Small Business Lending: Challenges and Opportunities for Community Banks – Before, During and After the Financial Crisis

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Abstract

The recent decline in small business lending among U.S. community banks has spurred a growing debate about the future roles of small banks in providing credit to U.S. small businesses. This paper adds to that discussion in three key ways. First, our research builds upon existing evidence that suggests the decline in small business lending (SBL) by community banks is a trend that began at least a decade before the financial crisis. Lager banks and nonbank institutions have been playing increasing roles in SBL. Second our work shows that in the years preceding the crisis, small businesses increasingly turned to mortgage credit – most notably, commercial mortgage credit – to fund their operations, exposing them to the property crisis that underpinned the Great Recession. Finally, our work illustrates how community banks face an increasingly dynamic competitive landscape, including the entrance of deep-pocketed alternative nonbank lenders who are using technology to find borrowers and underwrite loans, often using unconventional lending policies. While these lenders may pose a competitive threat to community banks, we explore emerging examples of partnerships and alliances between community banks and nonbank lenders.

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I. Introduction

The ongoing evolution of the small business lending sector presents both challenges and opportunities for community banks. There is a growing body of research examining how the financial crisis and new regulations have translated to a consistent decline in small business lending by community banks. Beginning in the 1990s, competition from large banks began to increase their market share at the expense of community banks. Ten years or more before the financial crisis, getting a standard commercial term loan from the bank down the street began to lose its place as the dominant choice for small businesses seeking credit.

The financial crisis served to accelerate some of those trends, setting the stage for a new post-crisis landscape in credit markets for small firms. Using Federal Reserve data, this paper demonstrates that before the financial crisis, small businesses increasingly used real estate as collateral for loans. During the crisis, credit available from community banks contracted. Subsequently, as the economy and housing market began to recover, large banks leveraged technology to compete for smaller commercial borrowers as they searched for lending opportunities in a low-return environment.

This paper also examines the rise of alternative and nonbank lenders over the past several years. Most recently, nonbank and alternative lenders have begun to compete with banks by introducing sophisticated technologies and new underwriting methods. These lenders typically issue small business loans electronically, with minimal processing time, across a range of sizes, terms and borrower risk profiles. In a bellwether development, non-bank lenders – including payment processors like PayPal and Square – have begun to harness databases of borrower sales history collected during the processing of payments to offer cash-flow loans and other credit products.

In the post-crisis environment, evidence suggests that community banks face a series of challenges and unique opportunities. Community banks face rising competition from large banks. Nonbank lenders are new entrants and face fewer regulatory constraints on their operations. Despite those challenges, evidence suggests community banks have their own opportunities in the emerging new world order for small business lending. For starters, there is evidence that demand for credit is growing. This paper also examines the emerging examples of banks partnering with alternative lenders to fund qualifying loans originated through online platforms.

In the next section, we summarize related literature. Section 3 discusses the increasing roles of nonbanks as SBL funding sources. Section 4 focuses on the banking institutions as SBL funding sources and compares the roles of large vs. small banks over time. Section 5 demonstrates evidence of the increasing role of mortgages as a funding source for small businesses. Section 6 discusses the SBL market environment after the financial crisis and the associated challenges and opportunities for community banks. Finally, Section 7 presents our concluding remarks.

II. Literature Review and Our Contribution

The health of small business lending in the U.S. has been a prominent area of research and debate since the financial crisis. During the crisis, lending standards tightened and many indicators suggested small businesses had difficulty obtaining credit. As credit conditions have thawed and new competitors have entered the sector – particularly alternative and nonbank lenders – one key point of inquiry is the future role of community banks, which were until recently all but synonymous with small business lending. Historically, community banks have been an important source of credit for small business once personal resources have been exhausted.

There is a sizeable body of research portraying a two-decade period during which community banks experienced a loss of small business lending market share. According to Wiersch and Shane (2013), small business loan issuance by community banks began to decline consistently during the 1990s. They demonstrate that banks' balances of commercial loans under $1 million – a traditional definition of small business loans – began to fall steadily between 1995 and 2012. They argue that some of this shift was due to a relative decline in the profitability of small business lending, including time-intensive processing for smaller-balance loans.

Even as the internet began to change the small business lending marketplace, community banks' knowledge of local markets remained an advantage. DeYoung, Frame, Glennon and Nigro (2011) and Peterson and Rajan (2002) noted increasing distance between small business borrowers and lenders as a result of changes in lending technology – such as the adoption of credit scoring technologies by the lending banks. DeYoung, Glennon and Nigro (2008), however, found a significant relationship between loan defaults and the proximity of borrowers and lenders.

Borrowers at least 25 miles away from their bank lender were 10.8% more likely to default on their loans, while borrowers located at least 50 miles away were 22.1% more likely to default on their loans. The paper argues that qualitative information about borrowers is best used by small banks because they are "owned, managed, staffed, and funded by members of the community and thus have an intimate knowledge of the local area and lower transportation costs for on-site visits with new firms." This confirms findings from previous studies, such as in Berger, Miller, Petersen, Rajan and Stein (2005) and Chakraborty and Hu (2006), that small banks have an advantage in relationship lending.

In examining the intersection of mortgage credit and small business lending, Mills and McCarthy (2015) analyzed Small Business Administration data and find that the level of exposure to the housing market by small businesses is significant. During the recent recession, small business-owning households held 59% of their debt in mortgages, versus 38% for other households, and they held another 7% of their debt in residential secured debt. They also report that self-employed households took on increasing amount of home equity debt during the boom period from 1998 to 2007, and that the number started declining after 2008. Kennickell, Kwast, and Pogach (2015) validated previous findings that households with a small business tend to use home equity as collateral for mortgage loans that support their small business, thereby driving up their home equity loan to net worth ratio, suggesting further research on the interplay between home ownership and small business finance. In this paper, we explore the role of mortgages as funding sources for small business finance.

In addition to increasing dependency on mortgage financing for small business financing, some studies find that small businesses have increasingly depended on larger banks as their funding sources. For example, Prager and Wolken (2008), using the 2003 Survey of Small Business Finance (SSBF) data, find that 70% of small businesses cite a big bank as their primary financial institution, while only 25% cite a community bank (and 5% cite a non-bank). Interestingly, their multivariate analysis does not support the view that community banks are best placed to serve the smallest and youngest small businesses.

Similarly, there has been some debate as to whether the long-term consolidation of community banks leads to reduced small business activity once small community banks become part of a big bank through mergers and acquisitions. Jagtiani, Kotlier, and Maingi (2015) show that mergers involving community banks (during the period 2000-2012) have not adversely impacted small business lending activity. In fact, the combined banking firms tended to increase their small business lending after the mergers, compared to small business lending made by the targets and the acquirers combined (before the merger). Consistent with this finding, Hughes, Jagtiani, and Mester (2015) found that larger community banks (between $5 billion and $10 billion in assets) are more efficient in offering SBL than smaller community banks.

In addition to increasing reliance on mortgages and larger banks, there has also been evidence (from SSBF data) of significant increased dependency on the use of nontraditional credit, such as loans from non-bank institutions and business credit cards which have grown dramatically in the past decade. For non-bank lenders, Mester, Nakamura, and Renault (2007) report that finance companies were responsible for an increasing share of loans to businesses over time, reaching one-third by 2006. For other non-traditional credit, the Board of Governors of the Federal Reserve System report (2007) suggests that the rapid payment of outstanding balances by a large fraction of firms indicates that business credit cards and trade credit (borrowing from suppliers) may have been largely used for convenience rather than for long-term financing.

It should be noted that different definitions of small business lending have been used in the literature and each definition has its limitations. Examples include commercial and industrial (C&I) loans with origination amounts less than $1 million regardless of whether the borrowers are actually small – the definition used in bank Reports of Income and Condition (aka Call Reports); loans made to businesses with less than $1million in gross revenue – the definition used in Community Reinvestment Act (CRA) reports; loans made to small businesses (those with fewer than 500 employees) regardless of loan size – the definition used in the SSBF; and C&I loans to non-financial non-corporate borrowers regardless of loan size and size of borrower – the definition used in the Flow of Funds data. Due to these different definitions, the results may not be comparable across studies.

We add to the growing body of small business lending research by exploring various data sources in the same study, and we further explore the impacts of competition and lending conditions before and after the financial crisis. First we find, using Federal Reserve and other sources of data, that large banks have increased their share of small business lending over the past decade. Second, our work shows that as property markets began to rise before the recent financial crisis, small businesses increasingly tapped equity in real estate to fund their business, exposing them to the eventual mortgages crisis. Finally, this paper explores the growth rates and strategies among the expanding sector of alternative and nonbank lenders, some of whom have established formal lending relationships with community banks.

III. Increasing Roles of Nonbank Institutions in SBL

Some of the most frequently used data sources for small business lending come from data reported by banks in their Call Reports and their CRA reports. However, this data only includes small business lending by banking institutions. Call report data defines small business lending by size of loan and CRA data defines small business lending by size of the borrower. Both definitions have limitations. Another data source for SBL that includes non-bank lenders is the Flow of Funds data. The definition of small business lending (SBL) in this data set is loans to non-corporate, nonfinancial borrowers (such as partnerships or individually owned businesses). The disadvantage with this data is that some non-corporate borrowers could be large and some corporate borrowers could be small. By using data from all three sources we can identify overarching trends. Using Flow of Funds data, we explore changes in the volume of small business loans (loans to non-corporate, nonfinancial companies) originated by nonbank institutions over time. Figure 1 shows that small business loans originated by non-depository institutions – i.e.; finance companies, Farm Credit System, and loans from the US government -- increased significantly since late 1990s and continued to rise through the financial crisis and post-crisis periods.

In addition to Flow of Funds data, PayNet's Small Business Credit Conditions Quarterly Report shows supporting evidence of increasing roles of nonbank institutions in small business lending. The SBL data from PayNet includes those loans originated by both banks and nonbank institutions which are members of this network. Paynet classifies business loans as SBL if the maximum outstanding balance that the borrower has ever obtained from all lenders in the PayNet database is under $1 million. In other words, it is the borrower's maximum receivable balance of all obligations reported to PayNet at any given point in the history.

If we assume that the member institutions of PayNet are a good representation of the entire SBL market[1], then Figures 2 and 3 indicate that the overall SBL origination (by banks and

[1] PayNet members must pay a fee to join the network. The benefits they receive from membership are access to peer data. Therefore the group of PayNet members would be biased toward larger participants in the SBL market.

nonbanks) declined significantly during the financial crisis period, while the nonbank funding sources of SBL grew steadily during the same period (as shown in Figure 1). Also, from PayNet data, Figure 4 shows the change in the distribution of lender types (banks, nonbank corporations, and finance companies) over the last decade from 2005 to 2015 – declining SBL market share for banks but increasing SBL market share for nonbank corporations and finance companies. Evidence so far suggests that small businesses have been increasingly depending on nonbank funding sources to finance their businesses.

IV. The Changing Roles of Banks in SBL – Large vs. Small Banks

Despite the evidence in the previous section of the changes in the SBL market, the growth of SBL lending outside the community banking sector is in some sense a relatively new trend. For decades, community banks were the primary source of credit for small businesses. As recently as 1997, small banks, with less than $10 billion in consolidated assets, accounted for 77 percent of the SBL market share issued by commercial banks. However, the ratio dropped to 43 percent in 2015. This is based on Call Report data for small business loans (with origination amount less than $1 million) held by depository institutions. The decline is even more severe for small SBL (less than $100,000), where the market share for small banks under $10 billion declined from 82 percent in 1997 to only 29 percent in 2015 -- see Figures 5B and 7B.

Using Call Report data, Figures 5A, 5B, and 6 report outstanding SBL by banks in different size groups. We inflation-adjust both asset size and the SBL amount to 2014 dollars. Figure 5A demonstrates that the overall SBL outstanding held by depository institutions have increased over the years. However, we observe a broad shift among community banks away from small business lending, relative to larger banks. Figure 5B shows market share of SBL issued by large vs. small banks over the years. Similarly, Figure 6 shows that small business loans as a portion of total assets among small banks (under $1 billion in assets) have been declining over the years. Unlike small community banks, we observe that larger banks seem to have maintained roughly the same SBL ratio to assets over the last two decades. This rise of large bank competition is even more apparent when examining changes in lower-balance small business loans. Figures 7A and 7B, using Call Report data, shows in real terms (dollar value) a 20-plus year decline in loans under $100,000 at community banks, compared to a rise at both large banks and at thrifts. Regardless of whether the data is unadjusted, inflation adjusted or adjusted for asset size, the decline in lending by smaller banks is evident.

We also examine CRA data, which provides detailed information about newly originated or purchased SBL by banks at the county level. In this data set, SBL is defined as loans to businesses with gross annual revenues of less than $1million. Because this data is based on the size of the company and not the size of the loan, it is the data source that best zeros in on credit for small businesses. Figures 8A, 8B, and 8C plot the ratio of newly originated (and purchased) SBL loans in each county that were made by large banks (larger than $10 billion in assets) relative to smaller banks (between $1 and $10 billion) for 1997, 2005, and 2013, respectively. The plots show that large banks have been playing an increasing role in the SBL market over the last two decades, from 1997 to 2005 and 2013. The number of counties where small banks made more than 80% of the small business loans made by banks fell by more than 70% between 1997 and 2013. More details of number of counties dominated by large vs. small banks over the period 1997-2013 are presented in Table 1.

It should be noted that these heat maps are plotted based on the CRA data which excludes banks smaller than approximately $1 billion in assets, thus the blue shade of counties dominated by large banks is likely to be overestimated. Despite this drawback in the CRA data, the dramatically increasing number of blue counties, those dominated by large bank SBL lending, provides strong evidence that large banks have been playing a significantly increasing role in SBL in the last decades.

Robustness Testing: In order to cover all banks, including small banks (under $1 billion) in the analysis, we create similar heat maps using Call report data. This method allows us to look across all banks, but we would be focusing on the SBL outstanding in the banks' portfolio, rather than the SBL origination data reported in CRA. Since Call Report data only provides the overall SBL amount, with no county breakdown, we use the summary of deposit data which reports deposits at each bank by county and assume the same county distribution for SBL and for deposits for all banks smaller than $1 billion (that do not report CRA data). For banks larger than $1 billion (that do report CRA data), we distribute each bank's overall SBL outstanding to each of the counties based on the SBL origination distribution, as reported in the CRA data. The heat maps for outstanding SBL for all banks in the U.S. are presented in Figures 9A, 9B, and 9C for the periods 1998, 2005, and 2013, respectively. While adding the data for smaller community banks and switching to the stock data in Call reports versus the flow data in CRA reports leads to fewer blue counties, the same trend of a declining number of counties dominated by small community banks in the SBL market still is evident. The number of counties where small banks made more than 80% of the small business loans made by banks fell by more than 40% between 1997 and 2013. More details on the number of counties dominated by large banks in the SBL outstanding over the years are summarized in Table 2.

V. Increasing Role of Mortgages as a Source of SBL Funding

One emerging line of inquiry is the role that mortgage credit played in the profile and condition of small business borrowers before and during the financial crisis. This paper argues that mortgage credit in broad terms – residential and commercial alike – rose sharply as a source of small business funding in the years preceding the financial crisis. As property values rose, businesses tapped the underlying equity.

According to flow of funds data, Figure 10 shows the increasing role of mortgages as funding sources for small businesses (non-corporate nonfinancial business), particularly during the housing market boom period of 2000-2007. The next figure, Figure 11, shows the breakdown of mortgages used to fund SBL. Commercial mortgage balances among non-corporate nonfinancial business liabilities rose by a factor of 2.5 between 1999 and 2008, to $1.45 trillion, the largest funding source. Multifamily mortgage balances rose 2.3 times during the same period, while single-family mortgage credit rose by a factor of 2.1. The data likewise suggest that commercial and multifamily credit experienced higher growth relative to the prior decade than did single-family mortgage balances, whose growth rate was modest over the same period. From 1990 to 2000, single-family mortgage credit originated to fund small businesses (non-financial and non-corporate businesses) rose by a factor of 1.3, compared to a three-fold rise in commercial and multifamily balances during the same period.

VI. Post-Crisis Environment for SBL: Challenges and Opportunities

Community banks engaged in small business lending face a number of challenges in the post-crisis environment. The historic advantage community banks have had in making small business loans was their ability to leverage "soft" information like knowledge of a business's cash flow from lock box and checking account relationships to make sound small business loans. Now community bank competitors have developed technology that more efficiently uses multiple sources of information to make speedy lending decisions, greatly reducing the competitive advantage of the type of information community banks have about their customers. The technology also reduces the involvement of lending staff which reduces the cost of making these loans.

The Rise of Alternative Nonbank Lenders to Small Businesses

The shadow lending sector has historically presented challenges for researchers attempting to gauge its size and scope; small business lending is no exception. While a variety of data sources exist, no source is authoritative. Nonbank lenders are subject to little or no regulatory oversight, including disclosure requirements, and data reporting is therefore largely voluntary. Only when these companies become publicly traded is more financial information available. There has been substantial anecdotal evidence that the nonbank alternative small business lending sector has been growing rapidly. Table 3 lists some of the better-known nonbank lenders and the information that was available about their lending volume. Although some of these "new" models have in fact been established for some time (for example, CAN Capital was founded in 1998), most entrants have appeared over the last seven to eight years. DeYoung, Frame, Glennon, McMillen, and Nigro (2008) have attributed the growing distance between lenders and small business borrowers shown in the Small Business Administration (SBA) data partly due to the growth in the shadow banking system. The faster application process, use of alternative data, and reduced collateral requirements continue to make nonbank lenders appealing to small business owners. While the growth rates in the last several years are impressive, the total volume of lending by nonbank lenders (about $190 billion overall, including about $40 billion of loans by finance companies, see Figure 1) does not come close to about $350 billion SBL loans made by the banking industry in 2014 (see Figure 5).

The growth rates reported by the nonbank lenders have attracted institutional investors (venture capital, hedge funds) and some private investors. For example, Kabbage (a working capital lender) was established in 2009, and it expects to issue $1 billion in credit in 2015 alone.[2] The company has tripled its yearly small business loan volume in less than a year.[3] In addition, OnDeck Capital said its quarterly loan volume in the first quarter of 2015 was $416 million, 83% higher

[2] See Darren Dahl "The Six-Minute Loan: How Kabbage is Upending Small Business Lending - and Building a Very Big Business," *Forbes*, May 6, 2015. http://www.forbes.com/sites/darrendahl/2015/05/06/the-six-minute-loan-how-kabbage-is-upending-small-business-lending-and-building-a-very-big-business/

[3] See Kabbage press release, "Kabbage Funding More than $3 Million Per Day," February 3, 2015. https://www.kabbage.com/pdfs/pressreleases/Kabbage-$3mm-Press-Release-2-3-2015.pdf

than the same quarter a year earlier.[4] Figure 12 shows the rapid growth of Lending Club after the introduction of its mall dollar business loan product. Moreover, payments processors PayPal and

Square entered the market recently and are demonstrating strong growth rates -- PayPal Working Capital has lent $500 million to 40,000 businesses from September 2013 to May 2015, and Square has lent more than $100 million to 20,000 small businesses within a year of launching.

The Various Business Models Used by Nonbank Lenders

Table 3 also presents details on the various business models used by nonbank lenders. Many of the earliest nonbank entrants have historically been referred to as "peer-to-peer" (P2P) lenders. As business models have evolved and become more hybrid in nature, they are frequently referred to as the "*marketplace lenders*." In general, marketplace lenders use online platforms that serve as intermediaries to connect borrowers with lenders (individuals and/or institutions). Rather than holding loans on their balance sheets, marketplace lenders generate revenue from transaction fees when they match borrowers with investors wishing to buy loans. Although marketplace lenders used to be characterized by their historical focus on *consumer* credits, their focus has recently shifted toward small *business* loans.

Lending Club has shifted away from a pure P2P model, where loans were funded by individuals who purchased the loans as investments in $25 increments. In 2014, 28 percent of its funding came from institutions, including banks and asset managers.[5] The company received considerable attention in 2014, when it released a new product of unsecured business loans between $15,000 and $300,000 in size.

Behind many of these marketplace lenders is WebBank, an FDIC insured, Utah-chartered Industrial bank. WebBank actually makes the loans and holds them for a short time and then sells them back to the marketplace lender. Lending Club, Prosper and PayPal reportedly use this

[4] See OnDeck Capital Inc., FY15-Q1 Form 10-Q for the Period Ending March 31, 2015 (filed May 13, 2015).
[5] See Noah Buhayar "Lending Club Wants to Broaden Its Membership," Bloomberg Business, April 23, 2015. http://www.bloomberg.com/news/articles/2015-04-23/lending-club-expands-into-business-loans-with-google-alibaba-help

arrangement. The marketplace lender then markets the loans to investors.[6] A majority of the loans on WebBank's books are listed as held for sale. The industrial bank charter allows the loans to be originated under Utah law, including Utah's lack of interest rate restrictions, and avoids the necessity of the marketplace lenders obtaining banking licenses in all the states where they operate. The ability of WebBank to bypass state usury laws is currently being challenged in the courts.

Unlike marketplace lenders, who connect borrowers to investors, *nonbank balance sheet lenders* retain the loans they originate. These lenders often raise capital from private equity and debt financing. Many of these alternative lenders, including Kabbage, On-Deck Capital, and CAN Capital, focus on working capital loans, These entities generally charge a premium, in return for ease of application, reduced collateral requirements and expedited funding. The lending platforms developed by these alternative balance sheet lenders differentiate them from banks. Balance sheet lenders typically use big data to build proprietary platforms that analyze a loan application quickly – for example, Kabbage claims it can assess a loan application in minutes. They often look beyond conventional data sources such as tax returns and credit scores. Many of these entities also directly interface with QuickBooks, PayPal, Square, and IRS tax returns.

Certain payment system providers, including PayPal and Square, have created their own niche in SBL by using data they collect in processing transactions to conduct credit analysis and expedite lending decisions. Loans are issued through PayPal's existing infrastructure and then repaid automatically through deductions from incoming receipts. *Payment processors* have demonstrated an advantage in their direct access to borrowers' sales, cash flow and other financial data. PayPal holds the loans on its balance sheet similar to OnDeck and CAN Capital. PayPal has

[6] WebBank has average total consolidated assets of $246 million and a total capital ratio of 21.87% as of June 30, 2015.

used SBL as a means to grow its volume of payments transactions, rather than as a standalone new line of business.[7]

Table 4 details the underwriting and terms for the loan products provided by the various nonbank lenders. As shown in Table 4, much of the focus of nonbank lenders is on smaller dollar loans for working capital. Many of the lenders only require a personal guarantee. Some take a lien on business assets, but none report taking a lien on personal assets. Interest rates can be competitive with traditional banks, but they do report the potential for much higher loan rates. OnDeck Capital reports an APR of 49.3 percent. All report application processing times of less than 10 to 15 minutes and some report funding in less than 3 days. As far as criteria, many do use credit scores and some state that the minimum credit score considered is 640, typically the dividing line between subprime and prime borrowers. OnDeck reports it will consider lower credit scores for certain types of loans. An exception to the use of credit scores is PayPal which states it does not consider business or personal credit scores. It relies on PayPal sales history. With the streamlined credit approval process, time will tell how well these loans season.

Nonbank lenders continue to develop and adjust their business models, forming a variety of partnerships and alliances with other companies. In 2015, for example, Lending Club established formal relationships with Google and Alibaba where the two tech companies provide lump-sum lending capital for their small business customers through Lending Club platform. Lending Club would handle the underwriting and servicing of those loans, while Google and Alibaba would fund the loans. Another example of a partnership is RiverNorth Capital Management, which recently sought permission from the Securities and Exchange Commission to create a closed-end mutual fund focused on loans originated through P2P lending platforms.[8]

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[7] Panel, New Products from New Players" Filling the Gaps: Summit on Small Business Credit Innovations, Federal Reserve Bank of New York, May 15, 2015.

[8] See Kevin Wack "SEC Petitioned for First-of-Its-Kind Marketplace Lending Fund," *American Banker*, June 25, 2015. http://www.americanbanker.com/news/marketplace-lending/sec-petitioned-for-first-of-its-kind-marketplace-lending-fund-1075088-1.html

Potential Benefits from Bank-Nonbank Partnerships?

Some community banks have started to adjust to the rise in nonbank lenders, as evidenced by new partnerships between banks and alternative lenders. These partnerships are most common among marketplace lenders, who generate revenue from originating loans and placing them with other investors (rather than warehousing the loans). For example in early 2015, Lending Club partnered with BancAlliance, a nationwide network of approximately 200 community banks. Under the agreement, banks direct their customers who need small dollar loans to Lending Club. In return, the bank is provided with the opportunity to purchase the loans made to their customers. If a loan does not meet the bank's lending criteria, that loan is made available to Lending Club's broader investor pool.[9] Banks can also purchase loans from the wider Lending Club portfolio, allowing them to add loans outside their area to their portfolio.

This type of partnership has allowed banks to leverage Lending Club's proprietary platform to make small dollar loans efficiently without investing in new technology. Lending Club benefits from increased transaction volume and from having a larger pool of investors to purchase loans. Meanwhile, banks grow their loan portfolio with minimal overhead by using Lending Club's infrastructure, allowing community banks to mimic the economies of scale of larger national banks.[10] These partnerships are gaining in popularity, as Lending Club's competitor, Prosper, entered into a similar arrangement with another consortium of 160 small community banks, Western Independent Bankers, in early 2015.[11]

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[9] See Lending Club Corporation (2015), FY15-Q1 Form 10-Q for the Period Ending March 31, 2015 (filed May 5, 2015).

[10] See Brian Graham "Opening the Consumer Lending Market for Community Banks," *BankDirector.com*, April 23, 2015. http://www.bankdirector.com/committees/lending/opening-the-consumer-lending-market-for-community-banks/

[11] See Prosper "Prosper Marketplace Partnership with Western Independent Bankers Expands Credit Opportunities for Small Banks and Their Customers," *Prosper*, February 26, 2015. http://blog.prosper.com/2015/02/26/prosper-marketplace-partnership-with-western-independent-bankers-expands-credit-opportunities-for-small-banks-and-their-customers/

There are also examples of community banks licensing technology directly from alternative lenders in order to combine cost-efficient technology with their existing borrower relationships and knowledge of their local markets.[12] Licensing may soon become a more widespread option as one market leader, Kabbage, recently announced their intent to offer licenses to banks.[13]

In addition, community banks can increase customer loyalty by referring them to nonbank lenders when the bank does not offer a product that meets the customer's needs. By providing customers with viable alternatives – it is more likely that these customers will maintain deposit and other banking relationships with the bank and return to the bank for future lending needs.[14] For example, BBVA entered into such a referral agreement with OnDeck in mid-2014, whereby BBVA's customers will get favorable pricing for loans from OnDeck.[15] In addition, in mid-2014, Santander entered into a reciprocal referral agreement with Funding Circle whereby Santander would proactively refer customers looking for SBL loans to Funding Circle. In return, Funding Circle will refer its customers looking for banking services to Santander.[16]

To summarize, nonbank lenders are growing rapidly, but they are far from approaching the volume of traditional bank lenders. However, with their technology platforms and their ability to use alternative information sources to judge creditworthiness, it is possible that they are increasing the availability of credit particularly to newer businesses that do not have the credit history required by traditional lenders. Additionally, as more millennials make up the pool of small

[12] See Ingrid Lunden "Kabbage Grows: The Online Platform for Small Business Loans Raises Another $50M," *Tech Crunch*, May 5, 2014. http://techcrunch.com/2014/05/05/kabbage-50m/

[13] See Pymnts @pymnts "Kabbage to License its Lending Platform," *Pymts.com*, March 24, 2015. http://www.pymnts.com/in-depth/2015/kabbage-to-license-its-lending-platform/

[14] See Mary Wisniewski "Why BBVA Compass is Sending Customers to an Online Rival," *American Banker*, May 8, 2014. http://www.americanbanker.com/issues/179_89/why-bbva-compass-is-sending-customers-to-an-online-rival-1067386-1.html

[15] See Patrick Clark "OnDeck's Latest Deal Shows Banks are Ready to Outsource Some Small Business Loans," *Bloomberg Business*, May 9, 2014. http://www.bloomberg.com/bw/articles/2014-05-09/ondecks-latest-deal-shows-banks-ready-to-outsource-some-small-business-loans

[16] See Chris Cummings "Funding Circle and Santander Deal Hailed as New Era for Funding," *The Yorkshire Post*, June 23, 2014. http://www.yorkshirepost.co.uk/business/business-news/funding-circle-and-santander-deal-hailed-as-new-era-for-funding-1-6689499

business owners, they may be more comfortable with technology and may prefer dealing with an online lender versus an in-person loan officer. However, nonbank lenders have found it beneficial to partner with traditional banks. Nonbanks look to banks for funding and referrals. There are even some indications that nonbanks find it advantageous to originate loans through a traditional bank. Banks are also interested in partnering with nonbanks. They look to nonbank lenders as sources of innovative loan platforms and access to a wider pool of loans that can help them meet the needs of their communities and possibly reduce their concentration risk by investing in loans from a larger area. Given the speed of innovation to date, there is likely to be increased innovation in this space, allowing community banks to make small business loans more efficiently to a wider group of borrowers.

VII. Conclusions

There is little doubt that U.S. community banks, the nation's dominant source of small business loans for decades, are facing a new competitive landscape. Our research shows the emerging landscape features the entrance of fast-growing nonbank lenders as well as a strong competition from large banks, such as business credit cards offered by large banks.

The decline in small business lending among community banks was well underway as long as a decade before the financial crisis, including a secular shift away from smaller-balance loans. Even so, our research adds to existing evidence that shows the crisis, combined with technological advancements, served to perpetuate the ongoing decline in community banks' market share in SBL.

Finally, our research suggests that the rise of alternative nonbank lenders represents both challenges and opportunities for community banks. By using technology and unconventional underwriting techniques, many alternative lenders are competing for borrowers with offers of faster processing times, automatic applications, minimal demands for financial documents and funding as soon as the same day – all services most community banks would struggle to imitate. At the same time, our research suggests these nonbank lenders may offer growth opportunities for community banks, most notably in the examples of formal partnerships and alliances.

Table 1

Number of Counties Dominated by Large Banks in SBL Origination (1997-2013)
Sources: CRA Data

% of SBL Originated by Banks > $10 Billion	**1997**	**2002**	**2005**	**2007**	**2009**	**2011**	**2013**
< 20%	1296	792	351	192	285	415	364
20%-40%	591	831	746	451	528	570	587
40%-60%	511	775	913	871	788	734	733
60%-80%	419	562	837	1085	927	829	825
> 80%	403	268	380	627	697	678	718
Total Counties	3220	3228	3227	3226	3225	3226	3227

Table 2
Number of Counties Dominated by Large Banks in SBL Outstanding (1998-2013)
Sources: Call Report for SBL data, CRA and Summary of Deposits for SBL Distribution across Counties

% of SBL Originated by Banks > $10 Billion	**1997**	**2002**	**2005**	**2007**	**2009**	**2011**	**2013**
< 20%	1946	1685	1700	1414	1289	1374	1156
20%-40%	482	675	731	757	799	709	780
40%-60%	371	465	429	579	566	555	588
60%-80%	226	253	254	355	435	410	497
> 80%	209	155	114	127	144	185	215
Total Counties	3234	3233	3228	3232	3233	3233	3236

Table 3: The Growth of Nonbank and Other Alternative Lenders	
Peer to Peer (P2P) Lenders	
Lending Club[17],[18]	*Launched lending platform for consumer loans with balances <$35k (including small business loans) in 2006*[19] ● From launch through first quarter 2015 issued nearly $9.3 billion in consumer and small business loans.[20] ● Small business loans with balances <$35k grew 68.1% from 2013 to 2014.[21] ● In 2015 $23.2M small business loans with balances <$35k originated through second quarter.[22] *Expansion of Small Business Loan Offerings* ● March 2014: Launched new unsecured small business loan product with loans ranging in amount from $15k-$300k.[23] ● January 2015: Google partnership.[24] ● February 2015: Alibaba partnership.[25]
Funding Circle USA	*Founded in the UK in 2010; Expanded to the US in 2013*[26]*,* ● >$1B small business loans funded in the US and UK as of April 2015 (>10k loans)[27] ● Lending ~$75M a month as of April 2015[28] ● > 40k investors participating in the marketplace as of April 2015[29]
Balance Sheet Lenders	
OnDeck Capital	*Established in 2007; IPO in 2014*[30] ● Originated more than $2B small business loans since 2007 launch. ● Loan originations increasing at 159% compound annual growth rate from 2012 to 2014. ● Originated $416M small business loans during 1Q2015, up 83% from the prior year.
Kabbage	*Founded in 2009* ● Originated more than $750M small business loans since 2009 launch.[31] ● Tripled its daily small business loan origination volume in less than a year (2015: $3M a day vs 2014: $1M a day).[32]

[17] Lending Club Corp., Form 10-Q Quarterly Filing for the Period Ending March 31, 2015 (filed May 5, 2015).
[18] Buhayer, Noah. "Lending Club Wants to Broaden Its Membership," *Bloomberg Business*, April 23, 2015.
[19] Homepage. (n.d.) Retrieved September 8, 2015 from Lending Club website. (https://www.lendingclub.com/).
[20] Lending Club Corp. (2015) "1Q15 Prepared Remarks," May 5, 2015.
[21] Lending Club Statistics. (n.d.) Retrieved September 8, 2015 from Lending Club website (https://www.lendingclub.com/info/download-data.action).
[22] *Id.*
[23] Lending Club Corp. (2015) FY14 Form 10-K for the Period Ending December 31, 2014 (filed February 27, 2015).
[24] Lending Club Corp. (2015) "Google and Lending Club Partner to Deliver New Business Financing Program" (company press release), January 15, 2015.
[25] De La Merced, Michael. (2015) "Alibaba and Lending Club to Form Financing Partnership" *The New York Times.* February 3, 2015.
[26] Zeitlin, Matthew. "Small Business Lender Funding Circle Raises $150 Million," *BuzzFeed News*, April 22, 2015.
[27] *Id.*
[28] *Id.*
[29] About. (n.d.) Retrieved September 8, 2015 from Funding Circle website (https://www.fundingcircle.com/us/about/).
[30] OnDeck Capital Inc., FY15-Q1 Form 10-Q for the Period Ending March 31, 2015 (filed May 13, 2015).
[31] Dahl, Darren. (2015) "The Six-Minute Loan: How Kabbage is Upending Small Business Lending - and Building a Very Big Business," *Forbes*, May 6, 2015.
[32] Kabbage Inc. (2015) "Kabbage Funding More than $3 Million Per Day" (company press release), February 3, 2015.

Payments Processors	
PayPal Working Capital	*Launched in September 2013* • Funded $500M to 40k businesses as of May 2015.[33] • Raised maximum loan amount to $85k from $20k.[34] • Net receivables grew 26.3% during 1Q2015, from $99M as of December 31, 2014[35] to $125M as of March 31, 2015.[36]
Square	*Began Offering loans in 2014* • Loaned more than $100M to 20k small businesses within a year of launch.[37]

[33] N.A. "Why PayPal Working Capital Was A No-Brainer," *PYMNTS.com*, May 8, 2015.
[34] *Id.*
[35] eBay Inc. (2015) FY14 Form 10-K Annual Report for the Period Ending December 31, 2014 (filed February 6, 2015).
[36] eBay Inc. (2015) FY15-Q1 Form 10-Q Quarterly Report for the Period Ending March 31, 2015 (filed April 23, 2015).
[37] Weinberger, Matt. "Square has Advanced $100 Million to Small Businesses," *Business Insider*, April 16 ,2015.

TABLE 4: ALTERNATIVE LENDERS – UNDERWRITING AND TERMS

ALTERNATIVE SMALL BUSINESS LENDER	LOAN AMOUNT	INTEREST RATES	APPLICATION AND FUNDING TIME	BORROWER CRITERIA
Marketplace Lenders				
LendingClub	Consumer Small Business Loan: $1k-$35k[38] Small Business Loans: $15k-$300k[39]	Annualized rates of 8%-32% (including origination fees, which are 1%-6% of balance)[40]	Pre-approval in minutes.[41] Approval and funding process typically takes 7 days.[42]	● No collateral required for loans under $100k.[43] ● Minimum standards for consumer small business loan include (but are not limited to): Minimum credit score of 660; 3 years of credit history; 2; limited credit inquiries within past six months.[44] ● Minimum standards for other small business loans: Annual sales greater than $75k; in business for at least 2 years;[45] own at least 20% of the business; no recent bankruptcies or tax liens.[46]
Prosper Marketplace	Consumer Small Business Loan: $2k-$35k[47]	5%-36%[48] Plus 1%-5% origination fee[49]	Online application.[50] Funding occurs 2-8 business days after investors are secured.[51]	● No collateral required.[52] ● Minimum standards for loans: Minimum credit score of 640; Debt-to-Income ratio of less than 50%; Maximum number of inquiries in the past 6 months: 7.[53]
Funding Circle USA	$25k-$500k[54]	5.49%-22.79%[55]	Loan application	● Collateral required. Lien on business assets

[38] LendingClub Corp. (2014) FY14-Form 10-K Annual Report for the Period Ending December 31, 2014 (filed February 27, 2015).
[39] *Id.*
[40] *Id.*
[41] *Id.*
[42] How Long Does It Take to Get My Loan? (n.d.) Retrieved September 8, 2015 from LendingClub website (http://kb.lendingclub.com/borrower/articles/Borrower/How-long-does-it-take-to-get-my-loan).
[43] Business Loans. (n.d.) Retrieved September 8, 2015 from LendingClub website (https://www.lendingclub.com/business).
[44] LendingClub Corp. (2015) FY14-Form 10-K Annual Report for the Period Ending December 31, 2014 (filed February 27, 2015).
[45] Laplanche, Renaud; Lending Club Corp. (2015) "Affordable Credit for Business Owners," (conference presentation), "Filling the Gaps: Summit on Small Business Credit Innovations," Federal Reserve Bank of New York, May 15, 2015.
[46] Business Loans. (n.d.) Retrieved September 8, 2015 from Lending Club website (https://www.lendingclub.com/business).
[47] Loan Types. (n.d.) Retrieved September 8, 2015 from Prosper website (https://www.prosper.com/loans/loan-types).
[48] *Id.*
[49] Prosper Funding LLC and Prosper Marketplace, Inc. (2015) FY14-Form 10-K Annual Report for the Period Ending December 31, 2014 (filed April 6, 2015).
[50] Prosper Borrower Help. (n.d.) Retrieved September 8, 2015 from Prosper website (https://www.prosper.com/help/borrowing).
[51] *Id.*
[52] Get a Personal Loan for Your Small Business. (2015) Retrieved September 8, 2015 from Prosper website (https://www.prosper.com/loans/loan-types/personal-loans-business).
[53] Prosper Funding LLC and Prosper Marketplace, Inc. (2015) Prospectus dated Aug. 13, 2015.
[54] Business Loans. (n.d.) Retrieved September 8, 2015 from Funding Circle website (https://www.fundingcircle.com/us/small_business_loans).

		Plus 1%-5% origination fee[56]	takes less than 10 minutes.[57] Funding in under 10 days.[58]	and a personal guaranty from primary business owners is required.[59] ● Factors Considered in Application: Credit score; real time cash flow; 3 years Business tax returns; 1 year personal tax return; 6 months business bank statement; online customer reviews; For loans over $200k: balance sheet and income statement; outstanding loans and credit profile.[60]
Balance Sheet Lenders				
OnDeck Capital[61]	Term Loan: $5k-$250k[62] Line of Credit: $20k maximum[63]	Aggregate effective interest rate of 37.7% on all loans.[64]	Application and approval in minutes.[65] Funding within 1 business day.[66]	● No collateral required. Lien on business assets and a personal guaranty is required.[67] ● Underwriting standards: Minimum credit score of 500; >$100K in annual revenue; In business for at least 1 year.[68] ● Average borrower has been in business for 10 years, and at least $1 million in annual revenue.[69]
Kabbage[70]	Line of Credit: $2k-$100k	Loans are paid off over 6 months. No "interest" charged. Fees are 1%-12% for first two months, and 1% for each of the	Application and funding in minutes.	● No collateral is required. Personal guarantee is required. ● Factors Considered in Application: Proprietary model that looks at real time business data (IRS, QuickBooks, eBay, PayPal, Amazon, Etsy, Square, etc.), credit score, average monthly revenue, seller rating, time in business, and

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55 *Id.*
56 *Id.*
57 *Id.*
58 Compare Us. (n.d.) Retrieved September 8, 2015 from Funding Circle website (https://www.fundingcircle.com/us/compare).
59 General Q&As. (n.d.) Retrieved September 8, 2015 from Funding Circle website (https://www.fundingcircle.com/us/support).
60 *Id.*
61 OnDeck Capital Inc. (2015) "OnDeck Reports First Quarter 2015 Financial Results" (company press release), May 4, 2015.
62 OnDeck Term Loans (n.d.) Retrieved September 8, 2015 from OnDeck Capital website (https://www.ondeck.com/business-loans/term).
63 OnDeck Line of Credit. (n.d.) Retrieved September 8, 2015 from OnDeck Capital website (https://www.ondeck.com/business-loans/line-of-credit).
64 On Deck Capital Inc. (2015) FY15-Q1 Form 10-Q Quarterly Report for the Period Ending June 30, 2015 (filed August 11, 2015).
65 *Id.*
66 *Id.*
67 Frequently Asked Questions. (n.d.) Retrieved September 8, 2015 from OnDeck website (https://www.ondeck.com/faqs).
68 Are you a small business in need of fast funding? (n.d.) Retrieved September 8, 2015 from OnDeck website (https://www.ondeck.com/business-loans/loan-qualifying).
69 Gellert, Andrea; OnDeck Capital. (2015) Conference presentation at "Filling the Gaps: Summit on Small Business Credit Innovations," Federal Reserve Bank of New York, May 15, 2015.
70 How Kabbage's Small Business Loans Work. (n.d.) Retrieved September 8, 2015 from Kabbage website (https://www.kabbage.com/how-it-works).

		remaining two months.		other unconventional metrics (online reviews and Facebook and Twitter followers).[71] ● Kabbage performs verification by automatically obtaining business data and instantly verifying bank account information.
Fundation[72]	Working Capital Loan: $20-$150k Business Expansion Loan: $20-$500k	APR from 8% Plus 2%+ origination fee	Application takes 10 minutes.[73] Funding can occur in as little as 3 business days.[74]	● No collateral required. Lien on business assets and a personal guaranty is required. ● Factors Considered in Application: Credit score; 2 years Business tax returns; 3 months business bank statements. ● Minimum Standards for Loans: Annual sales greater than $100k; in business for at least 2 years; have at least 3 employees.
Payments Processors				
PayPal Working Capital[75]	Maximum loan of 15% of annual PayPal sales, up to $85k.	Single fixed fee based on PayPal sales history, loan amount, and daily repayment deduction.	Application and funding in minutes.	● No personal guarantee required. ● Factors Considered in Application: PayPal sales history of the business; Personal and/or business credit scores are not considered. ● Minimum Standards for Loans: >$20K annual PayPal receipts.

[71] Dahl, Darren. (2015) "The Six-Minute Loan: How Kabbage Is Upending Small Business Lending – And Building a Very Big Business," *Forbes*, May 25, 2015.

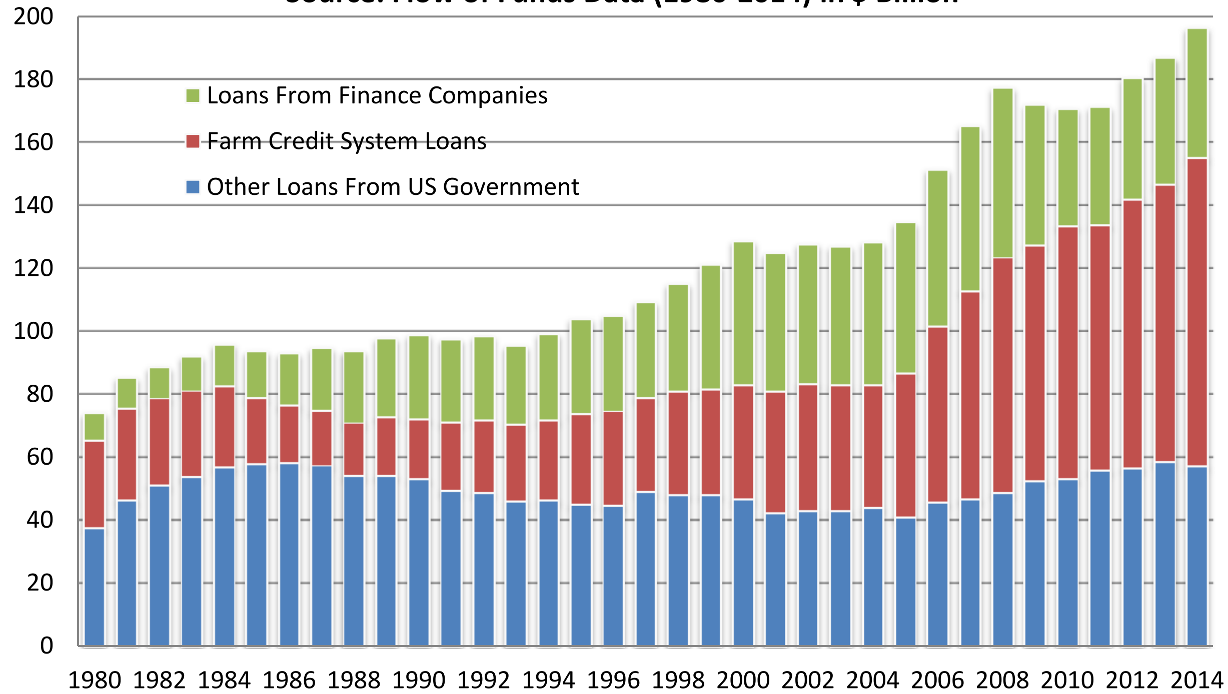
[72] The Best Product on the Market. (n.d.) Retrieved September 8, 2015 from Fundation website (http://www.fundation.com/how-much-can-i-borrow/#product).

[73] Experience. (n.d.) Retrieved September 8, 2015 from Fundation website (http://www.fundation.com/small-business-loans/#experience).

[74] Frequently Asked Questions. (n.d.) Retrieved September 8, 2015 from Fundation website (http://www.fundation.com/faq).

[75] Working Capital Tour. (n.d.) Retrieved September 8, 2015 from PayPal website (https://www.paypal.com/us/webapps/workingcapital/tour).

Figure 1: Breakdown of Other Loans and Advances (as Funding Source to Noncorporate Nonfinancial Companies)
Source: Flow of Funds Data (1980-2014) in $ Billion



Data Source: Flow of Funds Data

Figure 2: Small Business Lending Index: Year Over Year Change (2006:Q1 to 2015:Q1)
Sources – PayNet Small Business Credit Conditions Report

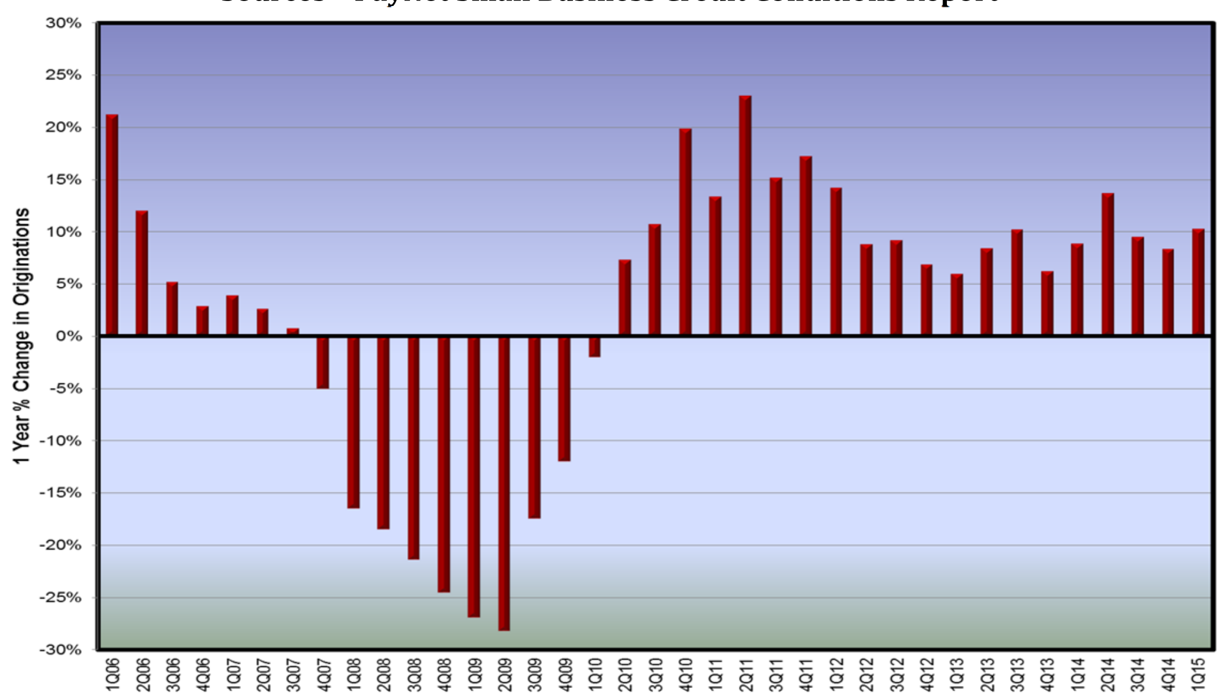


Figure 3: Small Business Lending Index: National (2006:Q1 to 2015_Q1)
Sources – PayNet Small Business Credit Conditions Report

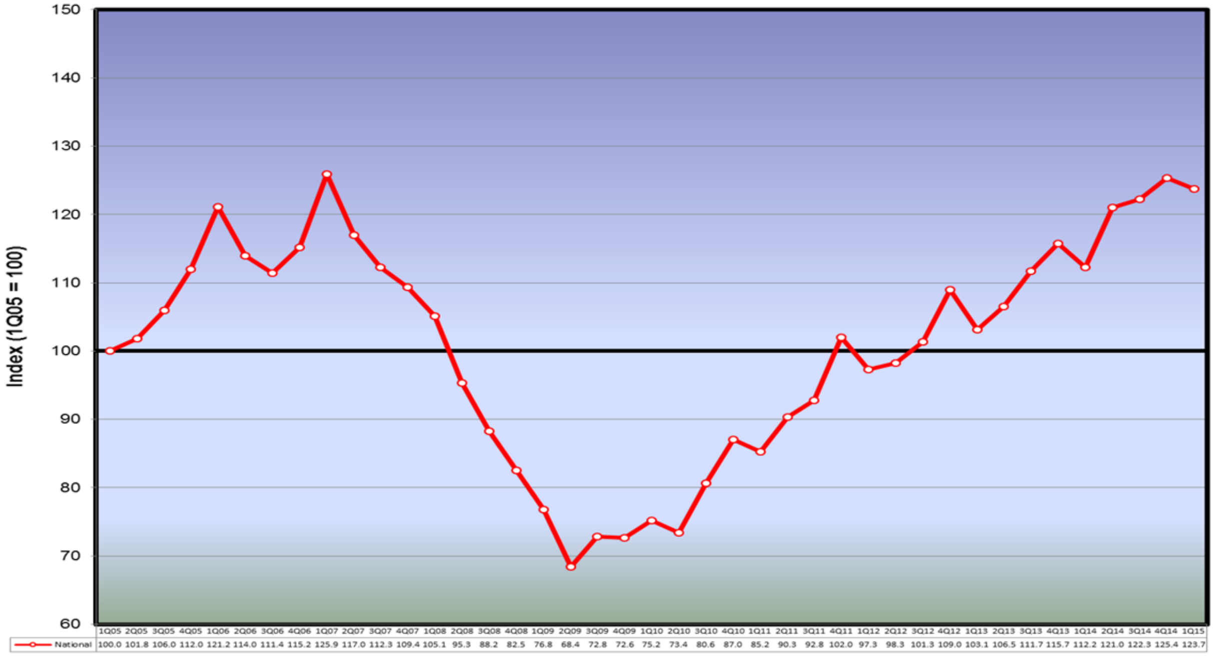


Figure 4: Lender Type Distribution for Small Business – Comparing 2005 vs. 2015

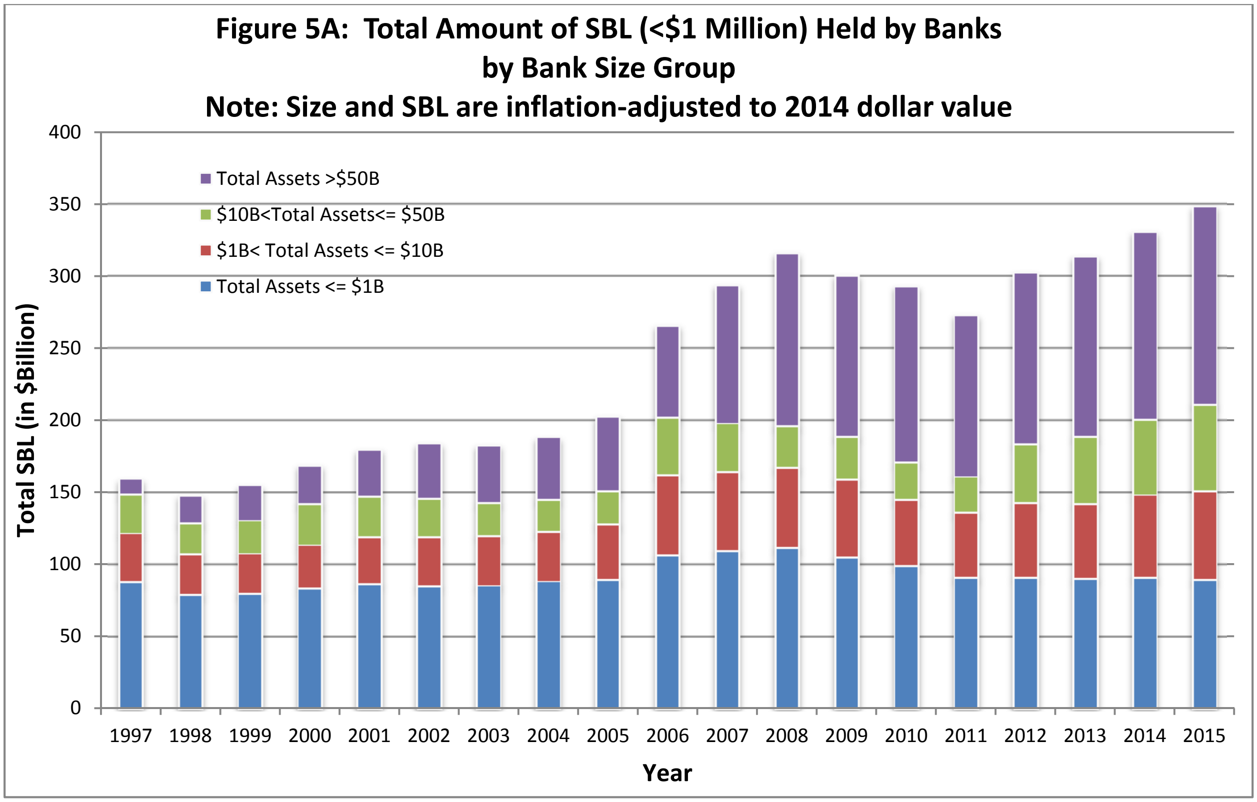
As of 2015:Q1

Lender Type	% Share
Banks	61.3%
Corporations	26.9%
Finance Companies	11.8%
Total	**100%**

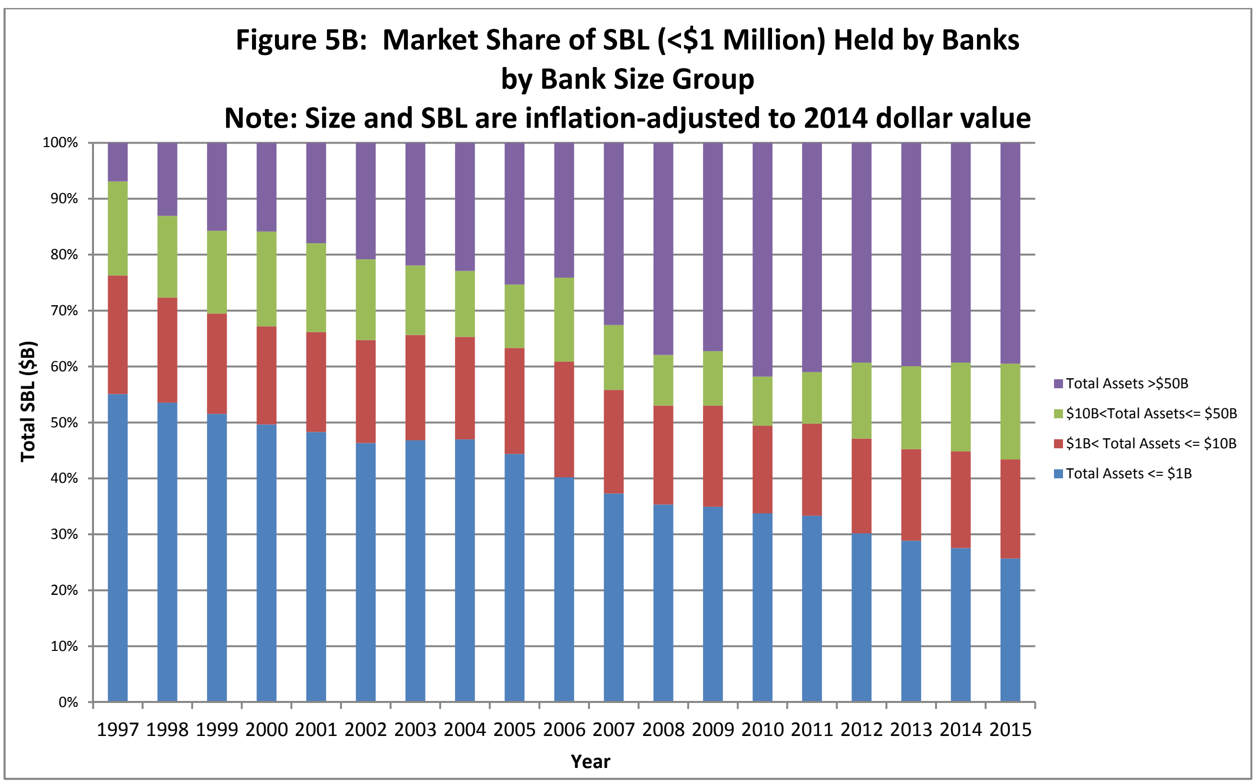
As of 2015:Q1

Lender Type	% Share
Banks	56.3%
Corporations	28.3%
Finance Companies	15.4%
Total	**100%**

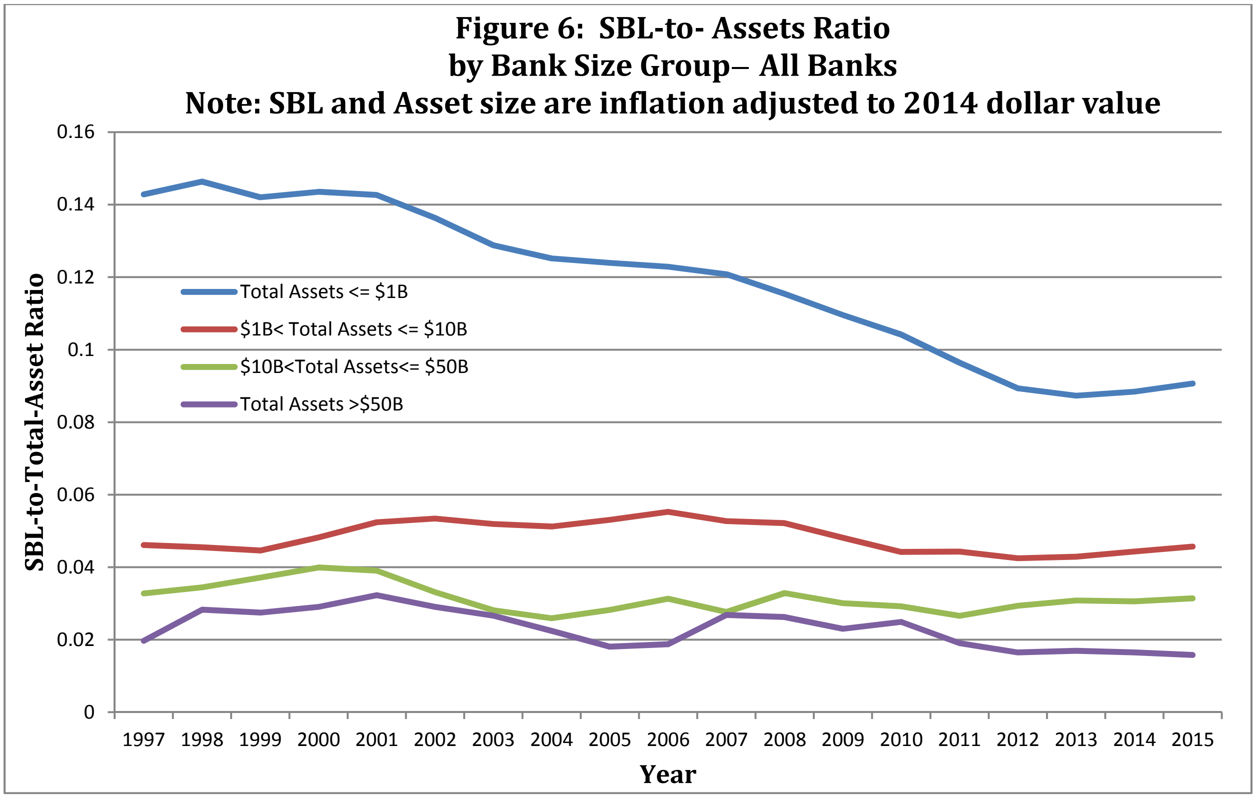
Source: PayNet Small Business Credit Conditions Report



Data Source: Call Reports



Data Source: Call Reports



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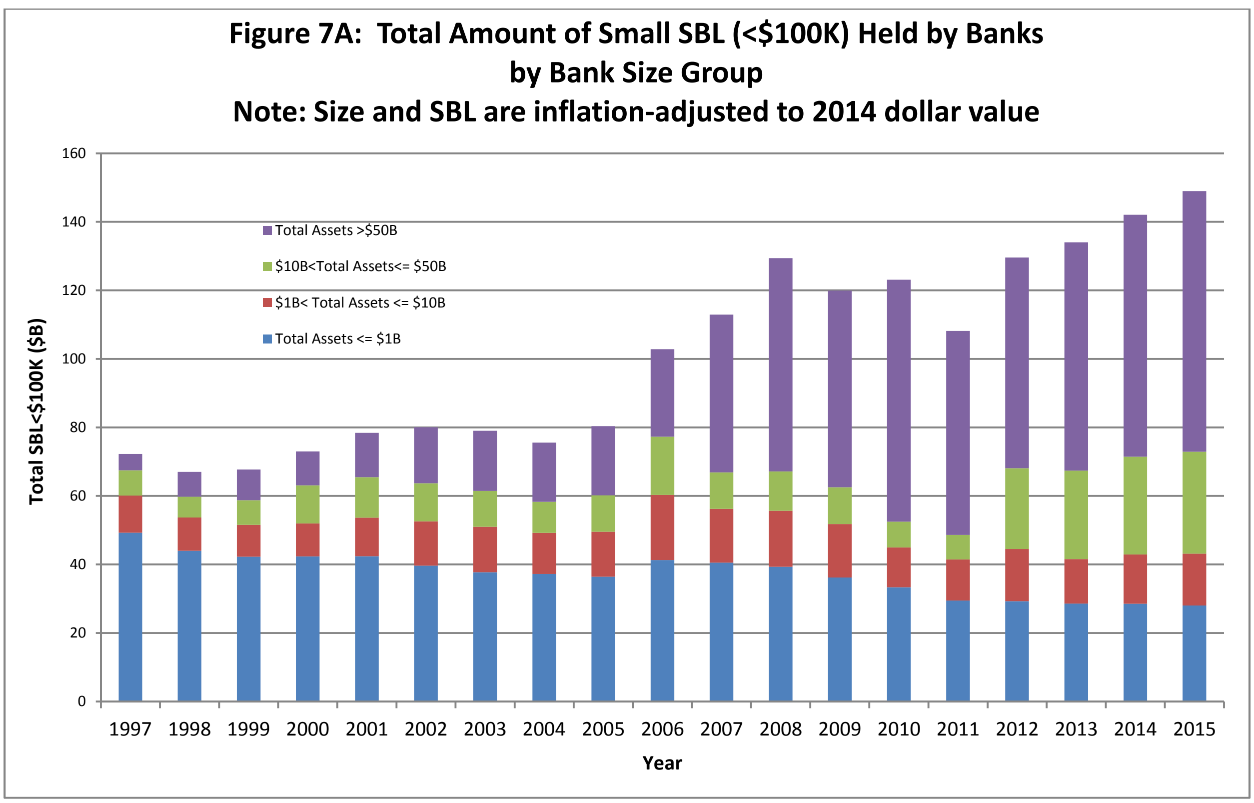

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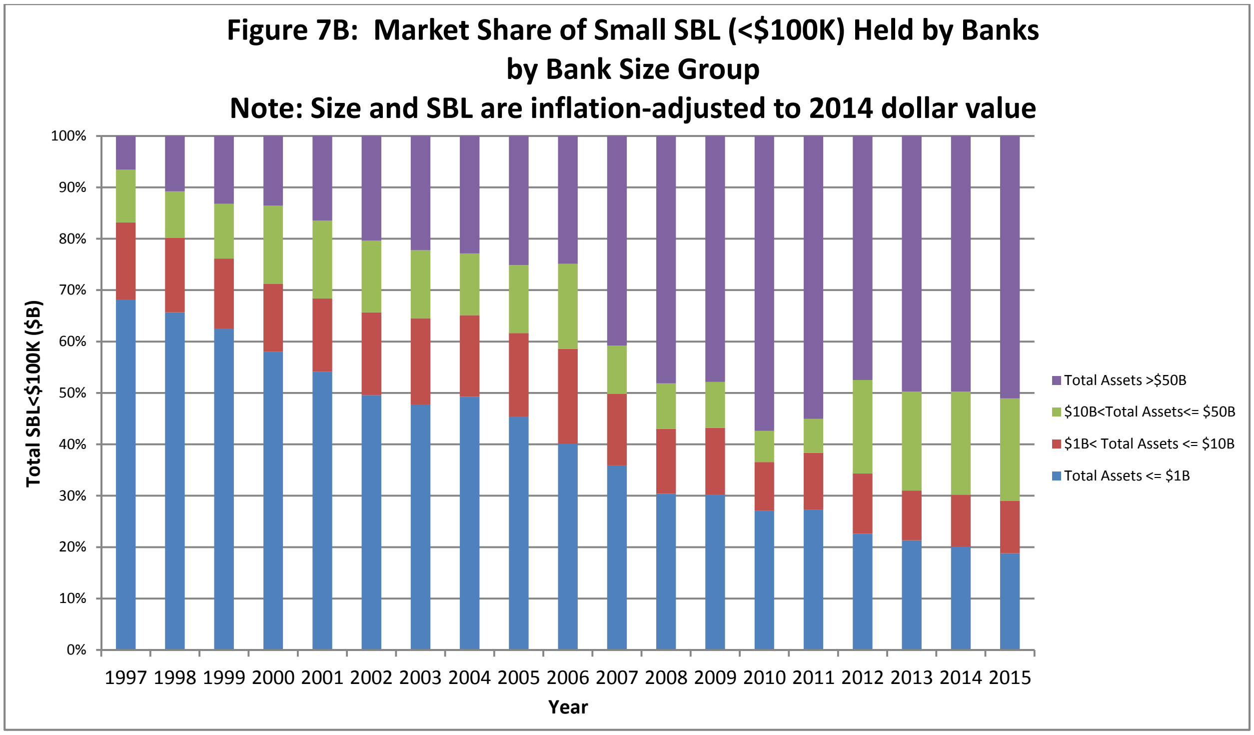


Data Source: Call Reports

Figure 8A:

Percent of Newly Originated or Purchased Small Business Loans by Large Banks (> $10 Billion) by County
Source: Community Reinvestment Act Data 1997

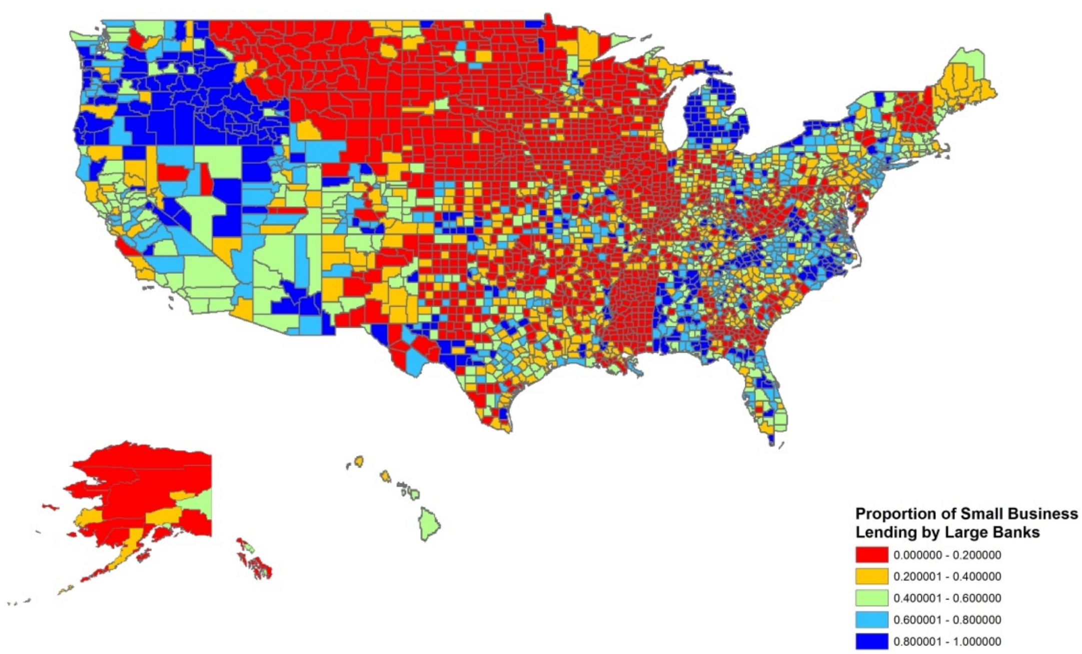


Figure 8B:

Percent of Newly Originated or Purchased Small Business Loans by Large Banks (> $10 Billion) by County
Source: Community Reinvestment Act Data 2005

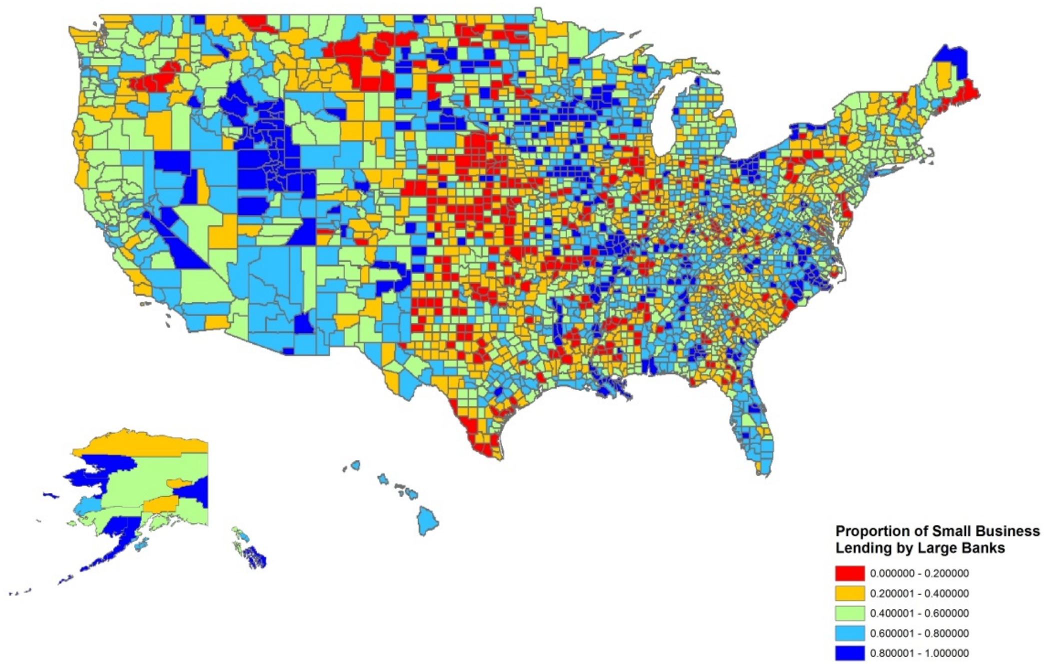


Figure 8C:

Percent of Newly Originated or Purchased Small Business Loans by Large Banks (> $10 Billion) by County
Source: Community Reinvestment Act Data 2013

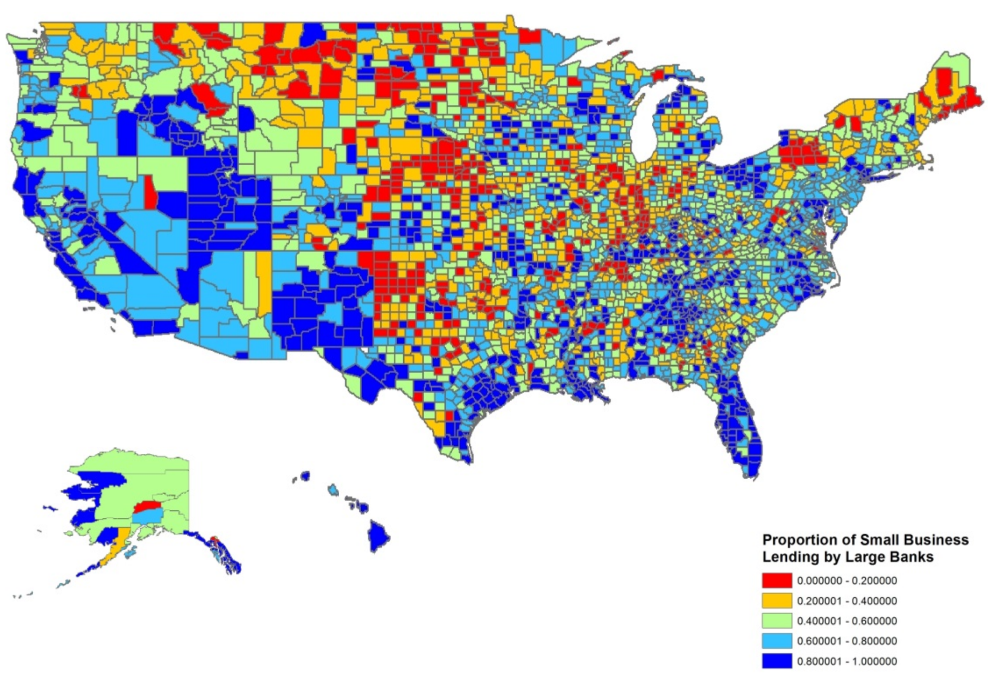


Figure 9A:

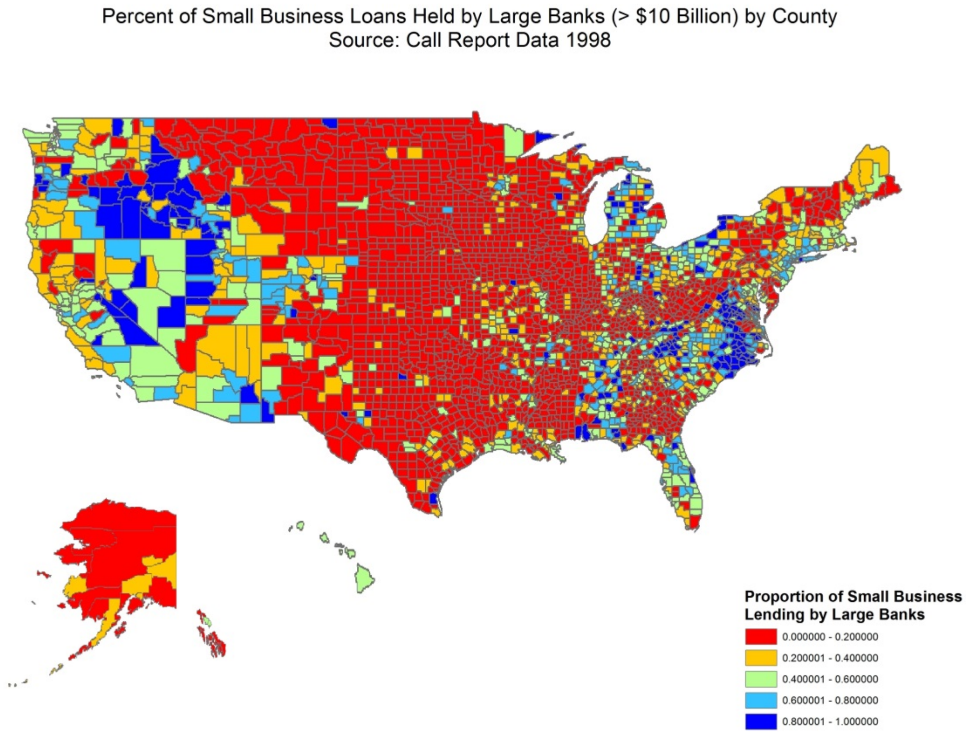


Figure 9B:

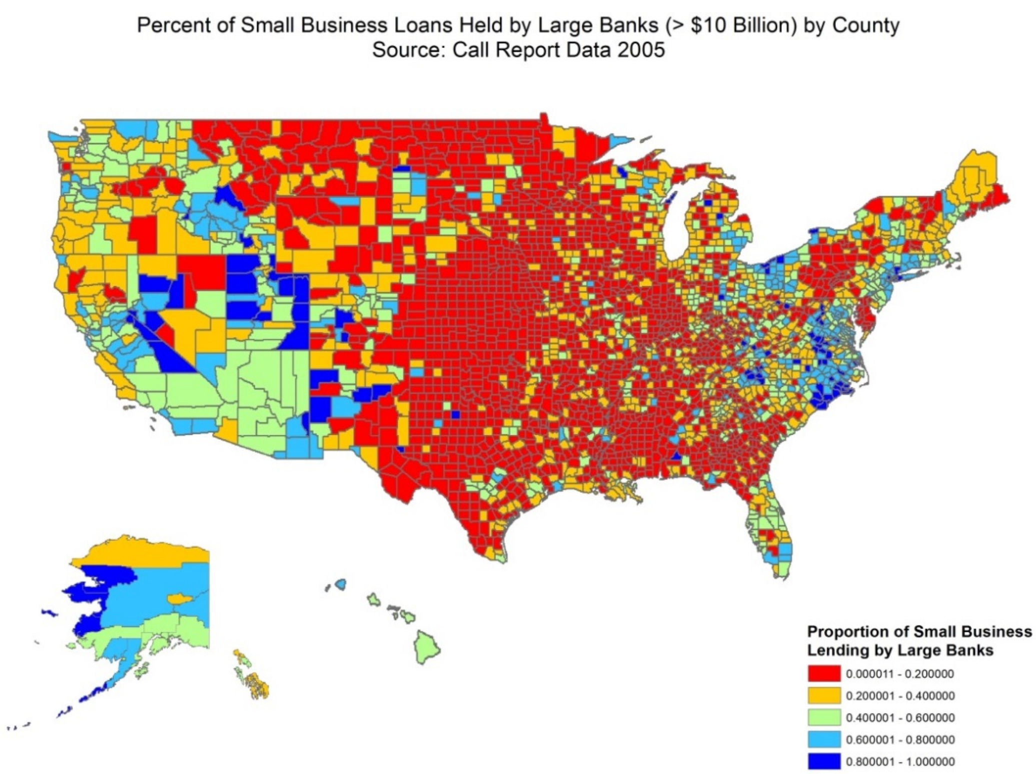
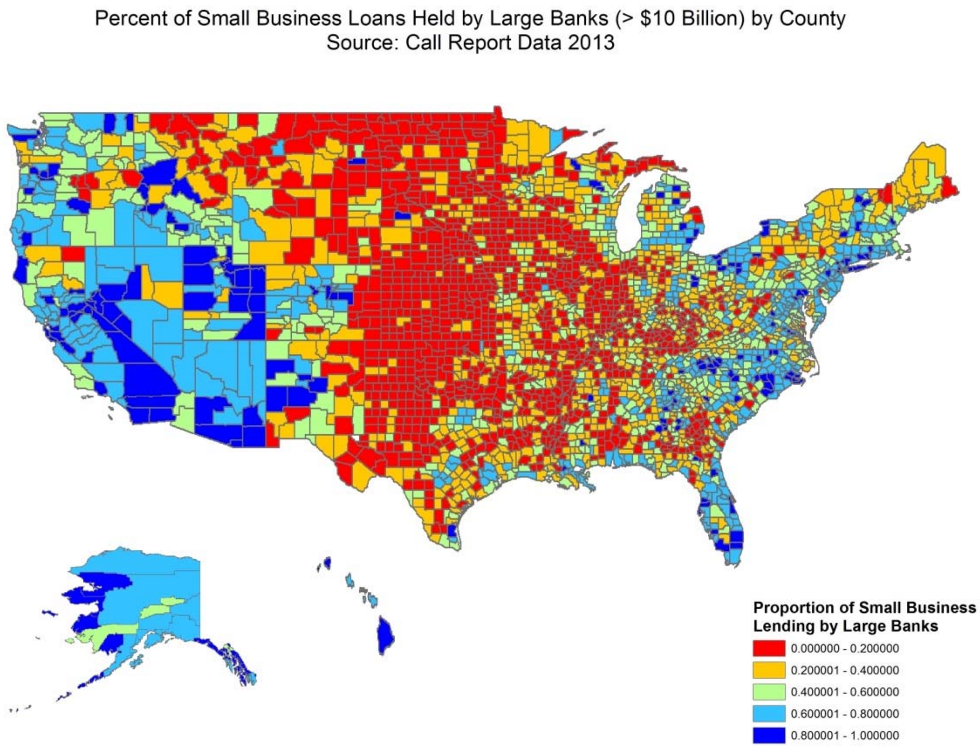
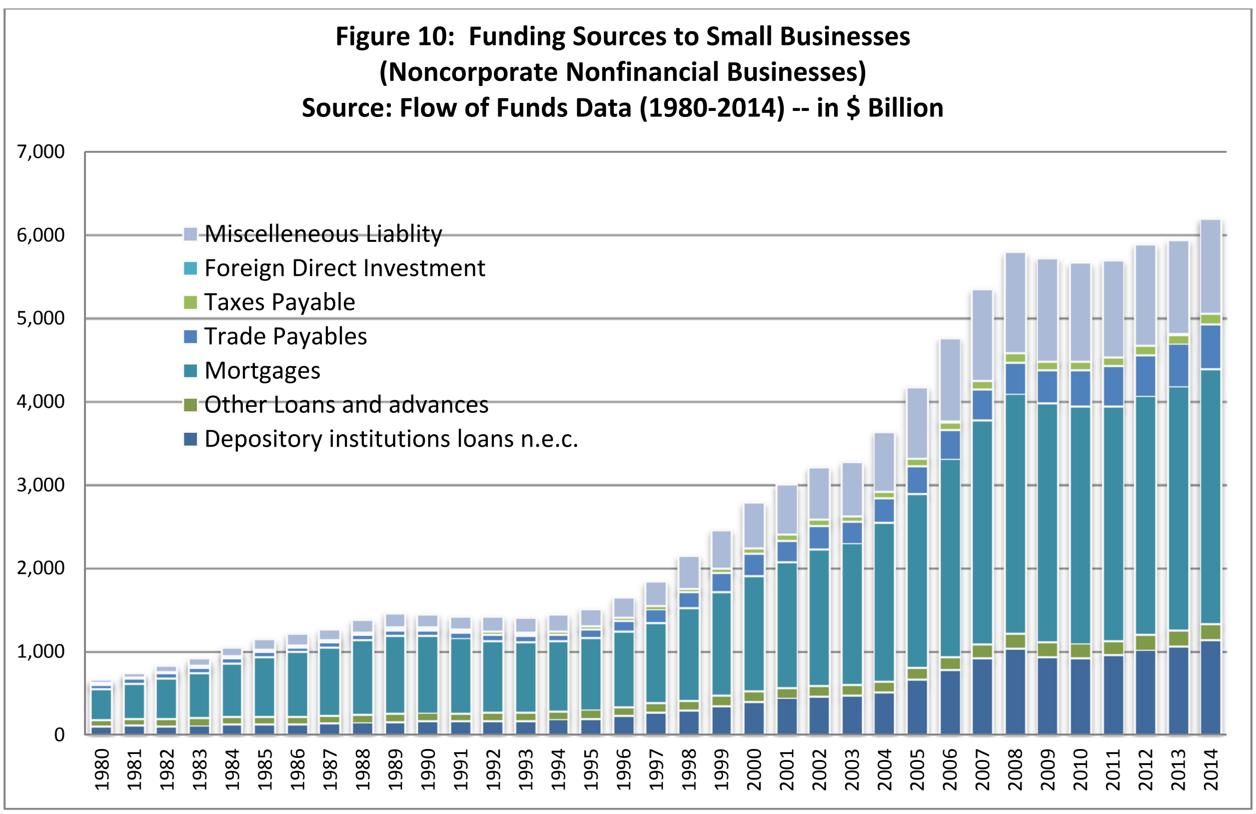
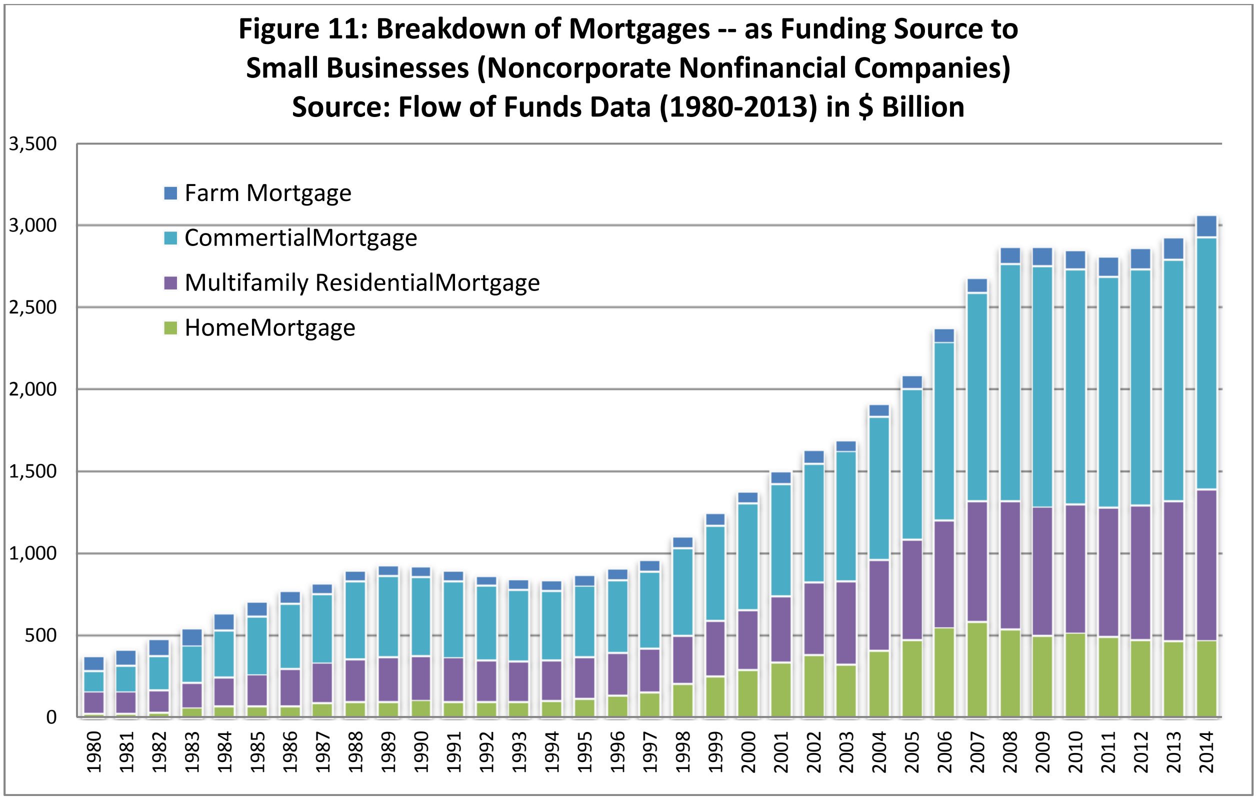


Figure 9C:

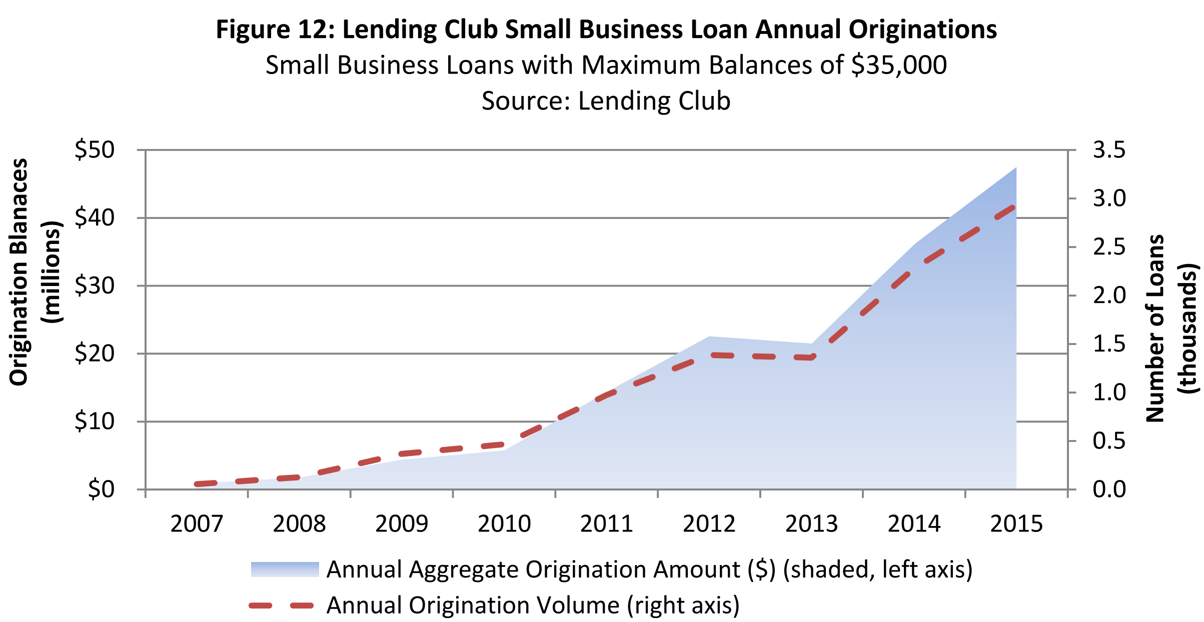




Data Source: Flow of Funds Data



Data Source: Flow of Funds data



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