

A Preliminary Causal Analysis of Small Business Access to Credit during Economic Expansion and Contraction

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Abstract

Access to credit is considered vital for small business survival. Many small-business owners in the United States indicate that one major obstacle to entry or expansion of their small business is the availability of sufficient intermediate and long-term capital to support their working capital and fixed-assets requirements. Relying on small business lending data from 2003 to 2009 collected under the Community Reinvestment Act (CRA), the paper examines small and medium-sized enterprise access to credit in the United States and makes policy and research recommendations. Data show that the number of loans, the average loan amount and the number of dollars available in credit to small business declined dramatically between 2007 and 2009. The paper addresses the concern that in reducing the ranks of the banking industry, the mortgage crisis and ensuing recession may have also pared small business lending.

JEL classification numbers: G21, G28, G32, H32, H81, O16

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1 Introduction

Small businesses—defined here as nonfarm entities with fewer than 500 employees—account for about half of private-sector output, employ more than half of private-sector workers, and generate a large share of new jobs.

Access to credit is considered vital for small business survival and commercial banks have often been regarded as the most important institutional suppliers of credit to these businesses. Based on a 2003 survey, roughly 60.4 percent of all small firms used traditional credit (i.e., credit lines, loans, and/or capital leases); and 68.0 percent of them obtained their credit from the banking sector (Williams and Ou 2008). Similar to

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established businesses, bank credit also plays a significant role for new business start-ups. Various studies have found a link between credit availability and firm creation (Cetorelli and Strahan 2004; Black and Strahan 2002).

Many small-business owners indicate that one major obstacle to entry or expansion of their small business is the availability of sufficient intermediate and long-term capital to support their working capital and fixed-assets requirements. In fact the recent credit crunch has underscored the reliance of the entire economy on the nation's banking institutions. (Laderman and Reid, 2010)

The paper examines small and medium-sized enterprise access to credit in the United States and makes policy and research recommendations. In the first section, it briefly reviews the literature on small business lending and provides an overview of the small business lending data. In the second section, it offers descriptive statistics and maps documenting trends in small business lending across the country. In the final section, it discusses the implications of this research for policy and suggests avenues for future research.

2 Data and Methods

This paper relies on small business lending data from 2003 to 2009 collected under the Community Reinvestment Act (CRA). Banks with assets of at least \$1 billion are required to report the geographic distribution of their small business lending, providing information about the number, amount, and census tracts of loans under \$1 million in size. Reportable loans include both commercial and industrial (C&I) loans and loans secured by nonresidential real estate and are defined to include extensions of new loans, granting of new credit lines, and refinancing of existing loans. In 2003, about 1,640 banks and 470 thrifts filed reports, accounting for almost four-fifths of the total volume of small business loans outstanding in June of that year (Federal Financial Institutions Examinations Council 2004). The CRA defines small business lending as loans of less than \$1 million made for business purposes and/or loans made to businesses with less than \$1 million in revenues. (Laderman and Reid, 2010)

Over the last three years, the financial crisis and ensuing recession have led to tectonic shifts in the availability of credit, especially for small businesses (Krozner 2008; Laderman and Reid 2010). Data show that the number of loans to small businesses has dropped from 5.2 million loans in 2007 to 1.6 million in 2009. The drop in the number of dollars available in credit to small businesses is also dramatic: in 2007, small businesses accessed nearly \$137 billion in loans and lines of credit; in 2009, this amount had dropped by nearly half, to \$73 billion (FFIEC 2010).

2.1 Trends in Small Business Lending

For the nation as a whole, the data demonstrate a clear expansion and contraction cycle in small business credit. Figure 1 presents data on the number and dollar volume of small business loans in the United States between 2003 and 2009.

Both the number and dollar volume of small business loans peaked in 2007 and then dropped dramatically in 2008; by 2009, both measures had dropped below 2003 levels. This is consistent with broader measures of C&I lending; in almost every recession, C&I

loan growth peaks just before the start of the recession, falls during the recession, and does not turn back upward until after the recession has ended (Keeton 2009). The graph also shows that between 2005 and 2007, large banks changed the nature of their small business lending in that they originated many more loans for smaller amounts. In 2005, the average loan amount calculated at the census tract level was \$70,500; in 2007, the average loan amount had dropped to \$41,500. By 2009, this trend had reversed. Although we cannot explain this shift, it is possible that small business owners during this time period used home equity lines of credit or money from their home refinancing to meet their credit needs (Laderman and Reid, 2010).

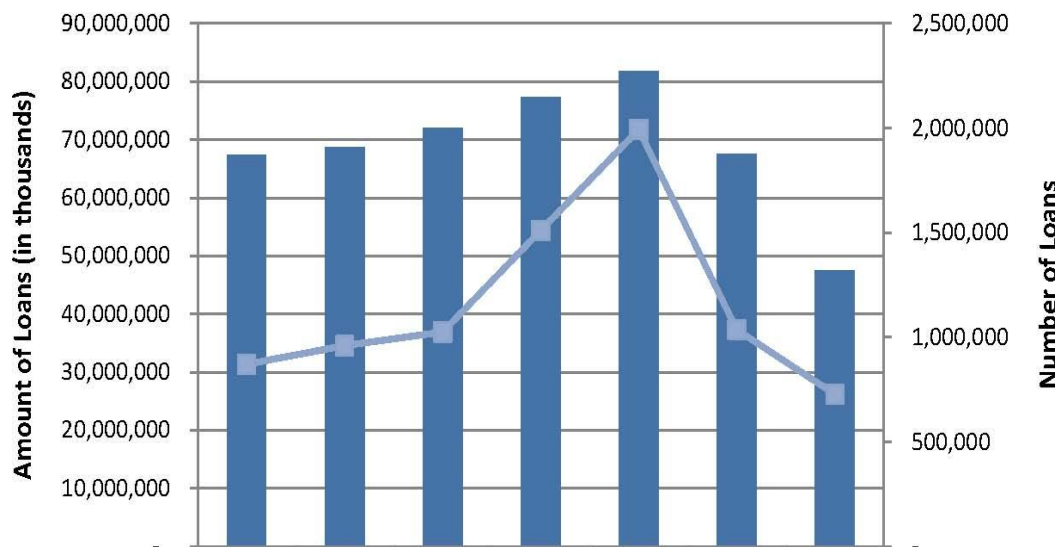


Figure 1: Trends in US Small Business Lending, 2003-2009

Since the crisis, small businesses have generally used the same types of credit as they did during the boom, but they experience less availability. One recent survey found that as of July 2009, 46 percent of small business owners relied on bank loans to finance their business operations and that bank loans were the most common source of financing, followed by earnings from the business, and credit cards. (Laderman and Reid, 2010).

2.2 Examining the Continued Contraction in Lending: Supply, Demand, and Regulation Arguments

Low lending levels can be difficult to analyze, as numerous factors - bank strength or weakness, number of creditworthy borrowers, soft demand for goods and services, and deleveraging, among other things - can all contribute in varying ways to lending levels. Further, the relative importance of these factors in the overall mix can shift over time, as demand and supply shift and interact (Ivashina and Scharfstein 2009). The debate over whether small business lending is constrained by supply or demand is a reminder of the absence of high-quality data about current lending practices. Such poor data have made it far more difficult to pinpoint the causes of today's problems and, as a result, to find effective solutions.

2.3 Demand-Based Arguments

To the extent that a would-be borrower is an attractive applicant but cannot obtain financing, that suggests there is a problem with capital supply. To the extent, however, that the would-be borrower is not an attractive credit risk, that may support an argument regarding a lack of demand.

- *Borrower Confidence:* It seems as though financially healthy borrowers who could borrow are not exhibiting significant interest in borrowing. Such low demand can be attributable to several different borrower characteristics.
- *Need for Credit:* For many industries, demand for credit is a reflection of sales volumes. This dynamic, of course, also applies in the contrary situation: low demand for a business's goods or services is likely, in turn, to decrease that business's demand for credit. Some element of the current low lending levels is likely attributable to low demand for sales during an economic downturn.
- *Borrower Condition:* Discussions of credit demand typically focus on demand by creditworthy loan applicants. Some businesses have had their credit damaged, but even a business owner with perfect credit may have a weak balance sheet showing sales that are at best flat but are more likely to be trending downward. Collateral may also have weakened. Assets owned by the business and/or the business owner may well have lost value during the recession, rendering the critical collateral component unable to support required credit.
- *Discouraged Borrowers:* Approximately 15 percent of respondents across various industries in the FRBA survey who did not apply for credit cited a belief that they would not be approved as one reason for failing to seek it. It is not clear how many of those who were denied credit might have obtained financing in a better economy, or how many "discouraged borrowers" may have actually been extended credit had they sought it. (Senior Loan Officer Opinion Survey, supra note 19, at 11, 26).

2.4 Supply Based Arguments

Despite the importance of credit, small businesses face numerous constraints in obtaining traditional financing. Small firms or startups may have little or no credit history and lenders may face difficulties assessing the risk of new businesses, especially when the service or product is innovative and does not have a clear track record (Laderman and Reid, 2010). These information gaps are thought to lead to potential credit rationing in the small business loan market. In this environment, therefore, seeking credit may not necessarily meet with all or even partial success.

- *Bank Solvency:* One issue is the health of the banks themselves. In a stable economy, banks will extend credit and seek a risk-adjusted rate of return. But in the environment of the financial crisis, many banks have suffered from increased loan defaults and, as a result, have insufficient capital to make additional loans. These uncertainties include interest rate risk, unrealized losses, and the prospect of tighter capital requirements, among other things. Not only does such uncertainty make raising capital difficult, it also may lead banks to conserve capital instead of making loans.

- Lending Practice Metrics:** Small business lending markets may lie in the different uses of "lending technologies" among large and small banks over the course of the last decade. For both large and small banks, small business lending can be divided into four categories of "lending technologies" - relationship lending, asset-based lending, credit scoring, and financial statement lending (Lalo and Schiff, 2001). The last three categories can together be considered "transaction based" lending, as they are all based on "hard" data about the borrower or collateral. Credit scoring is done almost entirely by large banks and relationship lending almost entirely by small banks. The other two are performed by large and small banks alike.

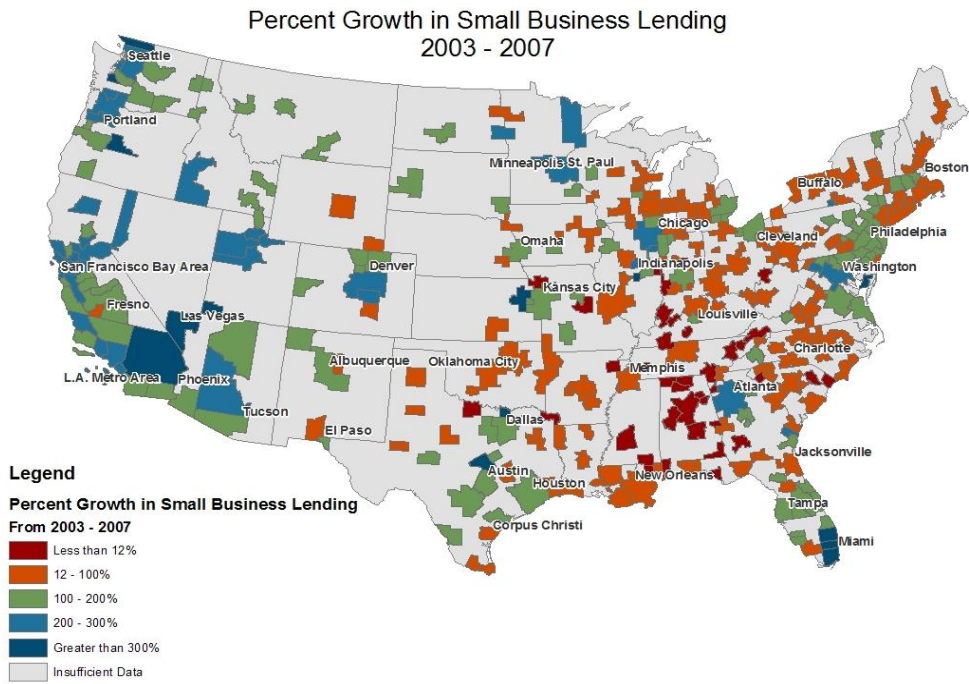


Figure 2: Geographic Distribution of Growth in SME Lending

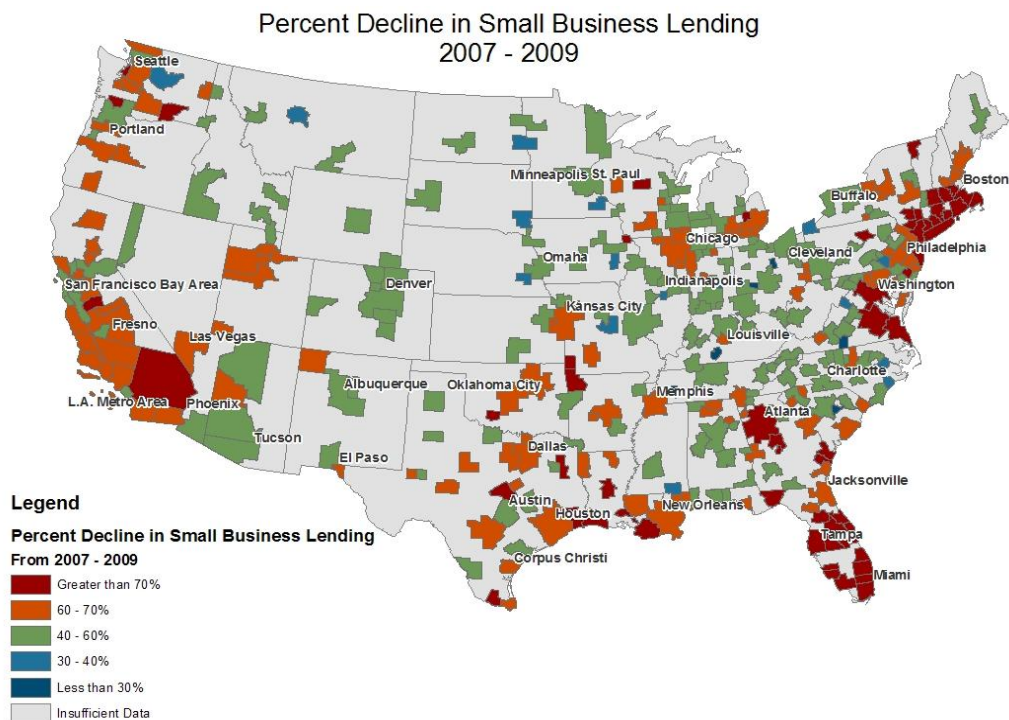


Figure 3: Geographic Distribution of Decline of SME Lending

3 Conclusion and Policy Implications

This paper first provides descriptive analysis of trends in small business lending between 2003 and 2009, a period characterized by significant volatility in both the housing and financial sectors. The findings are that there is a strong relationship between the boom and bust housing market cycle and patterns in small business lending, both over time and over space. While small business lending expanded rapidly between 2003 and 2007, this expansion was uneven. Since 2007, small business lending has contracted significantly, particularly in areas that have also seen contractions in the housing sector.

These results provide only a first attempt at understanding recent trends in small business lending and whether or not the contraction of small business credit is having a disparate impact on SME's. Future research is needed to understand why SME's continue to receive fewer loans per small business and whether limited access to credit may be limiting small business development in these areas. This is a critical question for public policy, particularly as small businesses are seen as key drivers of neighborhood stabilization and economic development.

Second, this research cannot tease out how changes in small business lending are driven by changes in supply and changes in demand. The lack of robust data on small business loan applications severely limits the ability to understand where there is unmet demand for credit and whether or not small businesses are being denied small business credit by banks. While there is some information on patterns of small business lending by banks, it is not viable to assess to what degree those loans reflect a true commitment to meeting the

credit needs of the banks' local communities. Access to more comprehensive data on small business lending – especially across the different types of credit markets – would greatly facilitate an understanding of credit barriers and gaps. Third, the link revealed between the housing cycle and small business lending is intriguing and deserves further exploration

Finally, it appears that in reducing the ranks of the banking industry, the mortgage crisis and ensuing recession may have also pared small business lending. The direction of causality is not definitive: however, the significant correlation between the decline in the number of lenders and the decline in the volume of small business loans suggests that bank failures and consolidations, even among larger institutions, may have consequences for the provision of small business loans over the long-term (Laderman and Reid 2010).

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