to operate and generate data on the outcomes created by novel business models before writing new rules. Better data collection is critical to measure credit access for small, and particularly minority-owned and other traditionally underserved, businesses. Surveys, anecdotal information, and SBA data can be illustrative, but we lack market-wide, real-time data on small business lending trends. The dearth of data confounds regulators' ability to identify problems or assess their depth and limits potential new investors' interest in the asset class. It also makes it difficult to evaluate attempted policy solutions.

Regulatory Action Plan (RAP)

Given our analysis of the small business lending market and the new online entrants, we recommend the following six point Regulatory Action Plan (RAP) be used as a path forward in the small business lending space. These recommendations are informed by suggestions from regulators, industry participants, and others through white papers, requests for information conducted by government agencies (RFIs), and discussion, and include many ideas proposed by others in the United States and in the United Kingdom.

Six key recommendations are summarized below and described in greater detail in this chapter:

1. **Offer Online Lenders a National Non-Bank Charter Option.** Currently nonbank lenders lack a designated federal supervisor. Under the current regulatory structure, nonbank lenders essentially have two options – 1) lending directly via state licenses and supervision where applicable or 2) originate through a national or state bank. Creating a clear, straightforward limited purpose national bank charter, currently under consideration by the OCC, would be a major step forward. Another approach would be for Congress to create a federal nonbank charter or lending license and designate one of the regulatory agencies as the rulemaking body and supervisor. By creating a national charter or license, small business lenders would be able to operate nationwide, subject to a consistent set of federal standards and protections, and benefit from a single supervisor and examination process, while at the same time encouraging additional innovation in the small business lending space.
2. **Increase Borrower Protections for Small Business Owners.** An important precondition of a national charter should be the creation of new rules, universally applied, that create borrower protections for small business borrowers. Indeed, if offering a national regulation option to fintech players is the proverbial carrot, compliance with commonsense borrower protections could be the stick. This is important because credit extended for a commercial purpose is not covered by the disclosure requirements of the federal Truth in Lending Act. This allows lenders, including traditional banks, to display loan terms and costs, such as APRs, inconsistently. Regulators should require disclosures that are clear and concise, and let borrowers decide what is best for them. Model disclosures being developed within the online small business lending industry, including Fundera's model for credit marketplaces and the [SMART Box](#) for online loans, including term loans



as well as MCAs, are steps in the right direction, and could provide a useful basis for a universal disclosure box, or set of disclosure boxes.

3. **Develop Joint Guidance on Third-Party Vendor Management.** Partnerships between banks and new entrants are already emerging, and will increasingly be one of the hallmarks of the next phase of market development in the online small business lending space. This can be a win-win for online lenders, banks and indeed the small business borrower that each player seeks to serve. But enabling these partnerships to flourish will require clear, consistent, and non-overlapping rules from agencies that already govern third-party relationships, in order to ensure good market practices and successful partnerships from the start.
4. **Consider Requiring that Loan Brokers Respect Fiduciary Duties of Disclosure, Loyalty and Prudence.** As with mortgage brokers in many states, and more recently with investment brokers at the federal level, small business loan brokers offering individualized advice should act in borrowers' best interest, respecting fiduciary duties of disclosure, loyalty and prudence. Most importantly, brokers should endeavor to reduce or eliminate biases where possible, but where they are unable to brokers should disclose conflicts that compromise their impartiality, such as incentives from lenders to market higher-priced loans over others, and clearly break out the fees they add to loans.
5. **Shine a Light on Borrower Outcomes by Mandating Disclosure of Originations, APRs, Default Rates, and Borrower Satisfaction Across the Small Business Lending Market.** This would entail efforts to collect market-wide data from all current market players on their small business loan transactions. Better data will shed light on current practices and on the state of access to credit, deterring bad actors and reducing the risk of cumbersome regulation stifling important innovations. We believe that the Consumer Financial Protection Bureau (CFPB) already has the mandate to implement this through Section 1071 of the Dodd-Frank Act.
6. **Create a National Advisory Board on Responsible Financial Innovation.** We are aware that all too often, the creation of an advisory board is a substitute for real action. But in this case, it would be a means to a broader end, and a vital precursor to a more coordinated regulatory approach to oversight of financial services. This body would consist of the major federal regulators that have purview in lending, including the Federal Reserve, OCC, SEC, FDIC, FTC and CFPB. In addition to the major federal regulators, this body should include borrower protection advocates, banks, current and former fintech executives, as well as other interested stakeholders, and be tasked with advising regulators on policy development, research and further stakeholder engagement. In addition, this group should look for opportunities to use technology to implement regulation in a more efficient way. This area, known as regtech, should be one of the core objectives of the RAP. Participants should seek out innovative ways of executing the regulatory tasks such as data collection, compliance and reporting, and disclosure that take advantage of technology, keep processes simple, and leave room for continuous improvement and innovation in the way the regulations are implemented. Efforts should be made to incorporate specific models, such as “innovation sandboxes” and regtech solutions “sprints” or hackathons as experiments.

Offer a National Non-bank Charter Option for Online Lenders



The landscape of small business lending is alive with innovation and with new entrants. In contrast, almost no new bank charters have been issued since the Great Recession. Financial technology has changed the way small business owners can access capital, and regulators need to provide appropriate structures that allow responsible new actors to enter the landscape and behave in ways that are transparent and accountable to regulators. Currently, our regulatory system is falling short.

No single federal regulator is charged with oversight of the new entrants. Often, online small business lenders are governed by an expensive and time-consuming patchwork of state-by-state oversight. Inconsistent rules across state laws can confine online lending to state-by-state silos, undermining what is an otherwise national market for credit.

This calls for a new limited purpose bank charter. Indeed, the OCC should allow online lenders to apply for a special purpose national charter, which permits preemption of state law in favor of national regulation. The Internet is not bound by any one state, and the market for loans online is no exception. However, regulators should not simply mandate all federal laws associated with a national bank charter must now apply to non-bank lenders. Rather, regulators should carefully consider which aspects of bank charters should apply to online lenders with an eye to ensuring soundness of the activities, and recognition of the vital innovation new entrants are bringing to small business lending. In fact, most existing banking laws were written at a time when online lending was nonexistent, let alone the fastest growing segment of the market.

In their white paper issued in March 2016, the OCC signaled that they might be willing to take on the challenge of leading these efforts, writing: “To expedite decision making, the OCC is evaluating whether it can streamline some of its licensing procedures, where appropriate, or develop new procedures where existing procedures may not work for certain innovative activities.”¹⁷³ Indeed, Comptroller Thomas Curry recently discussed this idea in a speech to the Marketplace Lending Policy Summit. Seeking to address concerns from banks that this would be “regulation light,” Curry noted, “If we at the OCC do decide to grant limited-purpose charters in this area, the institutions who receive the charters will be held to the same strict standards of safety, soundness, and fairness that other federally chartered institutions must meet.”¹⁷⁴ Concerns have also been raised about the possibility of payday lenders using this charter to spread nationally without interest rate caps, but the OCC can prevent this by using interest rates as a means of evaluating which lenders should receive a charter. It is widely anticipated that the agency will be setting out its proposals for seeking a path to a limited purpose bank charter and will be soliciting public comment.

Some new entrants have indicated an interest in coming under the purview of a national regulator. One reason for this eagerness is to avoid the varied and often conflicting governance of state regulation and the costs associated with multi-state compliance. The Conference of State Bank Supervisors is considering working on a more unified solution at the level of state banking law. Given the varied interests and the wide discrepancies and conflicting state regulations, limited regional coordination may be the best

¹⁷³ “Supporting Responsible Innovation in the Federal Banking System: An OCC Perspective.” Office of the Comptroller of the Currency. March 2016. <https://www.occ.gov/publications/publications-by-type/other-publications-reports/pub-responsible-innovation-banking-system-occ-perspective.pdf>

¹⁷⁴ “Remarks by Thomas J. Curry Comptroller of the Currency Before the Marketplace Lending Policy Summit 2016.” September 13, 2016. <https://www.occ.gov/news-issuances/speeches/2016/pub-speech-2016-111.pdf>

outcome that can be hoped for through this process in the near term, though the objective of greater state level regulatory coordination is laudable.

A limited purpose OCC charter could solve a number of oversight issues by providing a single known regulator who has jurisdiction over the new entrants. This could be a boost to innovative companies who now lend through “rent a charter” arrangements with state banks and use federal preemption rules, or cobble together state licenses. Other new entrants craft their products to not qualify as loans, in part to avoid the regulatory uncertainties. A limited purpose charter appears to be within the authority of the OCC and, interestingly, industry players seem eager to seek out – rather than attempt to avoid this kind of rational oversight.

A number of concerns about a limited purpose charter have been raised by banks and borrower advocates such as the Community Development Financial Institutions (CDFIs). These concerns are valid and include questions about what bank requirements the limited purpose charter recipients will be required to comply with, and which they will be able to avoid. To be viable, it seems to be a requirement that any federal charter preempt state usury laws, as the full bank charters do, to allow a national online presence. On the other hand, it seems important that the new entrants also contribute to small businesses in underserved communities, either through the Community Reinvestment Act (CRA) or a similar program. For borrower advocates limited charters, and the accompanying federal oversight, could become an opportunity to require additional transparency from new entrants and go after predatory behaviors.

Interestingly, consensus seems to be building among the small business banking community that having a clear regulator of the new online small business lenders is a positive. For the new entrants, this may offer clarity on the rules by which they are required to play. This may also provide more impetus to banks wishing to partner with a fintech player, but worried about doing so given limited existing oversight of such players. And from the point of view of the small business owner, there is more opportunity to access credit from reputable and accredited sources.¹⁷⁵

Increase Borrower Protections for Small Business Owners

An important precondition of a national charter should be the creation of new rules, universally applied to both banks and non-bank lenders, which create borrower protections for small business borrowers. Indeed, if offering a national regulation option to fintech players is the proverbial carrot, compliance with commonsense borrower protections could be the stick. This is important because currently extensive borrower protections exist for consumers, but small business customers slip through the regulatory cracks.

Some policy proposals to redress this gap are relatively simple and likely to be generally well-received across industry, consumer protection advocates and small businesses alike. For example,

¹⁷⁵ Note: The U.K. has been a leader in regulatory activity around online lending. They have created new charters and developed “innovation sandboxes” that are being copied around the world. It is worth looking at how they have gone about their regulatory activity, as it was part of a deliberate strategy to increase innovation and competition, particularly in the small business lending arena, and holds many valuable lessons for the U.S. plans. Our interviews and research into the U.K. activities are described in some detail in Appendix B.

policymakers should consider requiring lenders to issue "payoff letters" within 48 hours. Borrowers need these letters when they refinance with other lenders at cheaper rates. Some lenders today are slow to issue these letters so they can continue drawing daily payments from borrowers for as long as possible. Other policy efforts require more nuance, and further debate to flesh them out, but we lay out a series of first principles as well as a set of policy proposals for consideration.

1. Coalescing on Universal Disclosures to Protect Small Business Borrowers

At the top of any list of policy action to protect borrowers, however, must be better disclosures. Regulators should require disclosures that are clear and concise and let borrowers decide what's best. Requiring lenders to disclose annual percentage rates and to compose standardized contracts in plain English would go a long way toward reducing complexity and helping borrowers make well-informed choices.

Since 2000, the so-called Schumer box has been to credit cards what nutrition labels are to food. Instead of listing calorie and carbohydrate counts, the summary table requires disclosure of basic numbers like the interest rate and annual fee at the top of credit card solicitations. Named for legislation by then-Rep. Chuck Schumer (now New York's senior U.S. Senator), the box has a useful purpose, allowing a consumer who doesn't wish to pay high annual fees to easily toss aside expensive offers. Yet when that same consumer applies for a small business loan, he or she is left in the dark.

Credit extended for a business or commercial purpose is not covered by the disclosure requirements of the federal Truth in Lending Act; thus, lenders display loan terms and costs inconsistently. Some bury prepayment penalties deep inside three-inch-thick loan documents. Few disclose an APR, a number that would help loan prospects comparison shop.

Traditional arguments, that small business owners are financially sophisticated or have knowledgeable advisors, have not proved accurate, particularly for the large majority of small business owners who take on small dollar loans. A recent focus group study conducted by the Federal Reserve Bank of Cleveland was telling. The research found that mom-and-pop business owners are hard-pressed to compare credit products when using information provided on online alternative lenders' websites.¹⁷⁶

Such opacity is problematic. After all, how can borrowers get a fair shot at making informed financing decisions absent full and fair information about their loan options? To fix this a number of industry-led efforts are underway to push for greater transparency in small business lending. One such initiative, the Borrowers' Bill of Rights (BBOR) was announced in August 2015, led by Fundera, Funding Circle, Lending Club, the Aspen Institute, Small Business Majority, Accion and Opportunity Fund.¹⁷⁷ In an effort that has since garnered support from many of the online small business lending industry's leading players, the industry proposed a comprehensive set of borrower protections that included disclosures of prices, fees, and payment terms, and required brokers to also provide full transparency.

¹⁷⁶ Lipman, Barbara and Ann Marie Wiersch. "Alternative Lending Through the Eyes of 'Mom & Pop' Small-Business Owners: Findings from Online Focus Groups." Federal Reserve Bank of Cleveland. August 25, 2015. <https://www.clevelandfed.org/newsroom-and-events/publications/special-reports/sr-20150825-alternative-lending-through-the-eyes-of-mom-and-pop-small-business-owners.aspx>

¹⁷⁷ "Borrower Bill of Rights." Fundera. <https://www.fundera.com/resources/policy/borrower-bill-of-rights>

Additional industry-led initiatives have sought to further advance small business lending standards, including Fundera's model disclosure, which is intended to provide a minimum viable product for online credit marketplaces to use for credit products like term loans and MCAs, as well as the SMART (Straightforward Metrics Around Rate and Total cost) Box for small business term loans and MCAs, which was proposed by OnDeck, Kabbage and CAN Capital in May 2016, and has since garnered support of a host of other industry leaders, including LendingTree.

Industry driven self-regulation is a hallmark of maturing industries, and an important proactive step toward putting transparency and fairness front and center as the online lending industry continues to grow. While imperfect, both efforts represent important minimum viable products which policymakers and regulators should consider as they seek to form a set of universal disclosure boxes for industry players and products. However, we believe that a clear regulatory articulation of borrower protections and disclosures for small business owners should also be part of the near term regulatory plan.

Six principles should guide the discussion on the disclosure boxes.

1. Conspicuous. Key disclosures around price and terms should be conspicuously presented in boldface type at the top of loan documentation so that borrowers do not have to waste time searching for the information. Small business owners are generally time-strapped, particularly when they are searching for a loan. The average small business owner spends 24-to-72 hours talking to lenders, filling out loan applications and submitting documentation, according to a survey conducted by seven Federal Reserve banks.¹⁷⁸ Small business owners deserve to see their terms without having to flip through pages of complicated documentation.

2. Comprehensive. The disclosures should capture all relevant information that borrowers should care about when making a loan decision. In the Federal Reserve's same focus group highlighted above, virtually all participants said they want to see stated product features like duration, origination fees, financing charges expressed in dollar amounts and interest rates, as well as clear and conspicuous descriptions of late fees and prepayment penalties. Disclosure of monthly loan repayment terms would also be helpful given that small business owners are more likely to think of their business cash flow on a monthly, rather than a daily, basis.

3. Comparable. The disclosure box should empower borrowers to make straight-up and, where possible, side-by-side comparisons among loan options. While imperfect, universal disclosure of metrics such as an APR would help would-be borrowers understand their options. It is certainly the case that, absent education about what an APR represents, the metric can be confusing to borrowers — especially for loans with durations of less than one year. Alternative measures, such as a total cost of capital which incorporates all financing charges, origination fees and other costs associated with the loan, can often be more useful for loan products with less than one year in duration. However, despite its limitations, APR is ultimately a metric which borrowers are familiar with when seeing the price of other financing products, like credit cards. It is also the only widely used metric for incorporating all origination fees and financing charges. To strike the right balance, model disclosures should not adopt APR as the sole metric for the purposes of cross-comparison. Rather, the best model disclosures will incorporate APRs, as well as a host

¹⁷⁸ "2015 Small Business Credit Survey." Federal Reserve Banks of New York, Atlanta, Boston, Cleveland, Philadelphia, Richmond, and St. Louis. March 2016. <https://www.newyorkfed.org/medialibrary/media/smallbusiness/2015/Report-SBCS-2015.pdf>

of other metrics such as daily and monthly repayment, prepayment policy and total cost of capital, with straightforward language that highlights the pros and cons of each metric for particular products and terms. Fundera’s model disclosure for credit marketplaces and the [SMART Box](#) have made important first steps in showing how this balance can be struck.

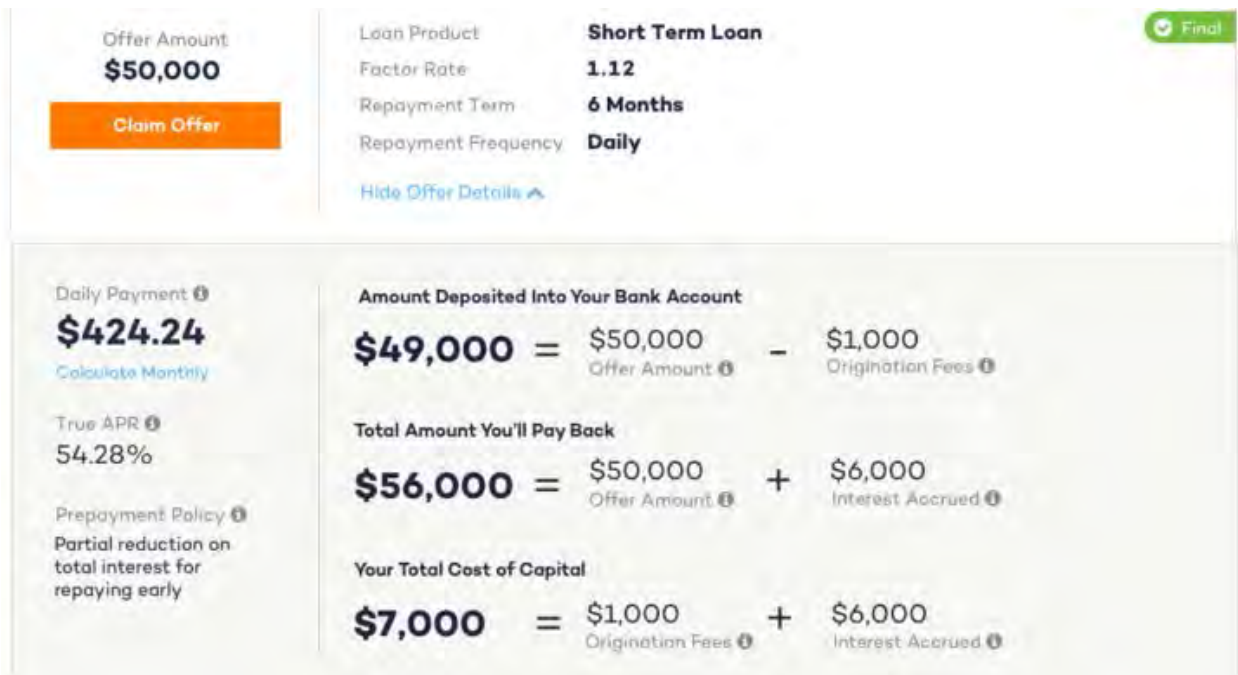
4. Clear. The disclosure box should be written in plain English. Modern behavioral economics shows that there are distinct limits to people's ability to internalize complex financial products.¹⁷⁹ Because of borrowers’ distinct limits of comprehending complex financial concepts, lenders have an elevated responsibility to make sure language is truly understandable to borrowers. The purpose of a disclosure is — of course — to ensure that borrowers get a fair shot to understand the risks and rewards of any credit product before making their decisions.

5. Contemporary. The disclosure box should also go beyond the static table snapshot of the “Schumer Box” with fully interactive tools that empower small business owners to make informed financing decisions, and lay out the metrics they deserve to understand in a user-friendly way.

6. Correct. The disclosure box should not oversimplify or overcomplicate a loan's terms to the point of inaccuracy. Crafting a universal disclosure is difficult, particularly when considering the complicated nature of small business loan products. Each loan comes with varying terms, repayment methods and use of proceeds. The challenge is to implement a disclosure box that balances the above considerations, many of which can be competing, while educating borrowers on the specifics of their credit offers.

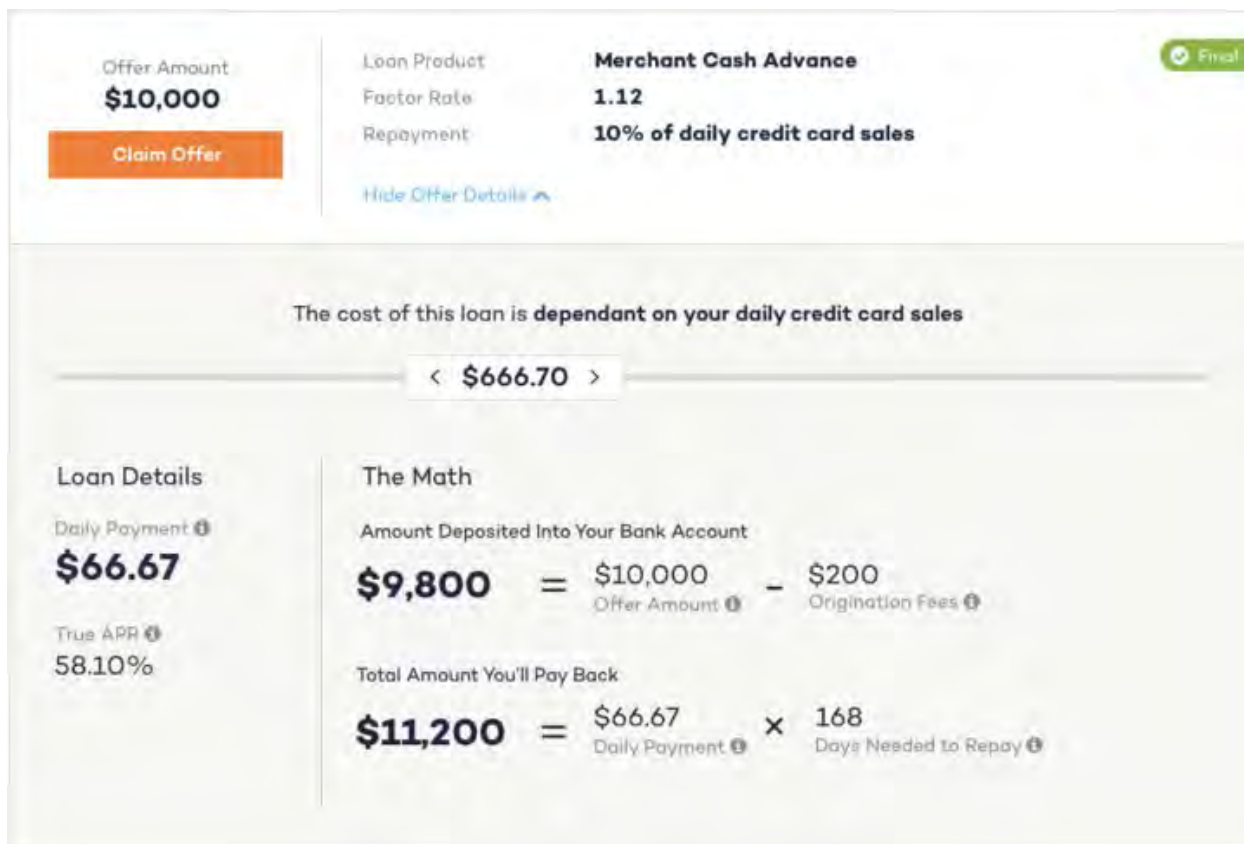
¹⁷⁹ Barr, Michael S., Sendhil Mullainathan and Eldar Shafir. “The Case for Behaviorally Informed Regulation.” *New Perspectives on Regulation*. 2009. http://www.tobinproject.org/sites/tobinproject.org/files/assets/New_Perspectives_Ch2_Barr_Mullainathan_Shafir.pdf

Figure 52: Fundera’s Example Disclosure Box for Term Loan Products on Credit Marketplaces



Source: McCarthy, Brayden. “Building a Disclosure Box for the Digital Age.” *Huffington Post*. September 14, 2016. http://www.huffingtonpost.com/brayden-mccarthy/building-a-disclosure-box_b_12014342.html?

Figure 53: Fundera’s Example Disclosure Box for Merchant Cash Advance Products on Credit Marketplaces



Source: McCarthy, Brayden. “Building a Disclosure Box for the Digital Age.” *Huffington Post*. September 14, 2016. http://www.huffingtonpost.com/brayden-mccarthy/building-a-disclosure-box_b_12014342.html?

2. Consider going beyond disclosures to strengthen borrower protections for small businesses

At first blush, disclosure requirements seem both fair and sensible. Armed with complete information, rational customers should be able to fairly evaluate a credit product. That being said, disclosure may be a necessary but ultimately insufficient precondition for better borrower protections in small business lending. Disclosure requirements also have bipartisan appeal because they try to address biases but involve minimal regulation. Industry also generally supports the idea, which is relatively inexpensive to implement and generally involves less disruption of the status quo, provided that it is executed while respecting the need for multiple metrics to be included in a disclosure box as opposed to a one-size-fits-all approach.

But disclosure on its own is not a panacea. Consider the results of a 2005 study conducted by a group of economists at Carnegie Mellon University.¹⁸⁰ In the experiment, one group — “estimators” —

¹⁸⁰ Cain Daylian M., George Loewenstein and Don A. Moore. “The dirt on coming clean: perverse effects of disclosing conflicts of interest.” *The Journal of Legal Studies*. Vol. 34, No. 1. 2005.

was tasked with guessing how many coins were in a jar. Another group, "advisors," were allowed to walk up to the jar, study it, and give their best guess to the estimator. Estimators were incentivized to provide accurate estimates, and advisors were rewarded for how high they could convince estimators to guess. Paradoxically, when advisors disclosed their upwardly biased rewards, the accuracy of estimates went down, not up — the opposite of disclosure's intended effect. Other studies have resulted in a similar outcome, including a 2010 follow-up conducted by the same economists and a seminal study conducted back in 1982.¹⁸¹

Moreover, modern behavioral economics shows that there are distinct limits to people's ability to internalize complex financial products. Consider a survey led by the Wharton School, George Washington University and the Pension Research Council which demonstrated that many borrowers do not understand the implications of even basic financial concepts — like, for example, compounding interest — which can lead borrowers to both under-save and over-borrow.¹⁸² Another study also conducted by researchers at Wharton, has found that even top MBA students had trouble picking out the best loans, including in tasks much simpler than ones they encounter in everyday life.¹⁸³

Viewed in this context, it's clear that the libertarian principle of "caveat emptor" — let buyers beware — may be ineffective on its own in financial services. "Caveat venditor" — let sellers beware — may be more sensible. There are a host of policy actions which regulators could take here, which merit further exploration. Policymakers and regulators should consider what former Treasury official Michael Barr calls an "objective reasonableness" test, which would require lenders to make a reasonable attempt at helping borrowers understand risks and rewards of taking out high-interest rate loans before closing.¹⁸⁴ Government agencies could provide clear guidance on this standard, including model disclosures, though these recommendations are beyond the scope of this paper.

Develop Joint Guidance on Third-Party Vendor Management

Partnerships between banks and new entrants are already emerging, and are likely to grow, provided that regulators allow it. This can be a win-win for online lenders, banks and indeed the small business borrower that each player seeks to serve.

As a case in point, when large banks decline small business applicants, they leave them to sort through complicated loan options from other banks or online lenders, entirely on their own. Another alternative could be joint partnerships in which banks fund the small businesses they wish to, and direct those which they are unable to fund to a vetted third-party fintech partner. This is the practice adopted recently in the United Kingdom.

¹⁸¹ Cain Daylian M., George Loewenstein and Don A. Moore. "When Sunlight Fails to Disinfect: Understanding the Perverse Effects of Disclosing Conflicts of Interest." *Journal of Consumer Research*. Vol. 37, No. 5. 2010.

¹⁸² Maranjian, Selena. "Most Americans Fail This Simple 3-Question Financial Quiz. Can You Pass It?" *Money*. March 11, 2015. <http://time.com/money/3740446/financial-literacy-quiz/?xid=timetwitter>

¹⁸³ Thaler, Richard and Cass Sunstein. "Nudge: Improving Decisions about Health, Wealth, and Happiness." Yale University Press. 2008.

¹⁸⁴ Barr, Michael S., Sendhil Mullainathan and Eldar Shafir. "Behaviorally Informed Financial Services Regulation." *New America Foundation*. October 2008. <https://www.fdic.gov/about/comein/behaveApril1a.pdf>

The OCC and other agencies have begun to explore explicitly the possibility of clarifying guidance around third party arrangements and even having a point of contact with whom to have direct discussions.

At least three agencies – the OCC, the Fed, the FDIC, and possibly the CFPB – all have responsibility for some aspects around regulating the extent to which banks and other regulated financial institutions are responsible for the activities of their third-party vendors. This might be through their bank supervisory audits or through their oversight of fair lending practices. In the case of online lending partnerships, one critical aspect of the third-party guidance is to understand clearly what certain partnerships between online lenders and banks require banks to do. For example, in the recent OnDeck- JPMorgan Chase partnership, the fact that JPMorgan Chase is retaining the relationship with the customer, while using the OnDeck technology, appears to create the obligation for compliance as extensive as the bank would for an internal process or product. Yet in other more arm’s length processes, where banks refer customers to outside parties, it needs to be clear what in the partnership relationship creates third party obligations, and explicitly what those obligations are.

The most difficult aspect of banking regulation for the industry participants is the overlapping and often conflicting authorities of regulators. Even before the advent of online lending, small banks would often express extreme frustration and anxiety about conflicting directives received from different agencies about the same loan. This is a problem that must be solved. Current regulatory burdens and expenses on small and community banks are immense, and these forces have a negative impact on the willingness of these important sources of capital to make loans to small businesses. For these entities to succeed they must also be able to tap into and partner with some of the new innovative lenders- and find the partnerships that are right for their customers.

Resolving potential conflicts in guidance by different regulators is a critical principle for the implementation of third party guidance by the OCC and their fellow regulators. One option to resolve potential conflicts around online lending and third-party vendor partnerships is the Federal Financial Institutions Examination Council (FFIEC). The FFIEC is the interagency council with the goal of prescribing “uniform principles, standards and report forms for the federal examination of financial institutions.” A crisp reorientation of this currently under-effective group (possibly emulating the U.K.’s FCA ombudsman activities) might be a critical piece of the interagency implementation of the RAP. Other possible activities include doing FFIEC joint exams and conducting regular trainings of examiners that are coordinated across all of the regulatory agencies so that examiners have the same criteria by which they administer third-party rules.

Similar recommendations about joint examinations and coordination between agencies have been made more generally by the Bipartisan Policy Center in their 2014 report describing a “roadmap for a more effective regulatory environment,” as well as in their 2016 report assessing the post-recovery financial framework.^{185,186} Ultimately, enabling these partnerships to flourish—and benefit small businesses—will require clear, consistent, and non-overlapping rules from the multiple agencies that already govern third-party relationships. No-action letters could also be helpful tools, as they would allow regulators to assure

¹⁸⁵ Neiman, Richard and Mark Olson. “Dodd-Frank’s Missed Opportunity: A Road Map for a More Effective Regulatory Architecture.” Bipartisan Policy Program. April 2014. <http://cdn.bipartisanpolicy.org/wp-content/uploads/sites/default/files/BPC%20Dodd-Frank%20Missed%20Opportunity.pdf>

¹⁸⁶ Baily, Martin N., Justin Schardin and Phillip L. Swagel. “Did Policymakers Get Post-Crisis Financial Regulation Right?” Bipartisan Policy Center. <http://cdn.bipartisanpolicy.org/wp-content/uploads/2016/09/BPC-FRRI-Post-Crisis-Financial-Regulation.pdf>

lenders that new products, or partnerships, are legal and that no enforcement action will be needed. These are the kind of changes that could be incorporated in upcoming legislative actions around financial regulation.

Brokers Must be Governed by Fiduciary Duty and Greater Disclosure Rules

The subprime crisis illuminated just how dangerous it can be when loan brokers go unchecked. Today, a number of concerns have also been raised by similar practices of small business loan brokers. Brokers are an important factor in the market, as they originate a quarter to three-quarters of all loans at some of the largest online lenders, depending on the lender and loan product type.

These small business loan brokers typically fall outside the purview of regulators. Aside from fair lending laws, they are not subject to federal oversight. Only a handful of states require brokers to obtain licenses. Brokers often charge high commissions ranging from 10 to 20 percent of a loan. That should cause concern, as brokers' commissions can dramatically increase the costs of loans. These fees are rarely, as far as we can tell, broken out to borrowers, meaning borrowers do not know how much they are paying for their brokers' services. Brokers also routinely fail to disclose to borrowers on whose behalf they are acting, often marketing themselves as impartial when in fact many of them are incentivized because of their expensive commissions from lenders to steer borrowers toward certain loans where the broker makes the most money, even if cheaper options are available.¹⁸⁷

However, as finding creditworthy borrowers is not easy, brokers are likely to remain a feature of the burgeoning alternative lending industry for the foreseeable future. These actions undermine the positive role that brokers can play in facilitating loan discovery. After all, finding a business loan can be daunting, consuming an average of 22 to 34 hours and requiring that borrowers make sense of myriad complicated loan options, as we highlighted in prior sections. Since brokers wield enormous influence over a borrower's financing decisions, it is critical to establish rules of the road that compel all brokers to respect the trust of borrowers.

We should consider requiring loan brokers to respect fiduciary duties of disclosure, loyalty and prudence. In keeping with this standard, brokers should clearly break out the fees they will add to borrowers' loans as part of the cost of doing business with them. The industry should also work on standardizing fee and term disclosure across brokers, so that borrowers fully understand what they are paying for. If a borrower can get the same loan more cheaply by going directly to a lender, they should be able to do so. A standardized disclosure form with side-by-side comparisons of a broker's products by compensation as well as cost and terms would help de-bias information and empower clients to act optimally. A 2007 study by the FTC found disclosures that enabled cross-comparisons dramatically increased borrowers' ability to understand mortgage options.¹⁸⁸

Furthermore, brokers should educate borrowers on every loan option for which they qualify and endeavor to ensure borrowers understand consequences of financing decisions before they sign a loan

¹⁸⁷ Clark, Patrick. "Brokers Get Big Commissions for Selling Entrepreneurs Costly Loans." Bloomberg. March 31, 2014. <http://www.bloomberg.com/news/articles/2014-03-31/brokers-get-big-commissions-for-selling-entrepreneurs-costly-loans>

¹⁸⁸ Lacko, James M. and Janis K. Pappalardo. "Improving Consumer Mortgage Disclosures: An Empirical Assessment of Current and Prototype Disclosure Forms: A Bureau of Economics Staff Report." Federal Trade Commission. June 2007. <https://www.ftc.gov/reports/improving-consumer-mortgage-disclosures-empirical-assessment-current-prototype-disclosure>

document. Brokers could use tools like loan calculators and APRs to help borrowers comparison-shop across loan products. Brokers could also disclose the pros and cons of each loan product, especially regarding high-interest loans.

Above all, brokers should ensure that loan advice is in the borrower's best interest, eliminating conflicts of interest and incentives to self-deal where possible. When conflicts of interest, such as financial incentives to market one lender over another, are not eliminated they must be disclosed upfront so that borrowers can take them into account when evaluating their broker's advice.

The standard that should potentially be applied is the one recommended by the SEC "Study on Investment Advisers and Broker-Dealers," which says that "the standard of conduct for all brokers, dealers, and investment advisers, when providing personalized investment advice about securities to retail customers (and such other customers as the Commission may by rule provide), shall be to act in the best interest of the customer without regard to the financial or other interest of the broker, dealer, or investment adviser providing the advice."

Oversight of brokers will require new regulation and likely new legislation. One option for the agency to provide this oversight is CFPB, as part of expanded oversight of small business loan disclosures.

Better Data Collection to Shine a Light on Borrower Outcomes

We lack market-wide data on small business lending trends. A more precise measure of the credit gap for small business, would require a more complete understanding of credit demand and an accurate measure of the actual level of loan originations. In particular, such a study would need to identify credit constrained borrowers, specifically creditworthy borrowers that did not apply for a loan fearing denial of their application, and firms that were unable to acquire the full amount of credit for which they applied. In addition, loan originations and denials would be key metrics required for the analysis. Unfortunately, this data does not currently exist, thus making it difficult to reach empirically decisive conclusions on the extent of the credit gap to small businesses.

However, as part of recent financial reform legislation, the gap in small business credit data was recognized and a specific provision was included to allow for more credible monitoring for small business access to bank credit. Section 1071 of the Dodd Frank Act amended the Equal Opportunity Act to entrust the Consumer Financial Protection Bureau (CFPB) with requiring banks to collect and maintain certain data in connection with credit applications made by women or minority owned businesses and small businesses. Required information under this provision includes:

- The number of the application and the date on which the application was received
- The type and purpose of the loan or other credit being applied for
- The amount of the credit or credit limit applied for, and the amount of the credit transaction or the credit limit approved for such applicant
- The type of action taken with respect to such application, and the date of such action
- The census tract in which is located the principal place of business of the women owned, minority owned, or small business loan applicant
- The gross annual revenue of the business in the last fiscal year of the women owned, minority owned, or small business loan applicant preceding the date of the application
- The race, sex, and ethnicity of the principal owners of the business



- Any additional data that the Bureau determines would aid in fulfilling the purposes of this section

There is no set deadline for CFPB to implement this ruling, though CFPB initially noted that it will act “expeditiously” to develop these rules in recognition that section 1071 is important to gain a broader understanding of the credit needs of small businesses. Already there have been concerns from banks, particularly regional and community banks, about the costs and paperwork required. However, the utility of this information is widely recognized and, when the regulations are finalized and the data is collected, this is likely to become the seminal data set on small business credit conditions.

The final section of 1071—“any additional data that the Bureau determines would aid in fulfilling the purposes of this section”—is admittedly vague. No express purpose is given at the outset of Section 1071. One could assume that the goal is simply data collection to better monitor and measure the small business lending market, and indeed that is the focus of the majority of the section. In keeping with that goal, we believe that CFPB could have sufficient room to use 1071 to shine light on small business lending by collecting and disseminating relevant information such as originations, APRs, and default rates across the small business lending market. It has been demonstrated in other regulatory environments that merely the collection and availability of information about levels of activity, pricing, and conditions such as defaults and losses sets appropriate standards for industry participants against which to measure their own activities, and shows customers and policy makers when markets are out of line with expectations. Supreme Court Justice Louis Brandeis famously observed that “sunshine is said to be the best of disinfectants; electric light the most efficient policeman.”

The path forward for implementation requires two key attributes: speed and usefulness. It serves the interest of neither small businesses nor lenders to wait years for all the regulations pertaining to 1071 to be fully written and vetted before collection of the first data sets begins. Instead, implementation should begin immediately with the most important information that is the simplest to assemble. Then the collection should proceed in phases, adding information and data sources steadily and while gathering feedback on the accuracy, usefulness and presentation of the data as the process progresses.

As a first priority, the piece of data that must be collected at the earliest opportunity is basic data on loan originations by loan size. As noted earlier in this paper, there is no current tracking in the United States of loan originations to small businesses, even in aggregate at the national level. It is therefore impossible to accurately assess the availability of credit to small businesses in this country, a situation which surprises and disturbs the economic policy makers at home and our colleagues abroad, and was highly detrimental during the Great Recession. During the financial crisis policymakers and regulators were often flying blind, relying on guesswork and intuition to decipher how small business credit access was faring amidst broader credit market turmoil. This cannot be allowed to happen again.

Today, the best available data is the assets on the balance sheets of banks of loans in amounts under \$1 million. Asset of loans under \$1 million do not necessarily correlate with loans to small business as they can be small lines of credit to larger businesses, and asset levels have proven to not track closely with origination levels, particularly during times of sell downs on the balance sheets of banks. Thus collection of the originations of loans to small business is the key first step in the implementation of Dodd-Frank Section 1071. As a first approximation, the collection of C&I loan origination data by loan size must be the immediate priority. These data currently exist and should be added to the current bank call reports as an important first step, and collected from online lenders, many of who already report some of the data publically. This can be done even before what constitutes the definition of small business loans is finalized.

The second component of small business lending data works off the loan origination data and reports pricing, rejections, defaults and losses. All of these are currently collected by online lenders and by traditional lenders in the course of their business. CFPB needs to find an easy-to-use technology-enabled reporting process to allow timely collection of these categories and ensure they are accessible in the aggregate without long lags. Industry can provide input on the definitions and data collection technology during the start-up phase to alleviate some of the concerns that this data collection will create excessive new burdens. Given the expertise of many of the new online players, and many of the larger banks in large scale data activities, new templates for data reporting could potentially reflect the streamlined, cost effective, automated processes that now characterize online lending processes. The industry participants in the National Advisory Board on financial innovation recommended in this section, could be helpful in constructing these data templates.

The third section of the Dodd-Frank Section 1071 data collection requires measuring credit access for small, women and minority-owned, businesses. It's hardly a surprise that this has been the focus. Surveys, anecdotal information, and SBA data can be illustrative, but we lack market-wide, real-time data on segments of small business lending. The dearth of data impedes regulators' ability to identify problems, such as underserved markets or fair lending issues, or assess their depth. It also makes it difficult to evaluate attempted policy solutions. In the advent of another credit crisis this could prove disastrous. Implementing 1071 would add much-needed clarity.

Though not specifically described in the legislation, CFPB could use its' authority under 1071 to shine a light on predatory practices by mandating that online lenders publicly disclose product outcomes. As a first step, CFPB might require online lenders to disclose, by loan product, average APRs, default rates, as well as demographic and geographic characteristics.

Requiring public disclosure of such data would help name and shame worst offenders. In so doing, it would empower watchdogs, reporters and state regulators to evaluate and police bad apples. Including narratives of abuse alongside data, as CFPB has done in other sectors, would incentivize lenders to improve product quality and more vigorously compete on customer service, while also helping borrowers make empowered decisions.

Mandating data disclosure for online lenders could garner support from an unlikely alliance of market players. Consumer protection advocates, many of whom are concerned today about predatory practices in online lending, are certain to applaud the effort. Ironically, community bankers, many of whom oppose 1071 implementation for the time being, are also likely to be supportive as it would expose shady online actors which pose threats to lending operations of community banks. And, if you believe in the power and potential of online lending, what do you have to lose by being transparent on how loan products and lenders stack up?

Create a National Advisory Board on Responsible Financial Innovation

One step the new President or Congress could take immediately is to create a National Advisory Board on responsible financial innovation. This body would be a coordinated effort by the major federal regulators involved, including the Federal Reserve, OCC, SEC, FDIC, NCUA, FTC and CFPB. In addition to the major federal regulators, this body should include borrower protection advocates, banks, current

and former fintech executives, as well as other interested stakeholders, and be tasked with advising regulators on policy development, research, and further stakeholder engagement.

This entity could also act as a coordinating force for the various offices of innovation within each regulatory agency, such as the one announced recently by the OCC and those proposed by Congressman McHenry.¹⁸⁹

This coordination is important because what good would multiple offices be if those offices are not talking to one another? This advisory board could be housed either in Treasury or in one of the regulatory oversight agencies such as the Fed.

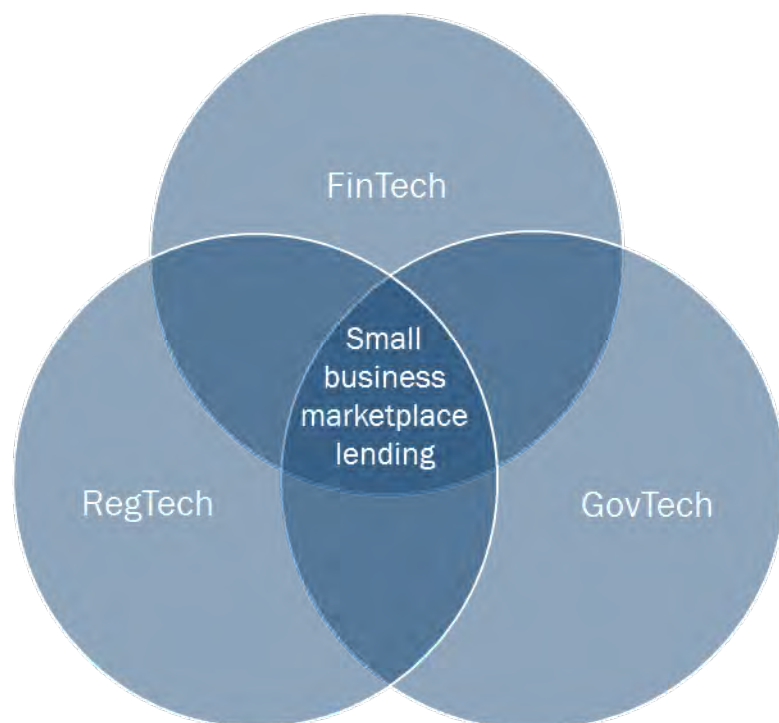
We are aware that all too often, the creation of a National Advisory Board is a substitute for real action. But in this case, it would be a means to a broader end, and a vital precursor to a more coordinated, transparent, and whole-of-government approach to oversight of financial services. Rather than launching immediately into comprehensive regulatory action, this group could help regulators ensure that rules coming out are being written in a coordinated manner with clear goals and success metrics. Industry should be included and at the table to ensure that they have a consistent mechanism to provide feedback and advice on how any new regulation will hurt or harm innovation.

Use RegTech to “Do It Smart.” This White Paper is proposing a serious set of regulatory activities that cannot be taken on without resolve. The objective is to provide an environment where innovation, technology and entrepreneurial actors can join with our existing banking and other capital providers to better serve small businesses. The mission is critical, because of the key role that small businesses play in our economy is under pressure. But the mission will not succeed unless we bring to it a new set of guidelines that govern our regulatory activities. What we can learn from the United Kingdom is that the successful implementation of an innovation agenda requires a focus on finding new ways that better serve the small business customer. For regulators and policymakers, this means acting in a way that is focused on creating access to data, transparency, clarity and continuous improvement in processes and outcomes.

RegTech is a new concept, following fast on the FinTech and GovTech waves.

¹⁸⁹ “H.R.6118 - Financial Services Innovation Act of 2016.” Congress.gov. <https://www.congress.gov/bill/114th-congress/house-bill/6118>

Figure 54: Small Business is at the Intersection of FinTech, RegTech, and GovTech



Source: Author's analysis.

All three of these new concepts come into play in the creation of a successful regulatory environment for small business lending. The following five concepts are just a small number of the guiding ideas that might inform a “smart” regulatory reform process:

1. Use joint task forces of regulators, technology savvy bankers, and online lenders to set up the data collection templates and protocols
2. Borrow successful data base models, such as the online accessible mortgage data created by CFPB.
3. Where possible use borrower learnings from credit card or other proven consumer lending disclosures to increase small business borrower protections in ways that are known to work.
4. Run innovation “sprints” or hackathons to solve problems in the implementation of the Regulatory Action Plan.
5. Create an effective council of regulatory decision makers whose mission it is to solve problems and resolve overlapping or conflicting agency decisions that affect small businesses or small banks.

In the United States, some of the new online companies have shown an interest in working with the OCC and other regulators to come up with a similar kind of “regulatory sandbox.” The critical elements for success, however, need to explicitly be part of the framework from the beginning. And many of these elements are not currently present in the current regulatory culture. For example, many in the United Kingdom (see Appendix B) cited the following as critical to their actions so far:

- A rapid, responsive and transparent timetable
- Fully disclosed industry data
- Single point of authority and contact at the regulator
- Ability to accept some risk for a short time period in the interest of competition that will benefit the customer.

Industry needs to understand that in an innovation sandbox some ideas may be permitted for a while and then no longer permitted or further restricted. Industry councils or trade groups will be important players and constant communications channels will be critical. To this end, we suggest convening a **Fourth Treasury-SBA Capital Access Summit on Responsible Business Lending**. Treasury and the SBA have previously convened three capital access summits in 2009 (focused on bank credit access), 2010 (focused on equity capital formation), and 2012 (focused on crowd funding and alternative lending— ideas from which contributed to the JOBS Act of 2012), each of which fostered substantive conversations about policy solutions in their respective areas. A fourth summit focused on responsible lending to small businesses can flesh out the details of a national regulatory framework, including an innovation sandbox and other aspects of the Regulatory Action Plan described in this White Paper.



APPENDIX A: FEDERAL GOVERNMENT EFFORTS TO RESTORE CREDIT ACCESS FOLOWING THE '08 CRISIS

Most of the measures the federal government undertook to revive America’s small businesses during the recession and recovery lived within three landmark pieces of small business legislation passed from 2009 to 2012—specifically the American Reinvestment and Recovery Act of 2009, the Small Business Jobs Act of 2010 and the JOBS act of 2012. The measures contained in this legislation also included small business provisions beyond access to capital, including 18 small business tax cuts and export support, but the focus in this summary is on the initiatives designed to support lending and liquidity in credit markets for small firms. These programs generally fall into three categories: (1) guarantee programs, (2) capital infusions; (3) and support for secondary markets.

Figure 55: Federal Policy Response Helped Small Businesses During the Crisis



Increased loan sizes and temporarily reduced fees and higher guarantees at SBA

Guarantees can be a very cost efficient government tool as they do not require an outlay of cash unless the business defaults and the guarantee is triggered. They have significant impact on the market as lenders rely on the full amount of the guarantee as a reduction in their risk. For example, a loan guarantee program of \$100 million with a proven default rate of 5 percent will be ‘costed’ at \$5 million. In cases where loss rates are well understood, guarantee programs can be a good use of taxpayer resources, and have strong potential to be expanded at the state and local level.

During the financial crisis, the federal government dramatically expanded its role as a guarantor, particularly through the Small Business Administration (SBA), which runs a \$100 billion loan guarantee program that operates as a public-private partnership with about 5,000 banks nationwide. The role of the SBA loan guarantees is to work in partnership with banks and other lenders to ensure small businesses have access to the capital they need to grow and create jobs. If the market will give a small business a loan, then there is no need for taxpayer support. However, there are small businesses for which the bank would like to make a loan but that business may not meet the bank's standard credit criteria. In these cases, the loans can be made with SBA guarantees which reduce the bank's risk. The guarantee rates are generally 75 percent ensuring that banks maintain some "skin in the game."

The role of the SBA indicates that there is a market failure in the clearing of the small business loan market. All things being equal, if borrowers and lenders found each other seamlessly in a perfect market, then all creditworthy borrowers would find loans. But, the SBA has a portfolio of over \$100 billion of loans that lenders would not make without credit support. SBA loans carry additional fees so it is unlikely that a borrower who could get a conventional loan would choose an SBA loan instead. Yet the loss rates on these loans are under 5 percent, which is roughly 2 percentage points higher than conventional lenders. This indicates that many SBA borrowers are creditworthy applicants for whom the market was not functioning perfectly. In fact, according to the Urban Institute, women and minority owned businesses are 3 to 5 times more represented in the SBA loan portfolio than in those of general lenders.¹⁹⁰

In 2009, Congress passed the Recovery Act which reduced or eliminated fees for SBA's two largest loan programs, 7(a) and 504, and also raised the guarantees on SBA's 7(a) loan program temporarily to 90 percent. As of September 30, 2010 SBA had approved \$22.6 billion in Recovery Act loan guarantees, which supported \$30.4 billion in lending to small businesses. From February 17, 2009 to September 30, 2010, weekly SBA loan dollar volumes rose more than 90 percent in the 7(a) and 504 programs compared to the weeks preceding the Recovery Act's passage. Overall, more than 63,500 small businesses received SBA loans with Recovery Act enhancements.

The Small Business Jobs Act permanently increased SBA loan limits. The maximum 7(a) loan size increased from \$2 million to \$5 million and the maximum microloan size grew from \$35,000 to \$50,000. In addition, steps were taken to streamline loan paperwork and reduce turnaround times, particularly in the small dollar loans.

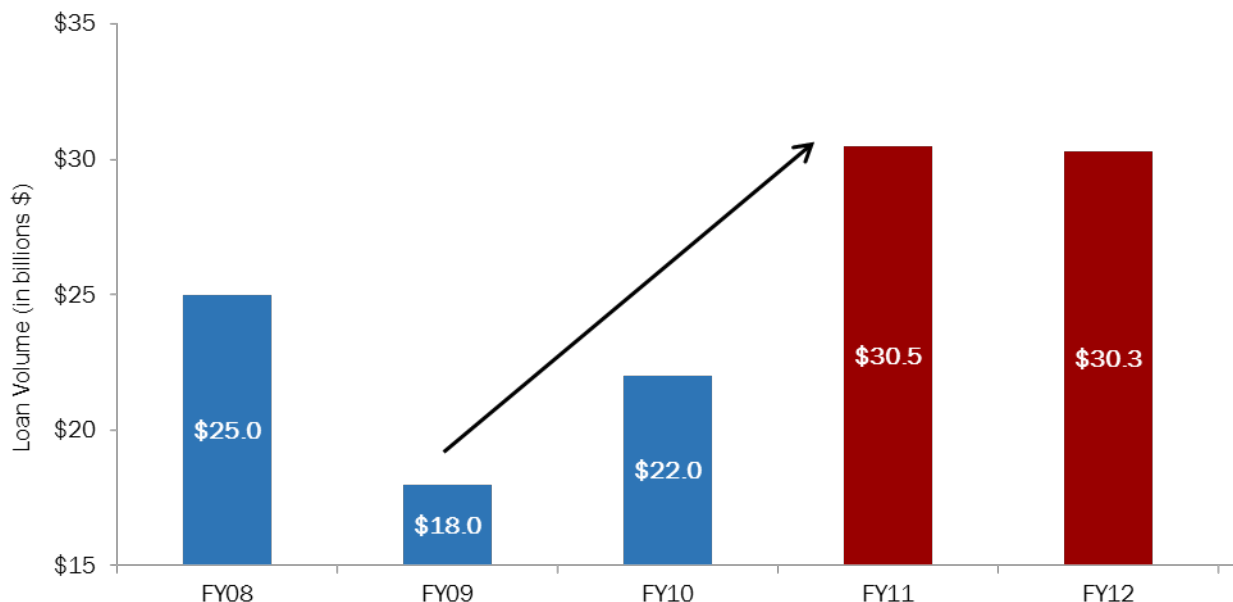
Together, the Recovery Act and Jobs Act enhancements resulted in a turnaround in loan volume from a sharp decline 2007-2009 to three record years in SBA lending, (about \$30 billion of lending in each fiscal year after 2011). In 2012 alone, 3,786 financial institutions made an SBA guaranteed loan, up 41 percent from February 2009. The SBA reported that this included over 1,200 lenders that had not made a loan in the previous two fiscal years.¹⁹¹

¹⁹⁰ "Competitive and Special Competitive Opportunity Gap Analysis of 7(a) and 504 Programs." Urban Institute. January 2008. <http://www.urban.org/sites/default/files/alfresco/publication-pdfs/411596-Competitive-and-Special-Competitive-Opportunity-Gap-Analysis-of-the-a-and--Programs.PDF>

¹⁹¹ Between fiscal years 2009 and 2012: more than 3,600 community banks made a 7(a) loan, nearly 260 community banks made a 504 loan, and more than 160 non-profit institutions made a microloan loan.

Figure 56: Record SBA Lending Has Helped, But SBA Has Limited Market Reach

SBA 7(a) and 504 Loan Volume (\$ Billions)



Source: Small Business Administration. 7(a) and 504 loan volume since Fiscal Year 2008. As of May 2014.

Capital Infusions to Jumpstart Small Business Lending

During the financial crisis, there was an intense effort to increase the amount of capital invested in financial institutions and other entities to aid small business lending. Federal efforts evolved along two lines: investment of capital directly into financial institutions, and additional funding to new and existing programs that provide credit support for banks to make more small business loans.

In terms of direct investment aimed at the small business lending capital base, the federal government put about \$11 billion through multiple programs into over 1,000 financial institutions, most of which were small and community banks, but also included credit unions, and community development financial institutions (CDFIs). One of the key programs was the Small Business Lending Fund (SBLF), which was established by the Small Business Jobs Act of 2010. This legislation created a dedicated fund to increase lending to small businesses by providing low cost capital to qualified community banks and community development loan funds with assets of less than \$10 billion. The Department of the Treasury invested over \$4 billion in 332 institutions through SBLF with incentives to reach specific milestones for increased small business lending. Overall, SBLF participants reported that they increased their small business lending by \$4.8 billion over a \$36 billion baseline, with 84 percent of participants having increased their small business lending over baseline levels. A substantial majority of SBLF participants—more than 68 percent—increased their small business lending by 10 percent or more.

The State Small Business Credit Initiative (SSBCI) was funded with \$1.5 billion from the Small Business Jobs Act to support state and local programs that provide lending to small businesses and small manufacturers that are creditworthy but were not getting the loans they needed. The Treasury Department approved funding to more than 150 state and local small business programs, including collateral support

programs, Capital Access Programs (CAPs), loan participation programs, loan guarantee programs, and state-sponsored venture capital programs.

Support for Secondary Markets

Secondary markets allow depository institutions either to sell or securitize loans, converting potentially illiquid assets into cash and shifting assets off their balance sheets. Prior to the fall of 2008, there was a healthy secondary market for the government-guaranteed portion of SBA 7(a) loans. Historically, about 40 to 45 percent of all 7(a) loans were securitized, though very few non-SBA small business loans are securitized due to the heterogeneity of small business loans as well as a lack of standardized documentation and data on their performance. In the fall of 2008, however, the secondary market for SBA 7(a) loans froze altogether. Monthly volume on 7(a) secondary market securities, which had averaged \$328 million during fiscal 2008, dropped, averaging \$100 million between October 2008 and January 2009. Unable to shed the associated risk from their books, and free up capital to make new loans, commercial lenders significantly curtailed their SBA lending and other small business lending activities. In March 2009, the federal government, through the Treasury Department, began providing additional liquidity for small business credit access through efforts targeting the SBA loan securitization market. Treasury made \$5.3 billion available for a direct purchase program, and it was partly responsible for returning SBA's securitization levels to near normalized levels by the summer of 2009.

\$20 Billion of Bank Commitments to Lend to Small Businesses

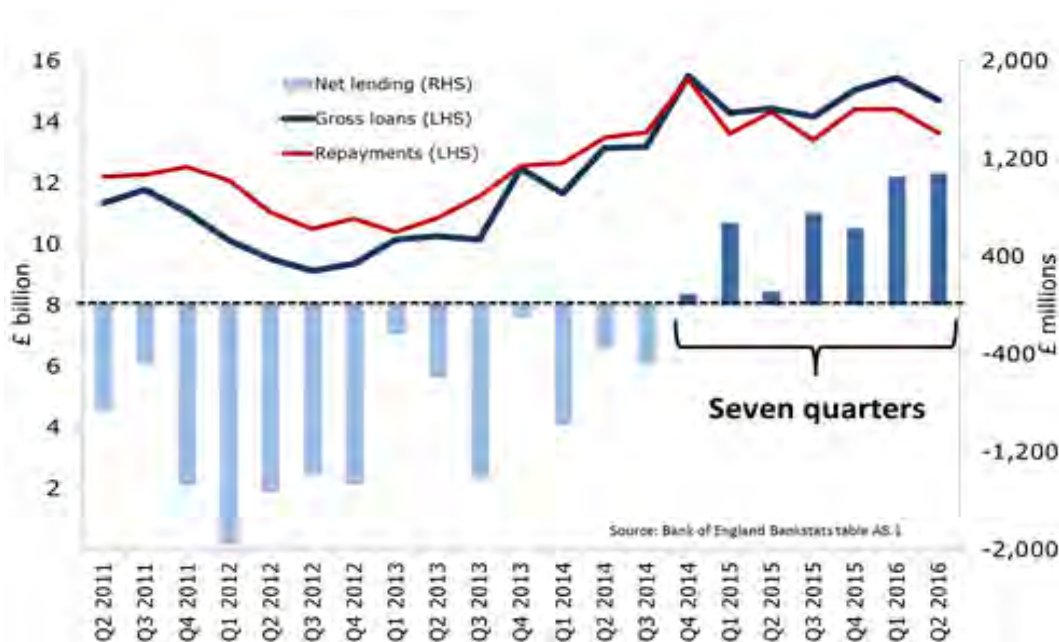
The federal government also encouraged the largest banks, which account for over 50 percent of small business lending, to put an increased focus on small business lending. In September 2011, SBA announced commitments by 13 of the largest banks in the country to increase lending for small businesses by a combined \$20 billion over the next three years. The new small business lending commitments represented an increase of 10 percent or more beyond the current levels of lending at many of the participating banks. The 13 private lenders included in the commitment were: Wells Fargo, Key Corp, Regions Financial Corporation, Huntington Bancshares Incorporated, M&T Bank Corporation, JP Morgan Chase, Citizens Financial, Citigroup, Bank of America Merrill Lynch, TD Bank, US Bank, PNC Bank, and Sun Trust Banks.

APPENDIX B: U.K. POLICY AND REGULATORY FRAMEWORK

The U.K. small business lending market suffered even more dramatically during the Great Recession than the U.S. market due to the high concentration of small business lending in only a small number of banks. In contrast to the network of over 5,000 community banks which in the United States provide most of the loan approvals, in the United Kingdom only four banks account for over 80 percent of the loan originations. In the United Kingdom, the stock of loans hit its nadir in 2012, and it was not until 2014 that net lending to U.K. SMEs reached a positive level (note data on both gross loans and repayments are reported in the United Kingdom on a quarterly basis). Recently, SME lending may have slowed slightly due to a combination of factors, possibly including a slowdown in institutional investment and uncertainty related to the Brexit vote.

Figure 57: U.K. SME Net Stock of Lending Negative Until 2014

Quarterly Lending to SMEs (Excluding Overdrafts)



Source: British Business Bank via Bank of England BankStats, Alternative Finance data.

Three Important Actions taken by the U.K. Government to Improve Small Businesses Lending

In response to the severe shortage during the financial crisis, the U.K. took a series of aggressive steps beginning in 2010 to dramatically change the environment for small business credit. Three important decisions were the creation of the British Business Bank to add additional funding sources, the positioning of the Financial Conduct Authority as the regulator in charge of consumer credit (including some SME credit) with promoting “effective competition in the interests of consumers” as one of its statutory objectives, and the specific passage of legislation written by HM Treasury around peer-to-peer lenders. These activities in the United Kingdom hold important insights and lessons for the Regulatory Action Plan (RAP) proposed in this White Paper.

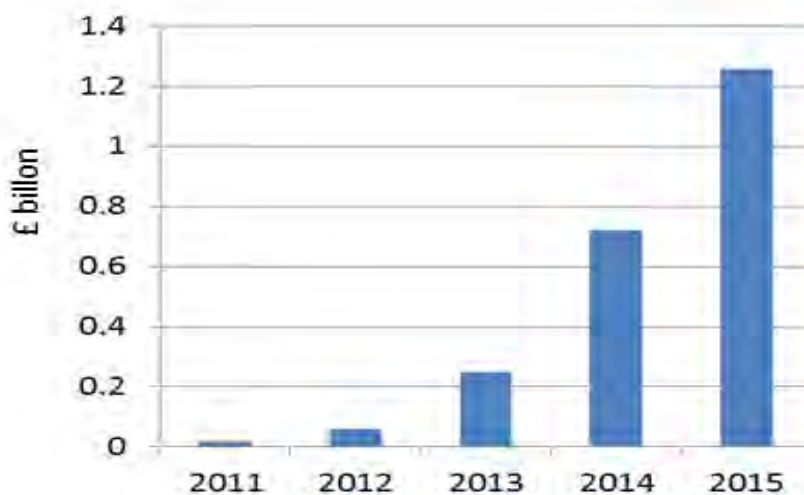
Newly Formed British Business Bank Adds to Stock of Lenders

The British Business Bank, in the less than 4 years since its formation, has engaged in numerous innovative activities that are designed to improve access to capital for Britain’s SMEs. They have provided Tier 2 capital for a new “challenger bank” and used their ENABLE guarantee program to support additional lending to SMEs by smaller banks, and have been active in promoting diversity and widening choice in the sector, for example through investments in private sector debt funds and asset backed lenders. Most importantly for this paper, however, have been their activities supporting the emerging fintech sector.

In the U.K. market, peer-to-peer lending began early and has remained the dominant form of online lending. Totalling over 4 billion pounds in loans to date, the last 12 months saw over 1 billion pounds in business loans transacted in the peer-to-peer market, largely by 3 players: Funding Circle, Rate Setter and Zopa.

Figure 58: U.K. Alternative Business Lending Volumes Growing Rapidly

U.K. Peer to Peer Business Lending, Millions of Pounds



Source: British Business Bank via Bank of England BankStats, Alternative Finance data.

In fact, following a competitive bid in 2014 the BBB’s Investment Programme, provided Funding Circle £60 million of investment capital as part of a £100 million investment program designed to catalyze the sector. In addition, the BBB is engaged in both wholesale channel and securitization efforts and is also leading an effort for data collection and dissemination on the SME lending market and on the fintech marketplace in general. It should be noted that data on both gross loans and repayments are reported in the U.K., on a quarterly basis by both banks and online lenders. Furthermore, there is a requirement that banks share commercial loan data in confidential formats with government regulators and policymakers, and also make this information potentially available to competitors via credit agencies, in order to improve overall credit assessment and oversight of credit discrimination.

Financial Conduct Authority Acts as a Promotor of Innovation

The Financial Conduct Authority (FCA) is the U.K. regulator in charge of the conduct of firms – i.e. how lenders in the U.K. treat their business customer. It is also the prudential regulator for smaller firms – making sure they are financially stable and, if necessary, can be resolved effectively without destabilizing the broader sector. In a departure from most regulators, they see themselves as differentiated by their remit to promote “effective competition in the interest of consumers.” This has led to a proactive approach they call “process mobilization.” In their efforts to develop new sources of credit for the small business market, they look to authorize new concepts in small pieces, in order to help innovative credit providers get started in ways that let them explore the product delivery actively, but control risks to customers.

According to Christopher Woolard, executive FCA Board member and Director of Strategy and Competition, “Traditional regulators have rulebooks that aim to minimize risk to consumers and emphasize firms’ prudential activity, safety and security. Quite rightly, they are there to prevent bad things from happening. We too have such objectives, set out in the law. However we also have a competition remit, which means we have to take a balanced view of risks that promotes positive things happening in the interests of consumers.”

This has led to Project Innovate, a much discussed way for new innovation fintech firms to “steer where they fit in the Regulatory landscape.” Project Innovate contains an Innovation Hub, Advice Unit, and a Regulatory Sandbox.

The Innovation Hub provides fintech startups with easy access to regulators, helps them prepare and submit applications for authorization, and assists them in understanding how the U.K. regulatory framework applies to them. This is a two-way street, as the FCA also engages businesses in order to identify potential changes to regulation that would promote the interests of borrowers. The Innovation Hub also has agreements with the Australian, Singaporean, and Korean FCA equivalents that facilitate the development of financial innovation in the U.K. and assists U.K.-based firms in accessing new markets.

The Advice Unit works with firms developing automated models for ‘personal recommendation’ investment advice. They work with individual firms to provide end to end authorization support and regulatory advice, and also publish resources for all firms developing these automated models.

According to the FCA, “the regulatory sandbox aims to create a ‘safe space’ in which businesses can test innovative products, services, business models and delivery mechanisms in a live environment without immediately incurring all the normal regulatory consequences of engaging in the activity in question.”¹⁹² As part of this program, the FCA grants restricted authorization to unauthorized firms in order to test their ideas and helps authorized firms test new ideas as well. Once a firm is in the sandbox, it is granted individual regulatory guidance, it is eligible to receive waivers or modifications of existing FCA rules (if said waiver of modification does not conflict with FCA objectives or violate U.K. or international law), and it is eligible to for “no enforcement action” letters that restrict disciplinary action as long as the firm deals openly with the FCA.¹⁹³ All of these activities help startups test new ideas while simultaneously allowing the FCA to monitor industry developments. Of 600 firms who applied over the last 2 years, 300

¹⁹² “Regulatory Sandbox.” Financial Conduct Authority. Last updated December 9, 2016. <https://www.the-fca.org.uk/firms/project-innovate-innovation-hub/regulatory-sandbox>

¹⁹³ “Project Innovate and Innovation Hub.” Financial Conduct Authority. Last updated August 22, 2016. <https://www.the-fca.org.uk/firms/fintech-and-innovative-businesses>

were viewed as actually “new” and innovative enough for the program. Approximately 86 were written up as potential new innovative firms and are in various levels of authorization.

A Regulatory Framework for Peer-to-Peer Lending

The peer-to-peer market began operating early in the United Kingdom and has grown robustly with marketplaces largely matching retail individuals as lenders to small businesses as borrowers, (a form that has evolved in the U.S. to have capital provided largely by institutional lenders). In response, the United Kingdom created a regulatory structure through legislation created by HM Treasury in 2013. This legislation defines the regulated activity of being a peer to peer lender as operating an electronic platform facilitating loans with an individual at either the borrower or lender end. Any peer-to-peer platform wishing to allow individuals to be either lenders or borrowers:

- Needs to be authorized by the FCA
- Must have wind down plans in place in case the marketplace firm fails, with funding set aside to enable the platform to continue to oversee servicing of the loans
- Must ensure their ads are fair, clear and not misleading, and give borrowers a 14 day right to withdraw from loan contracts.
- Are required to have credit checks on individual would-be borrowers

There are currently about 50 peer to peer lenders in the U.K. market with about 80 percent of the volume done by the top three players. Some hallmarks of the British regulatory activity around these innovations are the degree of coordination between the players (the HM Treasury, FCA, BBB) and the degree of flexibility built into the process. The FCA is currently undertaking a review of the peer-to-peer regulatory rules in view of the rapidly evolving market.

HM Treasury interventions in SME lending

Three significant policies have been legislated by HM Treasury to improve competition in SME lending. The first, Finance Platforms, was launched on November 1, 2016, and requires that all small business owners whose loan requests are declined from nine of the top banks are offered a referral to finance platforms vetted and approved by the British Business Bank. These platforms will then share these businesses’ details with alternative finance providers, and go on to facilitate a conversation between the business and any provider who expresses an interest in supplying finance to them. The aim of these new rules is to make it easier for businesses to access finance when they have been turned down by traditional lenders. The second, SME Credit Data, will require the largest banks to share SME credit information with alternative finance providers through designated Credit Reference Agencies. This could open up access to credit data to make it easier for alternative lenders to perform credit-assessments of SMEs. The third is the creation of British Banking Insight (BBI), which was launched in November 2013 by HM Treasury together with FSB and British Chambers of Commerce, and is funded by a number of banks.¹⁹⁴ The website, which contains publicly available data from the BBI’s ongoing survey of small businesses, enables small businesses to rank the bank products and services they use (including from challenger banks) and to see what other small businesses think about a particular lender and product.

¹⁹⁴ British Banking Insight. <http://www.businessbankinginsight.co.uk/>



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¹⁹⁵ Mills, Karen G., 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 No. 15-004, July 2014.
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