

FRBSF ECONOMIC LETTER

Number 2009-07, February 13, 2009

Out-of-Market Small Business Loans

Small businesses play a critical role in the U.S. economy, accounting for roughly half of all private employment and more than half of output, according to the U.S. Small Business Administration. Small businesses need financing to operate and grow, and bank lending is an important source of this financing. A key issue is whether the geographic proximity of banks to small business borrowers is important in the flow of credit. In other words, how significant is a bank's physical presence, in the form of a brick-and-mortar branch, to the provision of credit to small businesses in a given market?

This *Economic Letter* compares small business loans in a local area made by banks that have branches in that area with loans made by banks that do not have branches in that area. The findings are relevant to determining the appropriate delineation of the geographic boundaries of small business lending markets (the "geographic scope" of the markets) and, in turn, for the measurement of the degree of competition in those markets. Accurate measurement of competition in bank small business lending is important for public policy since competition can affect the availability and price of such credit.

Previous evidence on distance and lending

Historically, small businesses typically have borrowed from banks with branches located nearby. But research suggests that the distance between banks and their small business borrowers has been increasing over time. For example, Petersen and Rajan (2002) find that the median borrower-lender distance increased from two miles for relationships that began in the 1970s to five miles for relationships that began in the 1990s. According to another study, by 1998 the median distance between a small business's headquarters and the financial institution making a loan was ten miles. (Wolken and Rohde 2002). The question arises of whether more distant lenders might be accumulating a meaningful share of the market for small business loans in a local area or "market."

Out-of-market shares

For urban areas, the Federal Reserve currently defines small business lending markets to be about

the size of metropolitan statistical areas (MSAs). (For simplicity, I will refer to "MSA markets" or "MSA-based markets," even though actual Federal Reserve urban banking markets differ somewhat from MSAs.) In assessing the level of competition in these markets, the Federal Reserve currently considers data from all banks making small business loans in the MSA. Many of the banks that make loans in the market also have physical branches within the market ("in-market" banks), but some do not ("out-of-market" banks).

To assess the share of small business lending by out-of-market banks, I used 2004 data on small business loan origination for specific MSAs derived from reports that roughly 5,000 commercial banks, savings banks, and savings and loans submitted in compliance with the Community Reinvestment Act (CRA). I calculated the proportion of loans under \$1 million to businesses with revenues under \$1 million that were from out-of-market banks. (For a more detailed analysis, see Laderman 2008.) Excluding the loans of credit card banks, about 10% of the dollar volume of loans came from out-of-market banks. The average share was similar regardless of MSA size. This relatively small out-of-market share is consistent with the finding in Laderman (2006) that, in 2005, the share of out-of-market lending for the San Francisco Bay Area also was minimal. (Due to CRA reporting requirement changes that took effect in 2005, the 2005 data are less comprehensive than the 2004 data. This shortcoming was relatively easily overcome for the study focused on the Bay Area.) It also is consistent with Brevoort and Hannan (2006), who examined the distance from the center of the census tract in which a small business borrower was located to the nearest office of the lender. They found that distance was a statistically and economically significant deterrent to lending to small businesses within local markets.

The relatively low out-of-market share also is consistent with the view that defining small business lending markets geographically makes sense and, more specifically, that areas approximating MSAs make sense. Moreover, it appears that roughly half of the dollar volume of out-of-MSA lending comes

from within the same state as the MSA. At the same time, the sizable contribution of in-state banks to out-of-market lending suggests that, although MSAs likely are an appropriate, workable upper bound on the geographic size of defined small business lending markets, the real geographic borders of these markets actually are fuzzy. Therefore, it makes sense to consider small business lending by out-of-market banks when measuring lending competition in local markets.

Market concentration

The next question is, how much difference does including out-of-market loans make to measures of competition, such as concentration of market shares? In the classic structure-conduct-performance paradigm of industrial organization theory, when market shares are more concentrated at the top, competition is weaker. The Hirschman-Herfindahl Index (HHI) of market concentration, the sum of the squares of the percent market shares of all the firms in a market, is a convenient and widely used measure of concentration. (For example, a market with just one competitor has an HHI of 10,000, while a market with 10 equal-sized competitors has an HHI of 1,000.)

Even though out-of-market lending constitutes a small proportion of total lending, including such loans when measuring market concentration in MSA-based small business lending can make a material difference, decreasing the mean HHI for MSA-based markets from 2,282 to 1,924. That's roughly the equivalent of adding one equal-sized competitor to a market with four equal-sized competitors.

Nonetheless, including out-of-market banks does not always decrease the HHI. In fact, whether the inclusion of out-of-market lenders in the calculation of the HHI increases or decreases HHI depends on several factors, including not only the number of additional lenders, but also the change in the variance of market shares due to the inclusion of out-of-market lenders, the change in the number of lenders *times* the variance, the variance of market shares including only in-market lenders, and the number of in-market lenders. (See Laderman (1995) for a more detailed discussion of the breakdown of the HHI.)

Some characteristics of out-of-market loans

But, are out-of-market small business loans good substitutes for in-market small business loans? If the characteristics of the two types of loans are

very different, then the case for including out-of-market loans in the calculation of small business loan market shares may be less compelling.

It appears that, along some very basic dimensions, loans by out-of-market banks are similar to those extended by in-market banks. First, out-of-market loans are roughly the same size as in-market loans. The average out-of-market small business loan in 2004 was \$73,000, only slightly less than the average of \$84,000 for an in-market loan. Moreover, while most out-of-market loans (84.5%, on average, across MSA-based markets) are under \$100,000, so are most in-market loans (73.1%).

Another issue is the role of credit scoring versus relationship lending. In credit scoring, banks assess borrowers' creditworthiness using computer-generated models based mainly on information about the owner's credit quality from consumer credit bureaus and information about the small business's credit quality from commercial credit bureaus. Scoring models essentially automate the credit underwriting process, arguably making proximity of the lender and borrower less important. In contrast, relationship lending is based primarily on "soft" qualitative information, where proximity is likely to be more important.

Some economists have argued that lending that relies too much on credit scores is not a very effective substitute for more traditional "relationship" lending. However, others, for example Berger and Udell (2006), argue that credit scoring and fixed-asset lending, such as lending secured by commercial real estate, are examples of "transactions technologies" (lending based primarily on "hard" quantitative data) that enable banks to lend to the many small businesses that report little or no financial data. Therefore, they argue, credit scoring may be an effective substitute for relationship lending.

In the end, these differing views on the role of lending methods may matter little. Akhavein, Frame, and White (2005) report survey data indicating that small business credit scoring is most likely to be used for loans under \$100,000. The fact that loans under \$100,000 are made in about the same proportion both in and out of market suggests that credit scoring should be as prevalent in both situations. In addition, out-of-market small business loans are about as likely to be secured by commercial real estate as are in-market loans, on average 33.1% compared with 35.6%, respectively.

Conclusion

The quantity and characteristics of out-of-market small business loans have implications for the demarcation of the geographic borders of small business lending markets and for the measurement of the amount of competition within those markets. Although the share of small business loans in MSA-based markets from out-of-market lenders is a relatively small 10% on average, the relatively important role played by out-of-market banks within the same state suggests that effective market boundaries are fuzzy. Consideration should be given to out-of-market loans when assessing small business lending competition within a local area. Moreover, the inclusion of out-of-market loans reduces measured concentration in the market. Finally, out-of-market loans are not markedly different from in-market loans in terms of size or the probability that they are secured by commercial real estate.

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