



## How Did Bank Lending to Small Business in the United States Fare After the Financial Crisis?

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Since the financial crisis, researchers have examined the health of the small business credit market. Bank credit is the form of credit most commonly used by small businesses, and it contracted sharply during the financial crisis years of 2009-2011. Building upon previous literature, this study is a follow-up to the author's 2012 study.<sup>1</sup> That research analyzed the financial crisis and time period preceding it, and it demonstrated that the decline in bank

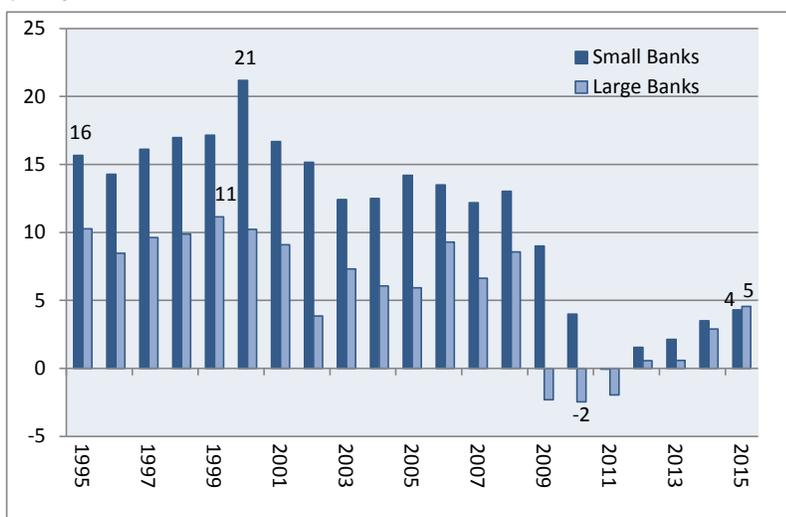
lending was much more acute for small businesses than for larger firms during the crisis.

This study, analyzing the time period after the financial crisis, assesses changes in bank credit to small businesses and to all businesses to determine whether bank lending to small businesses recovered to pre-crisis levels after the crisis. The study also tests whether there were significant differences in the lending behavior of large vs. small banks and of troubled vs. healthy banks. The decline in the number of banks—including the drop in community banks—during and after the crisis makes it difficult to determine if banks have continued the tight-credit poli-

cies of 2009-2011, or if they have eased them. The study defines small business loans as loans of \$1 million or less as reported in the data from the FFIEC. The information available does not make it possible to distinguish SBA-guaranteed loans.

1. Rebel Cole, *How Did the Financial Crisis Affect Small Business Lending in the United States?* U.S. Small Business Administration, Office of Advocacy, 2012.

**Figure 1. Average Percentage Change in Dollar Amount of Small Business Loans by Large and Small Banks, 1995-2015**



Source: Author's analysis of FFIEC data on small business loans outstanding. Rebel A. Cole, *How Did Bank Lending to Small Business in the United States Fare After the Financial Crisis?* U.S. Small Business Administration, Office of Advocacy, 2018.

### Overall Findings

Prior to the financial crisis, both small business loans and total business loans grew at double-digit rates, but small business loans grew only about half as fast at large banks as at small banks (Figure 1). Loan growth was greater for small business loans prior to the crisis, and the decline in lending was greater for small business loans during and after the crisis. (Figure 2)

- New originations of business loans declined abruptly during the crisis years, but more so at large banks than at small

banks (Figure 3). Post-crisis, small business lending grew much faster at small banks than at large banks while total business lending grew much faster at large banks than at small banks.

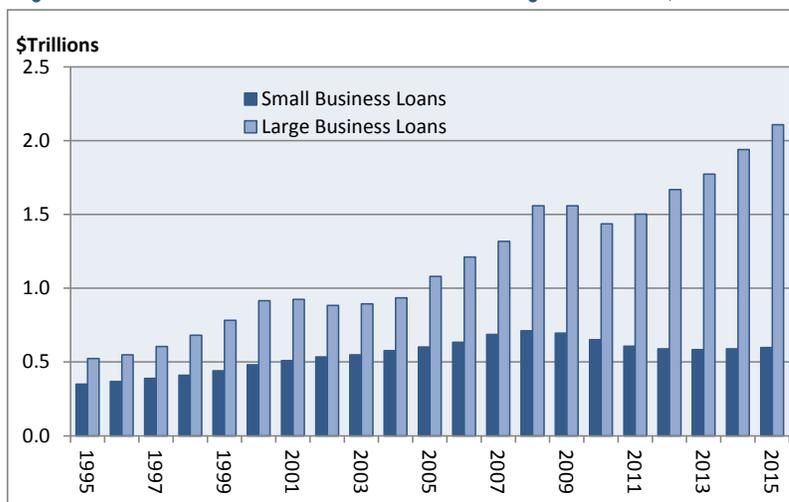
- Before the crisis, growth in business lending by troubled banks averaged only 3 percent per year as compared to 15 percent at healthy banks. Both total and small business lending contracted at troubled banks by more than 5 percent per year during the crisis years, but continued to expand at healthy banks by more than 5 percent per year. Post-crisis, small business lending by troubled banks remained weak, averaging growth of only about 2 percent per year while total business lending grew by 4 percent per year.

- Univariate results for the amounts and numbers of small business loan originations paint a very similar picture. The amount of small business loan originations plummeted by more than half during the crisis and has seen only a very limited recovery post-crisis, leaving small business loan originations down 40 percent from pre-crisis levels. The total number of originations fell by almost three-quarters during the financial crisis; it has recovered during the post-crisis years but remains substantially below pre-crisis levels. The decline in the number of originations during the financial crisis years was much more pronounced at large banks than at small banks but so has been the recovery.

- The univariate results also show the decline in small business loan originations and outstanding balances has been sharper at large banks and troubled banks. Figure 4 shows the percentage change in the dollar amount of small business lending outstanding at healthy and troubled banks.

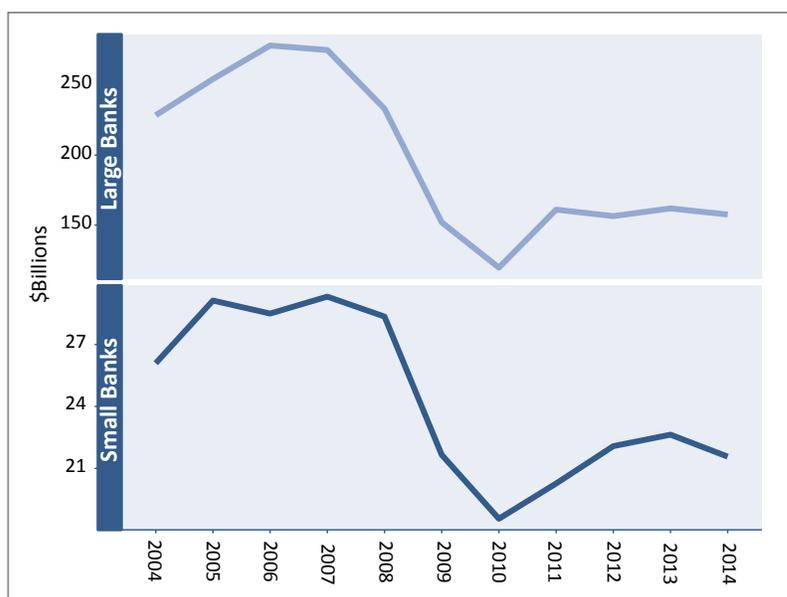
- Multivariate analysis of both outstanding loan amounts and loan originations largely confirms the univariate results. Hence, it appears that there has been little in the way of a recovery in the small business loan market, but a somewhat more robust recovery in the market for total business loans.

**Figure 2. Bank Loans to Small Businesses and to Large Businesses, 1995–2015**



Source: Author's analysis of FFIEC Data on small business loans outstanding. Rebel A. Cole, *How Did Bank Lending to Small Business in the United States Fare After the Financial Crisis?* U.S. Small Business Administration, Office of Advocacy, 2018.

**Figure 3. Average Dollar Amount of Total Small Business Loan Originations per Bank, 2004–2014**



Source: Author's analysis of CRA data. Rebel A. Cole, *How Did Bank Lending to Small Business in the United States Fare After the Financial Crisis?* U.S. Small Business Administration, Office of Advocacy, 2018.

## Policy Implications

This report examines the lending behavior of banks of different sizes and financial health regarding their lending activities to both small and large businesses after the financial crisis. It discovers that bank lending to small businesses remained at depressed levels throughout the post-crisis years, while total business lending saw somewhat of a recovery. Based on the findings, the author suggests several policy recommendations to strengthen small business lending.

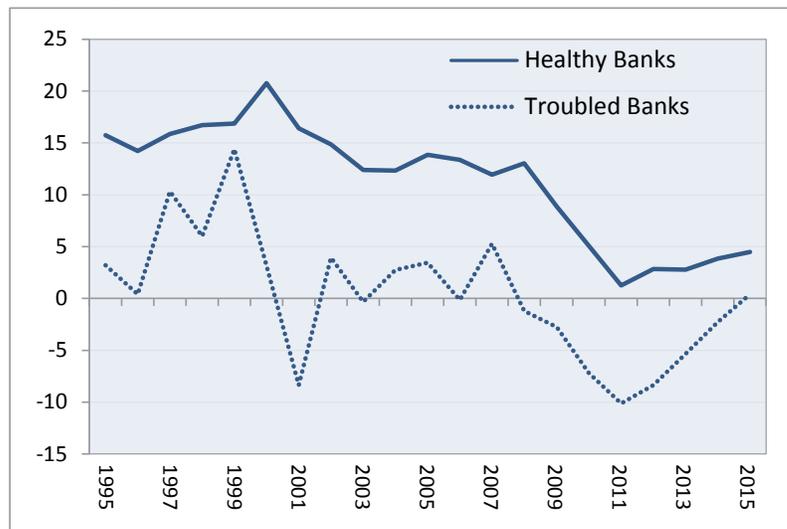
- **Encourage large banks to engage in more small business lending.** Large banks lent a smaller portion of their assets to small businesses than did small banks, and large banks also severely curtailed their small business lending following onset of the financial crisis. Post-crisis their lending has disproportionately gone to large businesses. Regulators could use existing laws, such as the Community Reinvestment Act, to encourage more small business lending by large banks.

- **Encourage the formation of new (de novo) community banks and reduce regulatory burdens on small banks.** Regulators should take steps to encourage the formation of new community banks, which are specialists in small business lending.<sup>2</sup> Legislation and policies to encourage the formation of new banks, as well as to reduce the regulatory burden on small banks, would be very helpful. One means of reducing the regulatory burden is to exempt small banks from undue regulations, such as rules implementing the Dodd-Frank Wall Street Reform and Consumer Protection Act which were designed to curb the excesses of large banks. The new revisions to the Consolidated Report of Condition and Income for Eligible Small Institutions is one policy example of burden reduction; this reduced the 2,400 data items found in the existing form by about 40 percent.<sup>3</sup> The ongoing review process for the Economic Growth and Regulatory Paperwork Reduction Act of 1996 is another such policy tool for regulatory relief; this law requires bank regulators

2. "De novo" banks or new banks less than five years old.

3. *The Federal Financial Institutions Examination Council (FFIEC) has proposed revisions to FFIEC Forms 041 and 051; phased implementation of these proposals may affect the policy changes mentioned here. For changes and revisions to the Call Report forms FFIEC 051, FFIEC, 041 and FFIEC 031, see and Federal Register notice 82 FR 29147 and the FFIEC's Call Reporting Form webpage, [www.ffiec.gov/forms051.htm](http://www.ffiec.gov/forms051.htm).*

Figure 4. Percentage Change in the Dollar Amount of Small Business Loans Outstanding, Troubled vs. Healthy Banks, 1995–2015



Source: Author's analysis of FFIEC Data on small business loans outstanding. Rebel A. Cole, *How Did Bank Lending to Small Business in the United States Fare After the Financial Crisis?* U.S. Small Business Administration, Office of Advocacy, 2018.

to review their existing regulations at least once every 10 years.

- **Support the growth of traditional non-bank lending to small businesses.** Legislators and regulators can take actions to encourage the growth of small business lending by other lenders. The idea of increasing small business loan limits on the almost 6,000 U.S. credit unions is one such action. A credit union had been limited to investing 12.25 percent of its total assets in business loans to members, and many credit unions had reached this limit; a proposal to increase this limit to 27.5 percent of assets has been suggested numerous times, but still not agreed to. Credit union lending to small businesses has more than doubled from 2008 to 2016, from \$30 billion to \$60 billion, while bank lending to small businesses over the same period has declined by almost \$100 billion.

- **Banking sector reforms.** The author also finds support in the data for resolving troubled banks quickly, limiting the concentration of the banking sector, and raising minimum capital ratios.

## Scope and Methodology

The study uses data from the U.S. Federal Financial Institution Examination Council to evaluate whether bank lending policies toward small businesses returned to pre-crisis levels after the financial crisis years of 2009–2011. The tests, which are based upon the “difference-in-differences” methodology, measure differences in lending activity before, during, and after the financial crisis. Two

treatment variables, large vs. small bank and healthy vs. troubled bank, are interacted with time indicators. The coefficients on these interaction terms identify whether small business lending significantly improved during the post-crisis years (2012–2015) or remained at depressed levels.

The univariate test results indicate that lending to small businesses remained at depressed levels throughout the post-crisis years, while total business lending saw somewhat of a recovery. The multivariate tests, which control for additional variables, such as the declining number of banks, generally reinforce the view that lending policies toward small businesses remained tightened after the crisis. The research also uses descriptive statistics and observable data patterns to identify correlations between bank lending and bank characteristics, such as size, financial condition as measured by capital adequacy, asset quality, profitability, and liquidity.

This report was peer reviewed consistent with Advocacy's data quality guidelines. More information on this process can be obtained by contacting the director of economic research at [advocacy@sba.gov](mailto:advocacy@sba.gov) or (202) 205-6533.

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