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Banking Trends

Is Small-Business Lending Local?

Although large banks dominate the market for small-business loans, a local presence still matters.

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The views expressed in this article are not necessarily those of the Federal Reserve.

Small banks have traditionally been a primary source of funding for small businesses. According to banking scholars and analysts, small businesses benefit from close lending relationships with their banker, and these relationships are more feasible with a locally based, typically small bank. However, as the banking industry has become more consolidated and as lending technologies have evolved, small banks' role in the industry has declined in relation to large megabanks such as Chase and Wells Fargo, lending credence to the idea that relationship lending is a thing of the past. But is it? To find out, I analyzed a data set comprising loans made to small businesses. I analyzed the data along four dimensions: the location of the lender (local or nonlocal), whether the nonlocal bank has a local

branch (yes or no), the size of the lender (large or small), and the size of the loan (larger or smaller).¹ By analyzing the data along these four dimensions, I am able to identify what kinds of banks lend to small businesses, and whether certain kinds of banks specialize in certain kinds of loans.

I find that local banks make only a small share of small-business loans in most metro areas and that large nonlocal banks dominate the market for small-business loans.² Surprisingly, large nonlocal banks are most dominant in the market for smaller loans—which make up a large share of total small-business loans—most likely because large banks are major players in the market for business credit cards, an important source of financing for small businesses. However, local banks remain competitive for larger

small-business loans such as commercial mortgages, most likely because of their local relationships.³ Bank branches provide still more evidence for the continued role of lending relationships. Nonlocal banks that retain a local presence through a local branch network are significantly more likely than other nonlocal banks to make larger small-business loans.

The History of Local Lending to Small Businesses

Historically, local banks have played a substantial role in small-business lending. When small businesses needed financing, they usually first turned to the local bank where they did their other business. This is called relationship lending, and there is much theoretical and empirical banking literature outlining the benefits of this type of lending for small firms.⁴ Local banks, banking analysts have long argued, have several advantages over nonlocal banks in building and maintaining lending relationships. First, they have specialized knowledge of local market conditions because their management and lending staff live and work in the same area and under the same conditions as their business customers.

In addition, locally based loan officers can visit a business and see for themselves how it's run. These repeated, personal interactions supplement the "hard" information contained in the business's accounting statements. Thus, a local bank can gather, through a direct contact, "soft" information that a more distant bank would find difficult to access.⁵ What's more, in addition to being able to just drop in on the client's shop, these loan officers can also see their clients socially, giving them additional opportunities to acquire soft information about the client's business.

Not so long ago, local banks also benefited from state-level legal and regulatory restrictions. Many states limited or prohibited banks from branching or merging across state lines. Some states even restricted in-state branching and merging. But beginning in the 1980s, local banks lost this regulatory advantage. Many states allowed at least regional interstate mergers beginning in the early 1980s, and many local banks were merged out of existence. Then, in 1997, the federal Interstate Banking and Branching Act became effective, allowing for full nationwide interstate mergers. Mergers replaced locally headquartered banks with branches of large banks. In a previous *Economic Insights* article on the Philadelphia banking market, I showed that large banks with local branches compete very successfully with local banks for commercial real estate (CRE) loans.⁶

Meanwhile, changes in technology have made it easier and cheaper for remote banks to screen and monitor small businesses using hard information such as credit scores.⁷ Automated underwriting methods, which use credit scores similar to those used for consumer credit cards, have substantially reduced the cost of screening. Whereas business loans were once difficult to score because businesses differ substantially, enhanced computer power, larger databases, and more sophisticated modeling techniques now allow many banks, especially larger ones, to treat loans to small-business owners much like personal loans when assessing creditworthiness.⁸

Automated underwriting methods have significant advantages for small businesses that may offset some of the advantages of

close relationships for some borrowers. Perhaps most important, firms can access funds within days of applying for a loan. Furthermore, loans made through automated underwriting—for example, business credit cards—are generally unsecured. By contrast, the typical relationship loan requires the business owner to post their house as collateral or maintain detailed records about accounts receivable posted as collateral.

Who Lends to Small Businesses Now

I analyzed all banks⁹ operating in any of the 30 metropolitan statistical areas (MSAs) with a population greater than 2 million, according to the 2010 census.¹⁰ The population of these MSAs varies from 18.9 million (New York-Newark-Jersey City) to a little over 2 million (Kansas City). The number of banks in each MSA varies from 538 (New York) to 207 (Sacramento-Roseville-Folsom).

I use the Community Reinvestment Act (CRA) Small Business Loan data set to see which types of banks make small-business loans. This data set defines a small-business loan as any commercial and industrial (C&I) or CRE loan smaller than \$1 million. The data do not have any information about the size of the borrower. The assumption is that small businesses are the predominant recipients of such small loans. Throughout, whenever I use the term "loans," I am referring to the small-business loans covered by the CRA data set.

I found that the vast majority of lending in these MSAs is done by nonlocal banks.¹¹ Among the 30 MSAs, the unweighted mean share of the number of loans made by local lenders is just 8.7 percent (Figure 1). For the value of loans, the mean is 20.2 percent.¹² This result is far from uniform—there is quite a bit of variance. Local lenders' share of the number of loans ranges from a low of 0.13 percent (Orlando) to a high of 63.3 percent (New York). Local lenders' share of the value of loans ranges from a low of 0.34 percent (San Diego) to a high of 50.7 percent (Chicago).

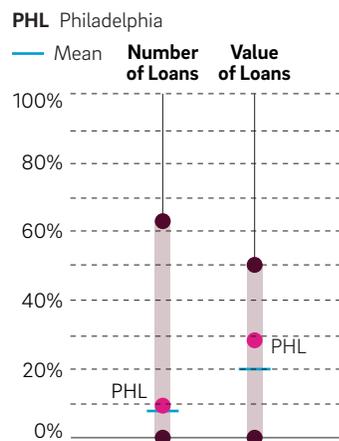
Many of the MSAs with the highest local share are home to at least one headquarters of a large bank. For instance, nine large banks are headquartered in New York, and not coincidentally, New York has the highest local-market share by number and the second highest by value. But having a large local bank does not guarantee that an MSA will have a large local presence. Atlanta and Cleveland both have low local

See [Description of Data Sources](#).

FIGURE 1

In Most MSAs, the Vast Majority of Lending Is Done by Nonlocal Banks

Local Share of Loans.
Metropolitan statistical areas (MSAs) with a population greater than 2 million, 2011–2018



Source: Federal Financial Institutions Examination Council (FFIEC) Community Reinvestment Act (CRA) Small Business Loan data.

lending despite being the former headquarters of SunTrust and the current headquarters of Keycorp, respectively.¹³ Regardless of whether the MSA is home to a large-bank headquarters, small local banks make fewer loans. Nonetheless, as will be shown below, these small local banks serve an important role in some types of loans.

See How Philadelphia Compares. 

“Nonlocal” Doesn’t Necessarily Mean Out-of-Town

Many nonlocal banks have a local branch, which likely helps them operate in those markets. A branch could serve as a substitute for being locally based. Perhaps a branch enables these banks to form close lending relationships just like local banks. Even without close lending relationships, a local branch might attract local business owners by advertising the nonlocal bank’s prioritization of the local market. Among the 30 MSAs, an average of 52.6 percent of the number of loans and 77.6 percent of the value of loans made by nonlocal banks are made by banks that have at least one branch in the MSA (Figure 2). The higher share by value suggests that having a local branch presence may be more important for banks competing for larger small-business loans and less important for smaller small-business loans.

Many nonlocal lenders have a local branch in part because they have acquired a large local bank through a merger. The successor bank then continues to operate in the legacy bank’s market.¹⁴ Although we don’t know the market shares of the legacy banks, it’s likely that if the successor has a high market

share, the legacy did as well. And, indeed, many successor banks have a high market share, in large part because they continue to operate many of the legacy bank’s branch networks.

Regardless of whether the bank has a local branch, large banks dominate the market for nonlocal loans. Among the 30 MSAs, large banks account for a mean share of 90.1 percent of the number and 72 percent of the value of nonlocal loans (Figure 3). It is somewhat surprising that large banks dominate nonlocal lending in terms of number of loans but less so in terms of dollar volume. In general, we expect large banks’ competitive advantage to increase with loan size, which should drive up their share of the dollar volume of loans. Later in this article I discuss why large banks might have a competitive advantage in making smaller small-business loans—an advantage that may explain why their share of the dollar value of nonlocal loans is so much lower than their share of the number of nonlocal loans.

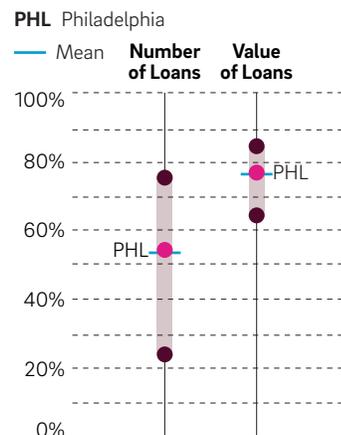
A recent study found that large banks retreated from small-business lending after the financial crisis of 2007–2009, but that isn’t evident in my study. In their 2018 National Bureau of Economic Research working paper, economists Vitaly M. Bord, Victoria Ivashina, and Ryan D. Taliaferro looked at lending from 2005 to 2015 using the same data I use. They found that some large banks had

FIGURE 2

Having a Local Branch Helps Nonlocal Banks Compete for Nonlocal Loans

Nonlocal Banks with a Local Branch, Share of Nonlocal Loans.

Metropolitan statistical areas (MSAs) with a population greater than 2 million, 2011–2018



Sources: Federal Financial Institutions Examination Council (FFIEC) Community Reinvestment Act (CRA) Small Business Loan data and Federal Deposit Insurance Corporation (FDIC) Summary of Deposits (SOD) data.

Description of Data Sources

This article primarily uses Federal Financial Institutions Examination Council (FFIEC) Community Reinvestment Act (CRA) Small Business Loan data and Federal Deposit Insurance Corporation (FDIC) Summary of Deposits (SOD) data. The CRA data consist of loans to small businesses and farms. These data are collected annually from all banks and thrifts with assets exceeding \$250 million. The data consist of any origination, purchase, or refinancing of c&i loans, commercial mortgages, agricultural loans, or loans secured by farmland in the amount of \$1 million or less. I included only originations, and only those of c&i loans and commercial mortgages. Unfortunately, the data do not distinguish between c&i loans and

CRE loans. These are lumped together and reported at the county level. Each lender reports the number and dollar amount of loans in each county in which they lent, in amounts of less than \$100,000, \$100,000–\$250,000, and \$250,000–\$1 million. c&i loans include lines of credit and company credit cards, but loan commitments and letters of credit don’t have to be reported until the loan is actually executed.

For lines of credit, the entire amount of the credit line is reported as a single loan at the time it’s extended. If the credit line is increased, the amount of the increase is reported as a separate loan. Company credit cards are reported as a single loan equal to

the amount of the credit limit on all cards, provided they are issued on the same day. Any subsequently issued cards are reported as separate loans in the same way. If the credit limit is increased, the amount of the increase is reported as a separate loan. For further information, see *A Guide to CRA Data Collection and Reporting* (2001).

The SOD data are the amount of deposits in each branch of a bank. They are reported annually as of June 30. Although there are many well-known problems with measuring a bank’s deposits in any MSA, I use the data only to determine whether a bank has a branch in any MSA. The data set is appropriate for this purpose.

decreased their small-business lending by over 25 percent as a result of the financial crisis. However, they found that the drop was at large banks heavily exposed to the real estate crisis (that is, unhealthy banks). Banks that were less exposed (that is, healthy banks) actually increased their lending.

The data in my sample are drawn from the postcrisis period. The unhealthy banks in Bord, Ivashina, and Taliaferro’s sample had either already pulled back their lending, been merged into healthy banks, or been bailed out and were in a better condition during the period my study covers. From 2011 to 2018, large banks’ share of loans nationwide increased from 79.3 to 84.6 percent, while their share of the value of loans decreased only slightly, from 58.2 to 54.3 percent.

Local Banks Still Have a Role to Play

As shown above, large nonlocal banks dominate lending in the top 30 MSAs in terms of number of loans, but less so in terms of dollar volume. As I discovered when I analyzed these loans, this is probably because business credit cards give large banks a significant advantage in the market for smaller small-business loans.

I began my analysis by splitting small-business loans into two categories: what I call *smaller* loans, or loans for amounts less than \$100,000, and what I call *larger* loans, or loans for at least \$100,000. The vast majority of loans are smaller (Figure 4). Among the 30 MSAs, smaller loans represent a mean of over 90 percent of the number of all small-business loans. In terms of

value of loans, however, the story is different. On average among the 30 MSAs, smaller loans represent about 36 percent of the value of all small-business loans.

When I looked closer at who was making these loans, I discovered that large banks dominate smaller loans, but they control only a little more than half the market for larger loans (Figure 5). This is somewhat surprising, since we typically expect large banks to have an advantage in making larger loans. The disparity between number and amount is likely due to business credit cards.

The banks making smaller loans are overwhelming large: Large banks have a mean share of 89.5 percent of the number and 84.7 percent of the value of smaller loans. These lenders also tend to be nonlocal, with nonlocal lenders accounting for the vast majority of smaller loans by both number and value (Figure 6).

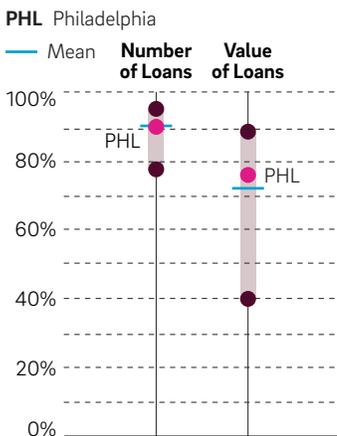
The average small-business credit card account has an outstanding balance of about \$32,000, making it an example of a smaller loan.¹⁵ Although the data do not explicitly say whether a loan is a business card or some other type of loan, the evidence suggests that business-card lending is a key to the dominant role played by large, nonlocal banks. But why do large banks have an advantage over small banks in making credit card loans?

All banks, both large and small, have a minimum loan size below which credit evaluation is completely automated—that is, the bank relies on the business owner’s personal score and other hard information that can be quickly processed without a careful examination of

See A Few Facts About Small-Business Credit Cards. ↘

FIGURE 3
Large Banks Dominate the Market for Non-local Loans

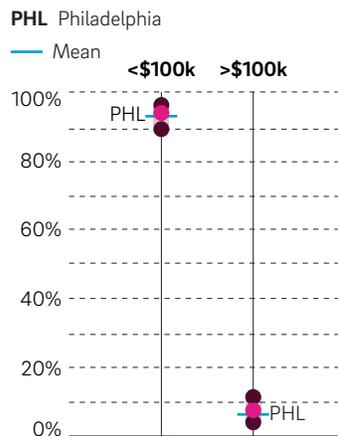
Large Banks, Share of Non-local Loans.
Metropolitan statistical areas (MSAs) with a population greater than 2 million, 2011–2018



Sources: Federal Financial Institutions Examination Council (FFIEC) Community Reinvestment Act (CRA) Small Business Loan data and Federal Deposit Insurance Corporation (FDIC) Summary of Deposits (sod) data.

FIGURE 4
The Vast Majority of Small-Business Loans Are Smaller

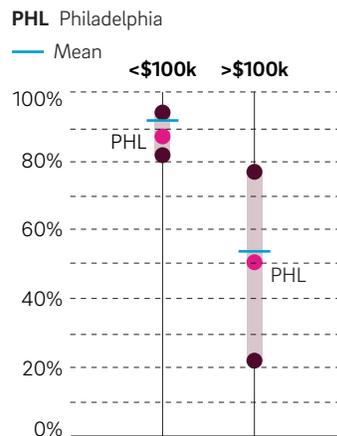
Percent of Loans by Loan Size, Number of Loans.
Metropolitan statistical areas (MSAs) with a population greater than 2 million, 2011–2018



Source: Federal Financial Institutions Examination Council (FFIEC) Community Reinvestment Act (CRA) Small Business Loan data.

FIGURE 5
Large Banks Make a Large Number of the Smaller Loans

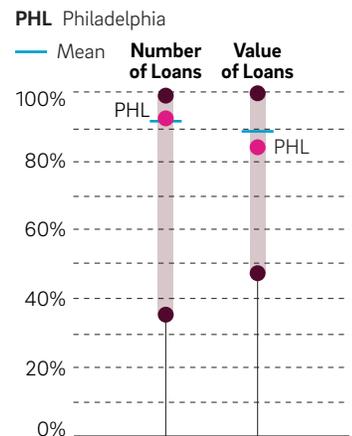
Large Banks’ Market Share by Loan Size, Number of Loans.
Metropolitan statistical areas (MSAs) with a population greater than 2 million, 2011–2018



Source: Federal Financial Institutions Examination Council (FFIEC) Community Reinvestment Act (CRA) Small Business Loan data.

FIGURE 6
Nonlocal Banks Dominate Market for Smaller Small-Business Loans

Share of All Loans <\$100k Made by Nonlocal Banks.
Metropolitan statistical areas (MSAs) with a population greater than 2 million, 2011–2018



Source: Federal Financial Institutions Examination Council (FFIEC) Community Reinvestment Act (CRA) Small Business Loan data.

the business's books and a personal meeting with the borrower. This cutoff can be as low as \$10,000 for a small bank but perhaps as high as \$60,000 or more for a large bank, giving large banks a competitive advantage because they can quickly approve more of these smaller loans for (presumably) larger small businesses. Additionally, automated underwriting has the advantage of speed and convenience for the small-business owner seeking financing.

Furthermore, the bulk of business cards are packaged into asset-backed securities, which are then sold to a wide range of financial institutions. Large banks have a significant comparative advantage over small banks in securitizing assets. Their larger scale permits them to maintain staff specialized in assembling and marketing securities backed by credit card receivables, whether these receivables are loans to consumers or loans to businesses.¹⁶ And because the consumer credit card market is dominated by large banks, large banks may have an edge in the market for business cards, too.¹⁷

But when we analyze larger loans, we see that local banks are still serious competitors for larger loans such as commercial mortgages. It also appears that a local presence through a branch network is necessary for nonlocal banks with the means to compete effectively in the market for larger loans. Local banks account for a mean of 23.9 percent of the number and 25.2 percent of the value of these loans (Figure 7). And an overwhelming share of the nonlocal larger loans are made by banks with a local branch; nonlocal banks with a branch make 70 percent of the number and 72 percent of the value of nonlocal loans.¹⁸ Thus, while the business card market is dominated by

large, primarily nonlocal banks, local banks and banks with a local presence are still serious competitors for larger loans. Here their superior knowledge of local conditions and established relationships may help them better compete with large nonlocal banks with no local presence.

Conclusion

Large nonlocal banks are the major small-business lenders in most large MSAs. Surprisingly, these banks dominate the market for smaller loans to small businesses, while local banks remain competitive in the market for larger small-business loans. In addition, large nonlocal banks with a local branch network act more like locally headquartered banks because they concentrate on larger small-business loans. The predominant role of large banks without any local presence in the small-dollar end of the market is likely due to their provision of business cards, which are an important source of small-business financing. However, local banks and nonlocal banks with a local presence through a branch network still play a role in making larger small-business loans, for which local knowledge and soft information may still be important. ■

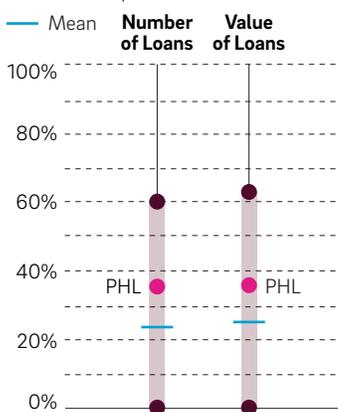
FIGURE 7

Nonlocal Banks Are Far Less Dominant in Market for Larger Small-Business Loans

Local Bank' Share of Loans >\$100k.

Metropolitan statistical areas (MSAs) with a population greater than 2 million, 2011–2018

PHL Philadelphia



Source: Federal Financial Institutions Examination Council (FFIEC) Community Reinvestment Act (CRA) Small Business Loan data.

How Philadelphia Compares

The Philadelphia–Camden–Wilmington MSA is the nation's fifth-largest metropolitan area, with a population of 5.96 million. It's made up of New Castle County, DE; Cecil County, MD; Burlington, Camden, Gloucester, and Salem counties, NJ; and Bucks, Chester, Delaware, Montgomery, and Philadelphia counties, PA. There were 397 lenders active in the MSA between 2011 and 2018, including 33 that were based in the MSA. Among MSAs in the sample, these figures are the fifth and third highest, respectively.

In terms of lending patterns, Philadelphia is not unique. (The figures in this article show the numbers for the Philadelphia MSA, not just Philadelphia.) The one area in which Philadelphia is consistently different from most areas is lending by local banks, and then only in terms of dollar volume. Among the 30 MSAs, Philadelphia banks had a substantially higher share of the volume of small loans but only a slightly higher share of the number of small loans. The same is true for Philadelphia banks' share of large loans. Two large banks are headquartered in the MSA, TD Bank USA and Sovereign Bank, but these are both subsidiaries of foreign banks, so they don't behave like local banks, and neither has a large share of either the number or the amount of loans.

A Few Facts About Small-Business Credit Cards

As of 2015, there were approximately 13.4 million small-business credit card accounts in the U.S.¹⁹ These accounted for over \$430 billion in spending, and that amount has been increasing. Thus, in 2015 the average small-business account had a balance of about \$32,000. Based on data from Experian, the average small-business credit card limit in 2020 was \$56,100.²⁰ Large banks such as JPMorgan Chase, Capital One, Citigroup, American Express, and Bank of America accounted for the vast majority of these accounts. Some small banks do offer them, but they are at best fringe competitors.

Notes

1 My data set comprises loans of no more than \$1 million. In practice, these small loans typically go to small businesses. Because all of the loans in the data set can be described as “small,” my further division is into “smaller” and “larger” (small) loans.

2 For the purposes of this article, a local bank is headquartered in the MSA, and a large bank has total assets in excess of \$50 billion in 2018 dollars.

3 In contemporaneous research using CRA small-business loan data, Adams et al. (2020) report results consistent with my findings. They find that the average distance between a small-business borrower and its lender has increased significantly in the last 20 years, but this is driven by the increase in small-dollar lending by 18 large banks.

4 See Berlin (1996) for an accessible account of the benefits (and costs) of lending relationships.

5 See Petersen and Rajan (2002).

6 See DiSalvo (2020). In that article, I examined the relative roles of local and nonlocal banks in the provision of CRE loans with a face value greater than \$1 million. This article focuses on smaller business loans.

7 See Petersen and Rajan (2002).

8 For more information on credit-scoring models, see Mester (1997).

9 I use the term “banks” as shorthand for the banks and thrifts covered by the Community Reinvestment Act (CRA). “Banks” does not include credit unions or other nonbank lenders such as finance companies and fintechs. Thus, a company like American Express, which lends through both a banking subsidiary and nonbank subsidiaries, would only report loans made by the bank. In addition, the CRA does not collect information on banks and thrifts with assets less than \$250 million.

10 For the definition of each of these MSAs, refer to *Metro-politan Statistical Area Definitions* (2018).

11 Since banks with assets less than \$250 million are not covered by the CRA data, and these very small banks surely make the vast majority of their loans in their local market, my numbers somewhat understate small-business loans by local banks. However, the Report of Condition shows that banks that do not report to the CRA Small Business Loan

data set only made about 7 percent of all loans less than \$1 million and about 2 percent of all loans less than \$100,000 in 2018. This suggests that nonreporting banks should not appreciably affect estimates of local banks’ share of smaller small-business loans.

12 I report unweighted means. The medians are all similar to the means.

13 SunTrust merged into BB&T Corporation (Charlotte, NC) in December 2019 and became Truist Financial. For the period covered in this paper, SunTrust was an independent organization.

14 Although I define large banks as having at least \$50 billion in assets in 2018 dollars, I define legacy banks as having had at least \$30 billion in assets in 2018 dollars at the time they were acquired.

15 See Steele (2016). Since the CRA data refer to the size of the loan rather than the size of the borrower, the reader may be concerned that many of these small loans are actually corporate credit cards for large firms. However, this is unlikely because CRA reporting requirements direct the bank to aggregate all of the individual card accounts for a single borrower. So, for example, if each individual account has a \$20,000 credit limit, a large firm would have to have no more than five individuals with corporate card accounts to have a loan smaller than \$100,000. In addition, corporate cards have much higher credit limits than small-business cards, and there are usually minimum usage requirements and a minimum number of cards issued. For further information, see Dieker (2021). Thus, even though the CRA data do not distinguish between business and corporate cards, I believe that, given the small value of most of these loans, they are business cards.

16 Unlike in the residential mortgage market, no government-sponsored-enterprises securitize credit card loans originated by small banks.

17 See Board of Governors (2010), which argues that business cards and consumer credit cards may be complementary goods in production.

18 In contrast, as a share of total nonlocal loans, nonlocal banks with local branches make 20 percent of the number of smaller loans and 49 percent of the value of smaller loans.

19 Steele (2016).

20 Porter (2021).

References

- Adams, Robert M., Kenneth P. Brevoort, and John C. Driscoll. "Is Lending Distance Really Changing? Distance Dynamics and Loan Composition in Small Business Lending," Finance and Economics Discussion Series Working Paper 2021-011 (December 2020), <https://doi.org/10.17016/FEDS.2021.011>.
- Berlin, Mitchell. "For Better and for Worse: Three Lending Relationships," Federal Reserve Bank of Philadelphia *Business Review* (November/December 1996), <https://www.philadelphiafed.org/-/media/frbp/assets/economy/articles/business-review/1996/november-december/brnd96mb.pdf>.
- Berger, Allen N., Adrian M. Cowan, and W. Scott Frame. "The Surprising Use of Credit Scoring in Small Business Lending and the Attendant Effects on Credit Availability and Risk," Federal Reserve Bank of Atlanta Working Paper 2009-9 (2009), <https://doi.org/10.1007/s10693-010-0088-1>.
- Board of Governors of the Federal Reserve System. "Report to the Congress on the Use of Credit Cards by Small Businesses and the Credit Card Market for Small Businesses" (May 2010).
- Bord, Vitaly F., Victoria Ivashina, and Ryan D. Taliaferro. "Large Banks and Small Firms," National Bureau of Economic Research Working Paper 25184 (2018), <https://doi.org/10.3386/w25184>.
- Dieker, Nicole. "What Are Corporate Credit Cards, and How Do They Work?" *Bankrate.com* (2021).
- DiSalvo, James. "Banking Trends: Why Don't Philly Banks Make More Local CRE Loans?" Federal Reserve Bank of Philadelphia *Economic Insights* (Third Quarter 2020), <https://www.philadelphiafed.org/the-economy/banking-and-financial-markets/banking-trends-why-dont-philly-banks-make-more-local-cre-loans>.
- DiSalvo, James, and Ryan Johnston. "Banking Trends: How Our Region Differs," Federal Reserve Bank of Philadelphia *Economic Insights*, (Third Quarter 2015), https://philadelphiafed.org/-/media/frbp/assets/economy/articles/business-review/2015/q3/bt-how_our_region_differs.pdf.
- Dore, Tim, and Traci Mach. "Recent Trends in Small Business Lending and the Community Reinvestment Act," Federal Reserve Board of Governors *FEDS Notes*, February 2018.
- Greenwald, Daniel, Johan Krainer, and Pascal Paul. "The Credit Line Channel," working paper (2021), http://www.dlgreenwald.com/uploads/4/5/2/8/45280895/credit_line_channel.pdf.
- A Guide to CRA Data Collection and Reporting*, Federal Financial Institutions Examination Council, January 2001, https://www.ffiec.gov/cra/pdf/cra_guide.pdf.
- Mester, Loretta J. "What's the Point of Credit Scoring?" Federal Reserve Bank of Philadelphia *Business Review* (September/October 1997), <https://www.philadelphiafed.org/-/media/frbp/assets/economy/articles/business-review/1997/september-october/brso97lm.pdf>.
- Metropolitan and Micropolitan Statistical Area Population Totals and Components of Change: 2010–2019*, U.S. Census Bureau, June 2020, <https://www.census.gov/data/tables/time-series/demo/popest/2010s-total-metro-and-micro-statistical-areas.html>.
- Metropolitan Statistical Area Definitions*, Bureau of Labor Statistics, April 2018, <https://www.bls.gov/sae/additional-resources/metropolitan-statistical-area-definitions.htm>.
- Petersen, Mitchell, and Raghuram G. Rajan. "Does Distance Still Matter? The Information Revolution in Small Business Lending," *Journal of Finance*, 57:6 (2002), pp. 2533–2570, <https://doi.org/10.1111/1540-6261.00505>.
- Porter, Thomas. "What Is the Average Credit Limit for Business Credit Cards?" *Mybanktracker.com* (2021).
- "Predicting Risk: The Relationship Between Business and Consumer Scores," Experian (June 2008), http://www.experian.com/assets/marketing-services/white-papers/EMS_PredictingRisk_WP.pdf.
- Steele, Jason. "Business Credit Card Statistics," *Creditcards.com* (2016).
- Summary of Deposits Reporting Instructions*. Federal Deposit Insurance Corporation, June 2020.