

The State of Small Business Lending: Credit Access during the Recovery and How Technology May Change the Game

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**HARVARD
BUSINESS SCHOOL**

THE STATE OF SMALL BUSINESS LENDING:

CREDIT ACCESS DURING THE RECOVERY AND HOW TECHNOLOGY MAY CHANGE THE GAME

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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 120 million people – but since 1995 they have created approximately two-thirds of the net new jobs in our country. Yet in recent years, small businesses have been slow to recover from a recession and credit crisis that hit them especially hard. This lag has prompted the question, "Is there a credit gap in small business lending?"

This paper compiles and analyzes the current state of access to bank capital for small business from the best available sources. We explore both the cyclical impact of the recession on small business and access to credit, and several structural issues in that impede the full recovery of bank credit markets for smaller loans.

One answer may be the emerging, dynamic market of online lenders that are using technology to disrupt the small business lending market. Though small relative to the traditional bank market, these new competitors are providing fast turnaround and online accessibility for customers, and are often using data to create more accurate credit scoring algorithms. Their presence raises many new questions including, who should regulate these new markets? And what will established players do? Finally, if these innovators are the answer to filling the small business credit gap particularly in underserved markets, how do we ensure this does not become the next subprime market?

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

Small businesses create two out of every three net new jobs. Small firms employ half of the private sector workforce, and since 1995 small businesses have created about two out of every three net new jobs—65 percent of total net job creation.

Most small businesses are Main Street businesses or sole proprietorships. Of America's 28.7 million small businesses, half of all small firms are home-based, and 23 million are sole proprietorships. The remaining 5.7 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 have been slower to recover from a recession of unusual depth and duration.

Small firms were hit harder than large firms during the crisis, with the smallest firms hit hardest. Between 2007 and 2012, the small business share of total net job losses was about 60 percent. From the employment peak before the recession until the last low point in March 2009, jobs at small firms fell about 11 percent. By contrast, payrolls at larger businesses shrank by about 7 percent. This disparity was even more significant among the smallest of small businesses. Jobs 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.

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. Credit markets act as a "financial accelerator" for small firms, such that they feel the credit market swings up and down more acutely.

Small businesses are back to creating two out of every three net new jobs in the U.S., but there remains a significant jobs gap. Small businesses have created jobs in every quarter since 2010, and

are back to creating two out of every three net new jobs. But, as Brookings data reveals, we are still well below the job creation levels that we need to see to fill the “jobs gap” left in the wake the recession.

Bank credit, particularly through term loans, 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.

Bank loans have historically been critical for small businesses. Unlike large firms, small businesses lack access to public institutional debt and equity capital markets and the vicissitudes of small business profits makes retained earnings a necessarily less stable source of capital. About 48 percent of business owners report a major bank as their primary financing relationship, with another 34 percent noting that a regional or community bank is their main financing partner for capital.

In the current lending environment, where you sit often determines where you stand on the question of, is there a gap in access to bank credit for small businesses? Most banks say they are lending to small businesses, but major surveys of small business owners point to constrained credit markets.

Bankers say they are lending to small businesses, but have trouble finding creditworthy borrowers. Banks today say that they are increasing their lending to small businesses but that the recession has had a lingering effect on the demand from small business borrowers. In addition, bankers note the dampening effect of increased regulatory oversight on the availability of small business credit. Not only is there more regulation and higher compliance costs, there is uncertainty about how regulators view the credit characteristics of

loans in their portfolios, making them less likely to make a loan based on “softer” underwriting criteria such as knowledge of the borrower from a long term relationship. Jamie Dimon, CEO and Chairman of JP Morgan Chase, noted in 2013 that, “Very few (small businesses) say, ‘I can’t get a loan.’ Sometimes they say that, and it is true. I would say that happens more in smaller towns, where smaller banks are having a hard time making loans because the examiners are all over them”.

Small businesses claim that loans are still difficult to get during the recovery. Some level of friction in small business credit markets is natural, and indicative of a financial sector working to allocate scarce resources to their most productive ends. It is also difficult to assess whether or not small firms being denied credit access are in fact creditworthy. Nonetheless, every major survey points to credit access being a problem and a top growth concern for small firms during the recovery, including national surveys conducted by the National Federation of Independent Businesses (NFIB) and regional surveys led by the Federal Reserve.

The data on the small business credit gap is limited and inconclusive, but raises troubling signs that access to bank credit for small businesses was in steady decline prior to the crisis, was hit hard during the crisis, and has continued to decline in the recovery as banks focus on more profitable market segments.

Small business lending continues to fall, while large business lending rises. In an absolute sense, small business loans on the balance sheets of banks are down about 20 percent since the financial crisis, while loans to larger businesses have risen by about 4 percent over the same period.

The banking industry in the aggregate appears increasingly less focused on small business lending. The share of small business loans of total bank loans was about 50 percent in 1995, but only about 30 percent in 2012. Moreover, small business owners report that competition among banks for their business peaked in the 2001 to 2006 period, and has sharply declined from 2006 to the present.

During the 2008 financial crisis, small businesses were less able to secure bank credit because of a 'perfect storm' of falling sales, weakened collateral and risk aversion among lenders. There are some lingering cyclical factors from the crisis that may still be constraining access to bank credit.

Small business sales were hit hard during the crisis and may still be soft, undermining their demand for loan capital. Income of the typical household headed by a self-employed person declined 19 percent in real terms between 2007 and 2010, according to the Federal Reserve's Survey of Consumer Finances. And, the NFIB survey notes that small businesses reported sales as their number one problem for four straight years during the crisis and subsequent recovery.

Collateral owned by small businesses was hit hard during the financial crisis, potentially making small business borrowers less creditworthy today. Small business credit scores are lower now than before the Great Recession. The Federal Reserve's 2003 Survey of Small Business Finances indicated that the average PAYDEX score of those surveyed was 53.4. By contrast, the 2011 NFIB Annual Small Business Finance Survey indicated that the average small company surveyed had a PAYDEX score of 44.7. Moreover, the values of both commercial and residential real estate which represent two-thirds of the assets of small business owners, and are often used as collateral for small business loans, were hit hard during the financial crisis.

Banks are more risk averse in the recovery. Measures of tightening on loan terms including the Federal Reserve Senior Loan Officer Survey, increased at double-digit rates during the recession and recovery for small businesses, and have loosened at just single-digit rates over the past several quarters. Loosening has been much slower and more tentative for small firms than for large firms.

Community bank failures increased and few new banks have started up. Troubled and failed banks reached levels not seen since the Great Depression during the financial crisis of 2008, with the failures consisting mostly of community banks—the most likely institutions to lend to small firms. This environment—where troubled local banks appear unable to meet re-emerging small firm credit needs—would be an ideal market for new banks to emerge, but new charters are down to a trickle. A year recently went by with no new bank charters—the first time in 80-year history of the FDIC.

Regulatory overhang may be hurting small business lending. Banks continue to raise capital levels to appease risk averse bank examiners and other regulators post-crisis, undermining their ability to underwrite small business loans, which are inherently riskier than consumer and large business lending. Federal Reserve economists have recently modeled that additional regulatory burdens are forcing banks to hire additional full-time employees focused on oversight and enforcement, which can hurt the return on assets of some community banks by as much as 40 basis points. Moreover, other studies have found that an elevated level of supervisory stringency during the most recent recession is likely to 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.

There also appear to be structural barriers that are impeding 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 big banks, with the number of community banks falling to less than 7,000 today, down from over 14,000 in the mid-1980s, while average bank assets continues to rise. This trend was exacerbated by the financial crisis. The top 106 banks with greater than \$10 billion in assets held 80 percent of the nation's \$14 trillion in financial assets in 2012, up from 116 firms with 69 percent of \$13 trillion in assets in 2007.

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 small business borrowers often spend almost 25 hours on paperwork for bank loans and approach multiple banks during the application process. Successful applicants wait weeks or, in some cases, a month or more for the funds to actually be approved and available. Some banks are even refusing to lend to businesses within particular industries (for example, restaurants) or below revenue thresholds of \$2 million.

Small business loans, often defined as business loans below \$1 million, are considerably less profitable than large business loans.

- *Small business lending is riskier than large business lending.* Small businesses are much more sensitive to swings in the economy, have higher failure rates, and have fewer assets to collateralize the loan.

- *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 because they rarely issue publicly trade equity or debt securities. Many small businesses also lack detailed balance sheets, use sparse tax returns and keep inadequate income statements. Community banks have traditionally placed greater emphasis on relationships with borrowers in their underwriting processes, but these relationships are expensive and have not in the past translated well to automated methods for assessing creditworthiness, which are favored by larger banks.

- *Costs of underwriting small business lending are also high due to heterogeneity of small businesses and lack of a secondary market.* Heterogeneity of small firms, together with widely varying uses of borrowed funds, have impeded development of general standards for assessing applicants for small business loans and have increased costs of evaluating such loans. Moreover, the heterogeneity of small business loans has made it difficult to securitize and sell pools of small business loans in the secondary market.

- *Transaction costs to process a \$100,000 loan are comparable to a \$1 million loan, but with less profit.* As a result, banks are less likely to engage in lending at the smallest dollar level. Some banks, particularly larger banks, have significantly reduced or eliminated loans below a certain threshold, typically \$100,000 or \$250,000, or simply will not lend to small businesses with revenue of less than \$2 million, as a way to limit time-consuming applications from small businesses. This is problematic as over half of small businesses surveyed are seeking loans of under \$100,000, leaving a critical gap in the small business loan market. Often times, the biggest banks refer small businesses below such revenue

thresholds or seeking such low dollar loans to their small business credit card products, which earn higher yields.

During the recovery, a number of new online lenders and marketplaces have emerged which may be opening up new pools of capital for small businesses through greater innovation in how small business loans are evaluated, decisioned 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 decisioning, and a greater emphasis on customer service. Many are developing data-driven algorithms to more accurately screen creditworthy borrowers.

Three models are emerging in online lending to small businesses. Players such as OnDeck and Kabbage are using their own balance sheet; they are raising capital from institutional investors, including hedge funds, and using proprietary risk scoring models that include non-traditional data to decision loans for small business owners. Peer-to-peer platforms such as Lending Club, Prosper and Funding Circle are connecting capital from institutional and retail investors with prime and sub-prime quality borrowers. Lender-agnostic marketplaces such as Fundera and Biz2Credit provide online marketplaces which connect

borrowers with a range of traditional and alternative lenders.

Existing players such as large banks and credit card companies are eyeing the space, and some have already begun to partner with or acquire these new entrants. Incumbent and conventional lenders have assets such as their own balance sheets and existing customer relationships which could prove advantageous if they can be nimble enough to compete with new players in terms of ease of use and rapid turnaround.

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

There is already disagreement 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, there is concern that if left unchecked, online small business lending could become the next sub-prime lending crisis.

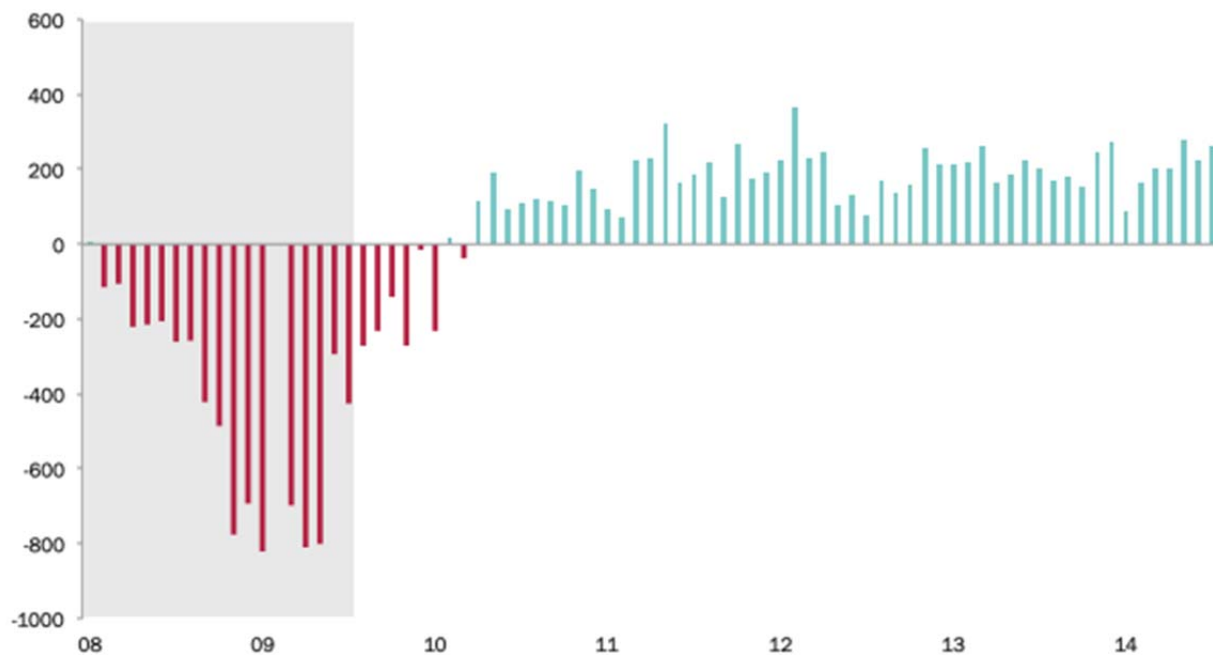
The current online marketplace for small business loans falls between the cracks for Federal regulators. Critical questions include: Who should be the regulator, and how much transparency should there be?

INTRODUCTION: AMERICA'S ECONOMIC ANXIETY

The U.S. economy has made significant progress in recovering from a financial crisis of unusual depth and duration. But, as America passed the five-year mark on its journey to recovery from the recession, it is clear that the U.S. is still gripped by an economic anxiety. In many parts of the country, people—particularly those in the middle class—wonder if their future will be as prosperous as they had once expected. Business leaders are also anxious and increasingly pessimistic about the future of America's ability to compete for business investment and to maintain, much less raise, the living standards of its citizens, as recent surveys of Harvard Business School alumni have underscored.¹ This concern has also been reinforced by many economic commentators who have called the current environment a "jobless recovery", and warned that the U.S. economy may be entering a period of "secular stagnation".

This anxiety centers on a fundamental question: Can the United States stay globally competitive and produce well-paying jobs that will leave the next generation better off than the current one?

Figure 1: Monthly Private Sector Job Creation Has Been Weak
Monthly Non-Farm Private Sector Net Job Gains and Losses



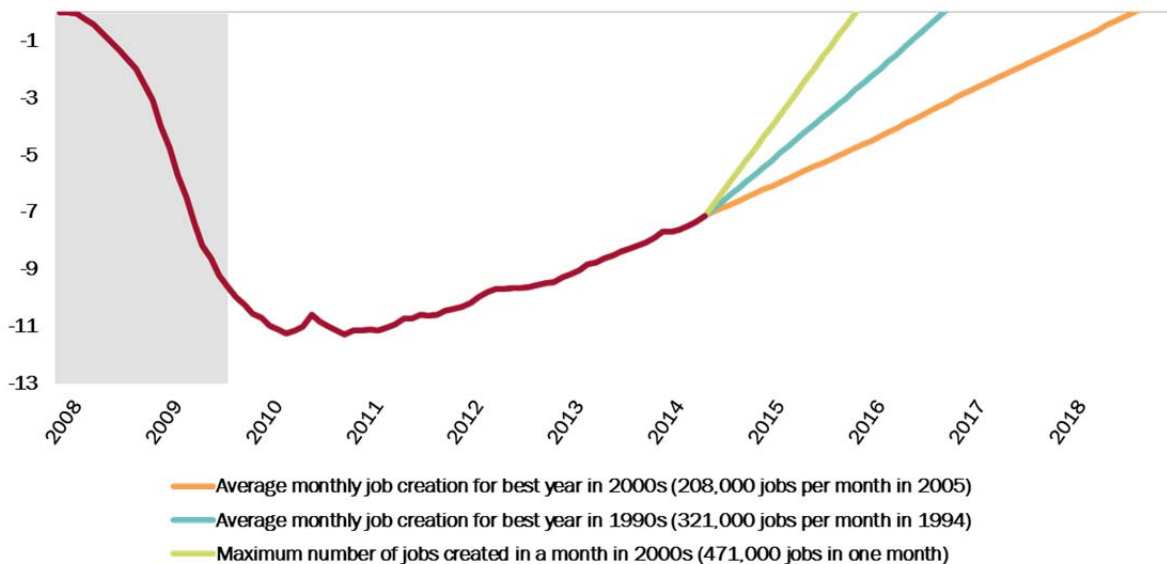
Source: Bureau of Labor Statistics as of June 2014.

¹ Porter, Michael, Rosabeth Moss Kanter and Jan Rivkin. "Competitiveness at a Crossroads: Findings of the Harvard Business School's 2012 Survey on U.S. Competitiveness", Harvard Business School (February 2013).

The reality is that recent jobs numbers show a slow and tentative recovery with the U.S. economy adding private sector jobs at between 80,000 and 250,000 jobs per month. According to calculations by the Brookings Institution’s Hamilton Project, if the U.S. economy consistently created jobs at a rate of 200,000 jobs per month, the unemployment rate would not fall to the November 2007 level of 4.7 percent for another five years, and about 7 million jobs would need to be created to get to that level.² Small businesses tend to create about two-thirds of jobs, meaning that the small business jobs gap could be around 4.7 million jobs.

Figure 2: The Yawning Jobs Gap

Size of “Jobs Gap” (Millions of Workers)



Source: *The Hamilton Project, Brookings Institute.*

And, even though real GDP is now 6.0 percent higher than it was at its previous peak in the final quarter of 2007, there is concern of lost potential from the last crisis, as the U.S. economy is today 10 percent, or about \$1.6 trillion, below levels that independent forecasters such as the Congressional Budget Office thought the economy would reach by this stage back in 2007. In fact, annual GDP growth has averaged less than 1.8 percent since the start of this century.

So, while we have made progress on the road to recovery from the last recession, there is little evidence that the U.S. economy is nearing escape velocity, a growth rate that boosts GDP while making an impact on the yawning jobs gap. It is no wonder, then, that American consumers and businesses are anxious.

Concern is growing that anemic economic and job growth during the recovery is due to something far more structural. Indeed, as a series of economists have recently noted (including Larry

² *The Hamilton Project, Brookings Institute. “Jobs gap” represents the number of jobs the economy needs to create in order to return to pre-recession employment rates, while also absorbing the people who enter the labor force each month. Data as of May 2014.*

Summers³ and Paul Krugman⁴), the economy may be entering a period of “secular stagnation”, a concept first put forward by Alvin Hansen in the late 1930s, which suggests that the normal, self-restorative properties of the economy might be inadequate to allow sustained full employment along with financial stability without extraordinary efforts to invest in long-term growth.

And, as Harvard Business School colleagues Michael Porter and Jan Rivkin have argued, 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, and have been bubbling under the surface for decades—a series of underlying structural challenges that are making the U.S. economy less competitive, undermining our ability to compete successfully in the global economy while also supporting high and rising living standards for the average American.⁵

What is Washington doing right now to boost job creation and support long-term growth?

Federal fiscal policy was expansionary in 2009 and 2010, and helped bring the U.S. economy back from the brink of another depression. However, over the past several years, federal fiscal policy has turned restrictive as Washington has been consumed by a rancorous debate about deficit reduction and the proper size of government. This is an important debate, and we have made progress. The federal deficit in this last fiscal year was down by half — 4.1 percent of GDP, down from 9.8 percent in 2009, which is the most rapid deficit reduction since World War II. 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.⁶

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 half of the private sector workforce—about 120 million people. Since 1995, small employers have created about two out of every three net new jobs—65 percent of total net job creation. Small businesses are also instrumental to our innovation economy; small firms produce 13 times more patents per employee than larger firms and employ more than 40 percent of high technology workers in America.⁷

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

³ Summers, Larry. “Why Secular Stagnation Might Prove to Be New Normal”, *Financial Times*. December 15, 2013.

⁴ Krugman, Paul. “Secular Stagnation, Coalmines, Bubbles and Larry Summers”, *The New York Times*. November 16, 2013.

⁵ Porter, Michael and Jan Rivkin. “The Looming Challenge to U.S. Competitiveness”, *Harvard Business Review*. March 2012.

⁶ Summers, Larry. “The Battle Over the U.S. Budget is the Wrong Fight”, *Financial Times* (October 13, 2013).

⁷ Small Business Administration. “Small Businesses By the Numbers” (2010).

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.⁸ Immigrants also over-index in owning small businesses in this country and small business ownership is a major path to the American dream.⁹

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 still be reeling from the economic fallout of the last recession. Assisting the turnaround of small businesses is critical for the improvement of labor market conditions, and such efforts can contribute to the overall U.S. recovery in the long run.

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

This paper focuses on access to capital for small businesses, particularly the bank loan market. There is some disagreement as to whether there is indeed a gap in small business lending. Banks say that there is currently a lack of demand, and are concerned that they cannot find enough qualified borrowers. Small business owners feel that, despite being creditworthy, today banks remain either wary or entirely unwilling to lend to them, often times no matter how many banks they approach.

What is the reality? It is difficult to draw decisive conclusions as there is a dearth of precise data measuring small business demand for and bank industry supply of credit. However, various sources of information can serve as proxies for small business activity and can be used to identify patterns of small business financing.

This data creates a troubling picture. The data sources outlined in this paper suggest that financing flows to small businesses weakened considerably as a result of the financial crisis and the recession, and that they have only partly recovered. More to the point, the reality is that for most banks, lending to small businesses, especially in the lower dollar range, is costly and risky. But it is these lower dollar loans that are most important to startups and small businesses.

This paper will examine from the best sources available the current state of small business lending. The first section, “The State of the Small Business Economy”, describes the importance of small firms to job creation in the United States and current condition of small businesses in the aftermath of the recession. The second section, “The Credit-Less Recovery”, details the sharp decline in bank lending to small businesses during the financial crisis and the relatively slow recovery.

The following two sections outline the cyclical and structural problems that may be impeding the return of prior levels of small business lending by banks. First, on the supply side of the equation, cyclical issues have caused a decline in the supply of bank loans as banks facing losses to their capital, as well as greater regulatory scrutiny and higher capital requirements, became significantly more risk

⁸ 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

⁹ Kauffman Foundation, “Index of Entrepreneurial Activity: 1996-2011”, March 2012.

adverse. On the demand side of the equation, during the recession small businesses faced a perfect storm of lower sales and sharp declines in the values of commercial real estate and the collateral in their homes, making many small business owners less creditworthy during the crisis and during the recovery as well. In addition to cyclical supply and demand issues, significant structural changes in bank lending have also occurred. For example, a decades-long trend toward banking consolidation and the low start rate of new community banks have also affected the supply of credit. In addition, high search costs and high transaction costs have made small dollar loans less profitable, causing a gap in small business loans under \$250,000, which is the level below which most small Main Street companies tend to seek to borrow.

Technology may play an important role in changing the way small businesses access capital, both from banks and from new entrants into this market. The second to last section describes new credit algorithms and emerging marketplaces for small business loans, and how technology may change the way small businesses access capital. In recent years, a number of entrepreneurial companies have developed online platforms in a variety of forms, including direct lending platforms for small businessness and marketplaces to match borrowers with lenders such as peer-to-peer lending. Many of these players are using “big data” to develop algorithms that predict small business creditworthiness better than the personal FICO scores of borrowers. Larger banks and credit card companies are eyeing the emerging space and some are engaging in it through proprietary activity of their own, partnerships with existing entrants or acquisitions of the new entrants.

The final section of this working paper asks the question, what kind of regulatory activity is appropriate for this emerging market? It also seeks to explore ways in which these new activities can help segments of the small business marketplace traditionally underserved by banks in terms of access to credit.

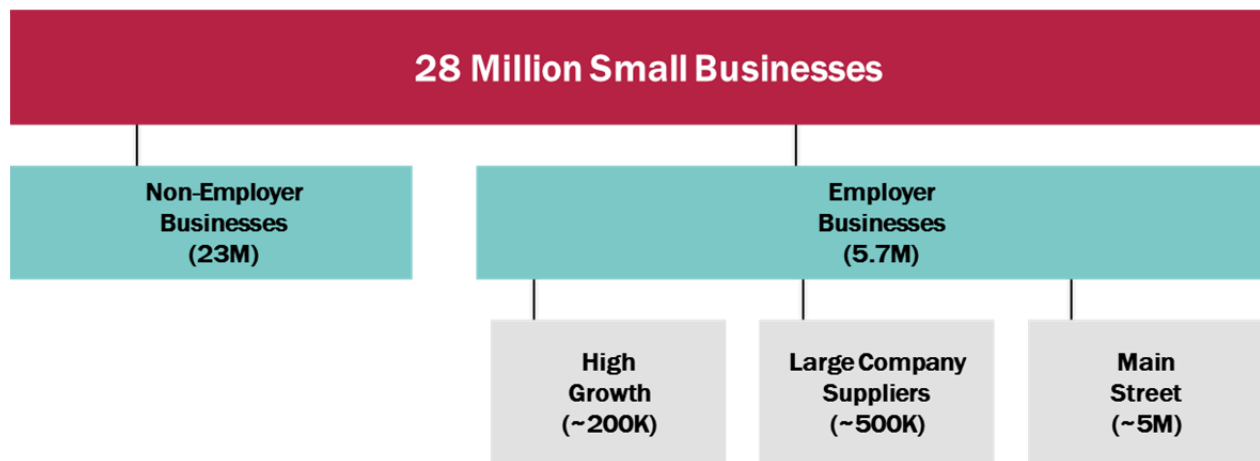
STATE OF THE SMALL BUSINESS ECONOMY: RECOVERING FROM THE FINANCIAL CRISIS OF '08

Four Types of Small Businesses in America

Any business with fewer than 500 employees is generally defined as a small business, a definition adopted by the U.S. Census Bureau, the Bureau of Labor Statistics (BLS), Federal Reserve, and the Small Business Administration (SBA). There are about 28 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.

Figure 3: Types of Small Businesses

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



Source: U.S. Census Bureau.

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. Recent research shows that 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.¹⁰

Analysis of Census Bureau data shows that there are about 5.7 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 5 employees and nearly an additional one-third employing between 5 and 19 employees. In fact, of the 5.7 million active employer businesses, it is estimated that about 5 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

¹⁰ Federal Reserve, "Report to Congress on the Availability of Credit to Small Businesses", September 2012.

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.

Of the remaining small businesses, a small portion—an estimated 200,000 firms—consists of start-ups and high-growth firms that punch above their weight when it comes to job creation. 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.¹¹ Even after they become large, these high growth firms have a disproportionate effect on the U.S. economy.

Lastly, there are an estimated 250,000 to 750,000 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. Studies show that being part of a supply chain can help take a business to the next level, with one study finding that suppliers reported revenue growth of more than 250 percent just a few years after selling their products to a large corporation and employment increases of more than 150 percent on average.¹² A robust network of small suppliers is 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.”¹³ A dynamic U.S. supply chain also can 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 of these types approaches their business in different ways, and each of the businesses has different capital needs. 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 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. 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.

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, often times 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,

¹¹ Acs, Zoltan J., and Pamela Mueller. 2008. “Employment effects of business dynamics: Mice, Gazelles and Elephants.” *Small Business Economics*, 30(1): pp. 85-100.

¹² Center for an Urban Future, “Giving Small Firms the Business”, March 2011.

¹³ Porter, Michael and Jan Rivkin. “What Businesses Should Do to Restore U.S. Competitiveness,” *Fortune Magazine* (March 2012).

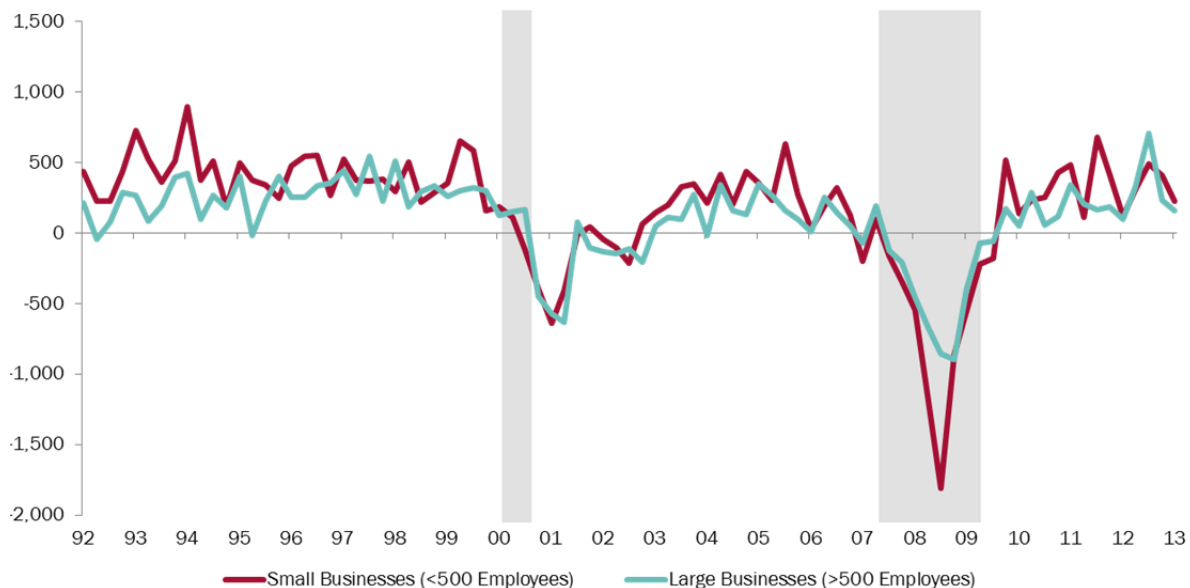
and medium-sized suppliers—which operate in different credit markets and, as a result, face different types of constraints.¹⁴

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 still be reeling from the economic fallout of the last recession.

Between 2007 and 2012, 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, according to the Business Employment Dynamics (BED) database of the Bureau of Labor Statistics. By contrast, payrolls at businesses with 500 or more employees shrank about 7 percent. This disparity was even more significant among the smallest of small businesses. Jobs 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. Small businesses have created jobs in every quarter since 2010, and are back to creating two out of every three net new jobs, but still remain well below the job creation levels that we need to see to fill the “jobs gap” left in the wake the recession.

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 Dynamics Statistics (latest as of 3Q13).

¹⁴ Bill Kerr and Ramana Nanda. “Financing Constraints and Entrepreneurship”, Harvard Business School Working Paper 10-013. 2009.

This is consistent with economic literature that tell 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). Their empirical analysis indicates that tight money or credit affect 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 (2007) used cross-country evidence to show that banking crises negatively affect bank-dependent firms, specifically small businesses, more than they affect firms less dependent on bank finance. Duygan-Bump, Levkov, and Montoriol-Garriga (2011) 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, as absent adequate capital to fund operations, these businesses were forced to pull back. Furthermore, among firms highly dependent on banks for financing, the likelihood that an employee will become unemployed is greater in small firms.



THE CREDIT-LESS RECOVERY? THAT DEPENDS ON WHO YOU ASK, BUT THE DATA IS TROUBLING

A dynamic credit market for small businesses will allow them to grow and create the jobs we need now, drive our nation’s competitiveness globally, and create a path to middle class prosperity. This section will describe the 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. The data, while not fully conclusive, is troubling.

Bank Credit is Key to America’s Small Businesses

Bank credit is a vital lifeline for small businesses, and often ranks in importance as high 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 and the vicissitudes of small business profits makes retained earnings a necessarily less stable source of capital, so they become more dependent on bank credit. About 48 percent of business owners report a major bank as their primary financing relationship, with another 34 percent noting that a regional or community bank is their main financing partner—underscoring the importance of banks to small business lending. These numbers are confirmed by other recent studies. In 2012, over 85 percent of small businesses reported to the NFIB that their primary financial institution was either a large or community bank.¹⁵

Figure 5: Primary Financial Institution
Percentage of Total Small Businesses Surveyed

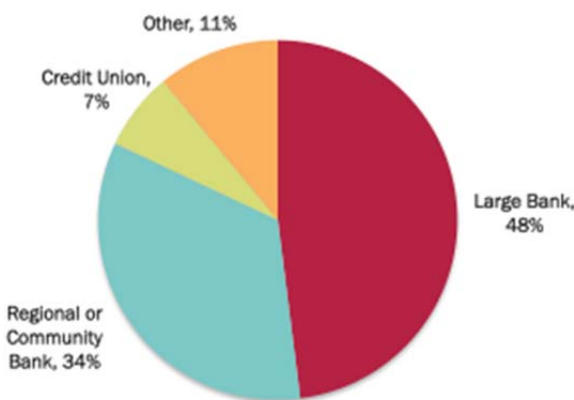
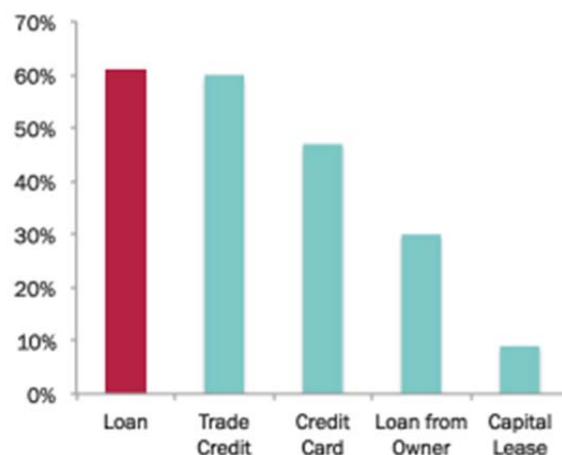


Figure 6: Small Business Sources of Capital
Percentage of Total Small Businesses Surveyed

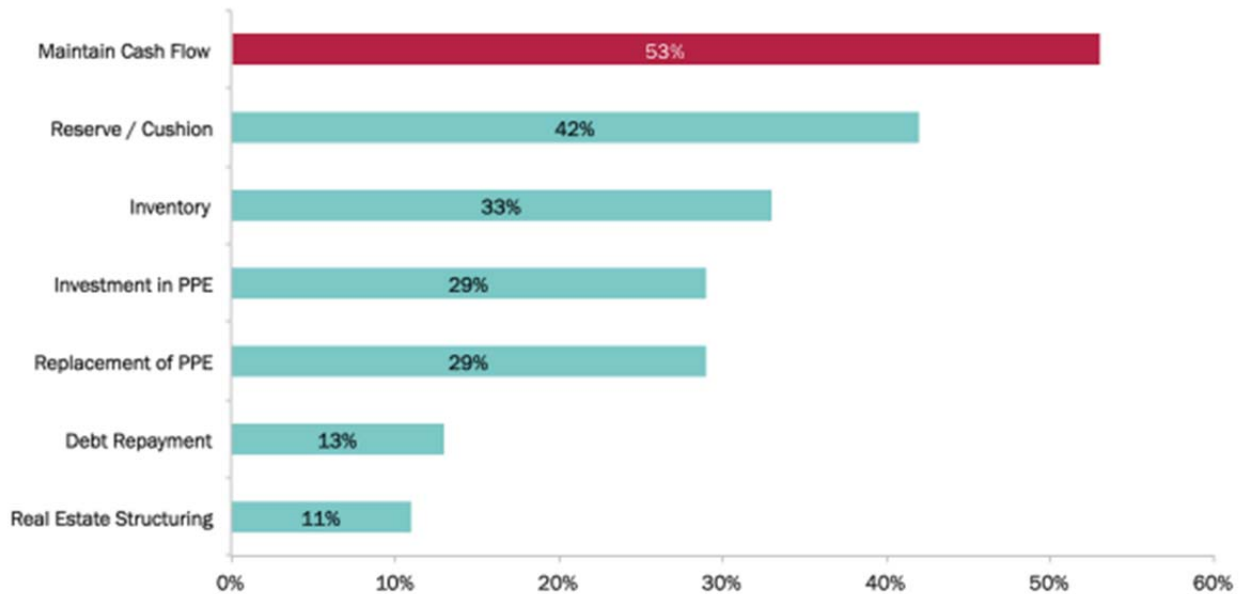


Source: National Federation of Independent Businesses, “Small Business, Credit Access, and a Lingering Recession”, (January ‘12) and Federal Reserve’s Survey of Small Business Finances (Released in ‘07).

¹⁵ National Federation of Independent Businesses, “Small Business, Credit Access, and a Lingering Recession”, (January 2012).

One of the best pictures we have of sources and uses of credit by small businesses is the Federal Reserve’s National Survey of Small Business Finances, which, while dated as of 2003, indicates that about 60 percent of small businesses use term loans to finance their operations. Small businesses use loan capital for a variety of purposes, ranging from maintaining cash flow and working capital to purchasing equipment and financing real estate purchases.

Figure 7: Small Business’ Use of Proceeds for Loan Capital Sought
Percentage of Total Small Businesses Surveyed



Source: National Federation of Independent Businesses, “Small Business, Credit Access, and a Lingering Recession”, (January 2012).

The Credit-Less Recovery? Where You Sit Determines Where You Stand

The financial crisis and the recession negatively affected credit flows to businesses for several reasons, including a tightening in the supply of credit by financial institutions, and the deterioration of financial health of potential borrowers. Since the recession ended in the second quarter of 2009, overall lending conditions and credit flows have improved for businesses, but—just as the recovery overall has been slower for small firms—improvement in credit access has also been slower for small businesses.

There is in fact some disagreement as to whether there is a gap in small business lending. Banks will tell you that there is currently a lack of demand and that they cannot find enough qualified borrowers. Jamie Dimon, CEO and Chairman of JP Morgan Chase, noted in 2013 that, “Very few (small businesses) say, ‘I can’t get a loan.’ Sometimes they say that, and it is true. I would say that happens more in smaller towns, where smaller banks are having a hard time making loans because the examiners are all over them.”¹⁶

¹⁶ Houston Business Journal. “Jamie Dimon Dishes on Small Business Lending, Regulatory Issues”. February 27, 2013.

Figure 8: Bank CEO's: Few Small Businesses Say, "I Can't Get a Loan"

"Very few (small businesses) say, 'I can't get a loan.'

Sometimes they say that, and it is true. I would say that happens more in smaller towns, where smaller banks are having a hard time making loans because the examiners are all over them."

Jamie Dimon

Chairman and CEO of JP Morgan Chase

February 2013

"As small business owners have increasingly looked to invest in and grow their operations, Citi has stepped up to help."

Robert Kleiber

Head of Citibank Small Business Lending

May 2014

"Working with small business owners is one of the most important things we do at Wells Fargo. We know America needs small businesses to grow, add jobs and prosper for our economy to fully thrive... We want to provide the support small businesses across the country need to move forward."

Lisa Stevens

Head, Wells Fargo Small Business Lending

May 2014

"A widget company makes widgets, and a bank makes loans. If banks could make money on it, you bet you'd see more lending to small firms."

Senior U.S. banker at Barclays

January 2013

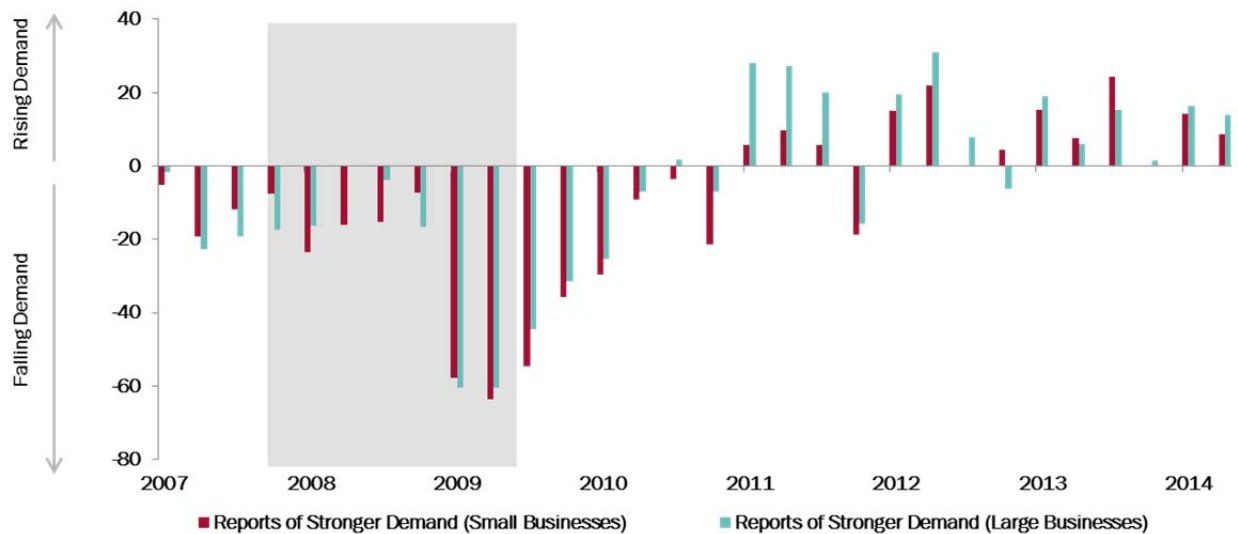
Certainly during the crisis, demand for small business loans fell partly because most small businesses experienced a decline in sales, and business owners had a heightened level of uncertainty concerning future sales. Many business owners decided to save capital instead of hiring additional employees and borrowing capital to invest in business expansions and inventory.

One of the best indicators of demand considerations in the small business lending market is the Federal Reserve's Senior Loan Officer Survey (SLOS).¹⁷ The net percentage of loan officers reporting negative demand reached as high as 63.5 percent during the recession. Since late 2010 recovery in demand for loans from larger businesses has outpaced that for smaller firms.

¹⁷ The Survey of Senior Loan Officer is a survey of loan officers at 75 domestic and international banks nationwide, with combined assets of \$8.4 trillion, or 71 percent of all assets at federally insured commercial banks. The survey does not provide metrics as to specific increases in markets such as interest rates or demand. Instead, it measures the percentage of Survey of Senior Loan Officers respondents that report increases, decreases, or no change from the last survey in the metric discussed. For example, the Survey of Senior Loan Officers respondents will describe whether loan demand has increased or decreased, but not by how much. For questions that ask about lending standards, reported net percentages equal the percentage of banks that reported tightening standards ("tightened considerably" or "tightened somewhat") minus the percentage of banks that reported easing standards ("eased considerably" or "eased somewhat"). For questions that ask about demand, reported net fractions equal the percentage of banks that reported stronger demand ("substantially stronger" or "moderately stronger") minus the percentage of banks that reported weaker demand ("substantially weaker" or "moderately weaker").

This data is often used to underscore the point that small business loan demand has been weak in the recovery. However, the actual survey asks loan officers to exclude demand for new or increased lines of credit, which may mean this indicator is lower than the actual level of loan demand from small businesses.¹⁸

Figure 9: Loan Officers Say Small Business Loan Demand Remains Weak in the Recovery
Quarterly Percentage of Loan Officers Reporting Greater Loan Demand



Source: Federal Reserve, “Senior Loan Officer Survey” as of April 2014.

The demand for small business financing can also be inferred from small business investment plans as reported in surveys conducted by NFIB. According to the surveys, the net percentage of firms that planned capital outlays and the net percentage that anticipated business expansions were at about their historical averages in 2005 and 2006, plummeted to record lows during the financial crisis, and have increased only slightly in recent years.¹⁹

Small business owners are generally quite adamant that even if they are just as creditworthy as they were in the period prior to the crisis, banks remain either wary or entirely unwilling to lend to them, no matter how many banks they approach. Every major survey of small business owners seems to point to credit access being a problem during this recovery. For example, a summer 2013 survey by the Federal Reserve Bank of New York noted, “Most business owners we polled cite access to capital as a top growth concern, but only a third of firms actually report applying for credit in 2012. Ability to access capital is a widespread challenge - even for profitable firms.”²⁰ In fact, one recent survey from the Federal Reserve

¹⁸ The question asks, “Apart from normal seasonal variation, how has demand for C&I loans changed over the past three months? (Please consider only funds actually disbursed as opposed to requests for new or increased lines of credit).” The question is asking for a very narrow interpretation of increases in demand as it is difficult to fully understand small business demand for credit without also including requests for new or increased lines of credit.

¹⁹ National Federation of Independent Businesses, “Small Business Economic Trends Survey”.

²⁰ Federal Reserve Bank of New York. “Small Business Credit Survey 2013”, September 2013.

Bank of Atlanta asked small business owners which had applied for a loan why they thought they were rejected, and almost 45 percent replied that banks are just not lending to their type of firm.

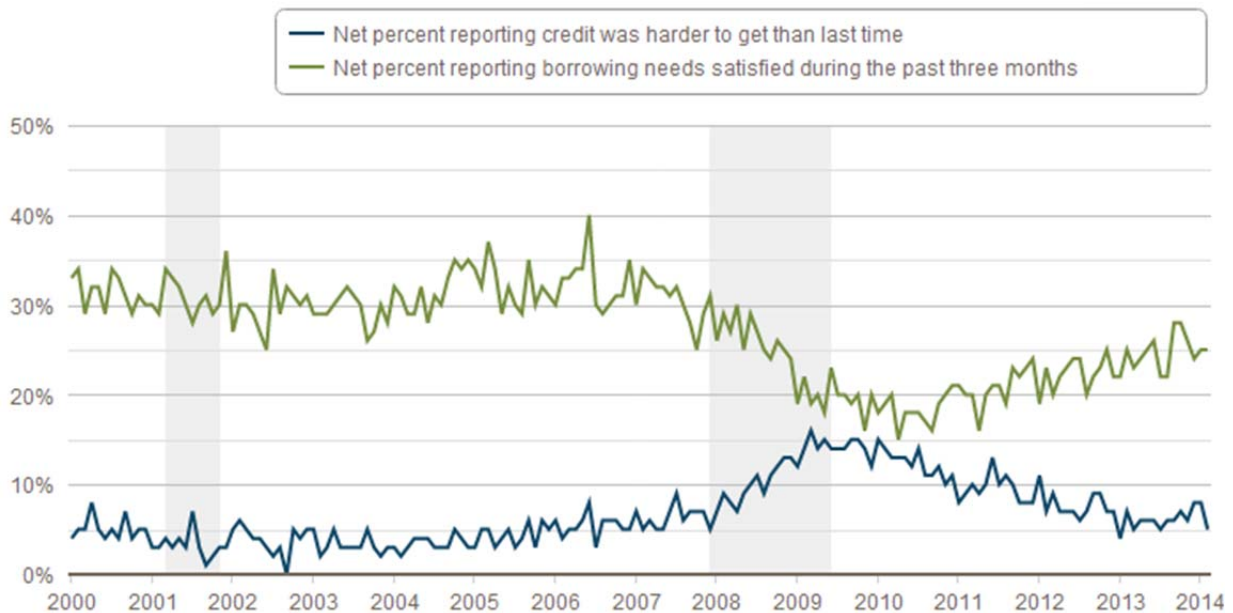
The Reality of the Credit-Less Recovery

What is the reality?

Some level of concern over credit access is natural and indicative of an expanding economy that is productively competing for scarce resources. There is limited data with long time series on how small businesses feel about credit markets, but the best available snapshot is from the National Federation of Independent Businesses (NFIB). This data shows that not all small businesses have historically been pleased with their access to credit markets, even during the strong growth period of the late 1990s. Nonetheless, this data also suggests that small businesses feel that credit access remains tighter today than in the prior recovery.

Figure 10: Small Business Owners' Perception of Credit Access

Net Percent Reporting Credit Was Harder to Get Than Last Time vs. Net Percent Reporting Borrowing Needs Satisfied During the Past Three Months



Source: National Federation of Independent Businesses. May 2014.

Data Constraints in Measuring the Credit Gap

A more precise measure of the credit gap for small businesses, 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.

In addition, the most comprehensive source for information about small business finances was the Federal Reserve's Survey of Small Business Finances (SSBF) was discontinued in 2007.²¹ 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.²² 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.

Evidence of the Bank Loan Gap

²¹ The final SSBF was published in 2006 based on 1998-2003 data collected between June 2004 and January 2005.

²² Consumer Financial Protection Bureau. *Letter to Chief Executive Officers of Financial Institutions Under Section 1071 of the Dodd-Frank Act*. April 11, 2011. 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.

Notwithstanding current gaps in small business data, various sources of information can serve as proxies for small business activity and can be used to identify patterns of small business financing. These sources suggest that financing flows to small businesses weakened considerably as a result of the financial crisis and the recession, and that they have only partly recovered. Due to a number of cyclical considerations in the wake of the recession and longer-term, potentially structural considerations that were mounting even before the crisis hit, there is growing evidence that small businesses face a tighter credit environment than is warranted by current economic conditions. The reality is that for most banks, lending to small businesses, especially below \$100,000, is costly and risky. But it is these lower dollar loans that actually are most important to startups and small businesses that are critical to accelerating the current recovery.

Based on regional survey data from the Federal Reserve Bank of New York, about 37 percent of all small businesses applied for credit in the fall of 2013. About 45 percent did not apply, presumably because they did not need credit, but about 20 percent did not apply because they were discouraged from doing so, either because they felt that they would not qualify or because they thought the process would be too arduous to justify the time commitment. Of businesses that did apply, over 40 percent either received no capital at all or received less than the amount that they requested. This underscores the manner in which seeking bank credit can be difficult, though not necessarily impossible, for many small businesses to secure. Other surveys also underscore that small business owners perceive credit access to be a problem in the recovery. For example, the Kauffman Firm Survey tracks, among other things, ease of access to capital for a subset of businesses started in 2004, and has found that about a third of businesses surveyed do not get all or any of the capital requested.²³

Figure 11: About 40 Percent of Small Businesses Apply for Credit
Percentage of Small Businesses Applying for Credit

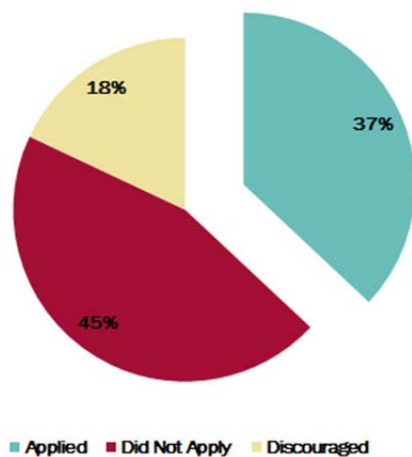
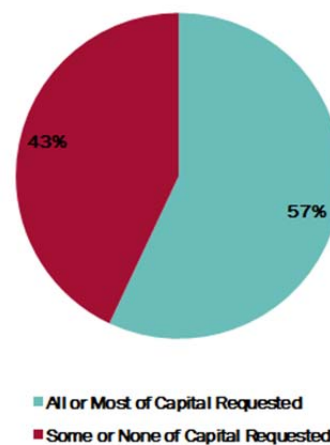


Figure 12: 40 Percent Applying for Credit Get Rejected or Less Credit Than Desired
Percentage of Small Businesses Receiving Credit

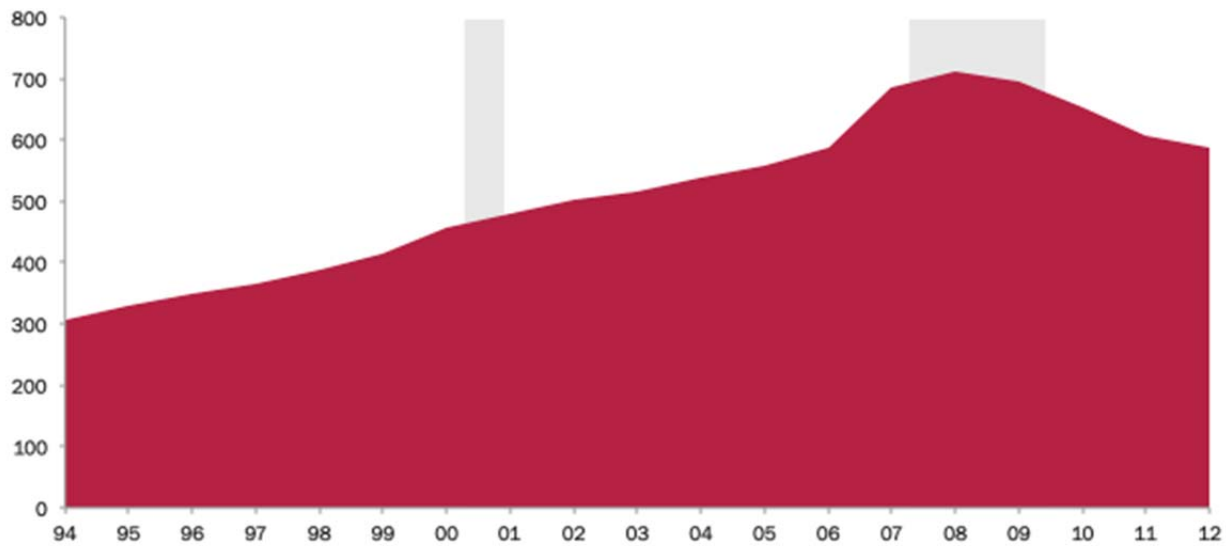


Source: Federal Reserve (Atlanta), "Small Business Credit Survey", Fall 2013.

²³ Ross, Alicia and Joseph Farhat. "An Overview of the Kauffman Firm Survey: Results from 2011 Business Activities." Kauffman Foundation. June 2013.

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, have shown declines through 2012, and are down about 20 percent since the financial crisis.²⁴

Figure 13: Small Business Loans Down About 20 Percent Since the Financial Crisis of 2008
Small Firm Loan Balances at Banks (\$ billions)



Source: Federal Deposit Insurance Corporation, Call Report Data. As of June 2012.

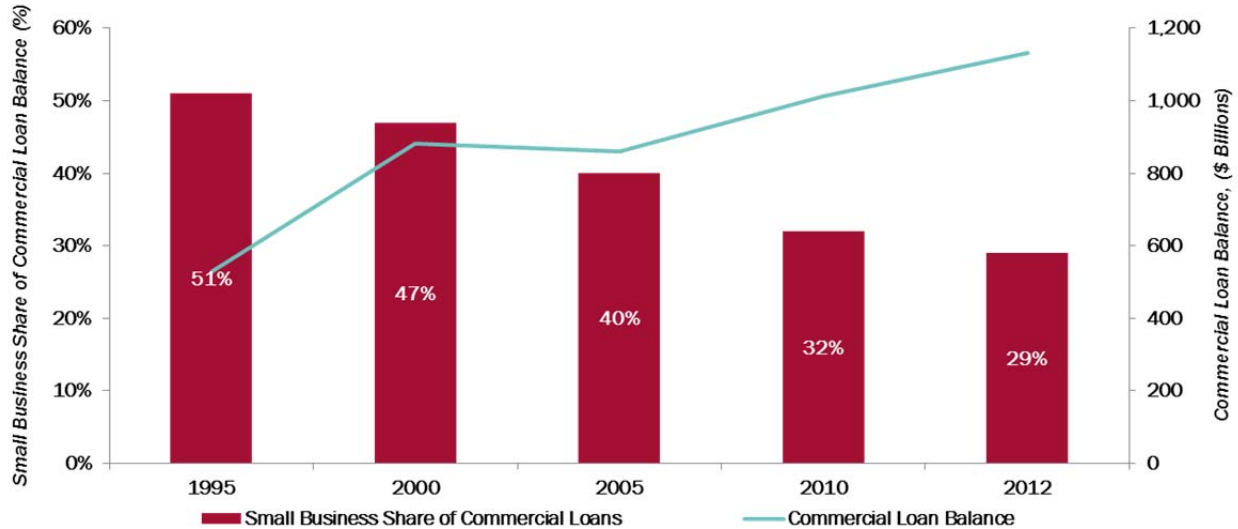
The decline in loans below \$1 million is striking, and all the more so when compared to the single-digit year-over-year increases during the recovery of loans above \$1 million. Loans to larger firms have risen every year since hitting bottom in 2011, and are now up by about 4 percent since that low point.

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

²⁴ 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. And lastly, this data includes debt that small businesses are drawing down from business credit cards, not just term loans or revolving lines of credit.

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 50 percent in 1995, but only about 30 percent in 2012, a remarkable decline over a nearly 30-year period.

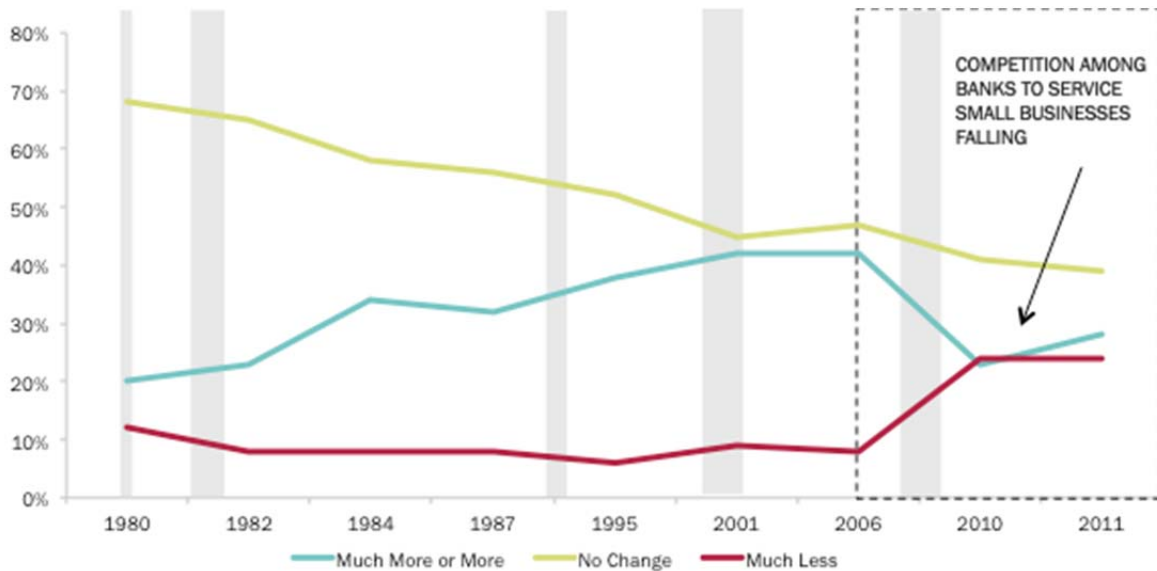
Figure 14: Small Business Loans as a Share of Total Loans Are in Secular Decline
Small Business Share of Loans at Banks (%) vs. Total Outstanding Commercial Loans (\$ Billions)



Source: Federal Deposit Insurance Corporation, Call Report Data. As of June 2012.

Moreover, if banks genuinely wanted to bank small businesses, there should be rising competition for small business loans. The more competition that exists, the more likely small business customers will receive sympathetic consideration for their loan requests, favorable rates and terms and conditions, and better service. The chart below presents a 30-year history of perceived competition for small firm banking business. From the perspective of small businesses, competition among banks for their business peaked in the 2001 to 2006 period, and sharply declined from 2006 to the present.

Figure 15: Bank Competition for Small Business Loans Is Falling
Percentage of Small Business Owners Noting Rising Banking Competition for Their Business



Source: Federal Reserve (New York), “Small Business Credit Survey”, Fall 2013.

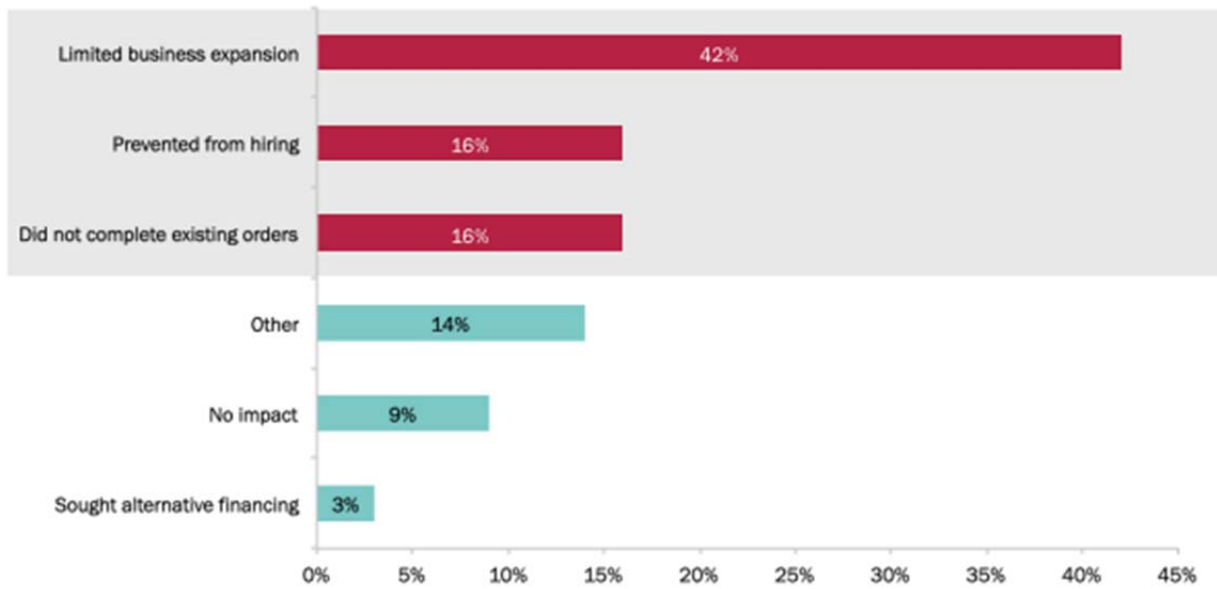
While it is difficult to make sweeping conclusions about a “credit-less recovery”, the data on small business credit conditions raises some alarms. There is weakness in small business credit markets, which disproportionately impacts Main Street businesses. By contrast, the halcyon days are back in high-growth capital markets. Venture capitalists raised almost \$9 billion during the first three months of 2014, pushing total fundraising to a 14-year high.²⁵

Lack of access to credit for small businesses is problematic because if credit is unavailable, small businesses may be unable to meet current business demands or to take advantage of opportunities for growth, potentially choking off any incipient economic recovery and undermining the free flow of financing to their most productive uses. Indeed, when small business owners are asked what getting rejected for credit does to their business, over 42 percent noted “limited business expansion”, 16 percent reported being “prevented from hiring”, and another 16 percent reported “not completing existing orders”, according to survey data from the Federal Reserve Bank of New York.²⁶

Figure 16: Impact of Credit Denial on Small Businesses and the Economy
What Impact Does Credit Denial Have on Your Business? Percentage of Small Businesses Surveyed

²⁵ PriceWaterhouseCooper’s MoneyTree Report on Venture Capital

²⁶ Federal Reserve (New York), “Small Business Credit Survey”, Fall 2013.

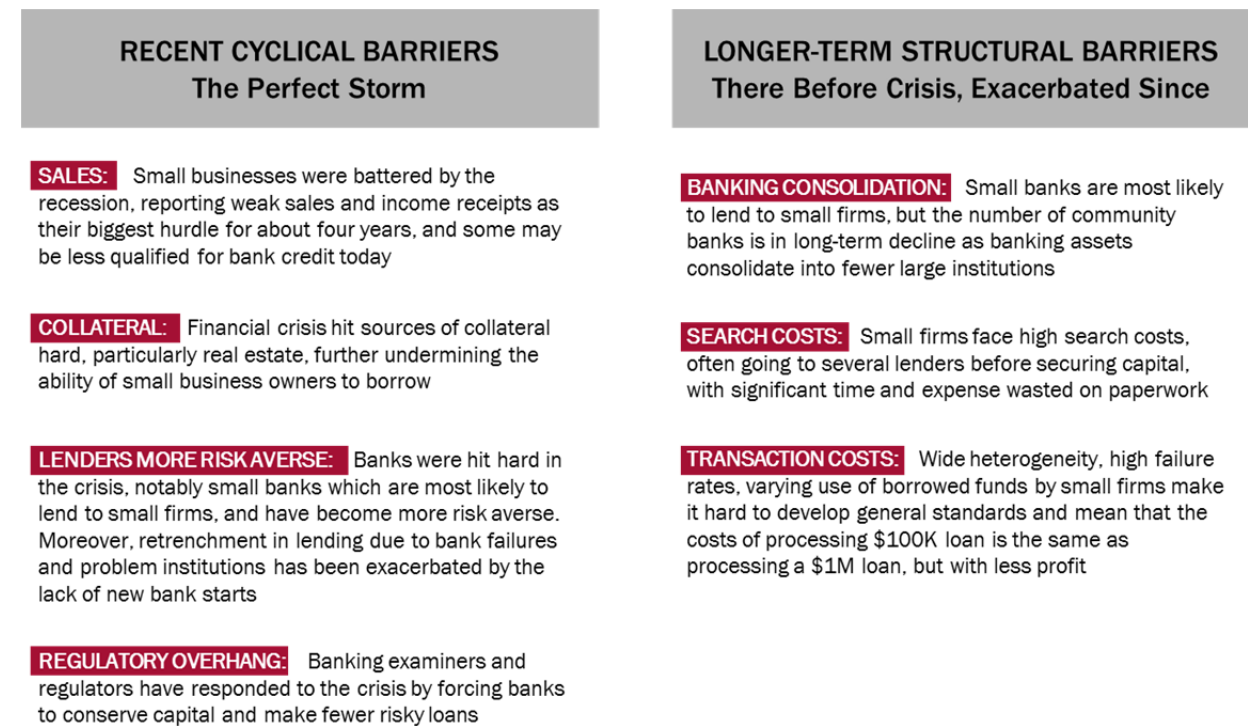


Source: Federal Reserve (New York), "Small Business Credit Survey", Fall 2013.

KEY PROBLEMS IN BANK LENDING TO SMALL BUSINESSES: CYCLICAL

While we do not have a complete and conclusive answer to the question of whether or not there is a gap in credit access for small business, our analysis suggests that the credit gap is due to a “perfect storm” of problems. These problems can be broken down into cyclical barriers lingering from the financial crisis and longer-term structural barriers that were there before the crisis, and may have been exacerbated since then.

Figure 17: Overview of Key Problems in Small Business Access to Bank Credit
Cyclical vs. Structural Barriers

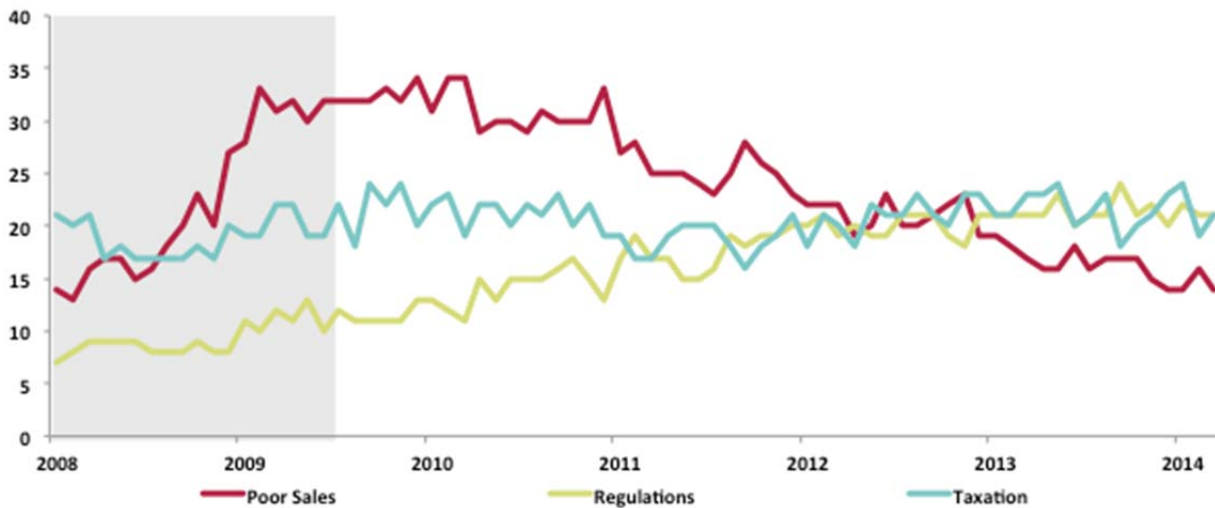


Recent Cyclical Barriers: Weakness in Small Business Sales

The impact of the recent crisis on small businesses – particularly their income, balance sheets and overall collateral held – is pivotal when assessing the health of today’s credit markets. Any loan is a contract between two parties: a bank that is willing and able to lend, and a business that is creditworthy and in need of a loan. Generally, banks require small businesses to show revenues that have increased quarter after quarter before they are willing to extend credit. Even a business owner with perfect credit may have a weak income statement showing sales that are at best flat. According to the NFIB index, small businesses reported sales as their biggest problem for about four years starting in August 2008 until early 2012. Income of the typical household headed by a self-employed person declined 19 percent in real

terms between 2007 and 2010, according to the Federal Reserve.²⁷ And, the Wells Fargo/Gallup Small Business Index shows that while from 2004 until 2007 about half of all small business owners surveyed reported revenue for the last 12 months as either “very good” or “good”, that number fell to as low as 21 percent in 2009 and 2010, and has only modestly recovered over the past few years, hovering at around 35 percent for most of the past few quarters. So, despite recent progress, many small businesses, even those that have weathered the recession, have nonetheless been battered by it and many may look less creditworthy to banks today than prior to the crisis.

Figure 18: Small Businesses Reported Sales as Biggest Problem for About Four Years
Percentage of Small Businesses Identifying Item as “Largest Concern”



Source: National Federation of Independent Businesses, “Small Business Economic Trends Survey”. As of May 2014.

Recent Cyclical Barriers: Weakness in Small Business Collateral

Small business owners’ collateral was also hit hard during the crisis, and may be impacting their ability to qualify for loans, particularly at banks. Indeed, many lenders see small businesses as less attractive and more risky borrowers than they used to be. Fewer small business owners have the cash flow, credit scores, or collateral that lenders are looking for. According to the latest Wells Fargo/Gallup Small Business Index, 65 percent of small business owners said their cash flow was “very good” or “good” in the first quarter of 2006, compared to a range of just 30 to 40 percent reporting good cash flow for most of the recovery, although the number has risen slightly to about half as of the second quarter of 2014.

Small business credit scores are lower now than before the Great Recession. The Federal Reserve’s 2003 Survey of Small Business Finances indicated that the average PAYDEX score of those

²⁷ Wiersch, Ann Marie. Testimony to the U.S. House of Representatives Committee on Small Business on Research Conducted by the Federal Reserve Bank of Cleveland. December 5, 2013.

surveyed was 53.4. By contrast, the 2011 NFIB Annual Small Business Finance Survey indicated that the average small company surveyed had a PAYDEX score of 44.7. In addition, payment delinquency trends point to a decline in business credit scores. Dun and Bradstreet's Economic Outlook Reports chart the sharp rise in the percent of delinquent dollars (those 91 or more days past due) from a level of just over 2 percent in mid-2007 to a peak above 6 percent in late-2008. While delinquencies have subsided somewhat since then, the level as of late 2012 remained at nearly 5 percent, notably higher than the pre-recession period.

Real estate and home equity are also important examples of the collateral impact of the recession on small business owners. There is no definitive assessment of how many small businesses use real estate either as collateral for a loan or for a home equity line of credit, but the number has been estimated at as high as 56 percent by Federal Deposit Insurance Corporation (FDIC) Chief Economist Richard Brown, and a number of recent surveys point to 20 to 25 percent—20 percent in a 2009 Gallup survey of small businesses owners funded by NFIB, 25 percent according to a January 2012 survey by Small Business Majority, and about 25 percent in a survey of Barlow Research conducted in 2007, and 21 percent according to analysis of the Survey of Consumer Finances by the Federal Reserve's small business research team.^{28,29}

Moreover, the level of exposure to the housing market by small businesses is significant—small business-owning households held 59 percent of their debt in mortgages, versus 38 percent for other households, and they held another 7 percent of their debt in residential secured debt.³⁰ Federal Deposit Insurance Corporation (FDIC) Call Report data shows that from 1998 to 2007, self-employed households took on larger amounts of home equity debt and at a faster clip than other households.³¹ Since the beginning of 2008, the United States has seen home equity lines of credit decline by \$31.5 billion, compared to several years of rapid growth prior to the downturn.^{32,33} Notwithstanding recent progress, the real estate market remains weak in many parts of the country relative to the boom years of the last decade, which has impacted the quality of businesses' balance sheets and hurt businesses' ability to provide sufficient collateral to qualify for credit.

²⁸ Barlow Research. "Small Business and Middle Market Economic Pulse Survey Report." 2007.

²⁹ Bucks, Brian K., Arthur B. Kennickell, Traci L. Mach, and Kevin B. Moore. "Changes in U.S. Family Finances from 2004 to 2007: Evidence from the Survey of Consumer Finances." Washington, D.C.: Federal Reserve Board, 2009.

³⁰ Haynes, Gregory. *Small Business Administration. Office of Advocacy. "Structure of Household Debt of Small Business Owners in the United States: Finding from the Survey of Consumer Finances, 1998-2007."* 2010.

³¹ Schweitzer and Shane. "The Effect of Falling Home Prices."

³² *Ibid.*

³³ National Federation of Independent Businesses. "Small Business, Credit Access, And a Lingering Recession", January 2012. In this report released by the NFIB, which was based on Dun & Bradstreet financial data of 850 small businesses nationwide, credit access for small businesses was analyzed based on two housing-related measures: the first was the percentage of home mortgages upside-down in 3Q11 and the second was the six states (AZ, CA, FL, GA, MI, and NV) with 30 percent or more of their mortgages upside-down in the same time frame. Both measures were strongly associated with the ability of a small business owner to access credit; the latter holding greater explanatory power. The result was that owners located in one of those six states were about half as likely to have their credit needs met as were owners elsewhere in the country.

Figure 19: Small Firms Depend on Real Estate for Collateral, Home Equity Lines
Percentage of Households with Home Equity Debt

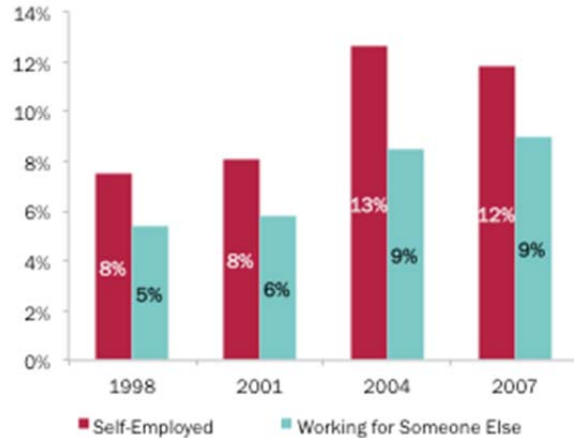


Figure 20: Home Prices Were Hit Hard in the Crisis and Banks Are Hesitant to Value Real Estate as Collateral or Offer HELOCs
HELOCs on Bank Balance Sheets (\$ Billions)



Source: National Federation of Independent Businesses, “Small Business Economic Trends Survey”. As of May 2014.

Recent Cyclical Barriers: Lenders Are More Risk Averse and Bank Starts Are Not Keeping Pace with Bank Failures

Risk Aversion of Lenders Remains High

As banks are forced to reduce risk and restore more prudent credit standards, they lend less. These forces work against the impact of lower interest rates, dampening the otherwise potentially powerful effects of monetary policy.

Bank credit began to tighten regardless of business size in early 2008, worsened over the course of 2009, and has made only a modest recovery since the crisis. Many banks have tightened lending standards such that what constitutes “qualified demand” today requires far more stringent income, asset and other ratio tests. More often than not, banks will offer liquidity in exchange for liquidity—looking for CDs, bank receipts or other forms of asset liquidity as collateral for bank loans and revolvers, reflecting an unwillingness to use real estate, equipment or other less liquid assets for collateral.

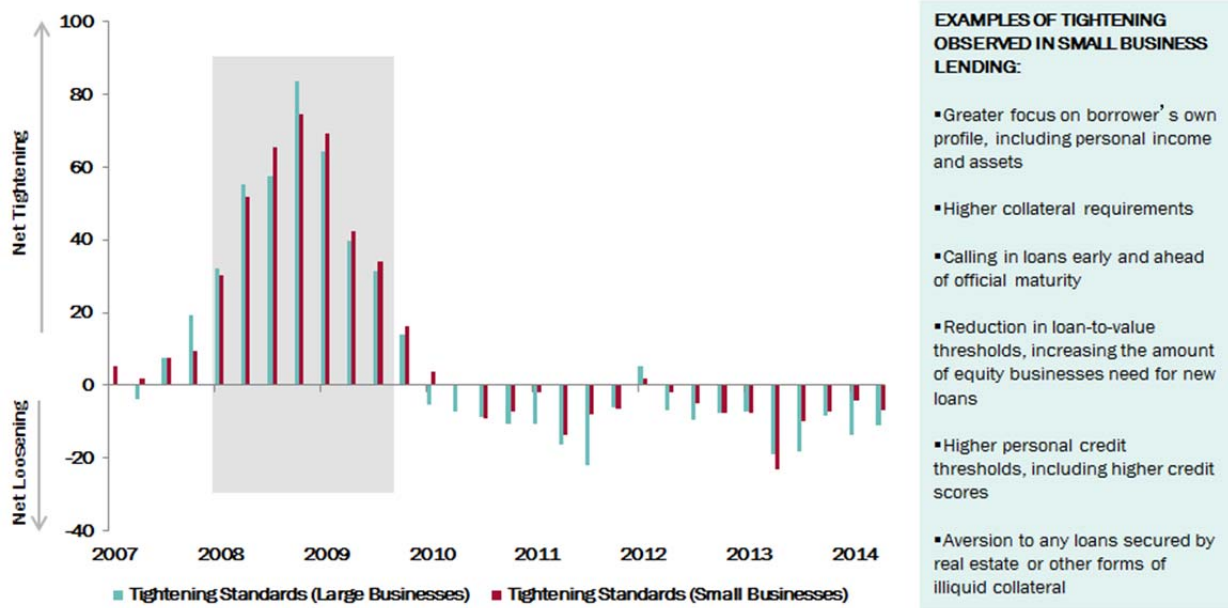
The most reliable measure of small business loan standards is the Federal Reserve’s quarterly Senior Loan Officer Survey (SLOS). For 13 straight quarters, from 1Q07 to 1Q10, senior loan officers reported tightening of standards, and for 8 of those quarters the percentage of bankers tightening standards was in the high double-digits. Credit markets froze and spreads rose to unprecedented levels following the collapse of Lehman Brothers in September 2008, including the TED spread (which is the difference between the interest rate of the 3-month London Interbank Offered Rate and 3-month Treasury bills), which reached a peak of 457 basis points in October 2008.

Over the past several years, there has been modest loosening of credit standards for small businesses, with the net percentage of bankers reporting that they loosened standards at either flat or

positive territory in 9 out of the past 10 quarters. But, this trend has been tepid at best, and has only broken above single-digits once in 2Q11 (13.5 percent). By contrast, standards began to loosen for large businesses six months before they did for small businesses, have reached as high as 21 percent in some quarters, and were generally never as negative during the crisis as they were for smaller firms. And despite recent progress, respondents to the January 2012 NFIB survey think borrowing conditions have not changed much over the past 12 months. Eliminating those who could not or would not offer an assessment, 53 percent claim obtaining credit has become more difficult for small businesses like theirs over the last 12 months; 38 percent report no change; and 8 percent think it is less difficult.³⁴

Figure 21: Banks Remain Risk Averse in the Recovery, Particularly in Small Firm Lending

Quarterly Percentage of Bankers Reporting Net Tightening or Loosening of Loan Conditions



Source: Federal Reserve's Senior Loan Officer Survey. Net Tightening or Loosening of Financial Conditions for Small Businesses.

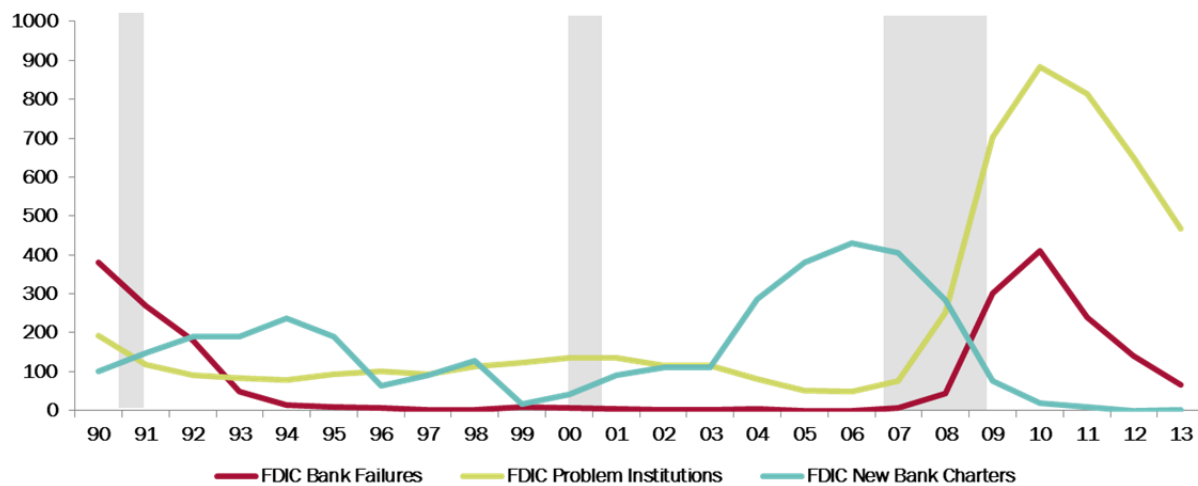
Moreover, lending standards have not eased across the board. Loan officers have eased the most on interest rate spreads and the cost of credit lines. Collateralization requirements, loan covenants, the maximum size of credit lines and premiums charged on riskier loans have changed little over the past three years. In fact, data suggests that more lending is secured by collateral now than before the recession, as banks seek to manage their risk more conservatively and have greater recourse to collateral in the event of a default. The Federal Reserve Survey of Terms of Business Lending shows that in 2007, 84 percent of the value of loans under \$100,000 was secured by collateral. That figure increased to 90 percent in 2013. Similarly, 76 percent of the value of loans between \$100,000 and \$1 million was secured by collateral in 2007, versus 80 percent in 2013.

Many Banks Were Battered During the Crisis

³⁴ National Federation of Independent Businesses. "Small Business, Credit Access, And a Lingering Recession", January 2012.

There is evidence that many parts of the banking sector are still reeling from the financial crisis, particularly in the community banking sector, which is the most likely to extend credit to small businesses. Many of these small banks are themselves in trouble, as they have suffered from increased loan defaults and have insufficient capital to make loans. The commercial real estate sector in particular has posed a problem for banks and particularly for community banks, whose portfolios hold a much larger share of such loans than large banks, per research conducted by Martin Feldstein.³⁵ Today there are 1,124, or 13.1 percent, fewer U.S. financial institutions than there were in 2007, and those who have disappeared consist mainly of banks with less than \$1 billion in assets.³⁶ There are also about 400 banks on the FDIC’s “watch list.”

Figure 22: Bank Starts Are Not Keeping Pace With Bank Failures
Number of FDIC-Insured Banks – New Bank Charters, Failures, Problem Institutions



Source: Federal Deposit Insurance Corporation, Call Report Data. As of 4Q13 (latest available data).

This environment—where troubled local banks appear unable to meet re-emerging small business credit needs—would normally be an ideal environment for new banking institutions to emerge. But, raising capital has been difficult given the scarcity of capital and the uncertainty that has clouded predictions about the sector over the last several years. These uncertainties include interest rate risk, unrealized losses, and the prospect of tighter capital requirements, among other things. New bank charters issued by the FDIC are down to a trickle. Banks obtain charters from their primary regulatory agency, either state banking regulators or, for national banks, the Office of the Comptroller of the Currency. But the charters are contingent on the applicants’ obtaining deposit insurance from the FDIC. Historically, the FDIC issued anywhere from 100 to 200 new charter deposit insurance certificates per year—for example, 151 and 175 charters were issued in 2006 and 2007, respectively. But new community or savings bank entrants have all but evaporated in the aftermath of the recession, falling to just 1 new

³⁵ Feldstein, Martin. “The Impotence of the Federal Reserve.” Project Syndicate (Washington, D.C.) 27 June 2012.

³⁶ Goozner, Merrill. “The Credit Drought.” The American Prospect. 7 March 2012.

bank in 2010 and an additional 10 that were previously shuttered but re-opened and just 3 in 2011. Almost two years recently went by with no new bank charters being founded—the first time that has happened in the 78-year history of the FDIC.³⁷

Recent Cyclical Barriers: 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. At least three federal regulators have broad regulatory authority for U.S. banks: the Federal Reserve, the Federal Deposit Insurance Corporation (FDIC), and the Office of the Comptroller of the Currency (OCC). Larger banks tend to be under the Fed; community and regional banks are regulated by the FDIC as well as individual regulators at the state level.

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 finds that a bank's return on assets is reduced from the addition of new regulatory officers, falling about 4 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.³⁸ And, a 2012 study by Federal Reserve economists finds 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.³⁹

During the 2009 crisis, banks were required to make a number of changes to their capital structure, including holding more Tier 1 capital and submitting to stress tests. Some regulatory guidance has also been issued on what constitutes “bad” loans. Banks often report that regulators and bank examiners are inconsistent, which leads to confusion and an aversion to taking on more risk from bankers. As a result, loan to deposit ratios fell dramatically beginning in 2009 and have only begun to rebound recently.

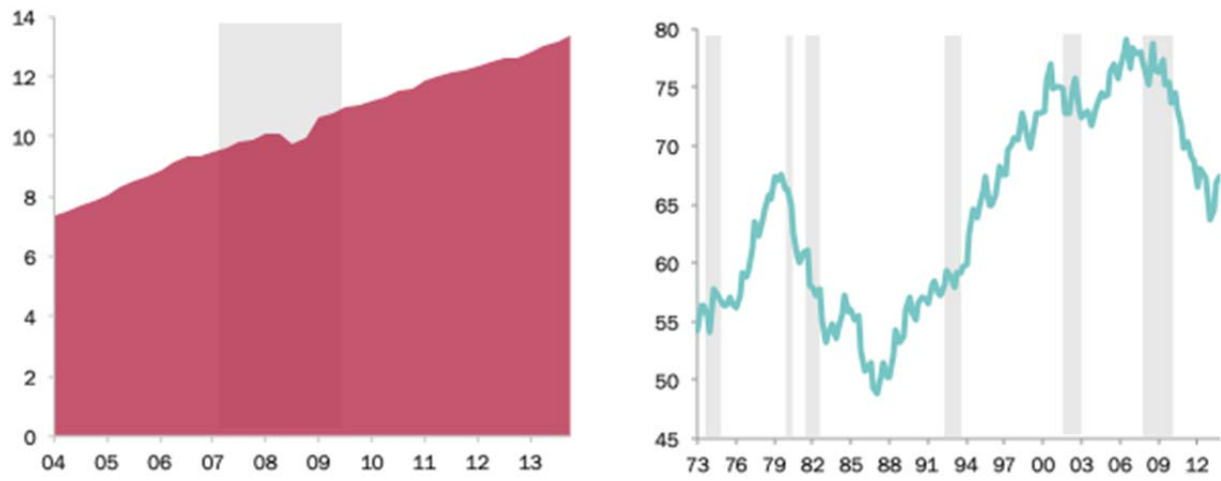
Figure 23: Banks Raising Tier 1 Capital
Tier 1 Capital (\$ Trillions)

Figure 24: Hoarding Deposits, Lending Less
Average Loan to Deposit Ratio

³⁷ Federal Deposit Insurance Corporation, *Call Report Data as of January 2014*.

³⁸ Feldman, Ron, Ken Heinecke and Jason Schmidt. “*Quantifying the Costs of Additional Regulation on Community Banks*,” Federal Reserve Bank of Minneapolis. May 30, 2013.

³⁹ Bassett, William, Seung Jung Lee and Thomas Spiller. “*Estimating Change in Supervisory Standards and Their Economic Effects*,” Federal Reserve Board. August 24, 2012.



Source: Federal Deposit Insurance Corporation. As of March 2014.

KEY PROBLEMS IN BANK LENDING TO SMALL BUSINESSES: STRUCTURAL

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. As a recent study by the Federal Reserve Bank of Cleveland notes, “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.”⁴⁰ The remainder of this section explores the structural barriers to small business lending which were steadily brewing before the crisis, and may have been exacerbated since.

Longer-term Structural Barriers: Banking Consolidation

The first 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 6,840 banks and 1,173 thrifts last year, down from 14,507 banks and 3,566 thrifts in 1984.⁴¹ Accompanying this consolidation has been an increasing concentration of banking assets and loans within money center and super regional banks. This is part of the reason why Alan Greenspan noted in 1999 that many business owners were anxious about the future as familiar ways of financing business were undergoing dramatic changes.⁴²

To be sure, this was a longer-term trend that the crisis has exacerbated. Our economy lost 932 financial institutions or nearly 13 percent of the total since the onset of the recession. The vast majority of those closed institutions had less than \$1 billion in assets, and were mostly community banks that were often the backbone of small business lending in their communities.⁴³ The top 106 banking giants, defined as institutions with more than \$10 billion in assets, held 79.4 percent of the nation’s \$13.8 trillion in financial assets in 2011, up from 116 firms with just 69.1 percent of \$12.7 trillion in total assets in 2007.

The primary financial institution of almost half (48 percent) of small business owners is now one of the 18 largest banks in the country, according to the January 2012 survey conducted by NFIB. Moreover, 37 percent use as their principal financial institution Bank of America, JP Morgan Chase, Wells Fargo/Wachovia, Citibank, U.S. Bank, HSBC, Sun Trust or PNC with another 11 percent using RBS Citizens, BB&T, Regions, TD Bank, Key, Fifth Third, State Street, Union, Bank of New York/Mellon, or Capital One. The current 48 percent represents a 5-percentage point increase from 2009.

⁴⁰ Federal Reserve Bank of Cleveland, “Why Small Business Lending Isn’t What It Used to Be”. August 14, 2013.

⁴¹ Martin, Andrew. “In Hard Times, One New Bank (Double-Wide).” *New York Times* 28 August 2010.

⁴² Greenspan, Alan. Keynote Address at the Business Access to Capital and Credit Conference. Federal Reserve Bank of Chicago. March 8-9, 1999.

⁴³ Goozner, Merrill. “Community Banks Lose as Big Banks Consolidate.” *The Fiscal Times* (New York City) 22 December 2011.

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.^{44,45} The Federal Reserve Bank of Atlanta recently noted that on a scale of 1 (offering no loan or line of credit to small businesses) to 4 (offering the full amount requested), community banks ranked 2.4 versus 2.3 at regional banks and 1.85 at large national banks. And, in the January 2012 survey conducted by NFIB, 57 percent of respondents whose primary financial institution is a large bank obtained their loan from it. However, 87 percent obtained the loan from a regional or local financial institution when that institution was their primary institution as small businesses consistently appear more willing to ask for credit when their bank is a regional or community bank and they appear to be more successful in their requests.

Figure 25: Community Banks More Likely to Approve Small Business Loans

Percentage of Small Firm Loans Approved by Bank

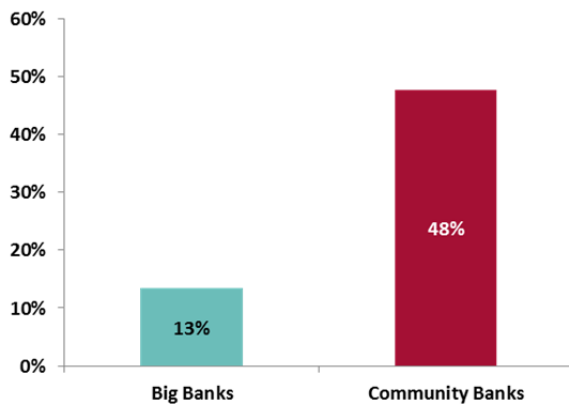
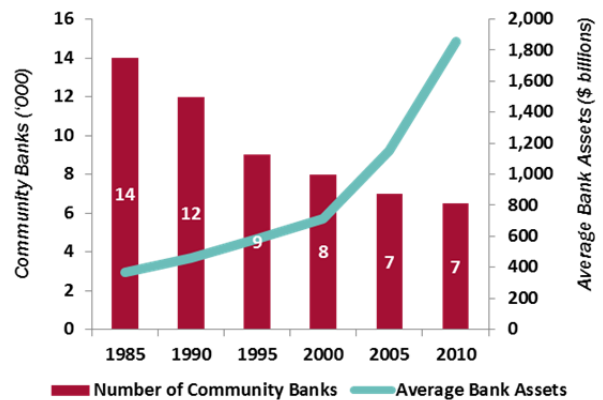


Figure 26: Community Banks Are Being Consolidated by Bigger Banks

Number of Community Banks versus Average Bank Assets (\$ Billions)



Source: Biz2Credit Small Business Lending Index (As of May 2014). Federal Deposit Insurance Corporation, Call Report Data. As of June 2013 (latest available data).

Research suggests that the structure of mega-banks and money centers is such that have difficult in assessing risk in small business lending. Small business borrowers tend to be more “informationally opaque” than their larger brethren and thus pose greater challenges for lenders.⁴⁶ For example, they lack as much publicly available, transparent information for lenders to review. Moreover, for many small businesses, gathering information about the firm’s owner is just as important as gathering information about the firm itself.

⁴⁴ Miller, Craig. “Small Banks’ Ranks Will Dwindle Without New Charters.” *American Banker* (New York) 20 March 2012.

⁴⁵ *Ibid.*

⁴⁶ 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.

Generally, large banks use standardized quantitative criteria to assess loan applications from small firms, where 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.^{47,48,49} Williamson's theory of hierarchical control partly explains the operational differences between small and large banks with respect to lending.⁵⁰ 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.

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.

Longer-term Structural Barriers: Search Costs

In the current environment it is difficult for 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.⁵¹ Successful applicants wait weeks or, in some cases, a month or more for the funds to actually be approved and available. Some banks are even refusing to lend to certain types and businesses within particular industries (for example, restaurants).

These frictions lead to high search costs 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

⁴⁷ *Ibid.*

⁴⁸ Scott, Jonathan, and William Dunkelberg. "Bank Consolidation and Small Business Lending: A Small Firm Perspective." *Proceedings* (1991): 328-61.

⁴⁹ 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.

⁵⁰ Williamson, Oliver E. "Hierarchical Control and Optimum Firm Size." *Journal of Political Economy*, Vol. 75, No. 2 (April, 1967), pp. 123-138.

⁵¹ *Federal Reserve Bank of New York. "Fall 2013 Small Business Credit Survey", September 2013.*

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. The higher transaction costs that result are a structural barrier to small business lending, which existed before the crisis and persist today.

Information Asymmetry

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.⁵² 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 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. Owners know more about their business than anyone else, but often have difficulty conveying that information through credible channels. Little, if any, public information exists about the performance of most small businesses because they rarely issue publicly trade equity or debt securities. Many small businesses also lack detailed balance sheets, use sparse tax return 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.

Banks can overcome these informational asymmetries, but have historically had to rely upon “soft” data to do so. 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.^{53,54} This is one reason, for example, that community banks may have lower margins, but approval rates for small business lending are more than double that of large banks.

⁵² Diamond, Robert. “Financial Intermediation and Delegated Monitoring”, *The Review of Economic Studies*. 1983.

⁵³ 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.

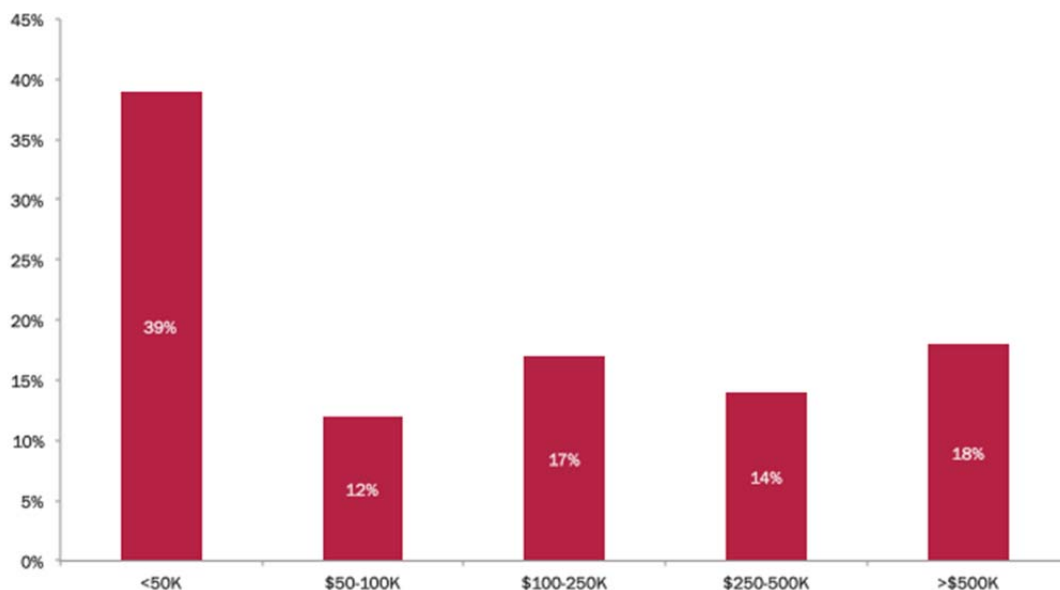
⁵⁴ Berger, Allen and Gregory Udell. “Small Firms, Commercial Lines of Credit, and Collateral”, *Journal of Business*, 351-382. 1995.

Heterogeneity of Small Businesses

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 evaluating such loans relatively expensive. Instead, many large lenders have relied on credit-scoring to maintain risk-averse and time efficient lending practices which 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 high volume, low dollar 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 decisioned largely on credit score data.

However, other, generally smaller banks and community lenders had better success relying on more traditional underwriting, including having experienced bankers review extensive documentation on sales, cash flow and collateral considerations of business borrower. But, that process is time-intensive and expensive. 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. This explains why banks are less likely to engage in lending at the smallest dollar level. As a result, some banks significantly reduced or eliminated loans below a certain threshold, typically \$100,000 or \$250,000, as a way to limit time-consuming applications from smaller and less sophisticated businesses. This is problematic as over 50 percent of small businesses are seeking loans of under \$100,000, leaving a critical gap in the small business loan market.

Figure 27: Small Businesses Want Small Dollar Loans
Percentage of Applications from Small Businesses by Loan Size



Source: Federal Reserve (New York), “Small Business Credit Survey”, Fall 2013.

Weak Securitized Loan Market

Securitization is the process of packaging individual loans and other debt instruments, converting the package into a security, and enhancing the credit status or rating to further the security's sale to third-party investors. The securitization of small business loans has the potential to substantially influence the availability of credit to small businesses, but the obstacles to securitizing small business loans are large.

Commercial loans, residential mortgages and credit card receivables are often bundled and sold in secondary markets, but the securitization market for small business loans is comparatively small and largely limited to SBA lending. The lack of a secondary market further raises the costs of small business lending. Securitization enables lenders to improve their return on capital and achieve liquidity and balance sheet diversity, so they often offer lower financing costs for loans that are eligible for securitization. Congress removed regulatory obstacles to the securitization of small business loans in 1994, but securitization of small business loans has historically been weak due to the lack of standardized lending terms, the lack of uniform underwriting guidelines, the historical nature of relationship lending to small businesses, and the dearth of historical data on credit performance. There has been some success in securitizing SBA-guaranteed loans due to in large part to the government guarantee. Until underwriting standards and documentation for these loans become more uniform and information for estimating the risk of loss more available, markets for securitized small business loans will remain small.

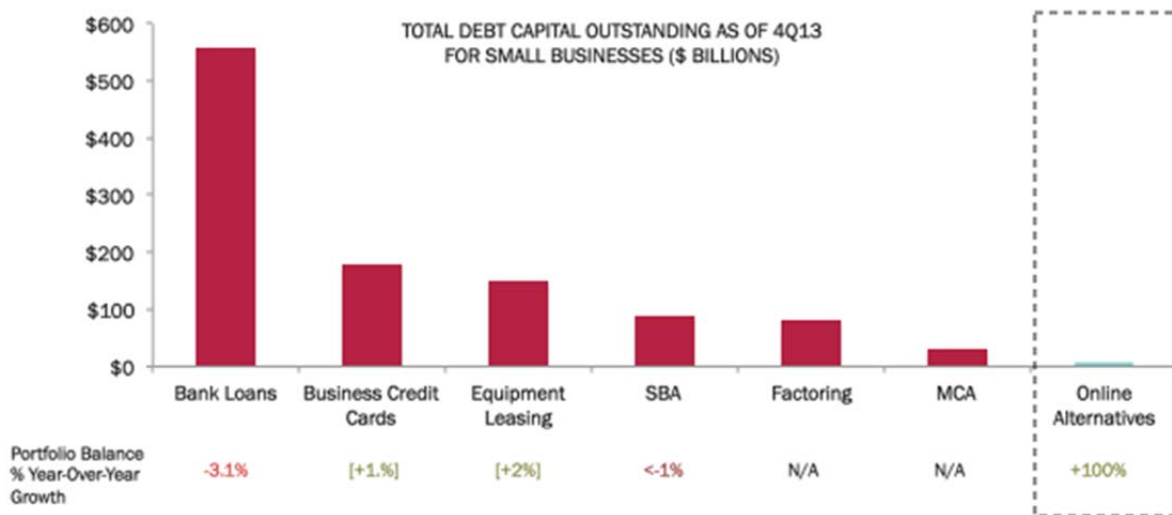


HOW TECHNOLOGY MAY CHANGE THE GAME: NEW CREDIT ALGORITHMS AND EMERGING MARKETPLACES FOR SMALL BUSINESS LOANS

Bank credit is the principal source of outside capital for small businesses, as we discussed in the second section of this paper, but there have always been alternative forms of loan capital to banks, including credit unions, Community Development Financial Institutions (CDFIs), merchant cash advances, equipment leasing and factoring products. Historically, this segment of the market has been small compared to the \$700 billion in small business bank credit assets. But, since the onset of the financial crisis, and particularly during the economic recovery, there has been significant growth in innovative alternative sources of loan capital to small businesses.

There are a broad range of alternative models emerging in commercial finance, particularly in the larger dollar small business loan segment, including receivables purchases and innovations in specialized lending by verticals. Indeed, these non-traditional lending sources have proliferated through the recovery, further suggesting either that businesses are forced to seek non-traditional credit because banks remain unwilling to lend or that non-traditional lenders have found ways of providing capital to small firms with greater efficiency and convenience. This section focuses on the online lenders. The outstanding portfolio balance of online alternative lenders is doubling every year, compared to a decline of about 3 percent in the traditional banking sector. Of course, the growth in alternative lending is from a standing start. This market represents less than \$10 billion in outstanding loan capital, compared to a bank credit market that is nearly seventy times that size.

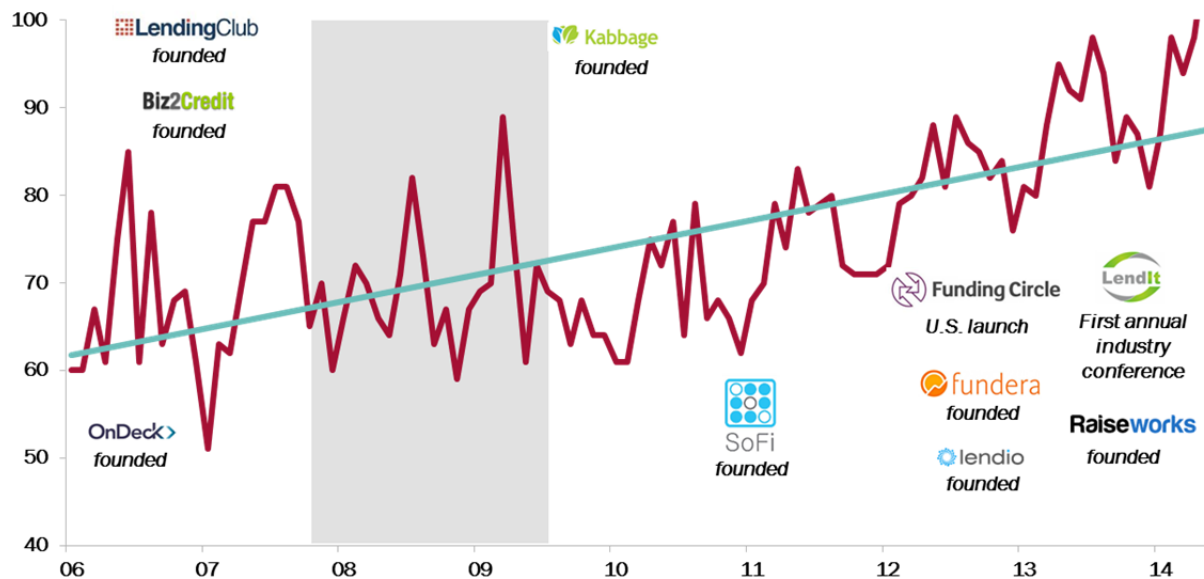
Figure 28: Online Loan Market is Small, But Growing Fast
Total Debt Capital Outstanding as of 4Q13 for Small Businesses (\$ Billions)



Source: Bank loans data taken from FDIC Call Reports; SBA data sourced from SBA publicly available information; Credit card data sourced from creditcards.com; remainder sourced from interviews with industry experts, and authors' analysis.

Despite their small scale, the technology used by these alternative players is fundamentally changing many of the ways in which small businesses access capital, creating efficiencies, greater competition, price transparency, and even making small business lending more profitable. There is evidence that small businesses are increasingly turning online when searching for loan capital. Google searches of “term loan” are running about 45 percent above ‘06 levels, and have grown every year during the crisis.⁵⁵ Banks have been slow to respond, investing more in bricks—in the form of new branches nationwide—than in clicks. Bill Gates famously quipped in 1994, “Retail banks are dinosaurs”.⁵⁶ And, Aaron Greenspan, CEO of Think Tank Computer Corporation and creator of mobile payments company FaceCash recently noted, “Given current market trends, retail banking as we know it today will no longer exist by 2020. Even by 2015, almost all small retail banks will be struggling, and even some of the large banks will be trying to re-invent themselves as software companies as they are confronted by competition from more agile and technologically adept competitors.”⁵⁷ Emerging online players are filling the technology void left by many banks, and pushing innovation within the banking sector in the same ways in which other online upstarts such as Amazon.com changed retail and Square has changed the small business payments business.

Figure 29: Small Businesses Clearly Want Online Loan Options
Average Monthly Google Searches of “Term Loan”



Source: Google.com/trends. As of May 2014.

Factors Behind Growth of Online Lending Platforms

⁵⁵ Google.com/trends. Search word “term loan”.

⁵⁶ BusinessWeek. “Bill Gates is Rattling the Teller’s Window.” October 13, 1994.

⁵⁷ Greenspan, Aaron. “The End of the Banking Era”, Huffington Post. October 31, 2010.

A few factors account for this rapid growth. First, institutional debt and equity investors have been attracted by the relatively high rate of returns available by lending in this market. Traditional bank loans may yield a return of 5 to 7 percent, but many alternative lending platforms charge yields ranging from 30 to 120 percent of the loan value, depending on the size, term duration and risk profile of the loan. These higher yields appear particularly attractive in an environment in which unprecedented quantitative easing by the Federal Reserve has kept yields below historic levels in bank and other conventional debt instruments. According to some estimates, direct lending to small growth companies via some alternative lending sources has actually delivered higher returns than investing in smaller companies' shares in the past year.

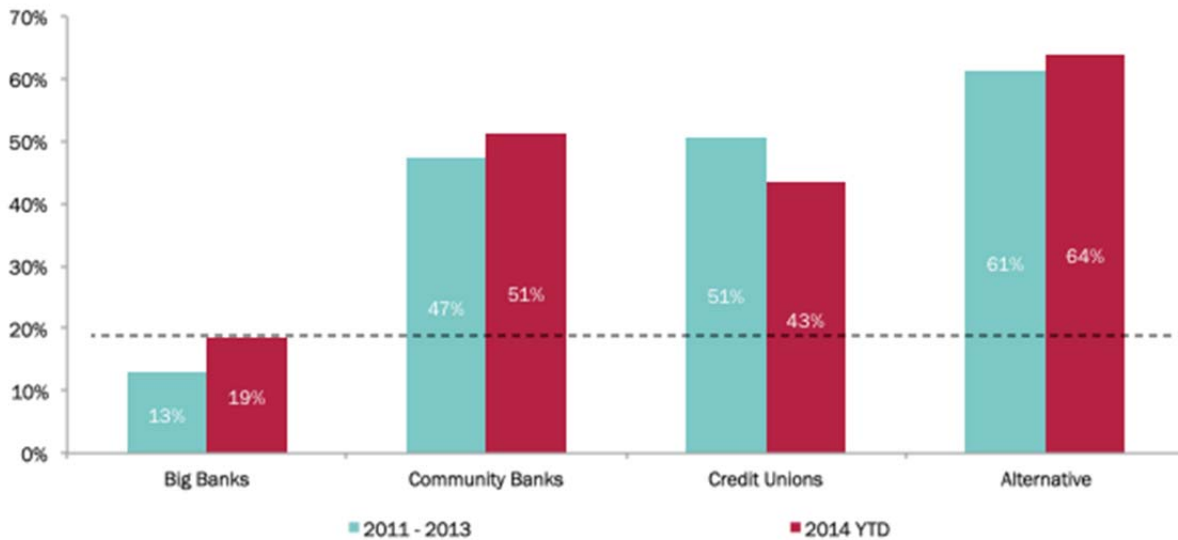
Some of this higher yield reflects the greater risk that alternative lending platforms are willing to assume. But, many of the fastest growing models in alternative online lending to small businesses are offering a middle path between banks, which lend primarily to the most creditworthy small businesses, and merchant cash advance lenders, which tend to focus on sub-prime candidates. These new platforms are largely focused on "mid-prime" businesses that are looking for a better product but do not qualify for a bank loan.

At the same time, growth in the alternative lending market has been driven by the needs of small business borrowers themselves on a number of fronts. First, small business borrowers want access to capital. As was discussed in the second section of this paper, every major national survey of small business owners notes that they feel access to loan capital remains constrained in the recovery, and in the absence of bank lending, alternative sources of credit are stepping in to fill the void. Indeed, the rapid growth of non-traditional lending sources suggests either that businesses are forced to seek non-traditional credit because banks remain unwilling to lend or that non-traditional lenders have found ways of providing capital to small firms with greater efficiency and convenience.

Data is limited on alternative lending, but Biz2Credit's April 2014 index notes that small business loan approval rates by alternative lenders, which measures activity among accounts receivable financiers, merchant cash advance lenders, CDFIs, micro-lenders, and others, runs above 60 percent versus 17 percent for large banks, 51 percent for community banks, and 45 percent for credit unions.⁵⁸ (Though it is worth pointing out that there is potential for selection bias here and approval rates vary often dramatically among these platform types.)

⁵⁸ Biz2Credit. "Small Business Lending Index", April 2014.

Figure 30: Alternative Lenders Taking More Risk
Approval Rate by Lender Type



Source: Biz2Credit Small Business Lending Index. As of May 2014.

Many of the borrowers accessing capital through these platforms are sub-prime, with FICO scores on some of the online lending platforms at levels well below 650. However, OnDeck’s recent securitization of \$175 million in its loan capital showed that the median credit score of the pool was about 690, underscoring that even some creditworthy borrowers are turning to these platforms. This may be due to the increasing propensity of some of the largest banks to push businesses with less than \$2 million in revenue to their automated, higher-yielding credit card products, even if the business owner in question is seeking project-based financing (e.g., purchase of new plant or equipment) which does not lend itself as easily to credit card financing. In addition, otherwise creditworthy businesses often cannot get access to credit if their business operates within certain industries which, following the recession, banks have deemed too cyclical and risky to lend term loans to, including the restaurant industry and parts of manufacturing.

The growth of online small business lending is not just supported by access and a greater inclination to take on risk in small business lending, and open new pools of capital for small business owners. The growth is also driven by the ways in which alternative lenders are ‘innovating’ in small business lending, particularly in terms of simplicity and convenience of the application process, speed of delivery of capital, and a greater focus on customer service. For example, all of the biggest players emerging in the alternative lending space offer online and mobile applications, many of which can be completed in under 30 minutes. These are not just inquiries; these are actual loan applications, which compares to the average of about 25 hours that small businesses spend on filling out paperwork at an average of three conventional banks before securing some form of credit.⁵⁹ Upon filling out an online

⁵⁹ Federal Reserve Bank of New York. “Fall 2013 Small Business Credit Survey”, September 2013.

application, owners can be approved in hours and have the money in their account in just days, whereas in the conventional banking model small business owners may not be approved for several weeks.

Fast funding and online and mobile applications are crucial competitive advantages of the alternative lending business model, and explain why even some well-qualified borrowers who could get some of their desired credit from banks are turning to alternative sources of credit. As has been recently reported in *The New York Times*⁶⁰, *Bloomberg BusinessWeek*⁶¹ and *Forbes*⁶², among other publications, many small businesses are willing to pay the price of the alternative lenders just to be able to get their capital and move on. By embracing technology to make small-business lending more efficient and profitable, the alternative lenders have opened opportunities for many small businesses.

Innovative Use of Technology and Big Data

By and large, the emerging online alternative lenders decision loans by using predictive modeling, data aggregation and electronic payment technology which use innovative software and data metrics, including social media interactions and reviews from online sources including Yelp, to assess the health of a business. Traditional lenders generally focus on the small business owners' personal credit history while these new alternative lenders also focus, on the current cash flow and performance of the small businesses using a broad array of traditional and non-traditional data sources. For example, several new entrants create new predictive indexes based on access to current cash flow data from bank accounts and Quick Books entries. Most of the players have developed a proprietary end-to-end lending platform which includes an online based origination platform, a proprietary credit scoring model, and an automated collection platform that collects ACH payments from borrowers sometimes as often as each business day.

⁶⁰ *The New York Times*. "Can't Get a Bank Loan? The Alternatives Are Expanding." March 5, 2014.

⁶¹ *BusinessWeek*. "How Much is Too Much to Pay for a Small Business Loan?", May 16, 2014.

⁶² *Forbes*. "Traditional Small Business Lenders: Watch Out, Alternative Lending is Gaining Steam". April 25, 2014.

Figure 31: New Models Are Tapping Into New Data Sources, Many Only Recently Available

		Rationale	Sources	Users	
				Alternatives	Banks
More Predictive ↑	Cash Flow	Best measure of firm fundamentals, gauging ability to repay and managing risk repayment cycle during life of loan	intuit QUICKBOOKS Bill.com	×	
	Credit Bureau	Useful for consumer risk profile, but limited business risk profile information and weak predictor of creditworthiness	FICO YODLEE EQUIFAX TransUnion	×	×
Less Predictive ↓	Firmographic	Risk correlates to revenue and profit level, firm size, age, industry, geography, customer size, owner ed.	United States Census Bureau BEA salesforce	×	
	Social	Highly volatile day to day, but viewed holistically can be a predictor of riskiness, esp. in retail / restaurant	yelp foursquare twitter Angie's list	×	

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, can be called “online balance sheet lenders”. OnDeck has underwritten more than \$1 billion in loans. And Kabbage, which targets online merchants, lent \$200 million in 2013 alone. These loans are typically short-term loans of less than 9 months to fund working capital and inventory purchases, and many of these loan products operate similarly to a merchant cash advance, with a fixed amount or percent of sales deducted daily from the borrower’s bank account over several months. Given the short loan terms, the rate a small business borrower could pay on an annualized basis is a median of about 50 percent at OnDeck for a business term loan, but can range anywhere from 30 percent to 120 percent, with average loans of about \$40,000.

These lenders originate new small business loans through three primary origination channels: direct, platform partnerships and brokers. The direct channel allows companies to acquire borrowers through a variety of marketing techniques including direct mail, online media, and email. As an example, OnDeck has originated loans through the direct channel since 2007 and in 2013 approximately 43 percent of their loans came through this channel.⁶³ In the platform channel, companies connect with prospective borrowers through customized strategic relationships with third party partners that have access to the small business community. OnDeck has originated loans through the platform channel since 2011 and originated approximately 10% of their loans through this channel in 2013.⁶⁴ Utilizing the broker channel,

⁶³ Dominion Bond Rating Service. “OnDeck Asset Securitization Trust LLC Series 2014-1”. April 30, 2014.

⁶⁴ Ibid.

companies connect with prospective borrowers by entering into relationships with third-party independent brokers that typically offer a variety of financial services to small businesses including commission-based business loan brokerage services. OnDeck has originated loans through the broker channel since 2007 and originated approximately 47% of their loans through this channel in 2013.⁶⁵

Peer to Peer Transactional Marketplaces

The peer-to-peer (P2P) model is already established in consumer lending, with two companies, Lending Club and Prosper, making more than \$4 billion in consumer loans to date. P2P means that individual investors—most of which are large institutional investors such as hedge funds and investment banks—direct capital to P2P transactional marketplaces, like Lending Club, which then decision loans based on a proprietary credit model. Revenue for P2P lending platforms is derived from origination fees that are deducted from loan proceeds disbursed to the borrower and servicing fees that are deducted from principal and interest payments paid to the lender.⁶⁶

P2P lenders say the peer lending component lowers their cost of capital by freeing them from raising money. They view their value proposition as straightforward: create lower interest rates for borrowers, attractive rates of return for individual investors and clean and simple electronic interfaces designed to make sophisticated consumer transactions between individuals efficient, convenient and painless—and to create this value with lower operating costs and more scalability than a consumer loan department within a traditional bank.

P2P lenders typically target midprime or near-prime borrowers and lend larger amounts for longer terms. Generally, P2P platforms offer amortizing loans with fixed interest rates and three to five year maturities. The loans appeal to individuals seeking to consolidate credit card debt, repay high interest rate loans, or borrow funds for other general purposes. Interest rates range from 8 to 24 percent for loans of up to \$250,000 that can stretch for three years. Funding Circle, a British lender that has expanded into the United States, charges 10 to 17 percent for loans of up to \$500,000. And, increasingly, P2P lenders like Lending Club and Prosper—and a range of new ones like Funding Circle and Fundation—are focusing their efforts on small business lending.

The fresh competition is already forcing established players to adjust. In February, OnDeck announced it would begin offering loans of up to \$250,000 with terms of 12 to 24 months and interest rates of 20 to 40 percent.⁶⁷ According to Noah Breslow, OnDeck's chief executive, the move into bigger, longer-term loans reflects the growing accuracy of OnDeck's lending model, now in its fourth generation, and market demand. "I don't think we'll ever get to a five-year bank loan, but we'll continue to move upstream," Mr. Breslow said.⁶⁸

⁶⁵ *Ibid.*

⁶⁶ Richards Kibbe & Orbe. "Legal White Paper: Too Big to Disintermediate? Peer-to-Peer Lending Takes on Traditional Consumer Lending". October 2013.

⁶⁷ OnDeck Press Release. "OnDeck Launches An Industry First: OnDeck Term 24, A New Loan Product Offering Amounts Up To \$250,000, Longer Terms, Lower APR & Funding In 24 Hours". February 18, 2014.

⁶⁸ *The New York Times*. "Can't Get a Bank Loan? The Alternatives Are Expanding." March 5, 2014.







Lender-Agnostic Marketplaces

Another emerging online player in small business lending are “lender-agnostic marketplaces”, which seek to create a marketplace in which small business borrowers can comparison shop a range of loan products, from term loans and lines of credit to merchant cash advances and factoring products, which are on offer from a wide variety of sources, from alternative lenders to conventional banks. Some of the most prominent of these players include Fundera, Biz2Credit, and Lendio, which are creating an online marketplace which is mitigating one of the biggest problems borrowers and lenders face—search costs.

Following the lead of other sectors like travel (Kayak) and consumer mortgages (Lending Tree), these marketplaces create a website that allow small business borrowers to comparison shop across a broad range of lenders—including community and regional banks, online balance sheet lenders such as those described above, and others—as well as across a range of a products—including term loans, SBA loans, merchant cash advances, equipment leasing loan products and factoring. Typically, marketplaces earn revenue by charging a small fee on top of the loan if the borrower gets funded and accepts the terms of a loan from its platform. Some of these players, such as Lendio, also sell small business leads and contact details to loan officers and others. Increasingly, these platforms are experimenting with ways to work collaboratively with traditional banking players, particularly community banks, including by encouraging these bankers to send small business borrowers whom they cannot fund, to the marketplace.

Intuit is experimenting with a platform where they use (with the permission of small businesses) QuickBooks data that they keep in the cloud to create a predictive small business credit score. QuickBooks customers then have access to the lending platform and can use their score to seek loans from providers which include Wells Fargo and On Deck.

Figure 32: Three Emerging Models in Online Lending to Small Businesses

	Online Balance Sheet	Marketplaces	P2P Platforms
	 	 	 
Model	Use balance sheet capital to decision loans via new risk scoring algorithms that include non-trad'l data	Connect borrowers with range of traditional and alternative lenders, incl. big banks, SBA, new players	Connect prime and super-prime quality borrowers with capital from consumers, inst'l investors
Loans to Date	Est. \$1.5B as of 4Q13	N/A	Est. \$4.7B as of 4Q13
APR	20 – 50 percent	Wide variation given range of products and lenders	9 – 12 percent
Terms	6 – 12 months on average; focused on new loans	Wide variation given range of products and lenders	3 year or 5 year; largely focused on refinancing of credit card debt
VCs	Google Ventures, First Round, Tiger, SAP Capital	Khosla Ventures, First Round Capital, Square 1	Khosla Ventures, Kleiner Perkins, General Atlantic

Disruptive Force of New Entrants

Clearly new online entrants present a challenge to established players in the small business lending marketplace. As discussed in the previous section, there are structural challenges preventing both large and small banks from lending small amounts to small businesses. Two of these factors, the high search costs and the difficulties in assessing the creditworthiness of potential borrowers are being addressed in innovative ways by online entrants. Technology is also creating an advantage by these new players in terms of ease of use and rapid turn-around.

These new entrants have been on the scene since 2007, but momentum has increased significantly in the last 12-18 months. LendIt, a conference devoted to on line lending convened over 50 players in May in a sold out event in San Francisco.⁶⁹ Nonetheless the marketplace is in the earliest stages of transformation. Algorithms are being built, funding sources are making commitments, and business models are being refined at a rapid rate. Yet it is clear that the traditional small business bank lending model has left gaps in the marketplace that with the help of technology, new entrants will find promising and profitable. This should benefit small businesses who could find more transparency in product and pricing options, lower search costs, and better speed and customer service.

⁶⁹ LendIt 2014, [Link to Agenda and Attendees](#).

The Response of Existing Players

The advantages of new entrepreneurial entrants which are disrupting the marketplace could be tested if more conventional players, particularly credit card companies, decide to target the market gaps and new approaches. Credit card companies, for example, often provide working capital funding and small dollar cash advances for small businesses. Their products are relatively easy to access, with yields that range based on the size, duration and risk profile of the borrower, but which are typically much lower than the new players. For example, the average small business credit card has a yield of about 20 percent versus a range of 20 to 120 percent for many of the online balance sheet players. Companies like American Express have developed Amex Open to specifically sell products and services to small businesses. Expansion into this evolving market may become a natural evolution. Similarly, Capital One has always viewed its data capabilities as a competitive advantage, and may develop more predictive small business credit algorithms for use in an online or other model.

Traditional large banks also have access to three types of assets that could make them important players. Banks such as JP Morgan Chase and Bank of America have millions of small business customers. The information these banks have on activity within the business' accounts can be valuable in a predictive model, and they also have a built-in source of small businesses seeking loans. In addition, these banks have their own balance sheets off which to lend and don't have to raise high cost capital to compete. All these factors could make them powerful competitors in the new marketplaces, but institutionally they may not be nimble enough to pursue these new areas. In one example, Barclays is looking to enter this emerging space by acquisition, having acquired a 49 percent stake in South African P2P Platform RainFin in March 2014.⁷⁰ Other traditional players are using joint ventures or are organically entering the market on their own.

⁷⁰ CNBC. "Peer-to-peer lending enters the South African mainstream as Barclays Africa invests in RainFin." March 5, 2014.

Figure 33: Incumbent and Other Traditional Players Beginning to Partner with New Models

Joint Ventures	M&A	Organic Entry
<p><i>BBVA Compass teams with OnDeck (May '14)</i></p> <ul style="list-style-type: none">▪BBVA will use OnDeck's technology to provide qualifying small business clients with loans up to \$250K, six- to 24-month terms, and funding in as fast as one business day. <p><i>Community banks start to buy loans via Lending Club (June '13)</i></p> <ul style="list-style-type: none">▪Partnership with Titan Bank and Congressional Bank, where they will buy loans through Lending Club's platform <p><i>Santander partners with Funding Circle (July '13)</i></p> <ul style="list-style-type: none">▪Santander will pass on leads to Funding Circle that they are unable to finance.	<p><i>LendingClub acquires Springstone Financial (April '14)</i></p> <ul style="list-style-type: none">▪Springstone provides affordable financing options for consumers looking to finance private education and elective medical procedures through a network of over 14,000 schools and healthcare providers <p><i>Barclays acquires 49 percent of South African P2P Platform RainFin (March '14)</i></p> <ul style="list-style-type: none">▪RainFin launched their platform in July 2012. Offers unsecured consumer loans, ranging up to 1 year. 1st year they loaned \$0.35m; Average net return to lender 10.2%.	<p><i>Range of companies may also decide to get into this space on their own, particularly:</i></p> <ul style="list-style-type: none">▪Companies with access to significant data sets on small business trends, including Intuit, which runs America's largest accounting software for small businesses ("QuickBooks")▪Credit card companies, particularly Capital One, which have built up significant data on and relationships with small business through their credit card products▪Square has also launched a merchant cash advance product in May '14

These are early days for the online small business loan market. The market is attracting robust attention from traditional players, entrepreneurs and venture capitalists. It is unclear as yet if the winning business models have emerged. The good news is that the marketplace is innovating and the new products that are emerging have the potential to fill an important gap in the small business loan market.

REGULATORY AND POLICY CONSIDERATIONS

What is the Appropriate Level of Regulation for the Online Small Business Lending Market?

Although the online small business lending market is in its infancy, there is already disagreement over the appropriate level of regulation. On one side many view the new entrants as disruptors of an old and inefficient marketplace, and caution against regulating too early or aggressively for fear of cutting off innovation that could provide valuable products to small businesses and fill market gaps.

But, on the other side, there is already concern that, if left unchecked, small business lending could become the next subprime lending crisis, as was recently pointed out by *Bloomberg BusinessWeek* in an article that has garnered significant attention in the industry.⁷¹ Traditional players, such as community banks, are weighing into the debate as well, fearing that stronger regulatory oversight in the wake of the recession is leaving them less competitive relative to new entrants that have to date operated in largely unregulated markets.

Another concern is how these new entrants will perform in a downturn. Most of the new online entrants were not making loans at scale during the financial crisis, and it is unclear how predictive their new credit algorithms would prove in the face of deteriorating economic conditions. Moreover, the supply of retail and institutional capital to these new platforms may dry up during a recession as investors retreat to safer, lower-yielding investments, which could limit the ability of these new players to make loans. By contrast, banks, which rely on federally-insured deposits, should theoretically still be able to make loans if the business cycle turns.

It is important to consider regulation of each type of new entrant separately, as the current regulatory environment, the appropriate regulatory players and indeed the level of regulation needed varies by type.

Online Business Lending and P2P Marketplaces

Broadly speaking, the current online marketplace for small business loans falls between the cracks for federal regulators. Because they are not banking entities, the traditional regulators—particularly the Federal Deposit Insurance Corporation, the Federal Reserve and the Office of the Comptroller of the Currency (OCC)—have been less involved. In fact, there is currently no single entity at the federal level that has claimed broad authority to regulate the emerging online lending players. While some federal regulations still apply, the majority of oversight happens at the state level, with the online players subject to a patchwork of state regulation on banking activity originated within state lines.

Institutional investors, including some prominent Wall Street investment banks and hedge funds, are helping this segment of business lending industry expand by providing funding and packaging the loans into securities that can be sold to investors in secondary markets. And, veterans of Wall Street stock brokerages are moving into online small business lending to sell these new loan products, raising

⁷¹ *Bloomberg BusinessWeek*. “Lenders Target a New Subprime Market”, May 22, 2014.

concerns that the small business borrowers, in need of quick capital and too busy with the day-to-day operations of their own business may not fully vet or understand their financing options.

Concerns have also been raised about transparency. Indeed, with the exception of peer-to-peer lenders that must disclose details on their overall loan portfolio publicly, most of the new online lenders do not publicly disclose detailed information on average loan sizes, terms and interest rates of their products or on average credit scores of their borrowers. It has also been noted that some of the new players do not invest in the loans on their platform alongside other institutional investors and do not align management compensation to performance of their loan portfolios, meaning they have less “skin in the game”.

The P2P lending platforms blur the lines between lending (the purview of traditional banking regulators at the state and federal level) and securities registration (the purview of, principally, the Securities & Exchange Commission). Indeed, a key innovation of the P2P lending platforms is that lenders on the platform are not lending money to borrowers in the legal or regulatory sense. Essentially, lenders are investors in securities issued by the P2P lending platforms that are linked directly to specific loans originated by an underlying bank.

P2P lending is not regulated at the federal level by one unified regulator, but unlike the online small business lending market, there has been federal oversight. In 2008, the Securities and Exchange Commission (SEC) required that P2P companies register their offerings as securities, pursuant to the Securities Act of 1933. In addition, an issuer must register its securities in every state in which the securities are offered for sale to the public unless an exemption from registration applies. These laws are complex and compliance entails substantial costs, and, some have argued, inhibit new entrants from gaining scale in the market. This is why Lending Club does not currently allow lending in 24 states (including populated states like Texas and Ohio). It is worth noting, however, that were Lending Club to go public through an IPO, as many market commentators expect in 2014, the platform would qualify for a blue-sky exemption allowing investors in every state access to Lending Club.

The Dodd Frank Act required the U.S. Government Accountability Office (“GAO”) to report to Congress on the federal regulatory structure for P2P lending. In July of 2011, the GAO issued a report summarizing the state of P2P lending and concluding that the activity was subject to regulation by a number of existing and overlapping regulatory agencies, including the Securities and Exchange Commission, state securities regulators, the Federal Deposit Insurance Corporation, state banking regulators and the newly formed Consumer Financial Protection Bureau.

As the Government Accountability Office has noted, on the one hand, banking regulators will have an interest in protecting borrowers on P2P lending platforms. Borrower protections include full disclosure of terms and conditions of a loan, protection from predatory or discriminatory lending practices, privacy protections and guidelines for the conduct of debt collectors in connection with consumer debt. On the other hand, the SEC and state securities regulators will have an interest in protecting lenders on the P2P lending platform as they purchase platform notes. Those investor protections include disclosures required in any sale of securities, and remedies available to purchasers of securities harmed as a result of a failure of an issuer to adhere to securities laws.

Key Regulatory Considerations in Online Small Business Lending and P2P Marketplaces

1. Transparency and Disclosure: The issues of transparency and disclosure are the most important considerations facing regulators overseeing the growth of online small business lending and P2P lending marketplaces, and can be broken down into three key questions. Are online lenders accurately and transparently disclosing terms of their loans to small business borrowers, such that small business borrowers can easily understand the terms of the transaction? Similarly, how much information should online lenders be disclosing to regulators and policymakers, particularly those tasked with overseeing macro-prudential risk across the financial system, about who these new players are lending to and how much risk they are assuming? Lastly, should there be greater standardization, transparency or regulation of online loan brokers? Indeed, this last question may be critical, as much of the negative publicity around online small business lending has centered on the rapid growth in brokers that find small business borrowers in need of capital and connect online lending platforms to these borrowers for large fees, which may be passed on to the borrower in terms of higher loan costs.
2. Standardization of Oversight and Monitoring: Who should be the federal regulator? The status quo consists of overlapping regulatory oversight. Should borrower and lender protections be consolidated under a single federal regulator and, if so, which regulator is best equipped to perform this role? In the online small business lending market, the newly created Consumer Financial Protection Bureau (CFPB) may be the most likely to oversee this market. This regulator has authority to oversee payday lenders and similar entities that loan to consumers, and is bringing greater transparency for borrowers to credit card and mortgage markets. In addition, CFPB is charged with data collection on small business loans required in Section 1071 (704b) of Dodd-Frank. But, the agency's plate seems full right now with writing and implementing a significant backlog of rules for consumer credit markets from Dodd-Frank. Given the hybrid nature of the P2P model, we should consider whether or not a hybrid oversight model between federal banking and securities regulators makes the most sense as protecting lenders through securities regulation may lack flexibility and impose inefficient burdens on firms.
3. Financial Literacy and Borrower Education: What more can be done to invest in programs and partnerships that impart financial literacy and financial management to small business borrowers, many of whom lack expertise at a time when financing options are proliferating. Policymakers often talk of the need for financial literacy among consumers, but could also consider investing greater resources, potentially through the SBA, in financial literacy for small business borrowers.

Opportunities to Reach Underserved Market Segments

From a policy point of view, the current market gaps in small dollar loans disproportionately effect underserved segments of the small business population. The SBA has targeted this sector with several products. Small Loan Advantage is a lower paperwork product directed at increasing the number of SBA loans under \$350,000. Community Advantage targets underserved communities by allowing

selected Community Development Financial Institutions (CDFIs) to qualify to use SBA loan guarantees. And, recently the SBA eliminated all of its fees on loans below \$150,000.⁷²

However, gaps continue, particularly among minority-owned and women-owned businesses. The amount of and reason for these gaps have not been fully identified. Nonetheless, it is possible that online small business lending may provide greater access for creditworthy borrowers in underserved areas by providing more transparent and accessible loan opportunities. In fact, some foundations have suggested exploring using the new technology solutions developed by online entrants to explicitly improve access to capital for underserved borrowers, and doing this now, rather than waiting for the marketplace to reach full scale. Some ideas here include using Community Reinvestment Act (CRA) funds to allow existing community lenders to partner with new entrants in developing new algorithms and channel creditworthy borrowers to these new lending platforms.



The online banking market is likely to continue to grow, disrupting traditional ways of lending to small businesses, and this will create both opportunities and risks for policymakers and regulators. Structural issues make it more difficult for community banks to fill market gaps in small business lending. New entrants are innovating and using technology in ways that improve access, time needed for delivery of capital, and the overall borrower experience. The policy challenge is to ensure that these new marketplaces have sufficient oversight to prevent abuse, but not too much oversight that the innovation is dampened or delayed. The potential of these market disruptors to fill the gaps in small business lending is high, and if they are successful, small businesses will have more opportunity to what they do best—grow the American economy and create jobs.

⁷² Small Business Administration. "7(a) Loan Amounts, Fees and Interest Rates". <http://www.sba.gov/content/7a-loan-amounts-fees-interest-rates>

APPENDIX: FEDERAL GOVERNMENT EFFORTS TO RESTORE CREDIT ACCESS FOLLOWING 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 Jumpstarting Our business Startups (“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 paper 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 34: Federal Policy Response Helped Small Businesses During the Crisis

<p>Recovery Act ('09)</p>	<ul style="list-style-type: none"> ▪ Strengthened SBA lending programs: reduced fees, raised guarantees to 90 percent for loan programs, which caused sharp rise in SBA loan volume, +64K small businesses financed ▪ Small business tax relief: Small business tax credits, including increased capex expensing; five year carryback of operating losses; exclusion of 75% of small businesses cap gains
<p>Small Business Jobs Act ('10)</p>	<ul style="list-style-type: none"> ▪ Small Business Lending Fund (SBLF): Program invested \$4B across 332 financial institutions provided low-cost capital to community banks with assets <\$10B to spur lending ▪ State Small Business Credit Initiative (SSBCI): \$1.5B to support state and local programs that provide lending to small businesses ▪ SBA lending: extended 90 percent guarantees and reduced fees; created refinancing program to help small business with refinancing commercial mortgages; enhanced loan limits for SBA's flagship loan products – led to three years of record SBA lending ▪ Small business tax relief: Small business tax credits, including capex expensing; temporary provisions zeroing out capital gains taxes and allowing entrepreneurs to deduct more start-up costs; allowed carryback for five years of business tax credits
<p>JOBS Act ('12)</p>	<ul style="list-style-type: none"> ▪ On-ramp: Incubator period of no longer than 5 years post-IPO for a new class of “emerging growth companies” to phase in certain costly SEC requirements ▪ Mini-IPO: Expands Regulation A “mini public offering” cap from \$5M to \$50M ▪ Crowd-funding: Framework for securities-based crowd-funding via regulated online platforms ▪ General solicitation: Lifts ban on advertising for certain private securities offerings

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.⁷³

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.

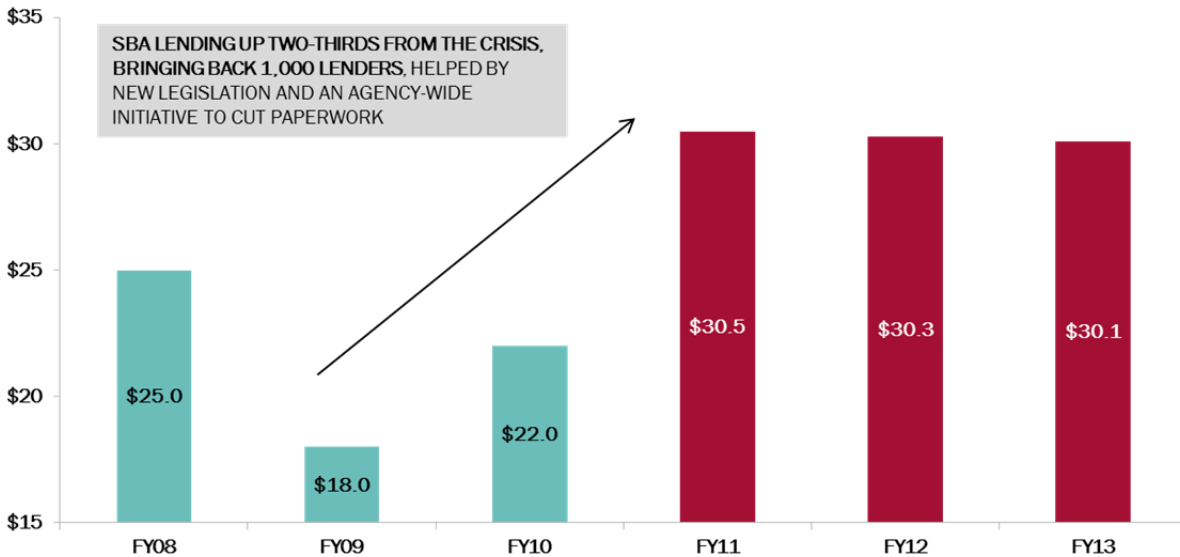
The Small Business Jobs Act permanently increased SBA loan limits. The maximum 7(a) loan size increased from \$2 million to \$5 million and the maximum microloan size grew from \$35,000 to \$50,000. In addition steps were taken to streamline loan paperwork and reduce turnaround times, particularly in 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 since 2011). In 2012 alone, 3,786 financial institutions made an SBA guaranteed loan, up 41

⁷³ Urban Institute. "Competitive and Special Competitive Opportunity Gap Analysis of 7(a) and 504 Programs", (January 2008).

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.⁷⁴

Figure 35: 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

⁷⁴ 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.

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 are not getting the loans they need. To date the Treasury Department has 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. As of December 31, 2013, these state and local programs have generated more than \$240 million in new small business financing.

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 have been 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. To date, these banks have reported levels of increase ahead of the amounts pledged.

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