FEDERAL DEPOSIT INSURANCE CORPORATION

FDIC Community Banking Study

December 2020

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Foreword

Eight years ago, coming out of the financial crisis, the FDIC conducted a study of community banks. This study was the first large-scale review of community banks ever conducted, and it recognized the importance of community banks and their unique role in the banking industry. As a result of that study, the FDIC changed its approach to identifying community banks. In general, community banks are those that provide traditional banking services in their local communities. As of year-end 2019, there were 4,750 community banks in the country with more than 29,000 branches in communities from coast to coast.

Since the 2012 study, community banks have proven to be resilient. Relative to noncommunity banks, community banks have had faster growth in return on assets ratios, higher net interest margins, stronger asset quality, and higher loan growth rates. Community banks have continued to demonstrate this strength during the COVID-19 pandemic.

The FDIC recognizes the role community banks play in providing loan and deposit services to customers throughout this country, which is why I made this update to the 2012 Community Banking Study a research priority in 2020. I instructed my research team not only to update key aspects of the prior study, but also to consider new topics that are important to community banks, such as regulatory change and technology. By continuing to study community banks and providing that research to the public—our stakeholders—we can continue to identify ways that the FDIC can provide support to these institutions.

I would like to extend a special thanks to Diane Ellis, Director of the FDIC Division of Insurance and Research, for leading this effort.

I believe this work will provide continued recognition of community banks' strength, their unique role in the banking industry, and their value to the public.

Jelena McWilliams
Chairman, FDIC
December 2020

Acknowledgements

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The study's primary authors are as follows:

Chapter 1: Community Bank Financial Performance
Christopher J. Raslavich

Chapter 2: Structural Change Among Community and Noncommunity Banks
Eric C. Breitenstein

Chapter 3: The Effects of Demographic Changes on Community Banks
Chester Polson

Chapter 4: Notable Lending Strengths of Community Banks
Robert M. DiChiara
Margaret Hanrahan
Richard D. Cofer Jr.

Chapter 5: Regulatory Change and Community Banks
George French

Chapter 6: Technology in Community Banks
Daniel Hoople

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Diane Ellis, Director
Division of Insurance and Research

Executive Summary

The *2020 Community Banking Study* is an update to the Federal Deposit Insurance Corporation's (FDIC) first community banking study, published in 2012, and covers the period from year-end 2011 through year-end 2019. The earlier work made several important contributions to our understanding of the performance of community banks and the significant role they play in the banking system and the nation's economy. It also established a definition of a "community bank" that was not solely driven by asset size but also incorporated a bank's business plan, geographic footprint, and number of branches (Appendix A). This study retains the definition established in the earlier edition and updates several areas of analysis including community bank financial performance, trends in community bank consolidation, and community bank lending focus. The current study also extends the conversation about community banks in several directions: it broadens the analysis of demographic changes affecting community banks and the products and services they offer, and it provides both an analysis of the effect of regulatory changes on community banks and an account of community banks' adoption of new technologies. Finally, each chapter in this study concludes by suggesting—from the perspective of the subject of the particular chapter—possible effects the COVID-19 pandemic could have on community banks.

Community Bank Financial Performance

Community banks continued to report positive financial performance, including improving pretax return on assets (ROA) ratios, a wide net interest margin, and strong asset quality indicators. Coming off the recession that ended in 2009, community bank pretax ROA ratios steadily improved, increasing from 1.05 percent in 2012 to 1.44 percent in 2019. The improvement in earnings was widespread with over 60 percent of community banks reporting increases from 2009 through 2019. Community banks' earnings performance, moreover, improved relative to noncommunity banks. By certain measures, particularly pretax ROA, community banks have long underperformed noncommunity banks. The most important factor contributing to the earnings gap between community and noncommunity banks had been the ability of noncommunity banks to generate noninterest income—primarily from investment activities that typically are not part of the traditional community banking business model. During the period 2012–2019, community banks narrowed the earnings gap with noncommunity banks because of factors such as a wider net interest margin and stronger credit quality. Community banks ended 2019 with a quarterly pretax ROA ratio of 1.44 percent, only 22 basis points below the pretax ROA ratio of noncommunity banks, a significant improvement from the 43 basis point gap at year-end 2012. Community banks maintained their margin advantage by earning higher yields on earning assets, which was partly attributable to their holding a higher share of longer-term assets than noncommunity banks. Community banks also maintained their asset quality advantage over noncommunity banks as measured by credit losses. The full-year net charge-off rate reported by community banks reached a post-crisis low of 0.13 percent in 2019, which was 45 basis points below the rate reported by noncommunity banks.

One area that noncommunity banks outperformed community banks was noninterest expenses. Noncommunity banks were able to reduce overhead expenses from 3.01 percent of average assets as of year-end 2012 to 2.61 percent of average assets as of year-end 2019. Community banks saw their overhead ratio decline from 3.13 percent to 2.83 percent during the same time period.

Structural Change Among Community and Noncommunity Banks

After the 2012 study the banking industry continued to consolidate, but existing community banks were less likely to close than noncommunity banks. Of the 6,802 institutions identified as community banks at year-end 2011, just under 30 percent had closed by year-end 2019.[1] In comparison, over the same period, more than 36 percent of the 555 institutions that identified as noncommunity banks had closed. Including institutions that were community banks at year-end 2011 but noncommunity banks at year-end 2019 and vice versa, as well as banks newly chartered between 2012 and 2019, there were 4,750 community banks and 427 noncommunity banks at year-end 2019.

[1] The 2012 Community Banking Study reported 6,799 community banks and 558 noncommunity banks. These numbers have changed slightly reflecting new and revised Call Report filings that caused designation changes.

The drivers of banking consolidation shifted after the 2012 study. In that study, we showed how consolidation between 1984 and 2011 for both community and noncommunity banks was driven by failures and charter consolidation. Between 2011 and 2019, a period of economic recovery, failures declined substantially, voluntary mergers between unaffiliated institutions increased and became the predominant cause of the decline in the number of insured depository institutions, and mergers between institutions that were part of the same holding company fell. The major contributor to the overall decline, however, was the historically low number of newly chartered institutions: between 1985 and 2011, 183 new institutions were chartered per year on average, compared with four per year between 2012 and 2019. This combination of factors pushed up the rate of net consolidation for the banking industry between 2012 and 2019 to 4.3 percent, compared with its average of 3.2 percent during the years 1985 to 2011.

The Effects of Demographic Changes on Community Banks

The changing demographic makeup of the United States affects demand for community bank services: as demographics change, banks see changes in their client bases and in the demand for loans. Two major demographic factors considered in this study are median age and net migration flows. A comparison with the community-bank industry as a whole shows that between 2011 and 2019, community banks that were headquartered in counties at one demographic extreme—counties with lower median ages and the highest levels of net migration inflows—experienced faster asset and loan growth rates, were more profitable, and had larger shares of business loans. Such counties tended to be in metropolitan areas. At the same time, community banks that were serving areas of the country at another demographic extreme—counties with higher median ages and the highest levels of net migration outflows—experienced fewer opportunities for growth. Such counties tended to be in rural areas.

Community banks headquartered in areas simultaneously experiencing two distinct demographic trends nonetheless saw consolidation trends that were similar to trends in the industry as a whole. As a result, these counties' share of the total banking industry headquarters remained stable.

In areas of the United States that were arguably most thriving—those with a younger population and net population inflows—community banks grew quickly and profitably and supported communities with commercial and industrial (C&I) and commercial real estate (CRE) loans to help areas continue to grow. Areas with net outflows, on the other hand, appear to experience demographic and economic headwinds, causing banks in those counties to grow more slowly and have lower commercial lending portfolios—conditions that could weigh on community banks in those areas. These demographic trends could also result in greater consolidation in the future.

Notable Lending Strengths of Community Banks

Community banks by count represent the vast majority of banks in the United States. By other size measures, however, community banks represent a considerably smaller share: in 2019, they had only 12 percent of total industry assets and 15 percent of total industry loans. Despite holding a small share of total loans, community banks are a key provider of funding for many local businesses, most importantly by making CRE loans, small business loans, and agricultural loans.

CRE Lending

CRE loans provide opportunities for businesses to own commercial property, for housing within communities, and for the provision of retail and other services to metropolitan, micropolitan, and rural areas. Community banks are an important source of financing for CRE as evidenced by these banks' loan portfolios, the types of properties they finance, and the myriad locations of the properties financed. The share of CRE loans community banks hold (30 percent of the banking industry's CRE loans) is large relative to the banks' representation in the banking industry. CRE lending also is widely distributed, with almost all community banks holding at least some amount of CRE loans, and many holding substantial portfolios. Community banks originate various types of CRE loans: multifamily lending grew in the years between 2011 and 2019, and community banks are active lenders to a wide range of industries, including industrial, retail, and hotel industries.

In addition to lending across industry types, community banks have been active CRE lenders across all sizes of markets. In 2019, community banks headquartered in rural and small metropolitan areas held more than two-thirds of CRE loans held by all banks headquartered in those smaller

geographic areas. In larger metropolitan areas, community banks' share of loans was smaller, but still material. Although community banks of all lending specialties provide CRE financing, the share of community banks that are CRE specialists increased during the period between 2012 and 2019.[2] These CRE specialists are important providers of CRE loans in small communities.

As important providers of CRE financing, community banks are among those lenders interested in CRE market dynamics in the years ahead. As of the beginning of 2020, the long economic expansion had been a positive backdrop to CRE. Delinquency rates among community banks' CRE loan portfolios had declined for much of the previous decade, and at the end of 2019, the average delinquency rate had settled at a very low level.

Small Business Lending

Small businesses are key to the U.S. economy, representing the vast majority of all businesses by count and employing almost half of the private sector workforce. These businesses often need funding, for example for inventory, working capital, or accounts receivable financing. Despite holding only 15 percent of total industry loans in 2019, community banks held 36 percent of the banking industry's small business loans.[3] Community banks focus on building relationships with small business owners and tend to make loans that require more interaction with the borrower. By contrast, noncommunity banks, which dominate the smallest category of business loan originations—loans below $100,000 that are typically business credit card lines—tend to use a scoring model that requires little interaction with customers.[4] During the period covered by this study, community banks' share of small business loans per Call Report data has declined. Small Business Administration 7(a) program loan originations increased from 38 percent of total originations in 2012 to 46 percent in 2019 with many loans greater than $1 million originated. Finally, in response to the 2018 FDIC Small Business Lending Survey, many bankers said their C&I loans were extended predominantly to small businesses, supporting the widely held belief that many loans to small businesses are above the Call Report's $1 million reporting limit.

[2] Refer to Appendix A for specialty bank determination criteria.
[3] This percentage is based on commercial and industrial and nonfarm, nonresidential loans below $1 million.
[4] Federal Reserve Banks.

Agriculture Lending

Community banks are an important source of financing for U.S. agriculture, funding roughly 31 percent of farm sector debt in 2019, with half of that total financed by community-bank agricultural specialists. The lending emphasis of community-bank agricultural specialists largely played in their favor from 2004 through 2013. Community-bank agriculture specialists' exposure to the negative credit effects of the housing crisis and recession that followed was minimized, and instead they benefited from a strong, decade-long farming boom. Beginning in 2014, the agriculture sector struggled in terms of profitability, but erosion in farm financial conditions was gradual and generally modest. Credit quality at community-bank agricultural specialists weakened but still remained favorable by long-term historical comparison, and earnings and capital were strong.

Community-bank agricultural specialists tend to be small; in 2019, more than 75 percent had total assets under $250 million, and just 19 out of 928 community-bank agricultural specialists had total assets in excess of $1 billion. Geographically, community-bank agricultural specialists were heavily concentrated in the center of the country. Agriculture in this area is dominated by cattle, corn, hogs, and soybeans and to a lesser extent cotton, dairy, poultry, and wheat.

Community-bank agricultural specialists have shown a strong commitment to lending to farmers through the peaks and valleys of cycles in the agricultural sector. From first quarter 2000 through fourth quarter 2019, in only two quarters did community-bank agricultural specialists see an annual decline in aggregate agricultural production loan volume, and never in aggregate farmland-secured loans.

Regulatory Change and Community Banks

The period 2008–2019 was one of intense regulatory activity, much but not all of it in response to the 2008–2013 financial and banking crises. So numerous were the regulatory changes that keeping current with them would have challenged any bank, but especially a small bank with modest staff resources. While many factors affect banks and it is difficult to be definitive, the pace of regulatory change may have been one factor that contributed to three post-crisis developments: a high proportion (compared with other time periods and other banks) of small community bank mortgage lenders that reduced their

residential mortgage holdings, the record rates at which community banks exited the banking industry in the years leading up to 2019, and an apparent increase in the target asset size of new small banks as reflected in their initial equity capital.

Based on their sheer number and scope, changes to rules regarding 1–4 family residential mortgage lending and servicing have a strong claim to being the most important rules of the post-crisis period. Between July 2008 and November 2019, largely in response to laws enacted to address abuses in subprime and alternative residential mortgage lending and mortgage servicing, federal agencies issued 36 distinct substantive final rules governing various aspects of 1–4 family residential mortgage lending and mortgage servicing. Even so, community banks *in the aggregate* continued to grow their residential mortgage portfolios. At the same time, noninterest expense ratios for community bank residential-mortgage lending specialists increased relative to those ratios for other community banks, and the proportion of community banks with small mortgage programs that materially reduced their mortgage holdings continued to increase. Both trends are optically consistent with the hypothesis that regulatory changes affected the costs and level of participation in residential mortgage lending of some community banks. Developments in financial and information technology also are likely creating a tendency towards commoditization of residential mortgage lending, with effects on the distribution of mortgage lending across banks of different sizes. Accordingly, it is not possible to be definitive about the relative importance of regulatory changes in driving mortgage lending trends.

The most important change to capital adequacy regulation during the 2008–2019 period was U.S. implementation of a version of the Basel III capital framework. Leverage ratios of community banks increased faster and to higher levels than did those ratios for noncommunity banks, and their loan growth exceeded that of noncommunity banks as well. A detailed look at how community banks brought about the increase in their capital ratios shows that the extent of asset quality problems played an important role in influencing how banks responded. Specifically, healthy community banks with low levels of nonperforming loans increased their capital ratios but do not appear to have curtailed loan growth to do this, while community banks with higher levels of nonperforming assets were more likely to increase their capital ratios in part by curtailing loan growth.

Finally, it is important to emphasize that this study views regulations only through the lens of their effects on community banks; a discussion of the policy goals Congress has sought to achieve with its statutes, or how well the regulations have achieved those goals, is beyond the scope of the analysis. Observations in this study about the effects of rules on community banks should thus not be taken as criticisms of those rules. The overall thrust of the analysis, however, does support the idea that if the societal benefits of a thriving community banking sector are to be preserved, it is important that regulations achieve their public policy goals in ways that accommodate, to the extent appropriate, the business models and learning curves of smaller institutions with limited compliance resources.

The chapter covers several types of rules beyond those mentioned here. Appendix B provides a chronology and a brief description of selected federal rules and programs—157 of them—that applied to community banks and were put in place from late December 2007 to year-end 2019 (an average of 1 every 28 days during the 2008–2019 period).

Technology in Community Banks

Community banks have adopted different technologies at different rates, with newer technologies such as mobile banking, automated loan underwriting, and online loan applications being no exception. According to research and community banks' own descriptions of the opportunities and challenges, several factors may play an important role in community banks' adoption of new technologies. These factors include a bank's characteristics, the economic and competitive environment, and the attitudes and expectations of bank leadership.

Data from the 2019 survey conducted by the Conference of State Bank Supervisors (CSBS) indicate that "low adopters" of several recent technologies were distinguished mostly by their smaller asset size and lower revenues. For at least some of the banks participating in the CSBS survey, those same characteristics predated technology adoption, suggesting that bank size and resources may indeed have influenced community banks' decisions to adopt technology. Although it is also plausible that the use of technology may have increased asset and revenue growth

after adoption, additional data and research are needed to determine whether that was the case.

Community banks that had higher ratios of loans to assets, higher growth, and better performance also were more likely to have adopted the technologies covered by the survey, even after differences in size were accounted for. Similarly, banks that faced greater competition, had more optimistic expectations, and had more positive attitudes toward technology were more likely to be "high adopters." Certain factors were not associated with the adoption of technology or else made no difference that could not be explained by asset size. Among these factors were loan specialization, deposits, location of main office, and local population. Future research into these relationships, as well as the methods community banks use to obtain technology, will broaden our understanding of the key drivers, barriers, and risks associated with financial technology and its likely effect on the continuing success of community banking.

Future Challenges and Opportunities for Community Banks

Although our data for this study end with 2019, the significant uncertainty that the COVID-19 pandemic has presented to the economy, the banking industry, and society at large cannot be overlooked. This uncertainty will present community banks with both challenges and possibilities. As earnings decline and credit losses materialize, community bank performance is likely to deteriorate. The rate of community bank mergers may initially slow but then rise as institutions reconsider branching and location strategies. Changes in demographic trends such as population migration away from urban areas could benefit community banks located in more rural areas by providing them with new opportunities for growth. At the same time, community banks that specialize in certain types of lending that are centered in metropolitan areas, such as C&I, could suffer with increased loan losses or lower growth rates. Finally, the increase in demand for contactless ways of doing business may encourage community banks' adoption of new technology or partnerships with financial technology providers. Overall, community banks have a strong history of recognizing and meeting the needs of their customers, and community banks will continue this tradition in years to come.

Chapter 1: Community Bank Financial Performance

Between year-end 2012 and year-end 2019, community banks continued to report positive financial performance, including steady improvement in pretax return on assets (ROA) ratios, a wide net interest margin, and strong asset quality indicators. While not the only way of measuring community bank performance, this analysis will address the comparison between these banks and noncommunity banks. Community banks had long underperformed noncommunity banks, particularly in pretax ROA. Although this trend continued during the years between the previous study and this one, community banks' wider net interest margin and strong credit quality caused this gap to narrow.[1] The most important factor contributing to the earnings gap had historically been the ability of noncommunity banks to generate noninterest income—primarily from investment activities that are still not associated with the traditional community-banking business model. Additionally, in the years preceding 2019 noncommunity banks' noninterest expenses relative to assets had fallen below the comparable ratios of community banks. Nevertheless, by providing traditional banking products and services to local communities, community banks remained profitable and were able to compete with their typically larger noncommunity bank competitors.

Community Bank Pretax Earnings Increased Between Year-End 2012 and Year-End 2019

Coming off the recession that ended in 2009, community bank pretax ROA ratios steadily improved, increasing from 1.05 percent in 2012 to 1.44 percent in 2019 (Table 1.1). The improvement in earnings was widespread, with more than 60 percent of community banks reporting increases throughout this study's period. Larger community banks (those with over $1 billion in assets) ended 2019 with the highest pretax ROA (1.48 percent), followed by community banks with assets between $500 million and $1 billion (1.44 percent). Smaller community banks (those with assets between $100 million and $500 million) reported a pretax ROA of 1.41 percent while the smallest community banks (those with assets below $100 million) reported a pretax ROA of 0.94 in 2019, which represents a 24 basis point increase from year-end 2012.

Despite community banks' positive earnings performance between 2012 and 2019, their earnings were lower than the levels reported by noncommunity banks—but the difference narrowed: at year-end 2012 the gap was 43 basis points, and by 2019, it had dropped to 22 basis points. During the entire period, the average earnings gap between community and noncommunity banks in reported pretax ROA was 31 basis points. The trend in reported pretax ROA suggests that community banks were able to manage profitability and could still effectively compete with their noncommunity bank counterparts.

Community Banks' Net Interest Margins Exceeded Those of Noncommunity Banks for Several Years

Net interest margins (NIM) measure the spread between asset yields and funding costs for deposits and other borrowings. Wider NIMs result in higher levels of net interest income. In 2019 net interest income accounted for over 78 percent of community bank net operating revenue. Community banks ended 2019 with a quarterly NIM of 3.62 percent, exceeding the margin of 3.24 percent reported by noncommunity banks. Starting in 2012, community banks were reporting yields that were, on average, 53 basis points higher than yields reported by noncommunity banks (Chart 1.1). The primary way they maintained their margin advantage was by earning higher yields on earning assets.

Table 1.1 Full-Year Pretax ROA (Percent)

	2012	2013	2014	2015	2016	2017	2018	2019
All Banks	**1.42**	**1.55**	**1.46**	**1.49**	**1.50**	**1.54**	**1.69**	**1.63**
Community Banks	1.05	1.12	1.19	1.26	1.30	1.35	1.42	1.44
Noncommunity Banks	1.48	1.62	1.50	1.53	1.53	1.57	1.73	1.66

Source: FDIC.

[1] A focus on pretax ROA, as opposed to return on assets after tax, facilitates comparisons between banks organized as C corporations, which are taxed at the bank level, and S corporations, in which tax obligations pass through to shareholders.

Chart 1.1

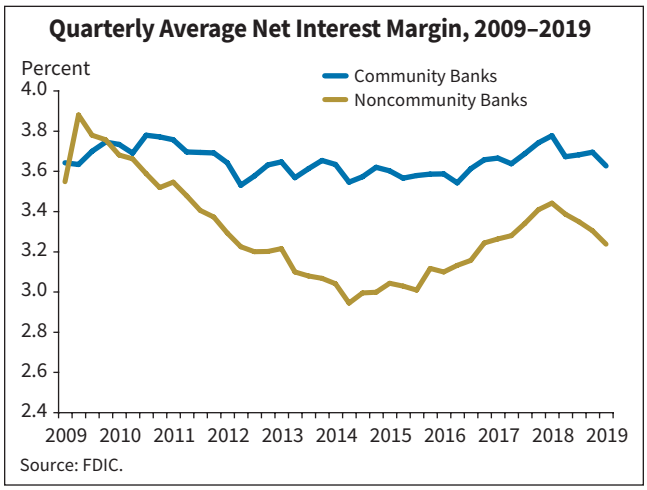


Chart 1.2

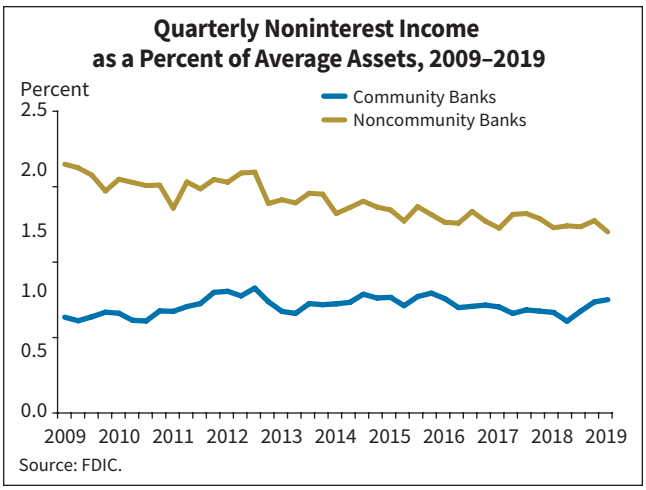


Table 1.2 Assets With Maturities Greater Than 3 Years to Total Assets (Percent)

	2012	2013	2014	2015	2016	2017	2018	2019
All Banks	**28.8**	**29.5**	**30.2**	**31.6**	**32.4**	**32.6**	**32.4**	**33.3**
Community Banks	42.9	47.3	47.9	47.4	47.2	46.8	45.8	44.8
Noncommunity Banks	26.5	26.7	27.5	29.2	30.2	30.5	30.4	31.8

Source: FDIC.

The higher yields reported by community banks were partly attributable to the fact that community banks held a higher share of longer-term assets, which typically have higher returns than assets maturing in the short term. As of year-end 2019, assets that matured or repriced in more than three years accounted for over 44 percent of community banks' total assets (Table 1.2). The comparable figure for noncommunity banks was just 31.8 percent. Between 2012 and 2019 both community and noncommunity banks increased their exposures to long-term assets because the historically low interest rate environment had several effects including causing many banks to lengthen their balance sheets to help maintain their margins as well as meeting credit needs of borrowers looking to lock in at low rates for longer periods.

Compared with Noncommunity Banks, Community Banks Generated Less Noninterest Income

Despite their net interest margin advantage, community banks trailed noncommunity banks in overall earnings because of noncommunity banks' ability to generate higher volumes of noninterest income due to their business model (Chart 1.2).

In 2019, noninterest income represented 0.9 percent of average assets at community banks, driving 20.2 percent of their net operating revenue (Table 1.3). For noncommunity banks, noninterest income represented 1.5 percent of average assets and drove 34.2 percent of their net operating revenue. In 2019 noncommunity banks derived close to 18 percent of their noninterest income from market-sensitive revenue streams, including trading and investment activities, which had not traditionally been part of the community-banking business model. Instead, for additional income, community banks relied more heavily on asset sales and service charges, whether these activities were part of the bank's strategy or not.

Table 1.3 lists the categories of noninterest income reported by banks throughout the period of this study. Despite the granularity of these categories, many of the services offered by both community and noncommunity banks are accounted for in the "all other" category—making it the largest component of noninterest income for both types of institutions. Banks are required to itemize amounts within the "all other" category only if the amounts exceed minimum levels. Thus, it is hard to compare with certainty the relative importance of various components within the "all other" noninterest income category.

Table 1.3 Noninterest Income at Community and Noncommunity Banks (Percent)

Category of Noninterest Income as a Percent of Total Noninterest Income	Full-Year 2012		Full-Year 2019	
	Community Banks	Noncommunity Banks	Community Banks	Noncommunity Banks
Service Charges on Deposit Accounts	24.3	12.7	18.8	13.1
Fiduciary Income	6.9	11.9	8.0	14.3
Gains on Asset Sales	21.7	3.9	22.0	4.0
Market Sensitive Income[1]	2.6	11.8	3.0	17.6
Securitization Income	0.5	0.6	0.1	0.1
Servicing Income	3.1	4.7	3.7	1.2
Insurance Income	3.3	1.4	3.1	1.7
All Other Noninterest Income[2]	37.5	53.0	41.4	47.9
Total Noninterest Income	**100.0**	**100.0**	**100.0**	**100.0**
Noninterest Income as a Percent of Net Operating Revenue	22.0	39.4	20.2	34.2
Noninterest Income as a Percent of Average Assets	0.95	1.9	0.87	1.5

Source: FDIC.
[1] Includes trading, venture capital, and investment banking income.
[2] Other noninterest income includes service charges, commissions, and fees (such as safe deposit box rentals, money orders and cashiers checks, notarizing of documents, ATM fees, wire transfers), check sales, rental income from other real estate owned, bank-owned life insurance income, annual credit card fees and interchange fees.

Community Banks Reported Lower Levels of Noninterest Expense Relative to Average Assets

At year-end 2019, noninterest expenses at community banks were 2.83 percent of average assets, down from 3.13 at year-end 2012 (Chart 1.3). The decline was due primarily to reductions of premises and fixed asset expenses as well as their "all other" noninterest expenses (a category that includes items such as data processing expenses, legal fees, and telecommunication expenses). These reductions could be a combination of items including reducing branches, streamlining computer expenses, and lowering legal expenses. These declines almost completely offset increases in salary and employee benefit expenses (Table 1.4).

Historically (1987–2007) community banks reported lower noninterest expenses as a percentage of average assets than noncommunity banks. Between 2012 and 2019, however, community banks reported a noninterest expense ratio that was on average 18 basis points higher

Chart 1.3

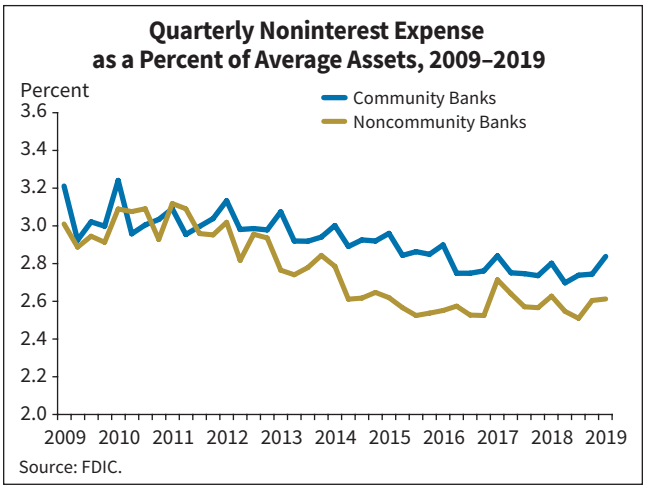


Table 1.4 Compound Annual Growth Rate of Noninterest Expense Categories (Percent)

	Full-Year 2012		Full-Year 2019	
	Community Banks	Noncommunity Banks	Community Banks	Noncommunity Banks
Salary and Employee Benefit Expenses	4.6	7.0	1.4	3.0
Premises and Fixed Asset Expenses	3.2	5.2	-0.8	0.7
Salary + Fixed Asset Expenses	**4.3**	**6.6**	**1.0**	**2.6**
All Other Noninterest Expenses	2.4	4.7	-1.6	0.8
Total Noninterest Expenses	**3.8**	**7.4**	**0.1**	**1.9**
Average Assets	**4.0**	**9.3**	**1.5**	**4.0**

Source: FDIC.

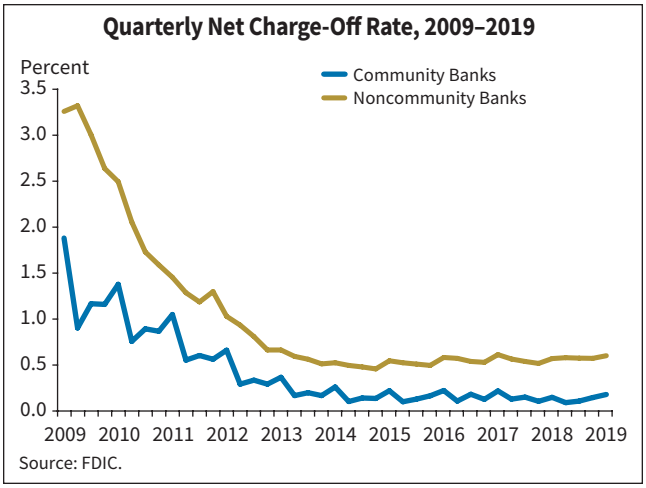
than that of noncommunity banks. In the years leading up to the financial crisis, noncommunity banks had grown their assets at a much faster rate than they had grown their noninterest expenses, which led to the convergence of the noninterest expense ratios of noncommunity and community banks. After the financial crisis, noncommunity banks continued to grow their assets at a faster rate than their noninterest expenses, with the result that in 2019 they reported noninterest expenses relative to average assets that were below community bank levels.[2]

Community Banks Continued to Report Low Levels of Credit Losses

In 2019 the full-year net charge-off rate reported by community banks reached a post-crisis low of 0.13 percent.

Community banks had generally reported lower loan-loss rates than noncommunity banks (Chart 1.4). This was especially true in the period 2008–2011, the years during and immediately after the financial crisis. From 2012 through 2019 community banks' average loss rates in commercial loan categories were comparable to the rates for noncommunity banks (these categories include nonfarm, nonresidential CRE, and C&I loans), but community banks continued to report lower loss rates than noncommunity banks in the two retail loan categories (residential real estate loans and consumer loans) as well as in agricultural loans (Table 1.5).

Chart 1.4



In general, between 2012 and 2019 loan portfolios of community and noncommunity banks did not shift significantly. Community bank loan portfolios continued to remain heavily weighted toward nonfarm, nonresidential CRE loans and 1–4 family residential mortgages. At year-end 2019, these two loan categories together represented 55 percent of community banks' total loans, a share that had been relatively unchanged since 2012. Meanwhile, noncommunity bank loan portfolios continued to consist mostly of C&I loans, consumer loans, and 1–4 family mortgages—categories that, together, represented over 62 percent of noncommunity banks' total loans.

Table 1.5 Average Net Charge-Off Rate by Loan Type (Percent)

Loan Type	Bank Type	2000–2007	2008–2011	2012–2019
1–4 Family	Community Banks	0.06	0.53	0.15
	Noncommunity Banks	0.13	1.64	0.26
Construction & Development	Community Banks	0.13	3.68	0.37
	Noncommunity Banks	0.12	4.81	0.23
Nonfarm Nonresidential	Community Banks	0.08	0.55	0.15
	Noncommunity Banks	0.10	0.94	0.13
Commercial & Industrial	Community Banks	0.63	1.41	0.43
	Noncommunity Banks	0.92	1.56	0.34
Consumer	Community Banks	0.87	1.18	0.85
	Noncommunity Banks	2.88	4.81	2.24
Agricultural	Community Banks	0.12	0.20	0.08
	Noncommunity Banks	0.27	0.65	0.20
Total Loans	Community Banks	0.22	1.02	0.23
	Noncommunity Banks	0.76	2.24	0.65

Source: FDIC.

[2] Chapter 5 includes a more detailed analysis of community bank and noncommunity bank noninterest expenses.

Summary

Community bank performance between 2012 and 2019 showed that despite lower earnings, community banks were profitable and could successfully compete against their typically larger noncommunity bank competitors. Community banks continued to benefit from higher margins due, in part, to their holding a higher share of long-term assets. Community banks also continued their long-run trend of strong asset quality metrics and lower loan-loss rates. However, community banks continued to lag their larger competitors in the ability to generate noninterest income, which appeared to be the biggest driver of the earnings difference between the two groups. Additionally, despite lowering their noninterest expenses, community banks were not able to match the strong asset growth that noncommunity banks had—growth that led to lower noninterest expense ratios for those banks in an area where community banks historically had had an advantage.

Overall, the performance of community banks continued to demonstrate that there is a role for these institutions in the banking landscape. Although they faced different challenges than noncommunity banks, community banks' proven advantages in the areas of net interest income and credit losses put these institutions in a good position to compete with noncommunity banks going forward.

Box 1.1 Financial Performance and the COVID-19 Pandemic

Community banks faced significant challenges in 2020 amid the onset of the COVID-19 pandemic. Through the first half of 2020, community banks reported a decline in earnings primarily driven by significant increases in provisions for credit losses, as temporary shutdowns resulted in reduced business and consumer spending and uncertainty surrounding large parts of the economy continued (Chart 1.1.1). Community bank pretax ROA through the first two quarters of 2020 fell by 25 basis points to 1.19 percent from year-end 2019 as a result of the earnings decline. Comparatively, pretax ROA among noncommunity banks fell by over a full percentage point to 0.35 percent through the first half of 2020.

The NIM for community banks fell in the first half of 2020 as asset yields declined more rapidly than funding costs due to the low interest-rate environment and an increase in the volume of lower-yielding assets, including balances due from depository institutions and Paycheck Protection Program (PPP) loans. The NIM for community banks fell 11 basis points from year-end 2019 to 3.51 percent in the second quarter of 2020. Comparatively, the NIM for noncommunity banks declined 52 basis points from year-end 2019 to 2.72 percent, representing the lowest NIM for noncommunity banks on record.

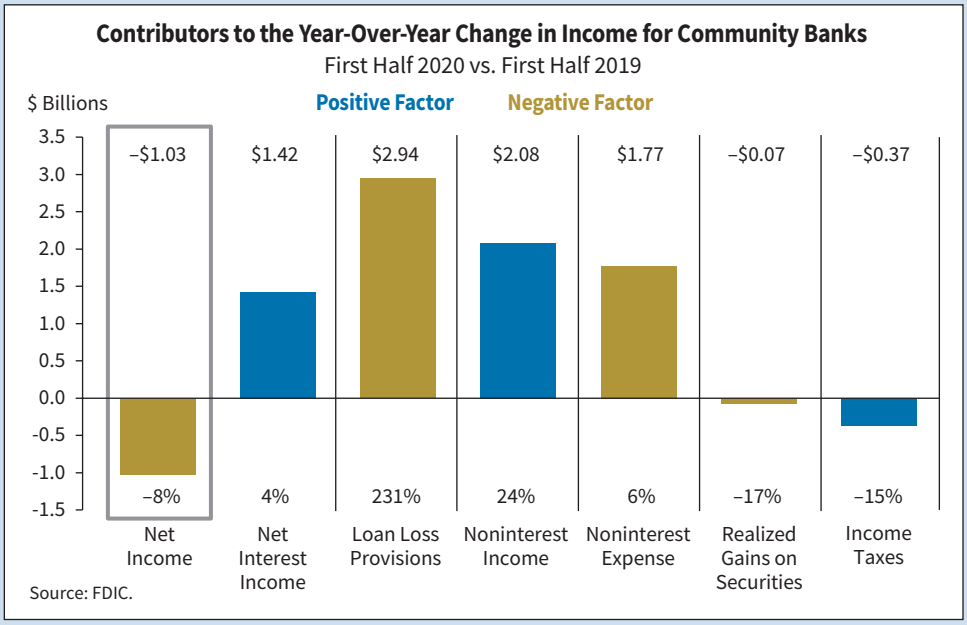
Loan loss rates for community banks remained low and stable since the start of 2020. The net charge-off rate for community banks through the first half of the year stood at 0.12 percent, just 2 basis points above the rate recorded through the same point in 2019 and still well below the rate recorded by noncommunity banks. Minor credit deterioration among community banks has primarily been concentrated in the C&I, farmland, and agricultural production loan categories. However, community banks may report higher credit losses across other loan categories in the coming quarters as businesses and consumers continue to experience adverse effects as a result of government-mandated business and travel restrictions in response to the pandemic.

Loan growth served as a bright spot for community banks as loan volumes expanded at a rate that exceeded noncommunity banks in the first half of 2020. Community banks reported an annual loan growth rate of 13.5 percent in second quarter 2020. Comparatively, loan balances among noncommunity banks expanded by just 5.6 percent annually. The increase among community banks was driven by large increases in C&I loans and community bank's participation in the PPP. As of second quarter 2020, community banks held 31 percent of PPP loans, with more than four out of five community banks (82 percent) participating in the program.

continued on page 1-6

Box 1.1, continued from page 1-5

Chart 1.1.1



Chapter 2: Structural Change Among Community and Noncommunity Banks

The decline in the number of banks that began in 1986 continued through 2019. Between year-end 2011 and year-end 2019, the number of banks dropped from 7,357 to 5,177, representing a decline of 30 percent. Among community banks, the number fell from 6,802 to 4,750; among noncommunity banks, the number fell from 555 to 427.

The drivers of net consolidation, however, shifted after 2011. As described in the 2012 FDIC Community Banking Study, a major cause of consolidation in the preceding two decades was bank failures, due mainly to the banking and thrift crises of the late 1980s and early 1990s and then to the financial crisis of 2007–2008 and the ensuing Great Recession. But as the effects of the Great Recession subsided and the economy transitioned into a slow recovery followed by expansion, the number of failures declined.

Nevertheless, the average rate of net consolidation continued to rise (Chart 2.1). The largest component of consolidation identified in the 2012 Study—voluntary mergers between unaffiliated institutions—increased as the economy recovered and expanded. At the same time, the rate of mergers between institutions within a holding company declined. Finally, new bank charters became less common, meaning there were few new institutions replacing those that merged, consolidated, or failed.

At the time the current study was being prepared, the COVID-19 pandemic had not significantly affected the rate of consolidation, although it ultimately may. Box 2.3 at the end of this chapter contains an overview of the pandemic's potential effects on consolidation.

The Largest Components of Charter Consolidation Between 2011 and 2019 Were Failures, Voluntary Mergers, and New Charters

Charter consolidation is the sum total of failures, voluntary mergers, new charters, and other voluntary closings.

Rates of Failure Declined

The merger booms of both the 1990s and the years following the Great Recession came close on the heels of periods of economic and financial disruption, particularly the disruption constituted by the banking crisis from approximately 2008 through 2013. The financial crisis had begun late in 2007, was quickly followed by the Great Recession, and roughly a year after the onset of the financial crisis the number of bank failures began increasing (Chart 2.2). But in 2011 the failure rate started declining, and by 2012 most of the failures associated with the financial crisis and Great Recession had occurred.

Chart 2.1

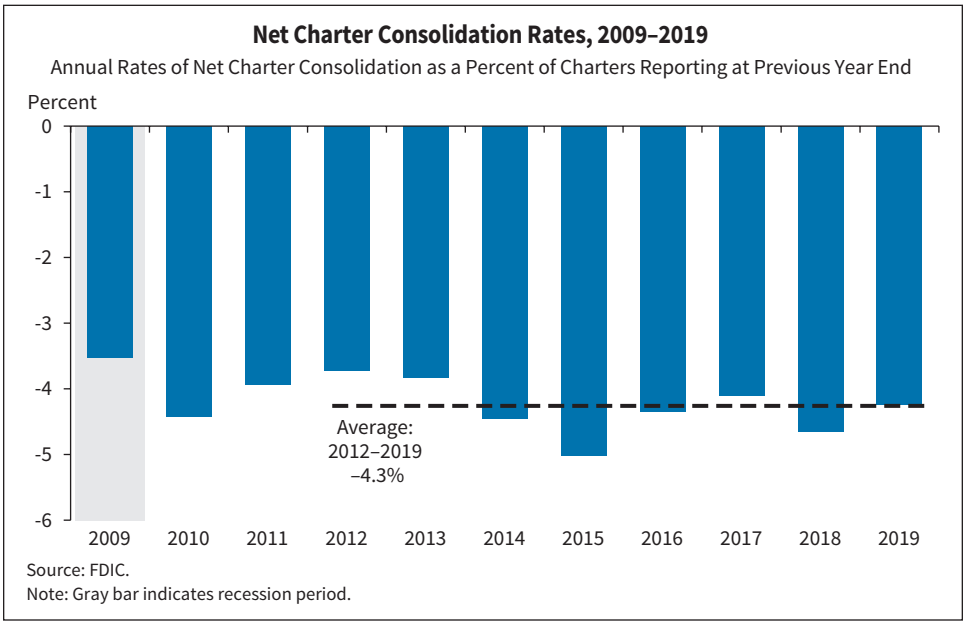
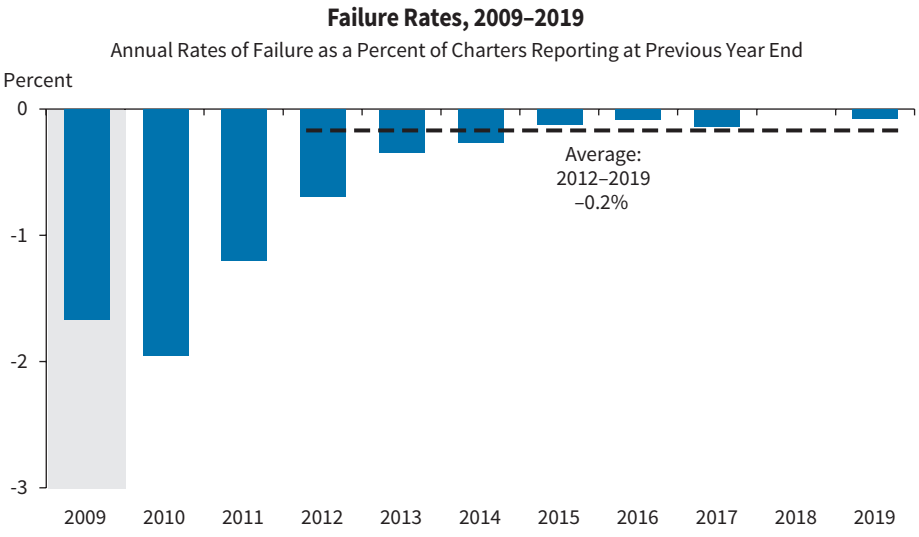
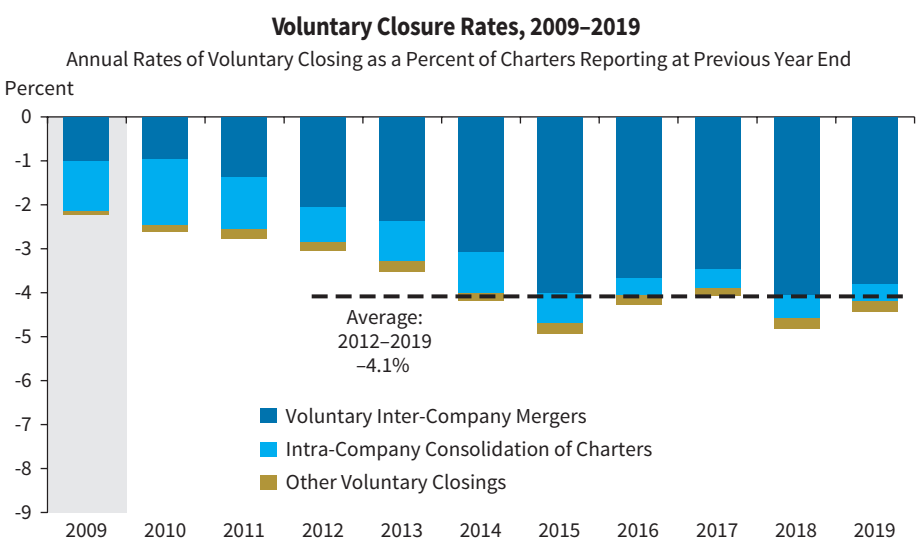


Chart 2.2



Source: FDIC.
Note: Gray bar indicates recession period.

Chart 2.3



Source: FDIC.
Note: Gray bar indicates recession period.

As the lingering effects of the recession wore off and economic expansion took hold, the failure rate continued to decline as failures became a much less important factor in charter consolidation. Between 2015 and 2019, only 25 institutions failed. In 2010, at the peak of the banking crisis, 157 banks failed.

Voluntary Merger Rates Increased

Starting in 2011, rates of voluntary mergers rose to levels not seen since the previous merger boom, in the 1990s (Chart 2.3). Many of the earlier mergers, however, particularly those occurring through 2000, were between separately chartered institutions that were owned by the same holding company—that is, they were *intra*-company mergers.[1] Starting in 2011, mergers were more likely to

[1] The Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994 removed many of the restrictions banks faced if they wished to open a branch in a different state than the one in which they were headquartered. To the extent holding companies maintained separately chartered banks to comply with interstate banking restrictions, the Act rendered the separate charters unnecessary and facilitated their combination.

occur between unaffiliated institutions—that is, they were *inter*-company mergers.

Inter-company mergers reduce the number of genuinely independent institutions. Although intra-company mergers reduce the number of chartered banks, because the merging banks are owned by the same holding company, such mergers can be thought of as combining separate divisions of a single company rather than mergers of distinct companies.

Although between 2011 and 2019 unaffiliated (inter-company) mergers constituted most merger activity among insured institutions, the rate of such mergers did not reach or exceed its previous peak. Between 1994 and 1999 the annual average rate for inter-company mergers was 3.6 percent, with a peak of 4.4 percent in 1998, but in the period after 2011, the annual merger rate for unaffiliated institutions did not again reach 4.0 percent until 2014, and it did not reach 4.1 percent until 2018.

In the meantime, mergers between charters within the same holding company dwindled as most had already consolidated their banks. A comparison of average merger rates for the two types of mergers shows that between 1985 and 2011, the unaffiliated merger rate averaged 2.3 percent of institutions per year, but 3.3 percent per year in the period since 2011. In contrast, the intra-company merger rate averaged 1.5 percent per year between 1985 and 2011, but only 0.6 percent per year between 2012 and 2019.

A new type of voluntary merger occurred in 2012, when for the first time a bank was acquired by a credit union. Between 2012 and 2019, 39 community banks were either acquired or were pending acquisition by 34 unique credit unions, compared with approximately 1,750 community banks that were acquired during this period by other banks. For more information on the acquisition of community banks by credit unions, see Box 2.1.

Box 2.1 The Acquisition of Community Banks by Credit Unions

Historically, credit unions and banks coexisted, offering similar services but with distinct business purposes. Although credit unions may have been viewed as competitors, they focused on a specific field of membership.[a] Mergers and acquisitions did not occur until 2012, when the first "purchase and assumption" of a bank by a federal credit union was completed.[b]

Credit unions continued to acquire banks after 2012, but the number of banks acquired by credit unions pales in comparison with the number of banks acquired by other banks over the same period. In the years since that first acquisition in 2012 through 2019, a total of 39 acquisitions of community banks by credit unions were completed or were pending.

Banks that were acquired by a credit union have some important characteristics that provide insight into possible reasons for their attractiveness to the credit union. Relative to otherwise similar non-acquired banks, acquired banks tended to be smaller in terms of asset size, have larger concentrations of single-family mortgage loans, and have smaller concentrations of C&I loans. These acquired banks also tended to have higher efficiency ratios and less profitability overall. Taken together, these characteristics suggest that the acquired banks were small enough that credit unions could incorporate the bank portfolio into existing operations. The banks also had loan portfolios that complemented the credit unions' business models.

As of year-end 2019, the trend among some credit unions to acquire banks made up a very small portion of the overall number of banks acquired in mergers.

[a] Potential members must belong to a credit union's field of membership in order to join. For example, membership in a credit union with a "community charter" is limited to people who live, work, worship, or attend school within a well-defined geographic area, such as a neighborhood, city, or rural district. Legislative and regulatory changes during the last 20 years, such as the Credit Union Membership Access Act of 1998, have increased the number of people eligible to join credit unions.

[b] A purchase and assumption transaction involves the transfer of assets and deposit liabilities from one institution to another without the two institutions legally combining into a single entity. When a credit union "acquires" a bank, it purchases all, or substantially all, of the bank's assets and assumes its liabilities. The legacy bank liquidates any remaining assets and relinquishes its charter. While credit unions had acquired assets from banks prior to 2012, there had not been a purchase and assumption of an entire bank by a federal credit union until then.

Chart 2.4

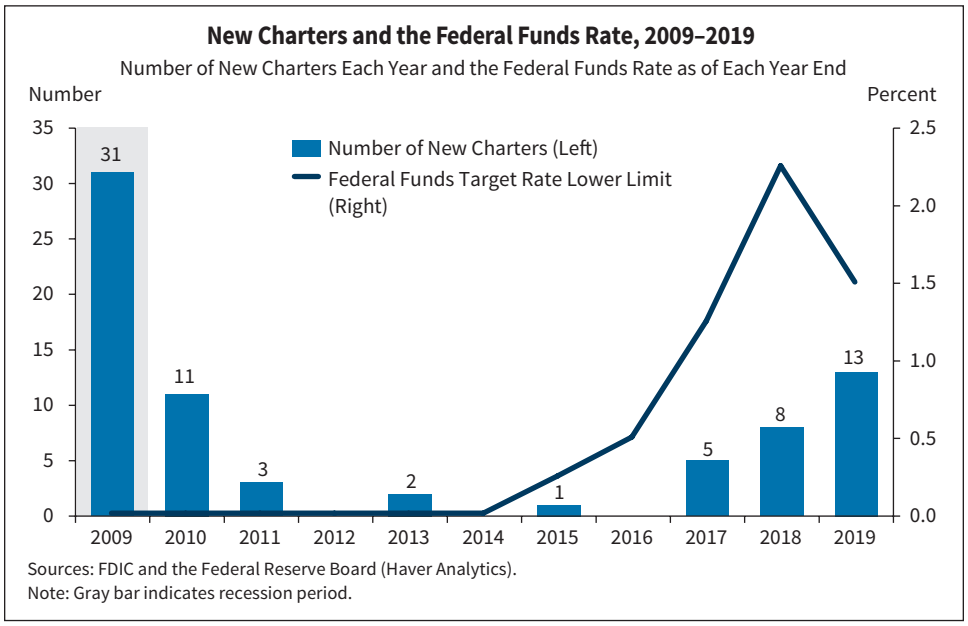
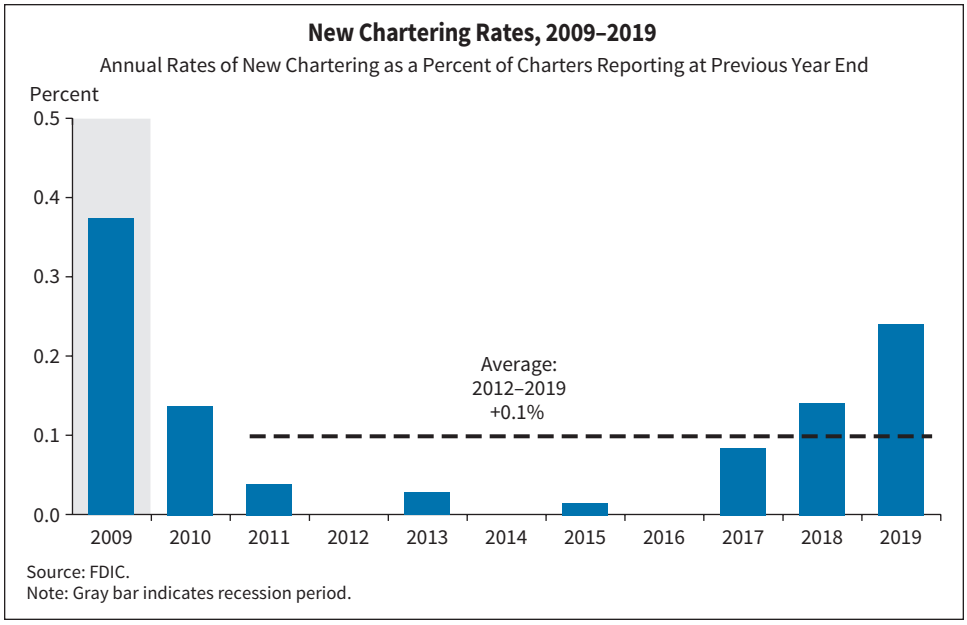


Chart 2.5



The New Chartering Rate Remains Low

The rate of new charter formation fell to zero in the aftermath of the financial crisis and Great Recession, and as of 2019 had only barely begun to recover. The last year of substantial new chartering activity was 2008; in 2009, the rate of new charter formation set what was at the time a post-1985 record low, and the rate continued to decline until it reached zero in 2012. Almost no new charter formation occurred between 2011 and 2016: no new institutions opened in 2012, 2014, or 2016, and during the entire six-year period, only six institutions opened. Late in the economic expansion new charter formation began to pick up, with 5 new institutions opening in 2017, 8 in 2018, and 13 in 2019 (Chart 2.4). However, the number of new charters in 2019 represented a new chartering rate of only 0.2 percent, far below the historical average rate of 1.4 percent, which prevailed between 1985 and 2011 (Chart 2.5).

Table 2.1 Average Annual Rates of Structural Change

Average Annual Rates of Percentage Change in the Number of Charters Between 1985–2011 and Between 2012–2019								
Average Rates of Change Because of:		Inter-Company Merger	Intra-Company Merger	Inter-Company and Intra-Company Merger	Other Voluntary Closing	Failure	New Chartering	Net Charter Consolidation
During the Period:	1985–2011	–2.3	–1.5	–3.9	–0.1	–0.7	1.4	–3.2
	2012–2019	–3.3	–0.6	–3.9	–0.2	–0.2	0.1	–4.3

Source: FDIC.
Note: Mergers are voluntary. Other Voluntary Closings include institutions that, for example, choose to liquidate without being acquired, or choose to relinquish FDIC insurance. The rates of Net Charter Consolidation, and "Inter-Company and Intra-Company Mergers," do not equal the sums of their component rates due to rounding.

The Net Consolidation Rate Increased

An important fact about consolidation within the banking industry is that the average annual rate of voluntary mergers between 2012 and 2019—combining both mergers between unaffiliated institutions and those between institutions within the same holding company—was the same as the average annual rate of voluntary mergers between 1985 and 2011: 3.9 percent (Table 2.1). Moreover, during the period 2012–2019 the average annual rate of failure declined by 0.5 percentage points, while the rate of other voluntary closings increased only slightly. Yet the average annual rate of net charter consolidation during the period 1985–2011 was 3.2 percent, compared with a rate of 4.3 percent during the period 2012–2019. The increase in net charter consolidation was due to the slow rate of new charters in the latter period.

Although a decline in new charter formation following the financial crisis and Great Recession is not entirely surprising given the severity of the crisis and recession, the slow rebound of new charters as the economy recovered is unusual. There are several possible explanations for it. Macroeconomic factors—such as output, interest rates, and unemployment—appear to be primarily responsible.[2] The possible role of regulatory compliance costs in affecting the cost of chartering a new small bank is discussed in Chapter 5.

The primary explanation focuses on bank profitability. This explanation maintains that new chartering declined because of the extraordinary decline and weak subsequent recovery in bank profitability associated with the financial crisis and Great Recession. Put simply, this explanation holds that banking became less profitable after the financial crisis and, therefore, fewer investors were interested in starting banks. It is true that banking became less profitable after the financial crisis, but an important question is how much of bank profitability post-crisis can be attributed to macroeconomic factors and how much to other factors, such as regulation.

FDIC research indicates that "[m]ore than 80 percent of the post-crisis decline in [community bank] profitability can be explained by negative macroeconomic shocks" and that the net effects of regulation, business practices, and other "structural" factors explain less than 20 percent of the post-crisis decline in profitability.[3]

It is important to note that while macroeconomic factors appear to explain most of the decline in community-bank profitability since the Great Recession and that these factors provide a plausible explanation for the low rate of new charter formation, the regulatory environment in which banks operate changed considerably at the same time. For detail on how the changed regulatory environment may have affected community banks, see Chapter 5 of this study.

Community Banks Are More Prevalent Than Noncommunity Banks, Although Both Groups Continue to Consolidate

Among FDIC-insured institutions, community banks are by far the most numerous, and noncommunity banks are the largest by asset size. Also, noncommunity banks have continued to grow their assets at a greater rate than community banks on average. Both bank types have been consolidating since 1986, although community banks were less likely to close than noncommunity banks between 2012 and 2019. This section compares consolidation among community banks with consolidation among noncommunity banks by comparing number of institutions, rates of attrition, and average asset growth.

[2] Adams and Gramlich; GAO.

[3] Fronk.

Chart 2.6

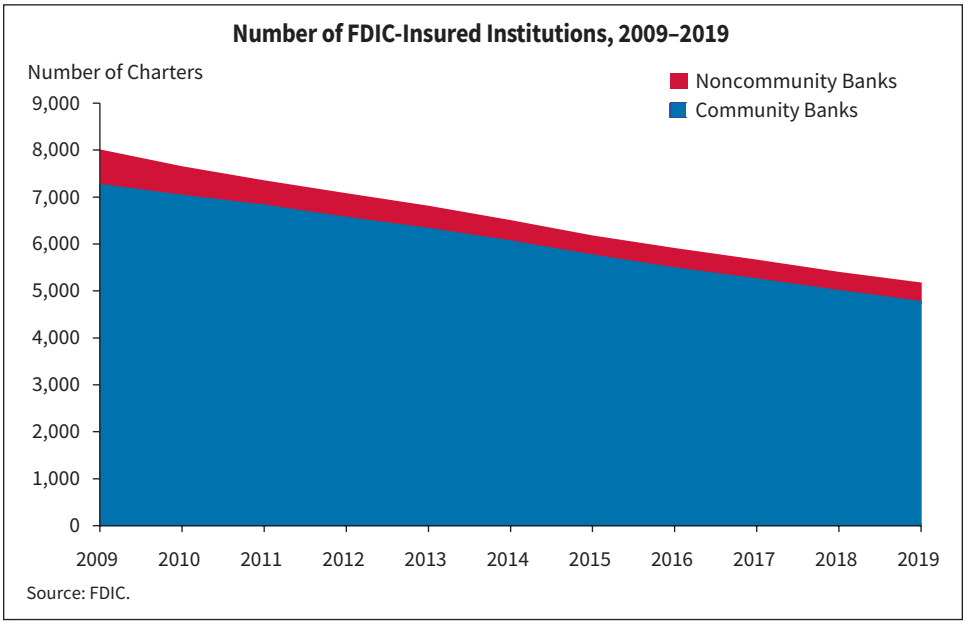
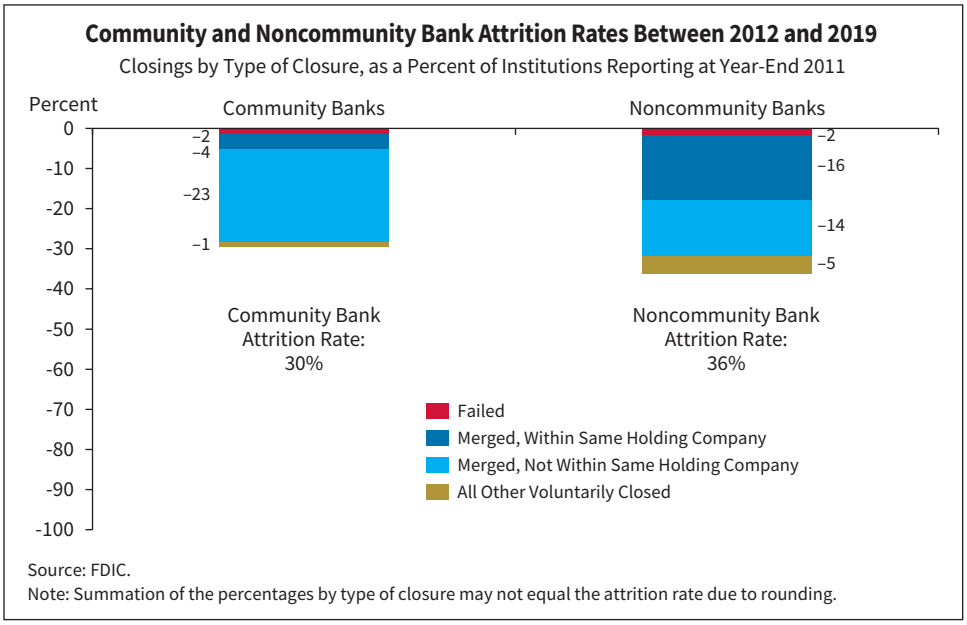


Chart 2.7



The Number of Community and Noncommunity Banks Continues to Decline

Between 1985 and 2019 the numbers of both community and noncommunity banks generally declined, after increases among both groups between 1984 and 1985. For each group the decline was substantial, especially between 2012 and 2019 when the number of community banks dropped by 30 percent and the number of noncommunity banks by 23 percent.

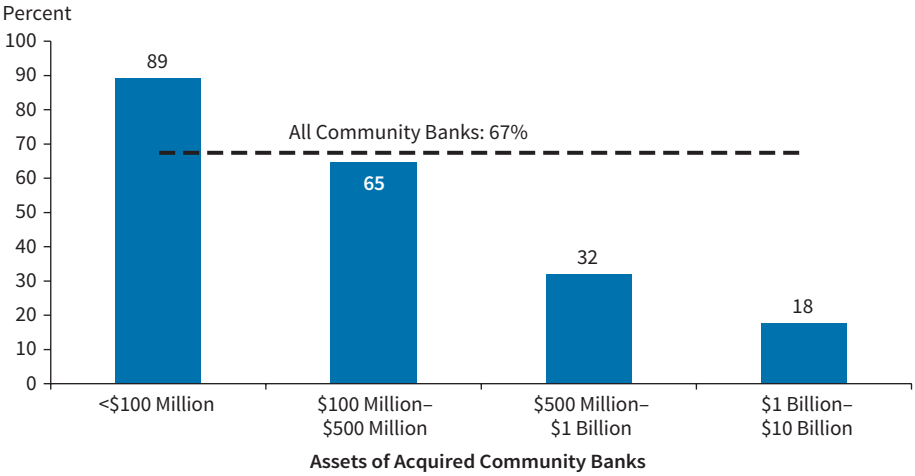
Although the number of community banks continued to decline, as of 2019 they were still the most prevalent type of FDIC-insured institution (Chart 2.6). In 2019, 92 percent of all bank charters were held by community banks, unchanged from 2011 and up from 87 percent in 1984.

Although the number of banks continued to decline, between 2012 and 2019 community banks were actually less likely to leave the industry than were noncommunity banks. Of the 6,802 institutions that reported as community banks at year-end 2011, just under 30 percent had closed by year-end 2019. In comparison, over the same

Box 2.2 Acquirers of Community Banks

Most often, community banks that close do so because they have been acquired by other community banks. Among community banks that ceased operating between 2012 and 2019, just over two-thirds were acquired by other community banks. Even among larger community banks, or those with an asset size between $1 billion and $10 billion, nearly one out of every five that ceased operating was acquired by another community bank (Chart 2.2.1).

Chart 2.2.1



Source: FDIC.
Note: Closed community banks failed, voluntarily merged, or voluntarily liquidated.

While most community banks that close do so because they have been acquired by other community banks, more than half of the offices operated by those acquired community banks are acquired by noncommunity banks (Table 2.2.1). This is because banks with larger asset sizes tend to operate more offices compared with smaller banks, and noncommunity banks acquire larger proportions of closed community banks as the asset size of those community banks rises. As shown in Chart 2.2.1, 89 percent of community banks that closed between 2012 and 2019 and had less than $100 million in total assets were acquired by other community banks. However, these relatively small community banks operated two offices each on average, according to data from the FDIC's Summary of Deposits surveys. Community banks that ceased operating and had between $1 billion and $10 billion in assets, on the other hand, operated 24 offices each on average and were much more likely to be acquired by noncommunity banks.

Table 2.2.1

Offices Acquired and Retained by the Acquirers of Community Banks Between 2012 and 2019						
Type of Acquirer	**Number of Acquirers**	**Offices Initially Acquired**	**Offices Retained by Acquirer**	**Retention Rate (Percent)**	**Offices Closed by Acquirer**	**Offices Sold to Other Institutions**
Noncommunity Bank	166	5,874	5,086	86.6	710	78
Community Bank	902	4,727	4,270	90.3	412	45

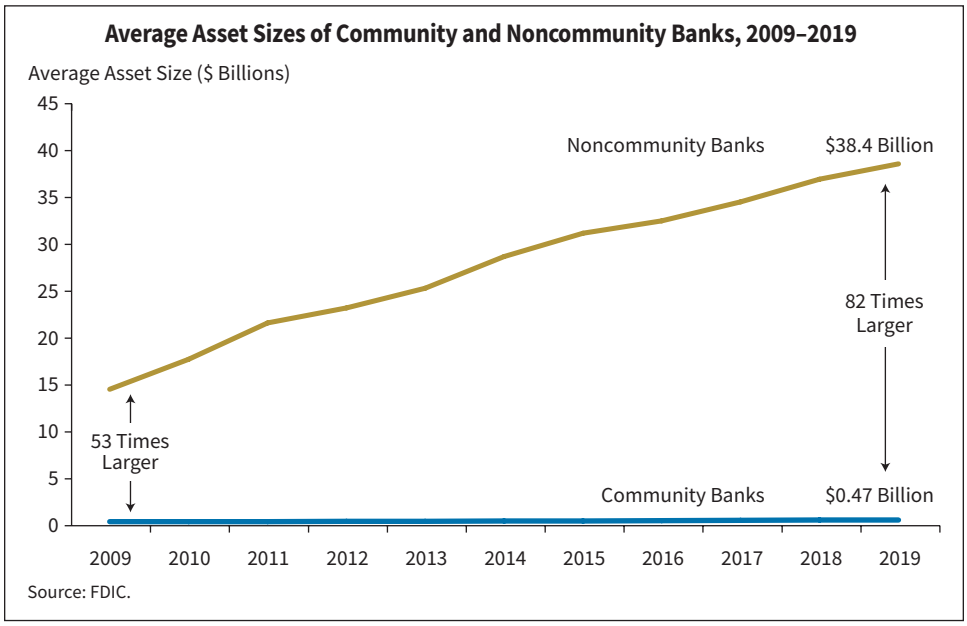
Source: FDIC Summary of Deposits data.
Notes: The offices initially acquired are those listed as belonging to acquired banks according to their last Summary of Deposits filings. The Summary of Deposits filings of acquiring institutions immediately following mergers are used to determine what happened to the acquired offices. Thus, the Table displays outcomes for acquired offices within the first year or less following an acquisition. These outcomes may be different over a time period longer than one year.

period more than 36 percent of the 555 institutions that reported as noncommunity banks had closed (Chart 2.7).

In addition to being more likely to close than community banks, noncommunity banks were also more likely to merge with other noncommunity banks within a shared holding company, as shown in Chart 2.7.[4] For details on who acquires community banks when they merge, see Box 2.2.

[4] The FDIC defines "community bank" at the holding company level, so separately chartered institutions belonging to the same holding company are either all community banks or all noncommunity banks.

Chart 2.8



Average Asset Growth at Noncommunity Banks Outpaces Growth at Community Banks

Between 1984 and 2019, noncommunity banks grew substantially compared with community banks, and as of year-end 2019 the average asset size of noncommunity banks was 82 times larger than the average asset size of community banks (Chart 2.8). Given the FDIC's definition of community bank, however, the growing divergence in average size between the two groups should not be entirely surprising. After all, although the FDIC does not impose an asset size threshold below which all institutions are considered community banks, the FDIC does impose limits on a community bank's geographic scope, among other things, once the bank reaches a certain asset size, which the FDIC adjusts upward over time. As an institution grows its balance sheet, it may grow its geographic footprint. Therefore, community banks that grow their balance sheets and expand into new markets may at some point in their growth become noncommunity banks. This implicitly slows down the rate at which the average asset size across all community banks can grow, since fast-growing community banks are more likely to become noncommunity banks.

On the other hand, noncommunity banks may grow their assets and footprint very rapidly, raising the average asset size growth rate for all noncommunity banks. The removal of restrictions on both intra- and inter-state branching in the 1980s and 1990s, followed by rapid growth in online and mobile banking, has allowed for the growth of noncommunity banks with very large balance sheets. U.S. Gross Domestic Product (GDP) in 2019 was approximately 5.3 times larger than GDP had been in 1984. Similarly, the average asset size of community banks in 2019 was about $470 million, about 5.3 times their average size of $88 million in 1984. Thus, from 1984 to 2019 community banks grew roughly in line with the U.S. economy. The average asset size of noncommunity banks in 2019, however, was more than 38 times their average size in 1984, since their growth during that 35-year period far outpaced that of the broader economy. The implicit growth "restriction" on community banks, described above, may be a key factor as to why their share of banking industry assets declined slowly after 2011. Between 2012 and 2019, the share of banking industry assets held at community banks declined from 14 percent to 12 percent of the total, down from a high of 38 percent in 1984.

Summary

The long-term consolidation of the banking industry that began in 1986 continued between 2012 and 2019. Bank failures contributed less to consolidation as the economy recovered from the financial crisis and Great Recession. Mergers made up a greater share of consolidation as failures receded. However, intra-company mergers became less common while inter-company mergers approached rates last seen in the 1990s. Because new chartering fell to post-1985 record low rates between 2012 and 2019, the

average annual rate of net consolidation increased to 4.3 percent from the rate of 3.2 percent, which prevailed between 1985 and 2011.

Both community banks and noncommunity banks consolidated between 2012 and 2019, although community banks that existed at year-end 2011 were less likely to stop operating between 2012 and 2019 compared with noncommunity banks. When community banks did cease operating, more than two-thirds of the time it was because of their acquisition by other community banks.

Average asset growth at noncommunity banks outpaced that at community banks between 2012 and 2019. However, community banks that expand their geographic footprints and their balance sheets may become noncommunity banks because of their growth, while noncommunity banks may grow without limit and remain noncommunity banks. Therefore, noncommunity banks are likely to report greater rates of average asset growth over time when compared with community banks.

Box 2.3 Structural Change and the COVID-19 Pandemic

The COVID-19 pandemic could affect the rate of consolidation in important ways. The number of mergers announced publicly fell in early 2020, suggesting that the rate of net consolidation will decline as planned mergers are postponed or canceled. Offsetting this factor, however, is the potential for a rise in bank failures as a result of the pandemic-related economic downturn, particularly if economic recovery is slow. Finally, while the rate of mergers may fall temporarily because of the effects of the pandemic, once the pandemic subsides, mergers could increase, as deals that were postponed are completed.

The rate of net consolidation in the first nine months of 2020 was nearly the same as the rate in the first nine months of 2019. The number of charters declined by 148 during the first nine months of 2019, representing a net consolidation rate of -2.7 percent, and during the first nine months of 2020, the number of charters declined by 144, which equates to a net consolidation rate of -2.8 percent. The number of mergers was 12 fewer during the first nine months of 2020, but there were also five fewer new charters, one more failure, and two more other voluntary closings than there had been in the first nine months of 2019.

More important, the number of merger announcements during the first nine months of 2020 was down 59 percent compared with the number during the first nine months of 2019, suggesting that merger activity would decline later in 2020 and potentially on into 2021. In terms of actual numbers, financial institutions announced 200 mergers during the first nine months of 2019, compared with 82 during the first nine months of 2020, according to data compiled by S&P Global.

Aside from leading to decreases in merger announcements in 2020, the COVID-19 pandemic also led to the termination and postponement of previously announced mergers. In 2019, 11 planned mergers were terminated, compared with 13 terminated mergers in the first nine months of 2020, according to S&P Global data.[a] In addition, seven planned mergers were postponed or had terms renegotiated and the parties cited the pandemic as one of the factors affecting the decision (Sullivan and Tor).[b]

[a] Terminated mergers are not included in the counts of merger announcements.
[b] As of September 30, 2020, five of the seven postponed or renegotiated mergers had been completed.

Chapter 3: The Effects of Demographic Changes on Community Banks

The changing demographics of the United States have affected demand for community-bank services, with banks seeing changing client bases and therefore changing demand for loans as well as other products and services. Community banks headquartered in some of the most dynamic areas of the United States—those with lower median ages and the highest levels of net migration inflows—are prospering and form an important part of the financial community. Community banks in these more dynamic areas experience faster rates of asset and loan growth, and compared with the community-bank industry as a whole, they are frequently more profitable and have larger shares of business loans. At the same time, community banks that are serving areas of the country with less favorable demographic trends—for example, community banks headquartered in areas with higher median ages and net migration outflows—have fewer opportunities for growth but nonetheless fill a vital role in their local communities. This chapter focuses on the community banks headquartered in the regions experiencing the most favorable and the least favorable demographic changes, the performance of each group relative to the other and to all community banks, and ways in which the two groups appear to be supporting their local communities.

In all, the community banks that were headquartered in counties where some of the greatest demographic change was taking place made up 27 percent of all community banks in the United States in 2019—a percentage that has increased just slightly over time. Put another way, the analysis in this chapter encompasses barely more than a quarter of community banks. It is not meant to ignore the other 73 percent of community banks but, instead, to highlight the differences between groups of community banks facing some of the most extreme demographic situations. Other community banks may be facing similar influences on their operations, depending on the demographics of their particular counties, but in any case all community banks can benefit from considering changes in their customer bases. Thus, the analysis as a whole is designed to help all of them better understand their changing customer bases.

Counties Can Be Defined by Two Key Demographics: Age and Migration

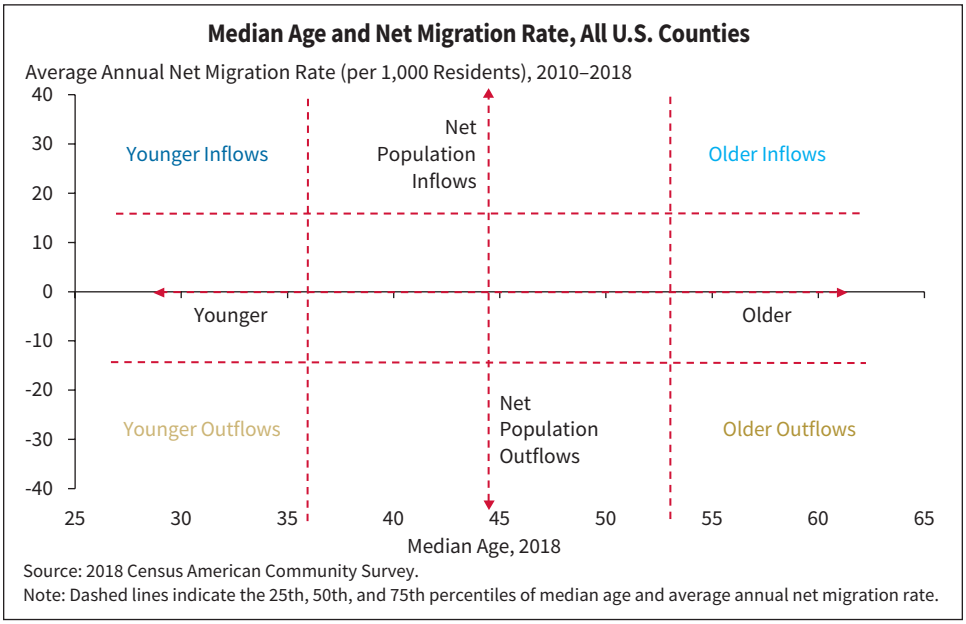
The term *demographic trends* refers broadly to major population characteristics—age, race, sex, marital status, educational attainment, and many others—and the ways in which they are changing in the nation over time. It is easy to sense that these trends will affect local economies and the community banks that serve them, but it is still important to understand how they produce their effects. Although there are many different kinds of demographic change influencing the U.S. workforce and population, of particular relevance to community banks are two key characteristics: age and migration. Each county in the United States can be ranked on both its median age and its net migration rate.

Chart 3.1 illustrates these two changes and delimits the counties of interest in this chapter. The dashed lines split all counties into quartiles, representing the 25th, 50th, and 75th percentiles for each age and migration trend. These two sets of quartiles separate counties, and, therefore, the community banks headquartered in them, into 16 groups, but it is only the outermost corners on which this chapter focuses:

- Younger inflow counties are those that are in the highest quartile of net migration inflows and the lowest quartile of median age.
- Older inflow counties are those that are in the highest quartile of net migration inflows and the highest quartile of median age.
- Younger outflow counties are those that are in the lowest quartile of net migration inflows—which in all cases means the community is experiencing population outflows—and the lowest quartile of median age.
- Older outflow counties are those in the lowest quartile of net migration inflows and the highest quartile for median age.

Although counties not in one of these four groups still are experiencing changing demographic conditions, the best way to illustrate and understand the effect on community

Chart 3.1



Source: 2018 Census American Community Survey.
Note: Dashed lines indicate the 25th, 50th, and 75th percentiles of median age and average annual net migration rate.

banks of these two major demographic trends is to focus on these four group of counties.

The United States, like many countries, is growing older as healthcare improves, birth rates decrease, and life spans increase. But increases in the average age in the aggregate do not mean that all parts of the country are aging at the same rate. Small changes in the national average can reflect large differences at the county, state, or regional levels. When median age by county, as reported in the 2018 Census American Community Survey, is delineated into quartiles, counties in the youngest 25 percent are those where the median age is 36.6 years or below. Counties in the oldest 25 percent are where the median age is 42.5 years or above.[1]

Map 3.1 displays these oldest and youngest counties, and shows that younger counties are often located more toward the South and West and also around larger metropolitan areas. Counties with some of the oldest median ages, on the other hand, are frequently located more to the Northeast, as well as in popular retirement destinations (such as Florida and Arizona) and in more rural areas. Age profiles across counties can have important implications for community banks headquartered in those areas because people of different ages and in different stages of life have different credit demands and use different banking services.

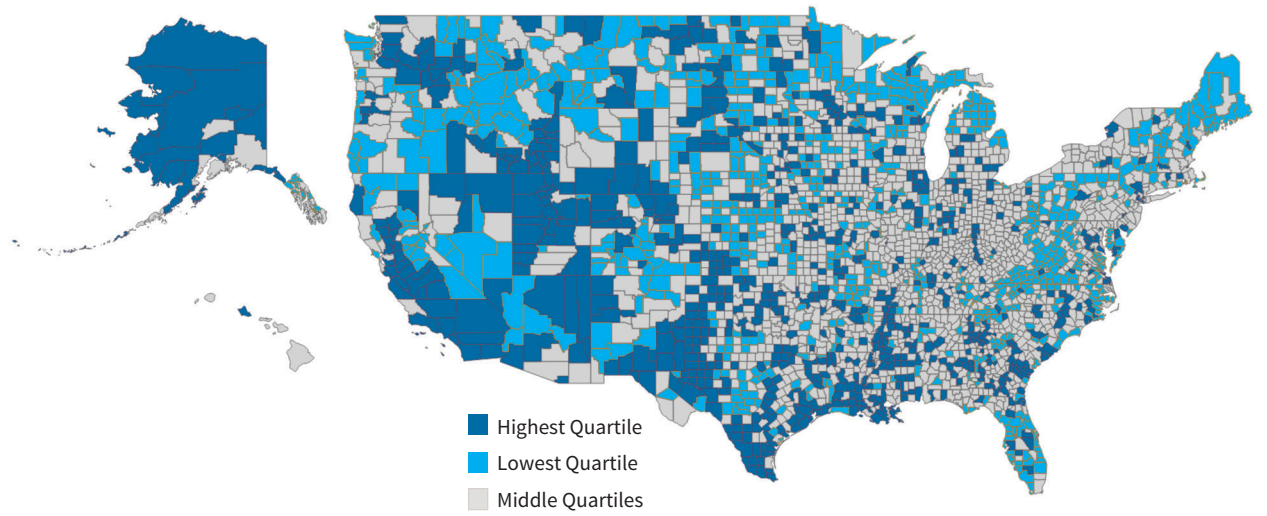
Net migration rate is the other key demographic trend affecting community banks. People move for many reasons, among which are school, work, and proximity to family. People also move different distances: within the same county, across state lines, and into and out of the United States. Net migration rate is the measure that captures all of this—the number of people moving into a county minus the number of people moving out of it. Although comparing net migration rates can mask important differences in why individuals are deciding to move into or out of a county, net inflows or outflows are still an important factor for community banks. Delineating the average annual net migration rate (per 1,000 residents) by county into quartiles shows that "inflow" counties are those with an average annual migration gain of more than 3.7 per 1,000 residents per year, while "outflow" counties are those that lose more than 3.7 per 1,000 residents to outmigration.[2]

Map 3.2, which shows the counties with the highest inflows and outflows, confirms conventional wisdom and the anecdotes that support it regarding population inflows and outflows. Somewhat like counties with the

[1] At the state level, the five states with the oldest median age (descending) are Maine, New Hampshire, Vermont, West Virginia, and Florida. The five states with the youngest median age (ascending) are Utah, Alaska, Texas, North Dakota, and Nebraska.

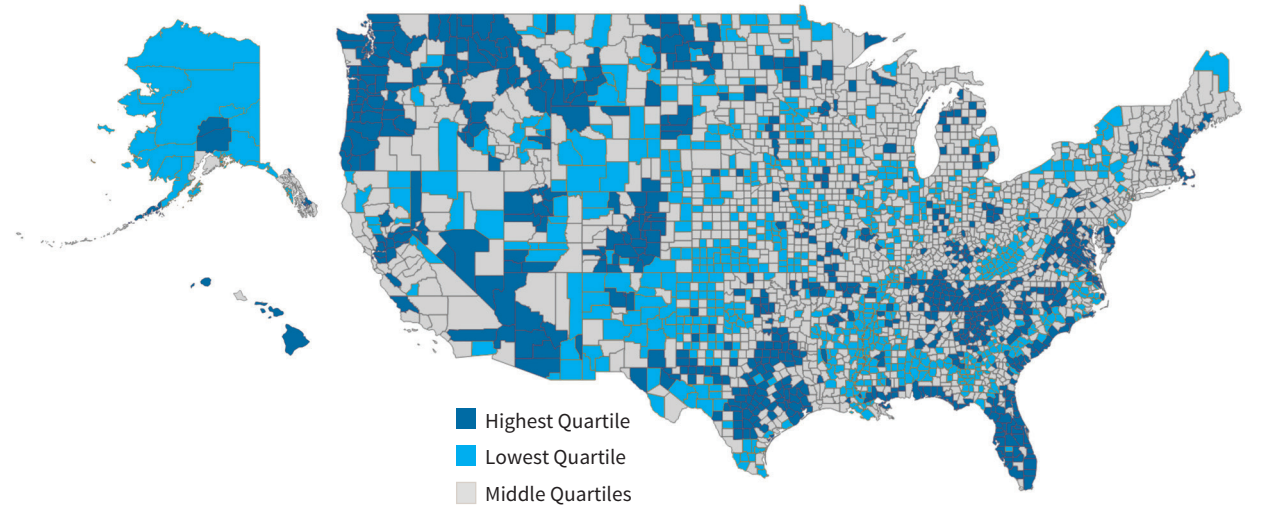
[2] The five states with the highest net migration inflows (descending) are Florida, Colorado, South Carolina, Arizona, and Washington. The states with the highest net migration outflows (descending) are Illinois, Alaska, New York, Mississippi, and New Jersey.

Map 3.1



Source: U.S. Census.

Map 3.2

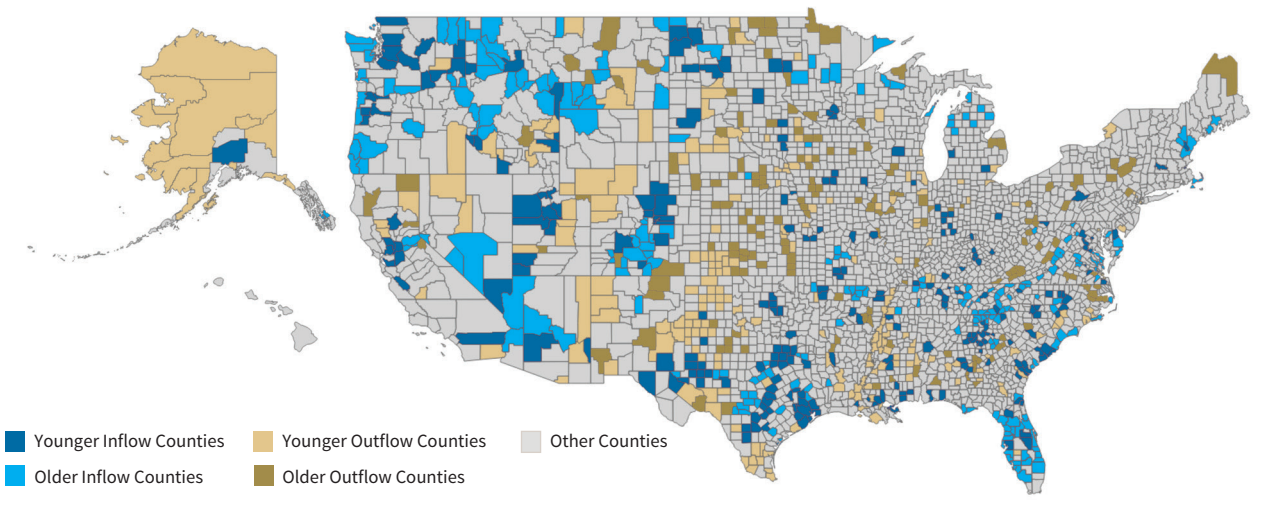


Source: 2018 Census American Community Survey.

youngest median age, counties with the highest net inflows are larger metropolitan areas or areas popular with retirees, like Florida and Arizona. Metropolitan areas, in fact, constitute not only just under 80 percent of inflow counties but also just over 70 percent of younger counties. Conversely, counties with the highest net outflows are often rural counties. Rural counties constitute almost 50 percent of outflow counties and just over 50 percent of older counties.

Each county is unique in the factors that affect who lives there and who moves there, yet between older counties as a group and younger ones as a group there are interesting and important differences, as there are between inflow counties as a group and outflow counties as a group. These differences affect the community banks headquartered in the different areas, with some banks experiencing an increase in demand and others serving a declining customer base. Map 3.3 displays counties that exhibit two

Map 3.3



Sources: U.S. Census, 2018 Census American Community Survey.

of these key demographic trends simultaneously: oldest populations with highest outflows, youngest populations with highest outflows, oldest populations with highest inflows, and youngest populations with highest inflows. As noted above, these four kinds of counties are the focus of this chapter.

The Share of Community Banks in Each County Type Has Been Stable, Tracking National Consolidation Trends

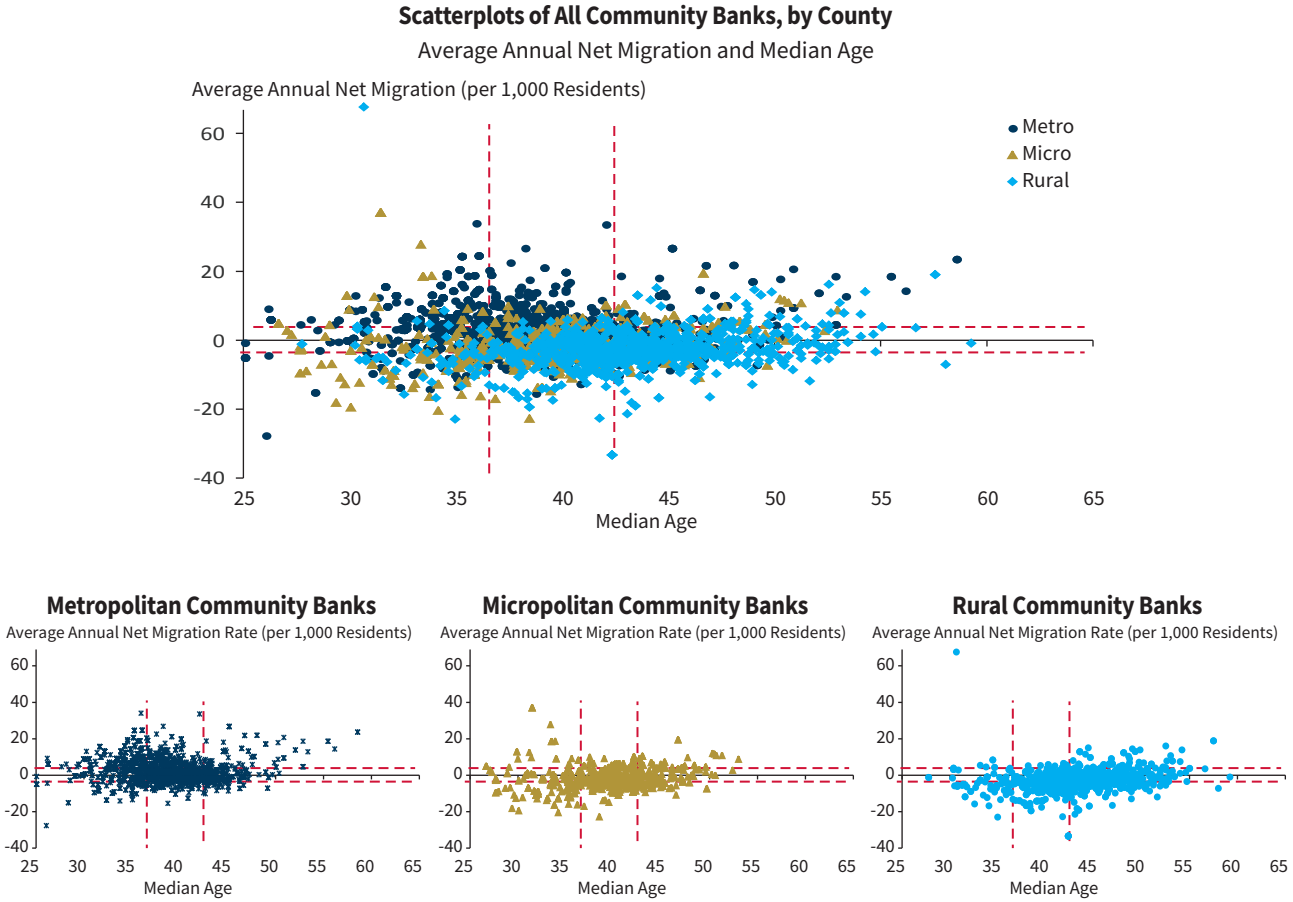
The first section of this chapter defined the types of counties where demographic changes are most pronounced. Though as noted above, all community banks can benefit from considering changes in their customer bases, the rest of this chapter focuses on community banks headquartered in highlighted counties shown in Map 3.3.

Honing in deeper than Map 3.3 illustrates, Chart 3.2 displays—for each community bank in the country—the average annual net migration rate and median age of the county in which the bank is headquartered.[3] The vertical and horizontal dashed lines in Chart 3.2 represent the thresholds for the bottom and top quartiles of age and net migration rates, respectively. The community banks of interest for this chapter are those in the most extreme quadrants made by the intersecting dashed lines—the furthest corners. Although many community banks are clearly serving areas that look similar to banks in the most extreme quadrants with respect to median age and average annual net migration rates, between banks in the highest and lowest quartiles there are real differences. And the chart strikingly symbolizes one set of differences that Maps 3.1–3.3 depict in a more conventional way: that community banks in metropolitan areas tend to have some of the youngest populations and highest net inflows, while community banks headquartered in rural areas have some of the oldest populations and highest net outflows.

For the end of each year from 2010 to 2019, Table 3.1 shows the number and percentage of community banks that were headquartered in each of the four demographic areas of interest—older inflow counties, older outflow counties, younger inflow counties, and younger outflow counties. Community banks headquartered in each of these four areas experienced consolidation trends similar to those for community banking as a whole, and so the number of charters fell consistently—but the *share* of community banks in each of these demographic categories was roughly stable for the entire eight-year period. All in all, community banks located in these demographic areas made up 28 percent of all community banks early in the decade and 27 percent later in the decade. Shares of community banks in each of the four county types were also remarkably stable during this period.

[3] Because statistics are reported at the county level, different community banks in the same county are represented in exactly the same location. Community banks are as of year-end 2019.

Chart 3.2



Sources: FDIC, U.S. Census, 2018 Census American Community Survey.
Note: Community banks are as of year-end 2019; Annual Net Migration is from 2010 through 2018; Median Age is 2018. Scale is set on all graphs to include outlier institutions.

Table 3.1 Number and Percentage of Community Banks Headquartered in Key Demographic Areas, Year-End 2010–2019

County Type		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Younger Inflows	Number of Institutions	695	665	624	601	563	509	484	467	434	415
	Percent of Community Banks	10	10	10	10	9	9	9	9	9	9
Older Inflows	Number of Institutions	361	338	320	302	290	273	258	233	217	199
	Percent of Community Banks	5	5	5	5	5	5	5	4	4	4
Younger Outflows	Number of Institutions	350	341	331	322	308	291	277	267	253	245
	Percent of Community Banks	5	5	5	5	5	5	5	5	5	5
Older Outflows	Number of Institutions	562	544	532	519	505	494	474	462	445	426
	Percent of Community Banks	8	8	8	8	8	9	9	9	9	9
All Others	Number of Institutions	5,044	4,914	4,737	4,563	4,371	4,169	3,969	3,799	3,631	3,465
	Percent of Community Banks	72	72	72	72	72	73	73	73	73	73
Total	**Number of Institutions**	**7,012**	**6,802**	**6,544**	**6,307**	**6,037**	**5,736**	**5,462**	**5,228**	**4,980**	**4,750**

Source: FDIC.

Some of the same metrics that were considered in Chapter 2 of this study ("Structural Change Among Community and Noncommunity Banks") can be considered in this discussion of community banks headquartered in specific demographic areas. Specifically, net inflow counties seemed to be a predictor of consolidation activity in general. Community banks headquartered in both younger inflow counties and older inflow counties had a higher net consolidation rate than did other institutions. And in both types of net inflow county, the most common cause of the decreasing number of individual institutions was outright purchase by another institution, rather than failure. It is counterintuitive that consolidation was highest in these counties: they had more customers to serve and were growing faster, and more customers should mean higher rates of new bank formation to serve them. But after mid-2009, the end of the Great Recession, as discussed in Chapter 2, de novo formation was limited.

In contrast, community banks headquartered in older outflow counties experienced lower rates of net consolidation than other institutions. This may be because of the strength of agriculture-focused community banks coming out of the Great Recession.[4] Community banks in older outflow counties also experienced lower rates of outright purchase by another institution. Younger outflow counties also had lower rates of consolidation than other institutions earlier in the decade, but by 2015 the rate of consolidation had accelerated some and has been similar to the rest of the United States in recent years.

Community Banks Headquartered in Net Inflow Areas Had Strong, Profitable Growth

Key portions of the balance sheets of community banks headquartered in counties with the highest population inflows indicate that these banks showed strong, profitable growth and continued to support the banking needs of their local communities. But within inflow areas, important differences emerge depending on whether the underlying population is older or younger. One can see these differences by focusing on the relationship between demographic trends and the forms taken by asset growth.

In the discussion below, the statistics on growth and profitability are calculated using fourth-quarter annualized data for all institutions designated community banks in a given year; assets are not merger-adjusted to reflect the ultimate purchaser in preceding years.

[4] Chapter 4 has a deeper analysis of agriculture-focused banks.

Younger Inflow Counties

The youngest counties with the highest net inflows are arguably some of the most dynamic areas of the country, and community banks headquartered in these counties are larger than other community banks. In 2019 the median asset size for these community banks was $313.8 million; the median asset size for community banks headquartered elsewhere was $206.6 million. Community banks headquartered in the youngest high-inflow counties were also more profitable than other community banks. Throughout the period from 2011 through 2019, the average community bank in younger inflow counties consistently had a higher NIM than other community banks, by 10 to 20 basis points. In addition, at these same community banks pretax ROA was often higher, usually by 5 to 20 basis points.

In addition, community banks headquartered in younger inflow counties were growing faster than other community banks, as several major parts of banks' balance sheets attested. Between 2010 and 2019, annual asset growth was always faster for the average community bank in younger inflow areas than for other community banks. Between 2012 and 2019 annual deposit growth was greater every year. And, almost always during the study period, the annual growth rate for loans was higher.

Older Inflow Counties

Community banks headquartered in older inflow counties are not as large as their counterparts in younger inflow counties, but their median asset size of $253.0 million made them, too, larger than other community banks located elsewhere. And like their counterparts in younger inflow counties, community banks in older inflow counties experienced stronger growth in key balance sheet metrics than the overall industry. Between 2013 and 2019, the annual growth rate for assets at the average community bank in an older inflow county was consistently higher than the rate for the community-bank industry overall. Similar trends can be seen in annual loan and deposit growth, which have been consistently higher than community banks overall since 2015 and higher more often than not during the entire study period.

There is also evidence to suggest that community banks in older inflow counties had more cash on hand, consistent with anecdotes about retirees keeping amassed assets in FDIC-insured, interest-bearing accounts. The evidence is

Table 3.2 Commercial and Industrial Loans to Total Assets (Percent)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
All Community Banks	8.3	8.3	8.4	8.9	9.2	9.3	9.3	9.3	9.8	9.5
Younger Inflow Counties	10.4	10.4	10.4	11.0	11.2	10.7	10.5	10.2	10.5	10.4
Older Inflow Counties	6.1	5.7	5.8	5.5	6.4	6.2	6.2	6.4	6.7	7.2

Source: FDIC.

Table 3.3 Commercial Real Estate Loans to Total Assets (Percent)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
All Community Banks	28.2	26.7	25.8	27.0	27.6	28.7	30.1	31.1	31.9	31.2
Younger Inflow Counties	33.4	31.2	30.3	31.3	31.8	33.2	34.5	35.2	36.7	36.7
Older Inflow Counties	32.6	30.6	27.0	26.2	26.5	26.2	27.5	27.9	26.8	27.4

Source: FDIC.

Table 3.4 Acquisition, Construction, and Development Loans to Total Assets (Percent)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
All Community Banks	5.4	4.2	3.8	3.8	4.1	4.4	4.7	4.8	5.0	5.1
Younger Inflow Counties	7.7	6.1	5.6	5.8	6.2	7.0	7.0	6.9	7.1	7.1
Older Inflow Counties	7.7	6.2	4.8	4.6	5.2	4.4	5.0	5.0	4.8	5.1

Source: FDIC.

that from 2010 through 2019, the deposit-to-asset ratio for the average community bank headquartered in an older inflow county was higher than for other community banks. This ratio indicated that these communities might be more deposit-heavy than the average community bank elsewhere, which in turn would further support the anecdotes mentioned above—not only that older customers had amassed assets in insured, interest-bearing accounts but also that the amount of the savings they had amassed was greater. At the same time, however, unlike the average community bank in younger areas, the quarterly pretax ROA at the average community bank in older inflow areas was consistently lower than for the average community bank overall. The lower ratio might have been due partly to the heavy deposit growth and high deposit-to-asset ratio.

Community Banks in Both Younger and Older Net Inflow Counties Supported Their Communities Through Business Lending, but Differently

Community banks headquartered in net inflow counties, whether older or younger populations, were clearly supporting economic growth and the needs of their local communities by issuing business loans. But comparing the shares of certain types of commercial loans makes it clear that community banks in younger inflow areas were doing a much larger volume than community banks overall.

For the period 2010 to 2019, Table 3.2 reports the share of C&I loans to assets for community banks headquartered in younger inflow counties, in older inflow counties, and in the community-bank industry as a whole. Community banks headquartered in younger inflow counties consistently had a higher share of C&I loans than the industry as a whole, but the banks headquartered in older areas still experiencing net inflows had a lower share of C&I loans than the community-bank industry as a whole, suggesting possible differences in demand between older and younger populations.

Table 3.3 reports the share of total assets that CRE loans made up for community banks headquartered in younger inflow counties, older inflow counties, and the entire community-bank industry, 2010–2019.[5] Community banks headquartered in younger inflow counties consistently had CRE rates higher than for the community bank industry as a whole. This suggests that community banks in those most dynamic areas were able to support new business growth.

Table 3.4 reports the share of acquisition, construction, and development (C&D) loans to total assets for all community banks and for those headquartered in the oldest and the youngest net inflow counties. As with C&I

[5] CRE loans group construction and development loans; multifamily real estate loans; and nonfarm, nonresidential loans.

and CRE lending, community banks headquartered in the youngest net inflow areas consistently had a higher share of C&D loans to assets. But whereas in older inflow counties the demand for the other two loan categories lagged behind the demand in other institutions, the C&D loan ratio for older areas was normally at or above the industry average.

Taken together, these trends suggest that areas with population inflows had stronger demand for loan growth and that community banks in those areas were ready to serve that demand. Community banks in younger inflow areas had a higher share of commercial lending than other institutions. And as noted earlier, areas with older populations had more deposits on hand and slower loan growth—findings that supported anecdotes about the characteristics of an older demographic group.

Community Banks in Net Outflow Counties Faced Challenges as Demand Growth Faded

The prior section discussed that, between 2012 and 2019, community banks in net inflow areas grew faster and were more profitable than the industry as a whole and some of the ways in which community banks supported commercial lending in those areas. In contrast to the higher rate of growth and greater profitability posted by community banks in net inflow areas, growth and profitability among community banks in areas of the country with net population outflows seem to have been hindered by headwinds resulting from this demographic change. Even so, differences between outflow areas that serve younger populations and outflow areas that serve older populations are interesting. As in the previous analysis of inflow counties, the statistics on growth and profitability are calculated using fourth-quarter annualized data for all institutions designated a community bank in a given year; and assets are not merger adjusted to reflect the ultimate purchaser in preceding years.

Younger Outflow Counties

One way in which net outflows seem to have affected community banks is by hampering their ability to grow. Between 2014 and 2019, average annual asset growth at the average community bank in younger outflow areas was for the most part lower than for other institutions, generally by 0.5 to 2.5 percentage points, or between only two-thirds and 90 percent of the average annual asset growth of other institutions. Starting in 2017, the average community bank in these areas also saw consistently lower annual loan growth; and starting in 2014, lower annual deposit growth.

Yet the slower growth rates and other factors affecting community banks in younger net outflow areas do not appear to have translated into less profitable institutions. Starting in 2017 the average community bank in a younger outflow area consistently had a higher quarterly NIM than community banks overall. A similar trend is apparent in pretax returns. However, both the loans to assets ratio and, starting in late 2014, annual asset growth were lower at the average younger outflow community bank than at other community banks.

Older Outflow Counties

Many of the issues raised for banks by the demographic headwind of net population outflows were amplified in areas with older populations. At year-end 2019, the median asset size at these community banks, at only $113.8 million, was much smaller than the median asset size at other community banks. And as in outflow areas with younger populations, annual growth rates for assets were lower for the average community bank in an older outflow county than for other community banks—starting in 2013, 0.6 to 3.5 percentage points lower. Likewise, from 2011 through 2019 the growth rate for loans at the average community bank in an older outflow area was consistently lower than for other community banks. The annual growth rate for deposits displayed the same trend: starting in 2013 it was consistently lower at the average community bank in an older outflow area.

The slower balance sheet growth occurring in older outflow areas seemed to weigh on bank profitability. Starting in 2010, the average community bank in older outflow areas consistently saw NIMs that averaged 3 to 20 basis points lower than other community banks; lower quarterly pretax ROA (though the difference was less stark than for NIMs, and it began in mid-2016); and a higher deposit-to-asset ratio (starting in 2010, it was consistently higher by roughly 10 to 70 basis points).

Box 3.1 The Effect of Rural Depopulation on Community-Bank Growth Potential

Even without updated Census designations of rural counties, it is still possible to update the analysis of rural population trends and the implications for banks headquartered in those areas from the 2012 FDIC Study.[a] Using the 2010 Census county designations for metropolitan, micropolitan, and rural areas but supplementing them with American Community Survey annual population data through 2018, we see that rural depopulation has continued. Between 2010 and 2018, just over 70 percent of rural counties lost population (990 of the 1,353 rural counties had a lower population in 2018 than in 2010). The change from FDIC analyses in 2012 was substantial: in that year, the FDIC reported that 50 percent of rural counties were experiencing depopulation. Furthermore, between the 2012 FDIC study and this study, there was also a further increase in a subset of declining rural counties: rural counties labeled "accelerated declining" because of the quickening pace of their population decline. As of 2019, 300 counties were designated as accelerated rural declining areas, up from 272 in the 2012 study.

In fourth quarter 2019, there were 1,121 community banks headquartered in depopulating rural counties, up slightly from 1,091 at the end of 2011. The 1,121 constituted about 24 percent of all community banks. The reason the number of community banks in depopulating rural counties increased even in the face of continued consolidation in the industry is that more counties began to lose population since 2011. And of the 1,121 community banks headquartered in depopulating rural counties, 391 were headquartered in accelerated declining rural counties.

Concern over the economic effects of depopulation centers on the same issues that previous FDIC analyses highlighted: prime-age workers, those between the ages of 20 and 45, may be moving to seek better opportunities in other places. This can pinch the age distribution of rural counties, and the shrinking tax base that results can increase the fiscal pressure on local governments. In addition, the absence of recent college graduates and other younger workers may make it more challenging for community banks and other local businesses to attract and retain qualified staff, management, and officers, as well as grow their customer bases. The dynamics of out-migration and depopulation risk becoming self-reinforcing, a risk highlighted in the prior FDIC studies.

The median asset size of a community bank in rural declining areas has been much smaller than the median asset size of a community bank headquartered in other areas. The 2012 FDIC Study found that from 2001 to 2007 community banks located in rural depopulating counties reported lower pretax returns than did community banks in other areas—but the study also found that from 2007 to 2011 these community banks had higher earnings. During the latter period, the performance success of depopulating rural banks relative to other institutions was mostly attributable to rural banks' dependence on agriculture, a sector that remained particularly strong throughout the Great Recession. The Great Recession largely hit metro areas, whereas the agriculture industry was spared major economic shocks. During the study period banks in rural declining areas consistently had a much higher share of agricultural loans to total assets, ranging from 14 to 19 percent of total assets and always at least triple the share of community banks headquartered in other areas. Agriculture-focused rural banks performed better during, and recovered more quickly from, that recession.

The period between 2011 and 2019 saw rural banks in depopulating areas continue to report higher earnings, and quarterly NIM was persistently around 5 basis points higher at these banks than at other institutions. This is once again attributable to the focus on agriculture lending at many of these institutions. Some of this advantage, however, eroded over time because of the fall in global commodity prices that began in 2014. Thus, although pretax returns recovered from the Great Recession more quickly at rural community banks than at other institutions and were higher initially, the situation reversed in 2015. Even so, going into 2019, community banks that specialized in agriculture were more profitable than community banks that were simply headquartered in rural communities. (See Chapter 4 of this study for details on agricultural specialists.)

continued on page 3-10

[a] For an analysis, see *FDIC Community Banking Study* (2012), Chapter 3. Anderlik and Cofer (2014) also addresses the issue of rural depopulation.

Box 3.1, continued from page 3-9

From early 2014 through 2019, the demographic headwinds of rural depopulation weighed more heavily on other parts of community-bank balance sheets. Asset growth was weaker at community banks in rural declining regions than at other community banks: annual growth rates for assets were consistently between 1.5 and 3 percentage points lower than they were for other banks. During the same period, the average community bank in rural declining areas saw slower loan growth and slower deposit growth than the average community bank. Starting in late 2013, growth rates for both loans and deposits generally ran 1 to 3.5 percentage points lower, or roughly a half to two-thirds of the growth experienced by other institutions.

In summary, these trends indicate a continuation of findings from the 2012 Study. The performance reported here of depopulating rural banks relative to other community banks is somewhat surprising because the agricultural sector, which many of these banks service, faced low commodity prices during the latter part of the period between 2012 and 2019. Until the appearance of COVID-19 (discussed more fully in Box 3.2), the outlook for rural depopulation was for demographic conditions to continue their long-term trend of deterioration, with more migration out of rural counties, more pinching of the distribution of ages (with prime-age workers leaving), and some of the fastest-growing rural counties set to be upgraded to micropolitan areas in the 2020 Census.

Community Banks in Net Outflow Areas Do Not Have Similar Commercial Lending Portfolios to Other Community Banks

Partly because of the demographic headwinds outlined above, community banks headquartered in net outflow counties often had lower commercial lending volumes than other institutions. Table 3.5 reports the share of C&I loans to total assets for all community banks and for the institutions headquartered in older outflow and younger outflow areas during the period 2010 through 2019. Community banks headquartered in older outflow counties consistently had a lower share of C&I loans than other institutions. Community banks in younger outflow areas showed a slightly different trend. Although they had a lower C&I loan share in the years immediately after the Great Recession, starting in 2012 their share steadily climbed and, starting in 2017, was higher than the share for all community banks. This suggested that in the coming years, perhaps the commercial loans demanded by a younger population would help support economic growth in their areas.

Table 3.6 displays the share of CRE loans for all community banks and for the institutions headquartered in older outflow and younger outflow counties. Between 2010 and 2019 community banks headquartered in younger outflow counties had CRE to asset ratios that were near—but always below—the ratios of the industry as a whole. Institutions in older counties, however, had CRE volumes much lower than those of the industry, suggesting less underlying demand for these types of commercial loans, which in turn may have been an additional headwind pushing against continued community-bank growth in those locations.

Table 3.5 Commercial and Industrial Loans to Total Assets (Percent)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
All Community Banks	8.3	8.3	8.4	8.9	9.2	9.3	9.3	9.3	9.8	9.5
Younger Outflow Counties	8.0	7.8	8.1	8.3	8.9	8.8	9.1	9.5	10.3	10.6
Older Outflow Counties	8.1	7.8	7.6	7.9	7.9	8.0	8.1	8.3	8.5	8.5

Source: FDIC.

Table 3.6 Commercial Real Estate Loans to Total Assets (Percent)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
All Community Banks	28.2	26.7	25.8	27.0	27.6	28.7	30.1	31.1	31.9	31.2
Younger Outflow Counties	28.0	25.9	25.7	25.8	26.6	28.0	30.0	30.4	30.6	30.1
Older Outflow Counties	17.4	16.3	15.5	15.8	16.4	17.1	18.0	19.0	19.9	19.8

Source: FDIC.

Table 3.7 Acquisition, Construction, and Development Loans to Total Assets (Percent)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
All Community Banks	5.4	4.2	3.8	3.8	4.1	4.4	4.7	4.8	5.0	5.1
Younger Outflow Counties	5.6	4.6	4.2	4.1	4.3	4.7	5.0	5.0	4.9	4.8
Older Outflow Counties	2.6	2.1	1.9	1.9	2.1	2.4	2.6	2.9	3.2	3.1

Source: FDIC.

Table 3.7 reports the share of C&D loans to total assets for all community banks and for the institutions headquartered in older outflow and younger outflow counties. From 2010 through 2017, community banks in younger outflow counties had C&D loan ratios above those of the industry as a whole, suggesting that these banks were able to support the economic expansion. In 2018 and 2019, however, the levels in these counties slipped below those of the industry. Levels of C&D loans in community banks headquartered in older outflow counties was less encouraging: the share of C&D loans at these institutions was much lower than for the industry as a whole—in some years, almost half as low—though the level of such loans has risen steadily since 2012.

This group of trends as a whole suggests that community banks headquartered in areas experiencing population outflows were less profitable and slower growing than other community banks. Worth noting, though, is the difference in deposit growth rates between community banks headquartered in older outflow areas and those headquartered in younger outflow areas. Although both groups of banks experienced lower deposit growth rates than other parts of the industry, the deposit to asset share of community banks in older outflow areas was significantly higher than for other community banks, suggesting that retirees were continuing to keep their money with local banks.

Summary

Community banks serve customers in their local geographic areas, and long-term population trends affect the individuals located in an area and the services those customers demand. In areas of the country that are arguably most thriving—younger with net population inflows—community banks are growing quickly and profitably and are supporting communities with C&I and CRE loans to help areas continue to grow. There is some concern, however, whether some of the areas experiencing net outflows will be able to continue to grow; banks in those areas have slower growth and lower commercial lending portfolios, both of which could weigh down community banks in those areas and possibly feed into higher consolidation rates in the future.

Box 3.2 Net Migration Rates and the COVID-19 Pandemic

The emergence of the COVID-19 pandemic was an unexpected shock that affected the economy with immense speed and force. Unlike other areas of the economy that the pandemic has disrupted, however, demographic trends are slow to change: because the U.S. population is so large, demographic trends in this country normally take decades to develop and make their economic mark. Thus, changes in the population data that are due to the pandemic are not likely to be seen for some time. Even if in retrospect there is a clean break in some demographic trends beginning in 2020, most likely the changes will not appear in population data for a number of years.

One issue worth monitoring for its potential effect on demographics over the longer term is remote working. The government-mandated requirement for social distancing to reduce infection has led to a temporary increase in telework in many industries. If this increase in telework becomes a permanent feature for segments of the workforce, it may allow workers to move to locations outside major cities and still be productive. They may choose to relocate to areas with more open space or a lower cost of living, which could increase migration overall as well as changing which counties are the areas of highest inflows. Additional telework flexibility could even reverse long-standing trends of inflows into the largest urban areas.

Chapter 4: Notable Lending Strengths of Community Banks

Community banks provide their local communities with valuable products and services, including offering various loan products to business owners and developers, small businesses, and farms. As discussed in Chapter 3, community banks are successful in areas that are experiencing a population inflow—areas filled with local small businesses. But community banks also continue to meet the credit needs of less economically vibrant areas, such as rural counties experiencing population outflows. Community banks tend to focus on loans as relationships, originating loans that require local knowledge, a greater personal touch, individual analysis, and continued administration rather than loans that can be made according to a formula.

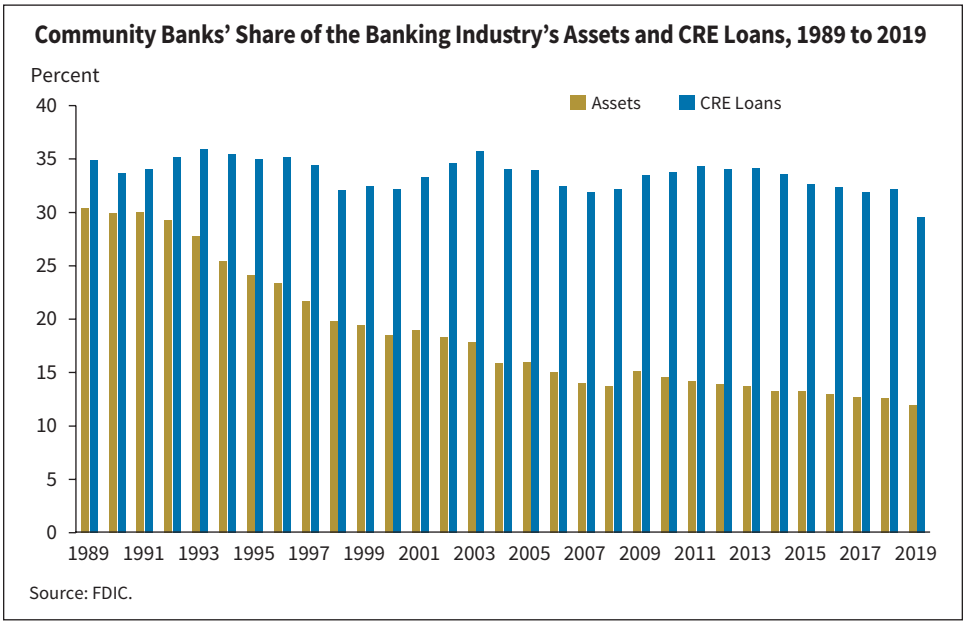
In this chapter, we discuss three lending areas that are particularly important for community banks: CRE lending, small business lending, and agricultural lending. Though by definition community banks tend to be relatively small, in each of these areas their lending far exceeds their aggregate lending share: community banks represent 15 percent of the industry's total loans but 30 percent of its CRE loans, 36 percent of small business loans, and 70 percent of agricultural loans.

CRE Lending

Throughout the United States CRE lending is an important function performed by banks of all sizes, including community banks. As of year-end 2019, banks held $2.3 trillion in CRE loans, an amount that gave them a significant presence in the broader financial industry. Community banks in aggregate held almost one-third of this amount—$690 billion—despite having only a small share (12 percent) of the banking industry's total assets. Moreover, as Chart 4.1 indicates, community banks' share of CRE loans has been relatively stable since 1989 even while their share of total banking industry assets was declining.

Community banks' participation in CRE lending is widespread. Almost all 4,750 community banks hold at least some CRE loans, and many have substantial CRE loan portfolios. More than one-fifth of community banks have CRE loan portfolios equal to or greater than three times their amount of capital—above the share of community banks that have substantial portfolios in any other loan type.

Chart 4.1



Source: FDIC.

Chart 4.2

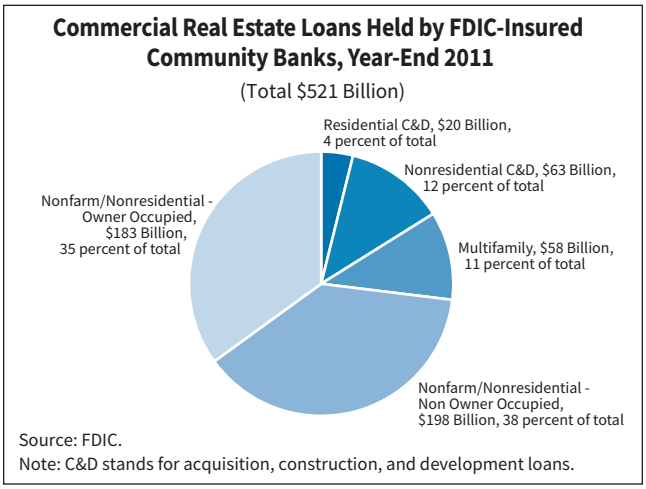
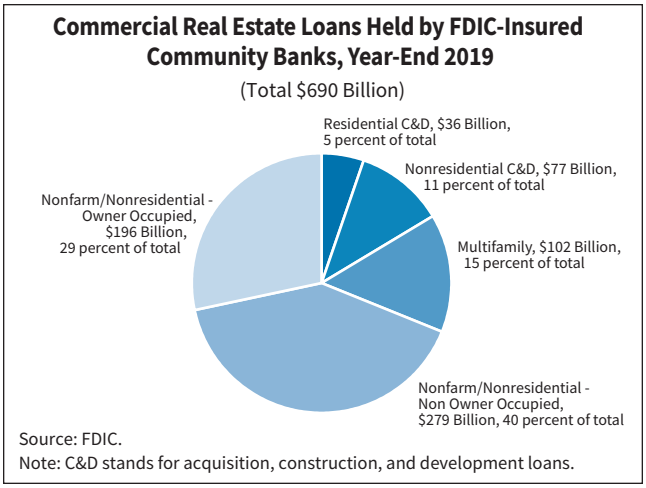


Chart 4.3



Community banks provide various types of CRE financing. Charts 4.2 and 4.3 show the types of loans that constituted total CRE loans held by community banks at the time of the 2012 FDIC Community Banking Study (year-end 2011) and as of year-end 2019. The three main components of CRE loans are loans secured by nonfarm, nonresidential properties; loans for the acquisition, construction, and development of real estate (C&D); and loans secured by multifamily properties. Loans secured by nonfarm, nonresidential properties are further divided into two groups according to whether the property is occupied by an owner or by a non-owner. C&D loans are further divided into two groups according to whether they are secured by nonresidential construction projects or by 1–4 family residential projects.

Between 2011 and 2019, the balance of CRE loans held by community banks increased from $521 billion to $690 billion. Although all types of CRE loans grew in dollar amounts, the mix shifted toward multifamily loans, that is, loans secured by rental properties.[1]

Multifamily loans represented 11 percent of community banks' CRE loans in 2011 and rose to 15 percent in 2019. This shift reflects growth in multifamily lending in the broader financial industry during a period when multifamily living became increasingly popular. Nonfarm, nonresidential loans represented 73 percent of CRE loans in 2011 and dropped to 69 percent in 2019. And as the chart shows, nonfarm, nonresidential loans shifted toward those secured by non-owner-occupied properties. This shift suggests an increased focus on the financing of investor-owned properties as opposed to owner-occupied properties, that is, properties whose owners use the property to operate a business. Loans to finance construction of properties increased only modestly in dollar amount between 2011 and 2019; the modest increase likely reflects moves away from this type of lending in the wake of the construction-loan stress experienced by many banks during the Great Recession.[2] Between 2011 and 2019, construction loans' share of community banks' total CRE loans remained steady at 16 percent.

Community Banks Are Active Lenders Across the Spectrum of CRE Industries and Are Key Lenders in Small Communities

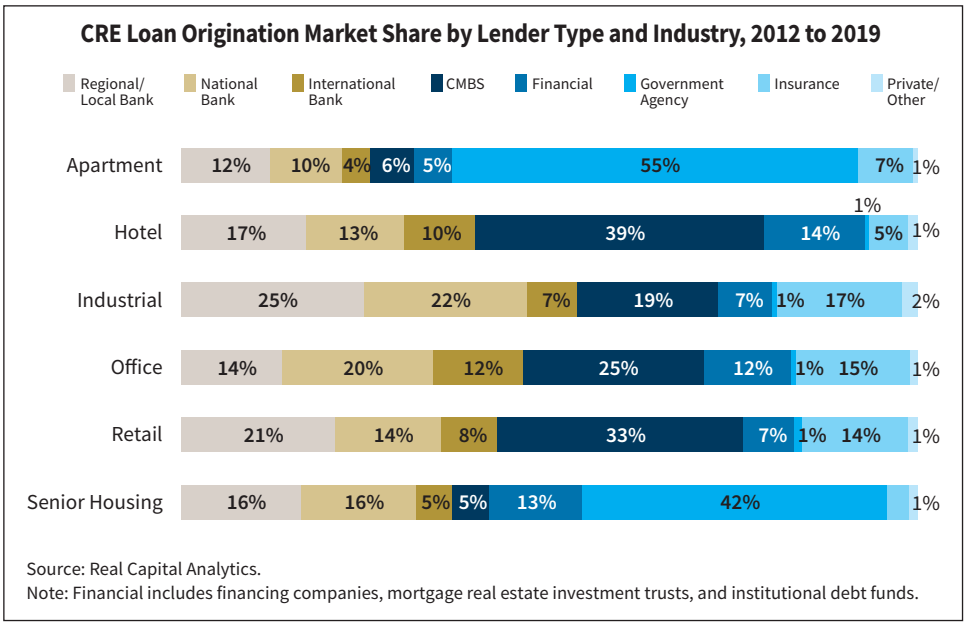
Banks' Call Reports categorize CRE loans by segment, such as the three just discussed: multifamily property loans; C&D loans; and nonfarm, nonresidential loans. This categorization provides some insight into the type of property that secures a CRE loan, but for banks' portfolios of nonfarm, nonresidential loans—that is, CRE loans that are not multifamily or C&D loans—the Call Report does not indicate the type of business or industry that uses the existing commercial property.

Other CRE industry data, however, suggest that regional and local banks, many of which are similar in profile to community banks, are active lenders to multiple industries. According to real estate firm Real Capital Analytics, regional and local banks lend across the

[1] Multifamily loans are those secured by properties with five or more housing units.

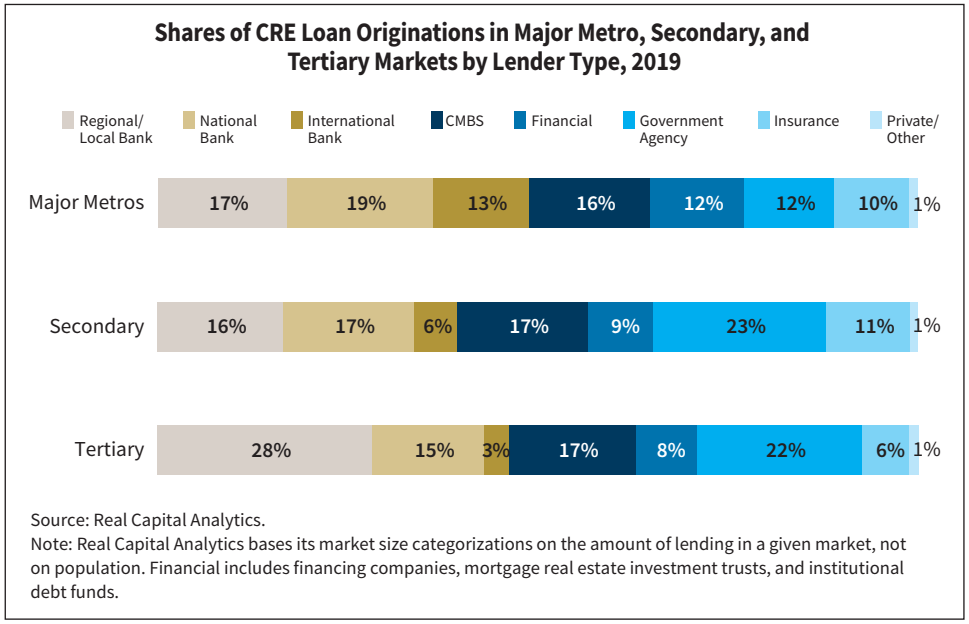
[2] Banks that held high levels of C&D loans before the Great Recession failed at a higher rate than those that did not *(2012 FDIC Community Banking Study* pp. 5–15).

Chart 4.4



Source: Real Capital Analytics.
Note: Financial includes financing companies, mortgage real estate investment trusts, and institutional debt funds.

Chart 4.5



Source: Real Capital Analytics.
Note: Real Capital Analytics bases its market size categorizations on the amount of lending in a given market, not on population. Financial includes financing companies, mortgage real estate investment trusts, and institutional debt funds.

spectrum of industries that operate CRE. Chart 4.4 shows the distribution of CRE loan originations from 2012 through 2019 according to use of the underlying property. Regional and local banks' market share has been significant in several property types, including industrial and retail. During the period covered, these banks originated 25 percent and 21 percent of the dollar volume of industrial and retail loans originated, respectively—notable market shares, given the range of industry lenders.

In addition to lending across industry types, community banks have been active CRE lenders across all sizes of markets, and are particularly prominent in smaller communities. According to Call Report data, community banks headquartered in rural areas and small metropolitan areas in 2019 held 67 percent of CRE loans held by all banks headquartered in those smaller geographic areas. In larger metropolitan areas, the share of CRE loans held by community banks is lower, but still material: 28 percent of total CRE loans of all banks headquartered in these areas.

In contrast, community banks' share of non-CRE loans is only 9 percent.[3]

Although Call Report data are based on the location of a bank's headquarters rather than the location of the property securing the loan, other CRE industry data are based on property location and they, too, suggest that banks similar in profile to community banks are significant sources of CRE financing in smaller markets. As Chart 4.5 shows, according to Real Capital Analytics, regional and local banks provided 28 percent of CRE financing in smaller markets in 2019, a material market share compared with the shares of other lenders.[4]

Community Banks Became More Involved in Multifamily Property Lending After the Previous Study

By year-end 2019, the volume of multifamily mortgage loans had almost doubled from its level in 2011.[5] At year-end 2019 multifamily mortgage loans in the United States totaled $1.6 trillion. These loans are held by various intermediaries such as banks and life insurance companies, and are also held in agency commercial-mortgage-backed securities. Significant growth in multifamily mortgage loans reflects the increase in multifamily housing stock, and the increase in preference for renting following the Great Recession and its associated housing crisis. Nationally, from 2011 to 2019 the number of renter households grew more than 13 percent, while owner households increased only 6 percent.[6]

As the volume of multifamily loans industry-wide grew, the share held by banks kept pace. These institutions held approximately one-third of the $1.6 trillion in multifamily mortgages outstanding at year-end 2019, up slightly from 2011. As of year-end 2019 community banks in aggregate held a small share—22 percent—of all banks' multifamily loans, but since the prior study a large number of community banks have entered multifamily lending for the first time. Of the 4,750 community banks in 2019, 474, or 10 percent, had multifamily loans on their books in 2019 but had none at year-end 2011. In comparison, during the same period very few community banks newly entered other lending businesses. For example, only 59, slightly more than 1 percent of community banks, newly entered C&I lending between year-end 2011 and year-end 2019.

The increase in multifamily lending pushed community banks' average ratio of multifamily loans to capital from 27 percent at year-end 2011 to 39 percent at year-end 2019. The average ratio of multifamily loans to capital increased in almost all states between 2011 and 2019. But in some states, multifamily lending is more important to community banks than in others. In several states in the northeast, such as New York, New Jersey, and Massachusetts, and in California, community banks' average ratios of multifamily loans to capital at year-end 2019 were well above the national average. The higher ratios are consistent with the above-average prevalence of multifamily living in these states.[7]

Community Banks That Specialize in CRE Lending Became More Prominent in the Years After the Previous Study

Community banks of all lending specialties provide CRE financing; however, the share of community banks considered to be CRE specialists has grown.[8] The *2012 Community Banking Study* found that at the highest point of their share of all community banks, in 2007, CRE specialists had come to constitute almost 30 percent of community banks. The share declined from 2008 to 2012, amid the economic slowdown and CRE market stress in the few years following the Great Recession, but after that the share recovered somewhat and then stabilized. As of year-end 2019, CRE lending specialists accounted for 26 percent of all community banks (Chart 4.6).

Notably, while CRE specialists accounted for, on average, about one-quarter of community banks from 2011 to 2019, their share of community banks' assets and

[3] Market size is determined according to data from the U.S. Census. "Larger metropolitan areas" are those designated by the U.S. Census as metropolitan statistical areas—those that have at least one urbanized area of 50,000 or more inhabitants. "Small metropolitan areas" are those designated by the U.S. Census as micropolitan statistical areas—those that have at least one urban cluster of at least 10,000 but less than 50,000 population. "Rural areas" are those not in a metropolitan or micropolitan statistical area.

[4] Real Capital Analytics bases its market size categorizations on the amount of lending in a given market, not on population.

[5] Federal Reserve, Report Z.1 – Financial Accounts of the United States, March 2020.

[6] U.S. Census Bureau, Current Population Survey/Housing Vacancy Survey, March 10, 2020.

[7] 2018 American Community Survey, 1-Year Estimates, U.S. Census Bureau. The four states mentioned in the text have a higher percentage of total housing identified as containing five or more housing units than the national percentage.

[8] As shown in Appendix A, CRE specialists hold construction and development (C&D) loans greater than 10 percent of assets OR total CRE loans (C&D; multifamily; and nonfarm, nonresidential loans) greater than 30 percent of total assets.

Chart 4.6

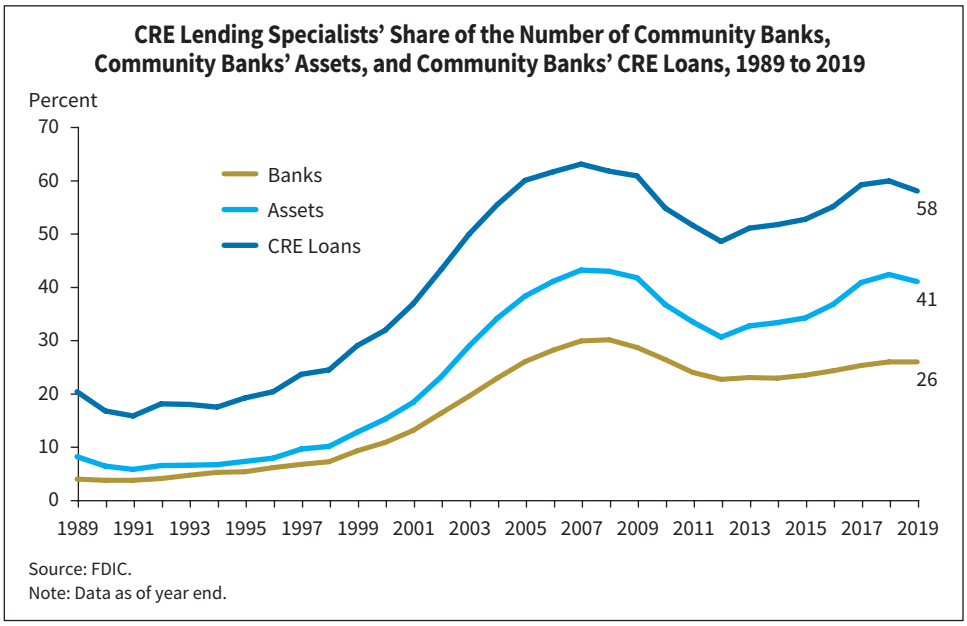


Table 4.1 CRE Lending Specialists' Share of the Number of Community Banks, Community Banks' Assets, and Community Banks' CRE Loans, by Market Size, 2011 and 2019

	Rural/Micro		Metro		Total	
	2011	2019	2011	2019	2011	2019
Percent of Community Banks	10	13	36	38	24	26
Percent of Assets	18	26	40	47	33	41
Percent of CRE Loans	33	41	57	63	51	58

Sources: FDIC, United States Census Bureau.
Note: Data as of fourth quarter. Market size is determined according to data from the United States Census Bureau. A metropolitan statistical area must have at least one urbanized area of 50,000 or more inhabitants, while each micropolitan statistical area must have at least one urban cluster of at least 10,000 but less than 50,000 inhabitants. Rural areas are those not in a metropolitan or micropolitan statistical area.

CRE loans increased to an outsized degree. As of year-end 2019, CRE specialists accounted for 41 percent of aggregate community-bank assets and 58 percent of aggregate community-bank CRE loans.

Community-bank CRE specialists have maintained their significance across different sizes of geographic markets. Not surprisingly, these specialists are prominent in larger geographic markets, that is, where population densities and high volumes of real estate provide lending opportunities for all types of lenders. However, community-bank CRE specialists are also important providers of CRE financing in small communities. Despite accounting for only 13 percent of the number of community banks headquartered in rural/micro markets, community-bank CRE specialists held 41 percent of community banks' CRE loans in these markets in 2019, up from 33 percent in 2011 (Table 4.1).

The CRE Credit Environment Was Favorable at the Start of 2020

For much of the period since the prior study, community banks, like much of the CRE finance industry, experienced a benign credit environment. Delinquency rates among community banks' CRE loan portfolios declined for nine consecutive years, from 2010 through 2018, before flattening at a low level in 2019. As of first quarter 2020, the average CRE loan delinquency rate was about 1 percent, much lower than the peak of more than 7 percent reached in first quarter 2010.

As important providers of CRE financing, community banks will be among those lenders interested in CRE market dynamics in the years ahead. As 2020 began, the long economic expansion had been a positive backdrop to conditions in the CRE market. However, the landscape

weakened significantly with the COVID-19 pandemic, and economic stress likely will be a headwind holding back the performance of numerous CRE property types. In addition, potential shifts in preferences for certain types of real estate over others may change the CRE lending environment. For insights into CRE market conditions and the COVID-19 pandemic, see Box 4.1.

CRE Lending: Summary

Despite challenges in CRE markets or the economy, community banks have been and continue to be CRE lending sources for business owners, property developers, and investors. Community banks hold a larger amount of CRE compared with their overall industry asset share. They fund a wide variety of properties in locations throughout the country, and as the demands of their communities change, their CRE lending changes to meet the need. Moreover, while some community banks may be considered CRE specialists because of the share of CRE loans in their portfolios, most community banks hold some CRE loans, supporting the premise that whatever a community bank's business strategy, the bank is focused on the various needs of its community.

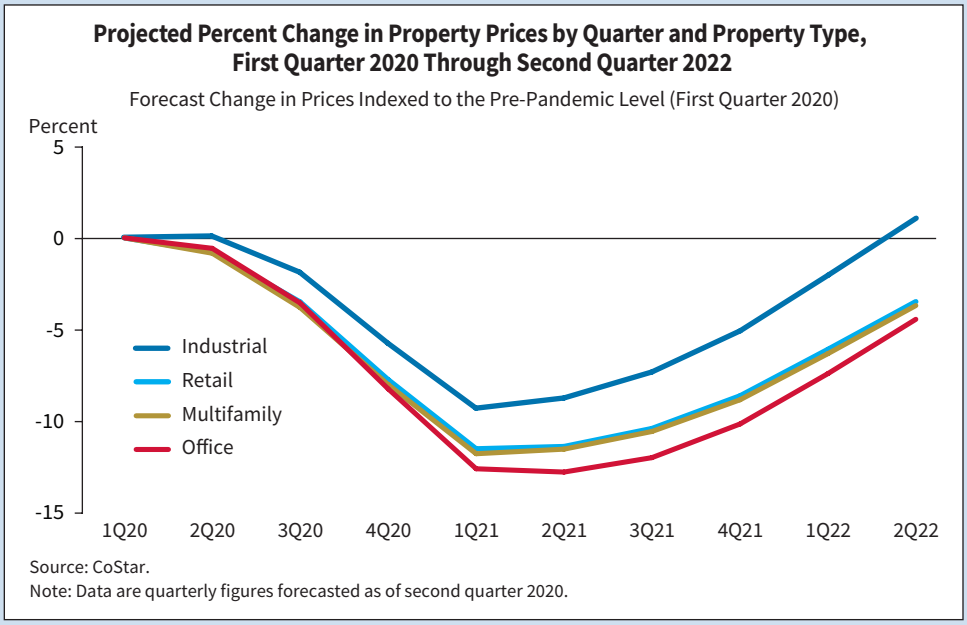
Box 4.1 CRE and the COVID-19 Pandemic

The COVID-19 pandemic has substantially altered the landscape of CRE markets in the United States. As businesses and industries reevaluate their use of space, questions have emerged about how CRE will be used, the amount needed, and the geographic implications.

Nationally, rents have declined and vacancy rates have increased in most property types since the onset of the pandemic, and projections call for continued weakness. For example, by the end of 2021, real estate firm CoStar projects that vacancy rates will increase by 20 percent or more in most property types.[a] As the pressure on rents and occupancy rates continues, ultimately CRE property prices are expected to show the strain. According to CoStar, prices in most property types are expected to decline by double digits into 2021 and to recover slowly from the COVID-19 pandemic (see Chart 4.1.1).

The effects of the COVID-19 pandemic have affected property types in different ways. As the pandemic emerged with government-mandated business and travel restrictions, immediate stress was felt in lodging and retail, as hotels, restaurants, and stores closed. Foot traffic at discretionary retail stores fell to near zero. The national hotel occupancy rate dropped to a low of 21 percent in April 2020, from a pre-pandemic monthly average in 2019 of approximately 66 percent.

Chart 4.1.1



Source: CoStar.
Note: Data are quarterly figures forecasted as of second quarter 2020.

continued on page 4-7

[a] CoStar forecast as of second quarter 2020.

Box 4.1, continued from page 4-6

Companies' use of office space slowed, and many cities' office markets may experience challenges in long-term demand as companies reevaluate their space needs. Office markets in some geographies may be strained more than others, depending on various factors such as long-term adoption of telework, challenges in cities highly dependent on public transportation, and the path of COVID-19 as a long-term health crisis.

Depending on the depth of economic contraction, the pace of recovery, and living preferences among renters, multifamily markets also may face headwinds. Some multifamily properties may be strained by delays in the payment of rents and by the recent large increase in multifamily supply in some markets.

Overall, CRE market weakness may manifest itself in the credit quality of CRE loan portfolios. Credit quality may suffer as economic strain from the COVID-19 pandemic increases vacancy rates, reduces properties' cash flows, and—potentially—hinders loan repayment ability.

Small Business Lending

Small businesses play a key role in the economy, making up the vast majority of all businesses by count and employing approximately 48 percent of the private sector workforce.[9] In addition, they are an important part of their community, not only by providing services and products but also by supporting local causes and charities. And just like large corporations, they need to borrow funds for a number of reasons, including to add to working capital and inventory, to finance accounts receivable, and to purchase properties that house their businesses.

In contrast to large corporations, which may be more likely to turn to the capital markets, small businesses more frequently turn to banks for credit, particularly if the business owner has a relationship with a lender.[10] Banks provide approximately 44 percent of small business financing, considerably higher than online lenders (22 percent) and credit unions (6 percent).[11] Although noncommunity banks may provide a larger portion of small business loans by dollar amount, figures for overall market share and the small-business-loans portion of total business loans make it clear that community banks tend to lend primarily to small businesses. An analysis of Call Report data in conjunction with responses to the 2018 FDIC Small Business Lending Survey and loan origination data from the Small Business Administration (SBA) shows that community banks are key providers of loans to small local businesses and are key resources for small businesses needing credit.

Study Definitions

In this study, business loans are all C&I loans and all nonfarm, nonresidential loans. Business loan growth reflects growth in all C&I and nonfarm nonresidential loans for all banks.

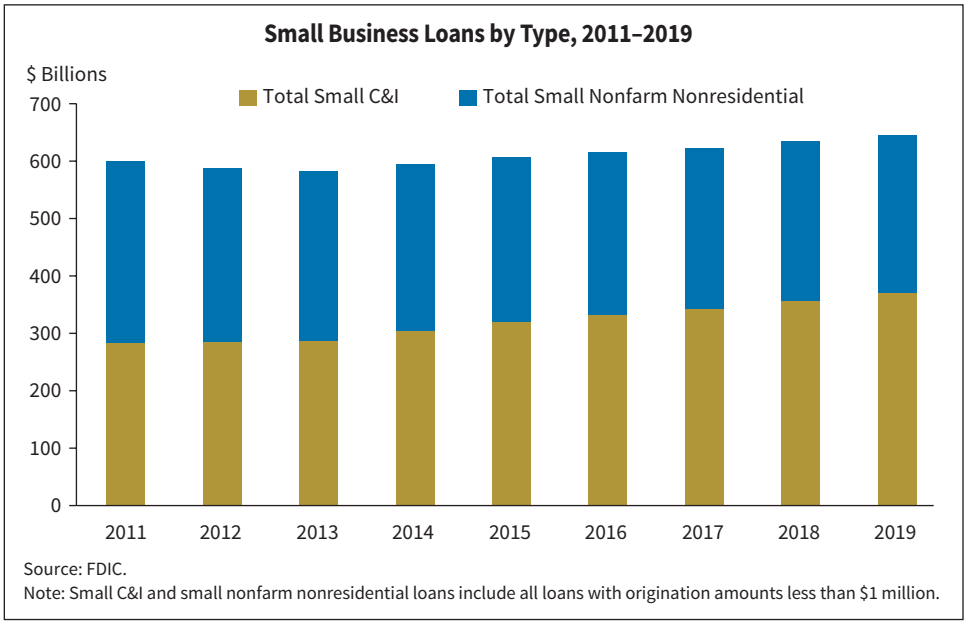
The Call Report defines small business loans as all C&I loans less than $1 million and nonfarm, nonresidential loans less than $1 million. This dollar limit was established in 1993 when this category was added to the Call Report. This study uses this definition.

Call Report Data Are Helpful but Do Not Show the Full Story

Call Reports are the primary source for analyzing growth and changes in banks' small business loans. According to Call Report data, small business loans grew from $599 billion at year-end 2011 to $645 billion at year-end 2019, for an average annual rate of loan growth of 0.98 percent. This growth rate is considerably less than the average annual business loan growth rate of 6.8 percent for the banking industry. Growth in small business loans was solely in small C&I loans, since small nonfarm, nonresidential loans fell from $316 billion to $275 billion during the period in question (Chart 4.7). Yet despite the slow growth trends, community banks' share of small business loans as of year-end 2019 continues to be larger than their overall share of the banking industry's total loans. Community banks hold 36 percent of total small business loans, which is double their share of the banking industry's total loans (15 percent).

[9] Federal Reserve Banks.
[10] Ibid.
[11] Ibid.

Chart 4.7



Source: FDIC.
Note: Small C&I and small nonfarm nonresidential loans include all loans with origination amounts less than $1 million.

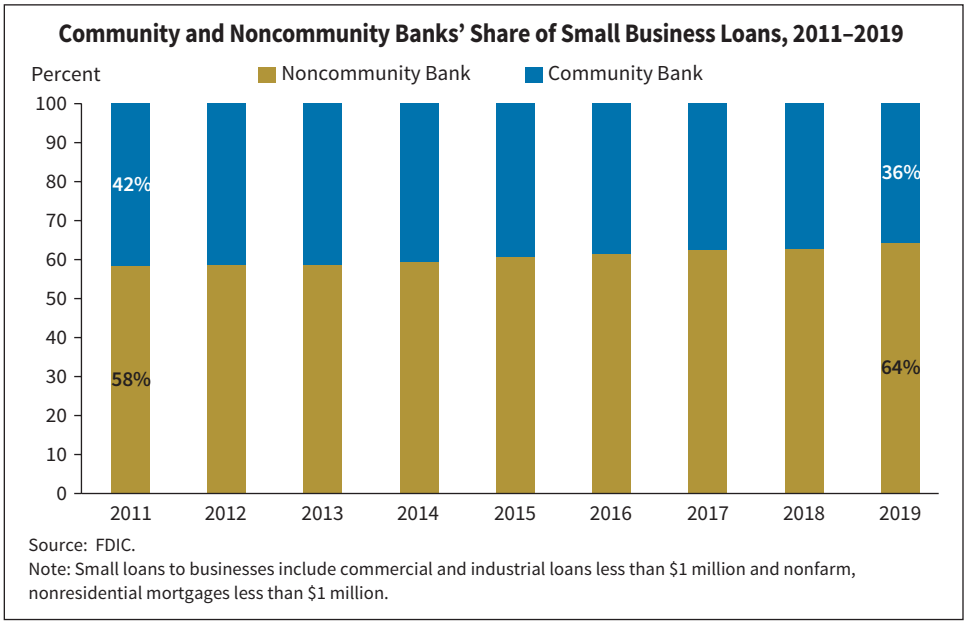
Community banks have, however, seen their share of small business loans decline since 2011; it shrank from 42 percent at year-end 2011 to the aforementioned 36 percent at year-end 2019 (Chart 4.8). This decline may be due to two factors: business consolidation and the typical size of loans made by noncommunity banks in contrast to community banks. The first factor (business consolidation) would affect community banks' lending if a decline in the number of small businesses (using small business employment as a proxy) meant a reduced demand for small business loans.[12] The period when the decline in the share of small business loans occurred was the period when small business employment declined (dropping from 50 percent in 2011 to 47 percent in 2017).[13] During that period, community banks' share of small C&I loans declined from 32 percent to 25 percent—but their share of small nonfarm, nonresidential loans remained relatively stable at 51 percent.

The second possible explanation for the decline in community banks' share of small business loans is the size of loans originated. Size of loan differs significantly between community and noncommunity banks. Noncommunity banks tend to help small businesses by offering business credit cards rather than other types of working capital or CRE loans. To determine whether to extend a loan, noncommunity banks use scoring models or other tools, and by using such technology, bank personnel do not have to build a relationship or take additional measures to learn about the business owner or the business itself. Using this model, noncommunity banks originate and hold more loans under $100 thousand than loans between $100 thousand and $1 million. Community banks, on the other hand, hold a greater share of loans between $250 thousand and $1 million than loans under $250 thousand (Chart 4.9). Community banks, therefore, focus on larger loans that require greater "touch" or interaction and analysis—loans that build a relationship between bank and borrower.

The fact that community banks originate larger small business loans than noncommunity banks leads us to an additional hypothesis as to the reason for the decline in community banks' share of small business lending. These larger loans would include those that exceed $1 million—the maximum small business loan limit (see the sidebar "Study Definitions" for more details). The reason for the limit was that there was no one measure to use in identifying a small business: Is the determination based on revenue? On number of employees? On capital invested by the business owner? Setting a loan limit for reporting purposes gave bankers a simple way to identify small business loans and ensure uniformity in Call Report filings. To provide support for our hypothesis that the decline in community banks' share of small business lending between 2011 and 2019 may be partly due to the size of some of their larger loans—with loans exceeding $1 million not being categorized as small business—

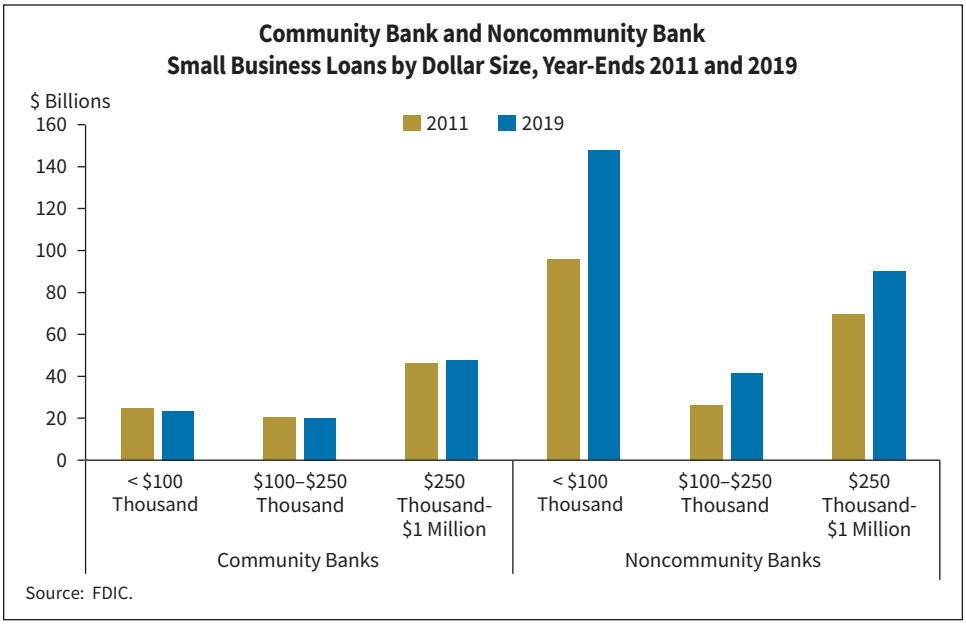
[12] Brennecke, Jacewitz, and Pogach.
[13] Ibid.

Chart 4.8



Source: FDIC.
Note: Small loans to businesses include commercial and industrial loans less than $1 million and nonfarm, nonresidential mortgages less than $1 million.

Chart 4.9



Source: FDIC.

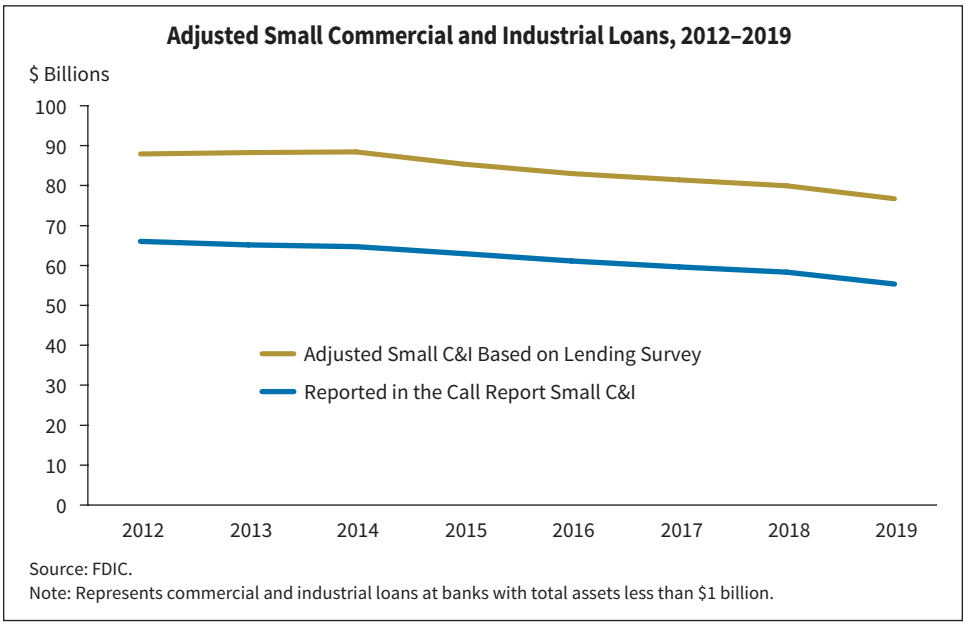
we look at responses to the FDIC's 2018 Small Business Lending Survey and to loan origination data from the SBA's 7(a) loan program.

What Do Bankers Consider to Be Small Business Lending?

Although community banks' share of *total business loans* is declining, within total business loans at community banks the share represented by *small business loans* has been growing. Small C&I loans as of year-end 2019 represent 43 percent of total C&I loans at community banks, whereas small C&I loans currently represent only 14 percent of total C&I loans at noncommunity banks.

In 2018, the FDIC, with assistance from the U.S. Census Bureau, conducted a small business lending survey (referred to hereafter as "Lending Survey") with direct responses from banks. Several questions centered on the topic of what the banker considers a small business

Chart 4.10



Source: FDIC.
Note: Represents commercial and industrial loans at banks with total assets less than $1 billion.

loan. The responses indicate that many bankers do not define a "small business loan" as a loan to a business with an origination amount less than $1 million, as Call Reports define it. Rather, bankers consider the "ownership structure, number of employees, business focus, and ownership characteristics" of the borrower to determine whether a loan is to a small business; often these loans exceed $1 million. The survey found that approximately 86 percent of banks with total assets less than $250 million responded that their C&I loans were "almost exclusively" to small businesses, regardless of the size of the underlying loans. For banks with total assets between $250 million and $1 billion, approximately 75 percent of respondents stated that their C&I loans were "almost exclusively" to small businesses. On the basis of these responses an adjustment to the share of C&I loans that are made to small businesses would have shown that small business loans as a percentage of total C&I loans at banks with total assets less than $1 billion jumped from 56 percent of C&I loans to approximately 78 percent in 2019 (or from $55 billion to $76 billion) (Chart 4.10).[14] Therefore, the responses from the Lending Survey provide additional support for the belief that community banks are lending to their local businesses despite the declines in share of small C&I loans and the slow C&I loan growth rates that are based solely on Call Report figures.

SBA Loan Originations Also Support the Belief That Community Banks Focus on Small Business Lending

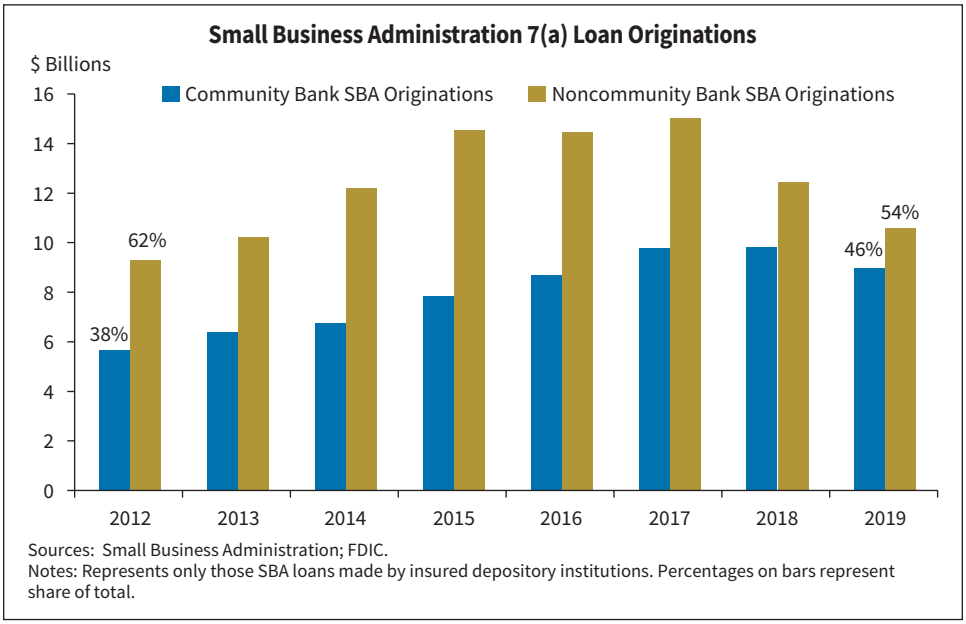
Community banks are also key players in the SBA-guaranteed 7(a) loan program, which guarantees loans originated up to $5 million.[15] Between 2011 and 2019, community banks saw their share of SBA 7(a) loan originations increase from $5.7 billion to $9.0 billion. Of the loans originated by banks in that program in 2019, community banks originated approximately 46 percent. Between 2012 and 2019, noncommunity banks saw their share of loan originations fluctuate, going from 62 percent in 2012 to a high of 65 percent in 2015 and then dropping to 54 percent in 2019, while the dollar amount dropped from the 2015 high of $14.5 billion to $10.6 billion in 2019 (Chart 4.11).

Most important, Chart 4.12 shows that community banks' SBA loan originations support the assertion that community banks do not limit their small business loans to $1 million. Rather, as with the findings of the Lending Survey, SBA data show that a majority of the loans originated by community banks are for amounts greater than $1 million.

[14] The 2018 FDIC Small Business Lending Survey did not use the community bank definition to differentiate between banks; rather, it used the asset sizes of institutions.

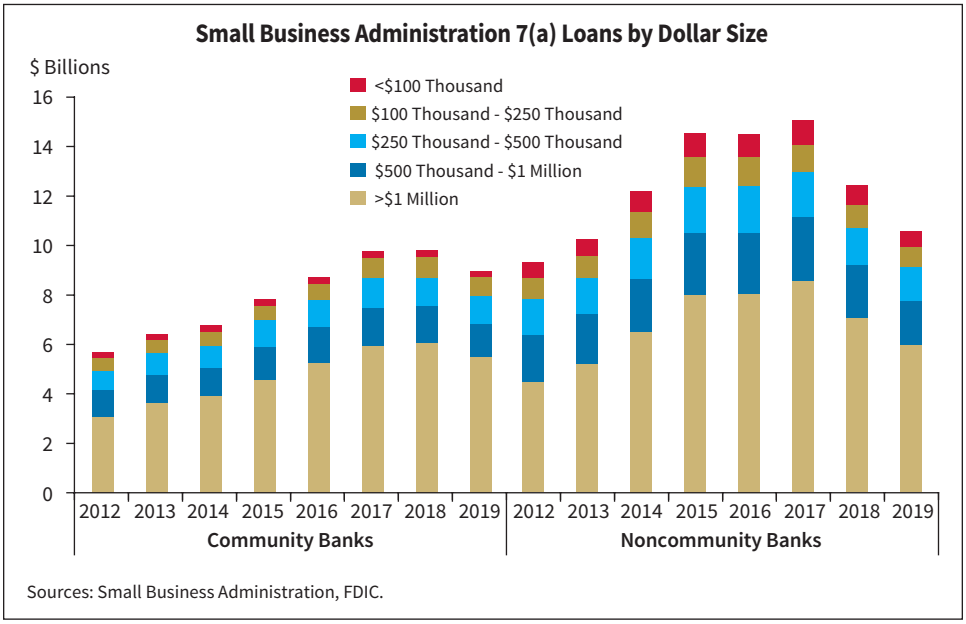
[15] SBA 7(a) program loans provide 75 percent guarantees on working capital loans to small businesses in varying amounts up to $5 million. Loans are originated through a bank, credit union, or community development financial institution. The total amount approved during the fiscal year ending September 30, 2019, was $23.6 billion.

Chart 4.11



Sources: Small Business Administration; FDIC.
Notes: Represents only those SBA loans made by insured depository institutions. Percentages on bars represent share of total.

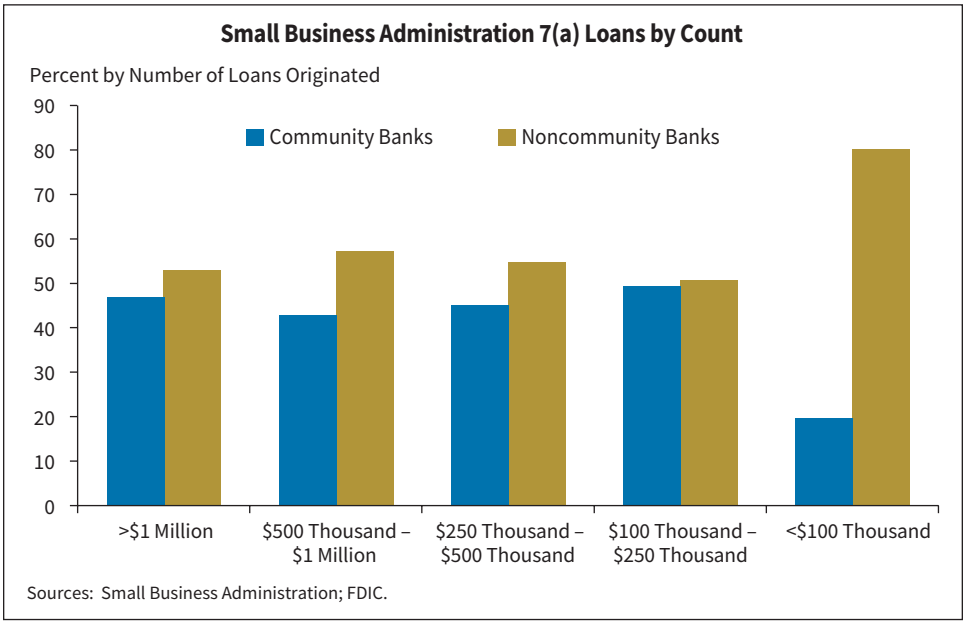
Chart 4.12



Sources: Small Business Administration, FDIC.

Like Call Report data, SBA loan origination data show that community banks tend to make more—by count—large SBA loans than small SBA loans, compared with noncommunity banks, which tend to focus on smaller SBA loans. As shown by Chart 4.13, noncommunity banks make the vast majority (80 percent)—by count—of loans below $100 thousand in value. This share has not changed since 2011. While noncommunity banks still make the majority of loans in other size groups, their share in these groups has been declining, and community banks are almost even in several categories. Community banks' share (by count) of loans originated for more than $1 million is almost equal to the share of loans originated by noncommunity banks. This level is not surprising because, as discussed above, community banks focus on loans that build relationships and may take more analysis and require an understanding of the business and the business owner.

Chart 4.13



Sources: Small Business Administration; FDIC.

Small Business Lending: Summary

Analysis of Call Report data, of responses to the FDIC Small Business Lending Survey, and of SBA 7(a) loan origination data reveals that community banks continue to play a key role in providing funding that support small businesses. Despite declines in the numbers reported in Call Reports, data from both the FDIC Lending Survey and the SBA show not only that community banks make loans to small businesses—loans often greater than $1 million—but also that small business loans often represent a majority of community banks' C&I portfolios. Moreover, for such community banks, the share of small business loans in the C&I portfolio may compare favorably with the share of small business loans in the portfolios of noncommunity banks. These local-minded banks focus on loans that build relationships: the loans tend to be larger and more hands-on, and they involve continued loan administration. The evidence indicates, therefore, that community banks continue to be key supporters of small businesses in their local areas, and there is no reason to expect this support to decline.

Box 4.2 Small Business Lending and the COVID-19 Pandemic

The federal government's first step in aiding small businesses was passage of the Coronavirus Aid, Relief, and Economic Security Act, which among other things provided $659 billion in funds for small businesses through the Paycheck Protection Program (PPP). The program is administered by the SBA and the U.S. Treasury, with applications for the funds submitted through banks, credit unions, Community Development Financial Institutions (CDFIs), and other financial institutions. The program was designed to provide an incentive for small businesses to keep their workers on the payroll during the initial weeks of the pandemic, when many states put stay-at-home orders into effect. The loan amounts were based on two months' salary and employee expenses (January and February 2020). Loan terms included an interest rate of 1 percent, a two-year maturity that was extended to five years for loans originated after June 5, six months of loan payment deferral, and loan forgiveness if certain criteria are met.

As of August 8, 2020, over five million loans totaling more than $525 billion had been originated.[a] Like community banks' share of the small business loans held by all banks, community banks' share of PPP loans outstanding held by all banks was larger than their share of total C&I loans held by all banks. As of June 30, 2020, community banks held 13 percent of all banks' C&I loans but more than 30 percent of PPP loans held at banks. Funding the PPP loans resulted in an annual C&I loan growth rate of 69 percent at community banks, compared with 16 percent at noncommunity banks.

continued on page 4-13

[a] U.S. Small Business Administration.

Box 4.2, continued from page 4-12

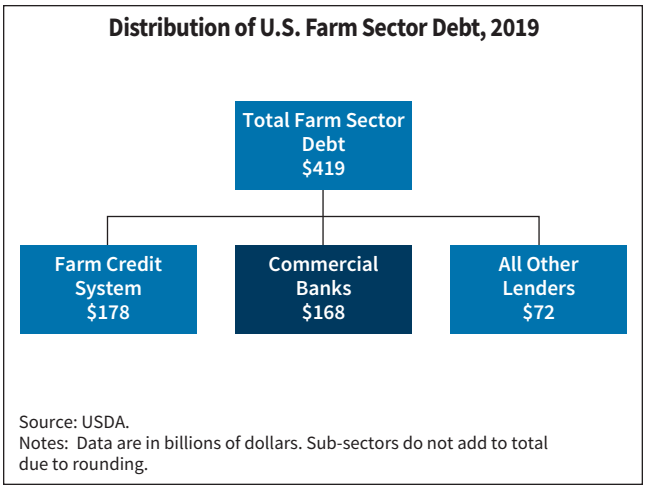
While the PPP helped many small businesses initially, economic challenges related to the pandemic have continued to affect many small businesses. According to the American Bankruptcy Institute, commercial bankruptcy filings have increased 44 percent when comparing filings from April through September 2020 to the same time period in 2019. Additionally, according to Yelp Economic Average, more than 163,000 businesses have closed through August 31, 2020, from the start of the pandemic (March 1, 2020). The full effect of the pandemic on small businesses may not be fully known for several years.

Agricultural Lending

In 2019, the more than two million farms in the United States held nearly $419 billion in debt, with about 83 percent of that amount split evenly between commercial banks and the Farm Credit System (FCS) (Chart 4.14). Although the aggregate volume of dollars lent is nearly evenly divided between commercial banks and FCS institutions, the number of institutions that extend the loans is vastly different. At year-end 2019, more than 4,300 banks (about 84 percent of all commercial banks) held agricultural loans, compared with the FCS network of 72 lending institutions.

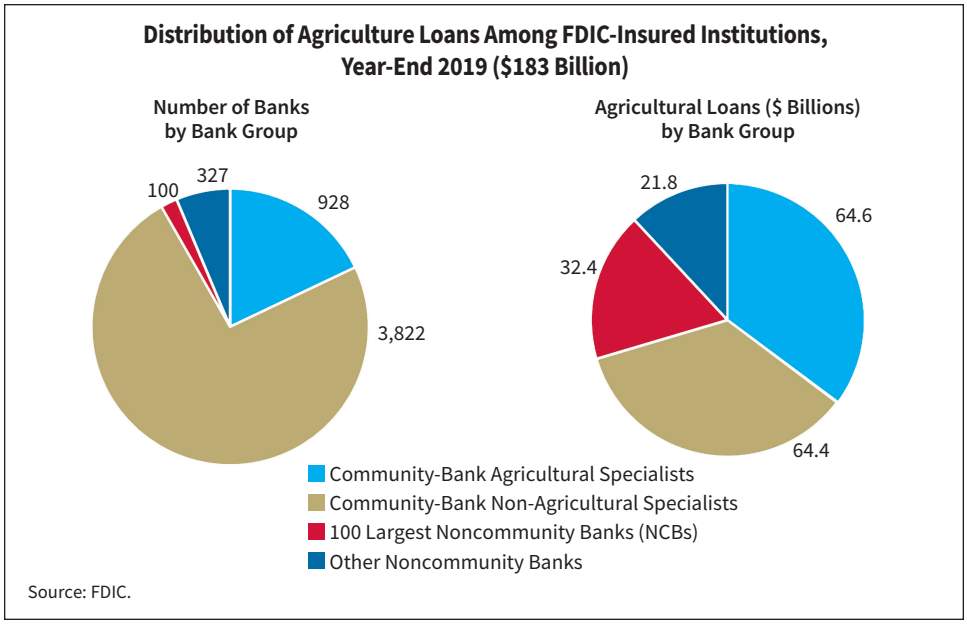
Rural communities rely on their community banks to fund agricultural production. As Chart 4.15 shows, at year-end 2019, although community banks held just 12 percent of total banking industry assets, their share of farm loans at commercial banks was approximately 70 percent.[16]

Chart 4.14



Source: USDA.
Notes: Data are in billions of dollars. Sub-sectors do not add to total due to rounding.

Chart 4.15



Source: FDIC.

[16] In 2019, community banks funded approximately 31 percent of farm sector debt.

At year-end 2019, there were 928 community banks that specialized in agricultural lending ("community-bank agricultural specialists").[17] They held 35 percent of all agricultural loans held by commercial banks but represented only about 18 percent of all banks. The rest of this section focuses on the performance and unique characteristics of the community-bank agricultural specialists.

Community-Bank Agricultural Specialists Performed Well Between 2012 and 2019

In the years leading up to and following the 2012 FDIC Community Banking Study, the lending emphasis of community-bank agricultural specialists largely played in their favor. Their exposure to the negative credit effects of the housing crisis and Great Recession was minimized, and instead they benefited from a strong, decade-long farming boom.

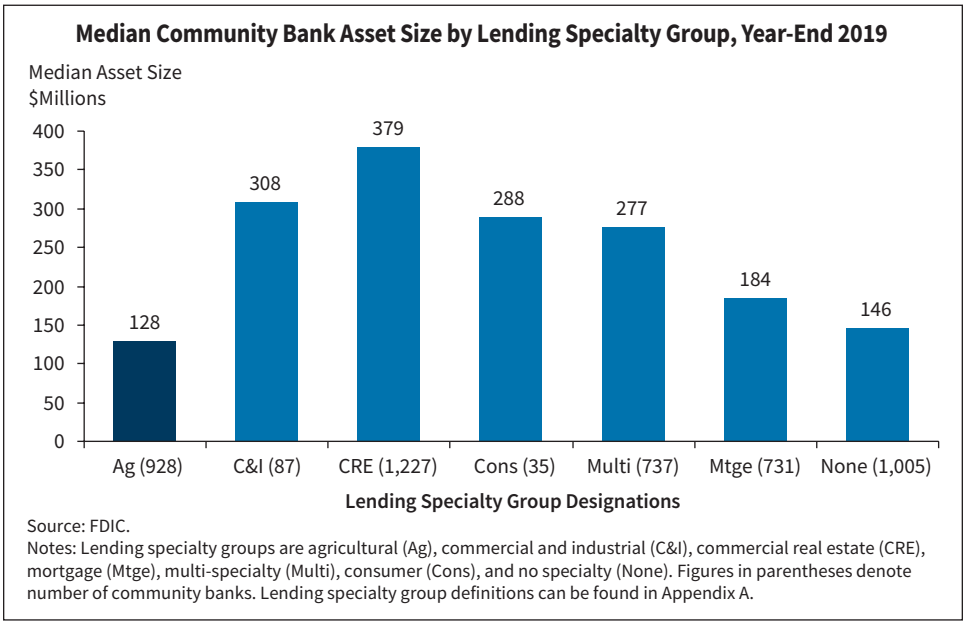
Starting in 2014 the agriculture sector struggled in terms of profitability, but erosion in farm financial conditions was gradual and generally modest in severity. Credit quality at community-bank agricultural specialists weakened but still remained favorable by long-term historical comparison, and earnings and capital were strong.

Community-Bank Agricultural Specialists Tend to Be Small and Heavily Concentrated in the Center of the Country and to Have Large Exposures to Row Crop and Livestock Production

Community-bank agricultural specialists are typically small, rural institutions. Remarkably, although as a group they hold about 35 percent of all agricultural loans, they hold just 1 percent of industry assets. The group's median asset size is just $128 million, compared with the nearly double $246 million for community-bank non-agricultural specialists. In fact, community-bank agricultural specialists tend to be the smallest of all community banks when the latter are grouped by lending specialty (Chart 4.16). More than 75 percent of the 928 community-bank agricultural specialists have total assets under $250 million, and just 19 have total assets in excess of $1 billion.

As shown in Map 4.1, 790 community-bank agricultural specialists, or 85 percent of the total, are concentrated in just ten states in the center of the country. In 2019, agricultural commodity receipts in these ten states totaled $152 billion, or 41 percent of the $370 billion in total U.S. agricultural commodity receipts. Agriculture in these ten states is heavily focused on a handful of commodities:

Chart 4.16

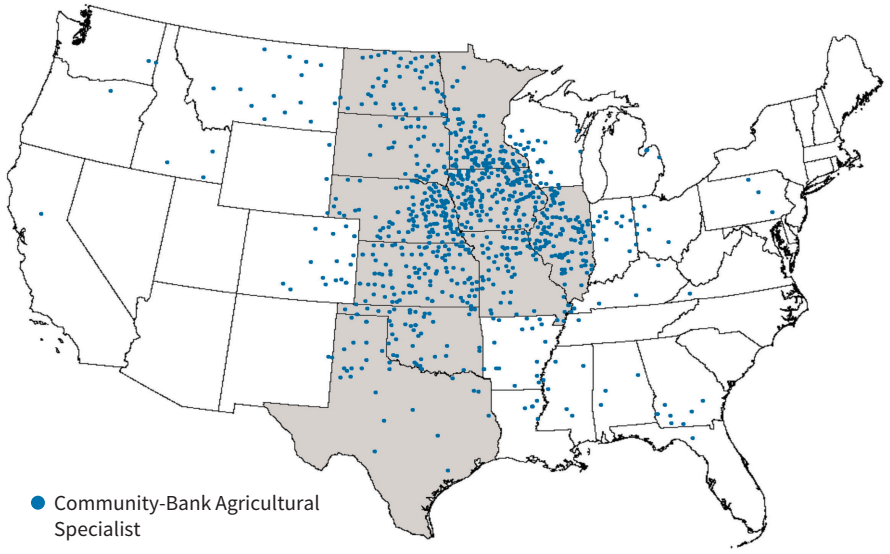


Source: FDIC.
Notes: Lending specialty groups are agricultural (Ag), commercial and industrial (C&I), commercial real estate (CRE), mortgage (Mtge), multi-specialty (Multi), consumer (Cons), and no specialty (None). Figures in parentheses denote number of community banks. Lending specialty group definitions can be found in Appendix A.

[17] As shown in Appendix A, the FDIC defines community-bank agricultural specialists as community banks that have total loans greater than 33 percent of total assets and agricultural loans greater than 20 percent of total assets, and are not considered a multi-specialist.

Map 4.1

Locations of Community-Bank Agricultural Specialists by Headquarters, Year-End 2019



Source: FDIC.
Notes: Dot positions are based on locations of bank headquarters. The 10 shaded states contain the largest numbers of community-bank agricultural specialists by state. There are no community-bank agricultural specialists headquartered in Alaska or Hawaii.

cattle, corn, hogs, and soybeans. In 2019, within these ten states, these four commodities totaled 77 percent of total commodity receipts, and the ten-state aggregate receipts of each of these commodities represented about two-thirds or more of total U.S. receipts for each commodity.[18] These states are less concentrated in dairy and poultry production and far less concentrated in fruits, nuts, and vegetable production.

Conversely, areas in these ten states that are heavily concentrated in dairy, poultry, fruits and tree nuts, and vegetables and melons are headquarters to few agricultural specialists. The seven states responsible for more than 90 percent of fruit and tree nut production and three-quarters of vegetable and melon production are headquarters to just 11 community-bank agricultural specialists.[19]

Therefore, while community-bank agricultural specialists are exposed to nearly all types of agricultural production, they are most heavily exposed to a handful of row crops and livestock, with significantly less risk posed by other agricultural production.

Agricultural Lending Is the Least Pervasive Lending Segment Among Community Banks

Although the vast majority of community banks hold at least some of each of the loan types constituting the various loan specialist groups, if a particular loan segment happens to be absent, it is most likely to be agriculture (Chart 4.17). A community bank is five times more likely to have no agricultural loans than to have no C&I loans, and 27 times more likely to have no agricultural loans than CRE loans.

Moreover, there is far greater polarization of concentration in agricultural loan holdings than in CRE, 1–4 family residential mortgage, and C&I lending. As shown in Chart 4.18, unless a bank holds sufficient agricultural loans to warrant the label "agricultural specialist," it tends to hold agricultural loans in low proportion to its capital. The only other lending specialty with similar polarization is the consumer specialist group.

[18] Aggregate receipts in the ten shaded states of Map 4.1, as a percentage of total U.S. receipts, by commodity: cattle (65 percent), corn (72 percent), hogs (73 percent), and soybeans (65 percent).
[19] The seven states represent the top five states in each commodity, with overlap of some states. Similarly, there are just 34 community-bank agricultural specialists in the eight states whose leading commodity is dairy products (61 percent of U.S. production), and there are just 34 community-bank agricultural specialists in the nine states whose leading commodity is commercial chickens (71 percent of U.S. production).

Chart 4.17

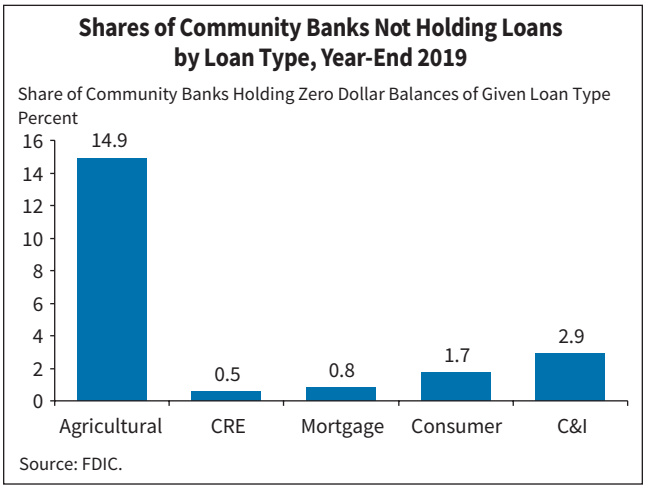
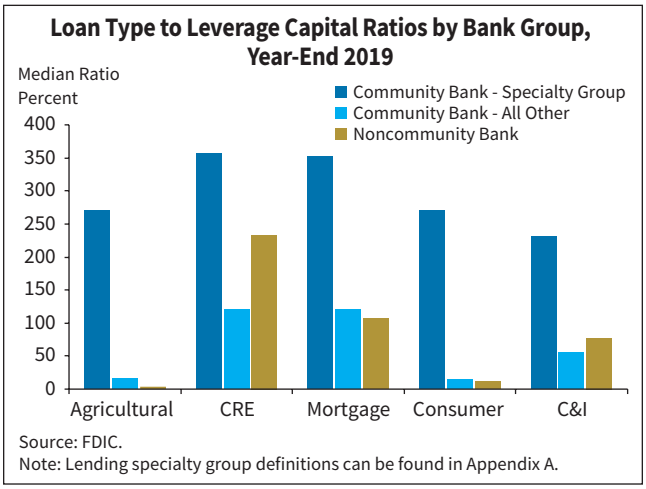


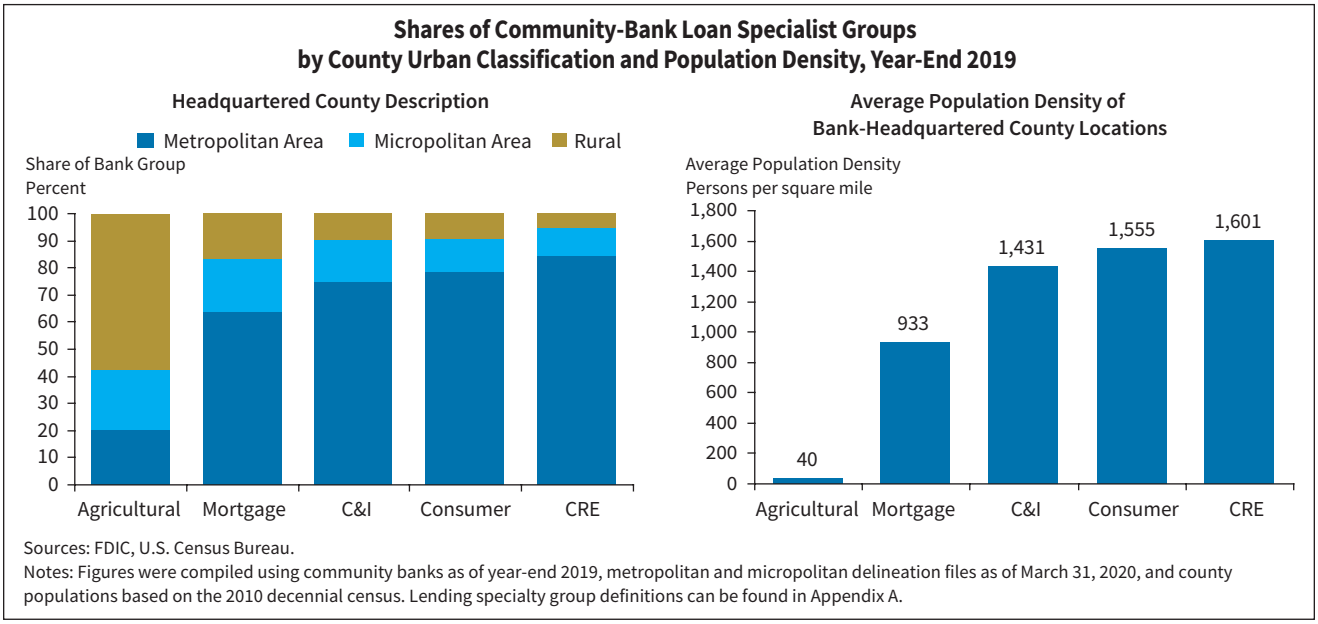
Chart 4.18



Few New Banks Become Agricultural Specialists, and the Group Is Dominated by Community Banks That Have Historically Been Agricultural Specialists

Although agricultural activity occurs just about everywhere in the United States, it is naturally most concentrated in rural areas, and as a result community agricultural specialists are also heavily concentrated in rural areas (Chart 4.19).[20] At year-end 2019, 57 percent of community-bank agricultural specialists were headquartered in rural counties, and just 20 percent in metropolitan counties. That is the inverse of the rural-urban mix of other community-bank loan specialist groups. One consequence of this inversion is that community-bank agricultural specialists are located in areas with vastly lower population densities, as seen in Chart 4.19. Even when the focus is solely on metropolitan areas, the average population density for agricultural specialists is still just 100 people per square mile, suggesting that even when agricultural specialists

Chart 4.19



[20] For purposes of this study, the FDIC has labeled all counties existing outside metropolitan statistical areas and micropolitan statistical areas as rural. This is consistent with the approach taken by FDIC authors in past studies on rural depopulation. See Anderlik and Walser (2004) and Anderlik and Cofer (2014).

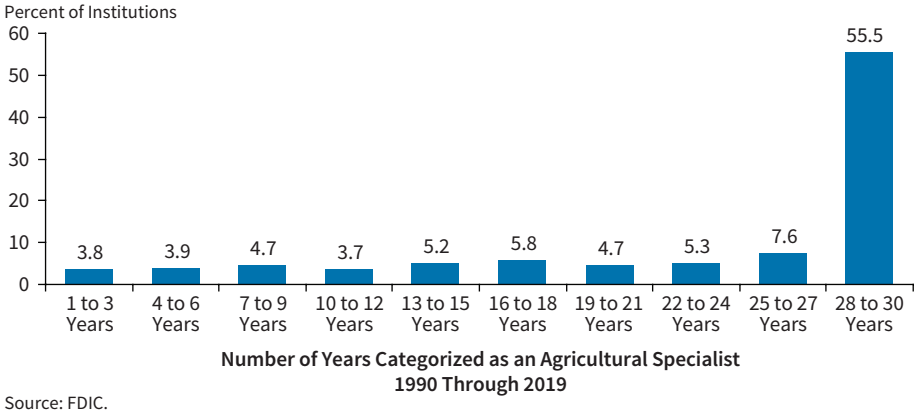
are based in metropolitan areas, they tend to be based in smaller metros or in the less urban fringes of the metro areas.

Moreover, half of agricultural specialists are headquartered in rural counties characterized by long-term population decline (see Box 3.1 in Chapter 3 for a more detailed analysis of such counties).[21] These counties tend to have sparse populations, greater proportions of elderly people, and less-vibrant and less-diversified economies than most other counties have.[22] Such conditions for the most part reflect the decades-long consolidation in agriculture. Since these dynamics are not conducive to new-bank formation, which largely occurs in areas experiencing strong population and economic growth, only 41 of the more than 1,400 new banks formed since the beginning of 2000 were identified as an agricultural specialist either at formation or in any quarter since formation.[23]

Meanwhile, absent branching into growing urban areas or purchasing assets, community banks in declining rural communities tend to reflect the characteristics of their communities and are marked by generally slower growth and high concentrations in agriculture. As a result, community-bank agricultural specialists tend to remain true to their agricultural roots. Chart 4.20 shows that 56 percent of the 793 community banks labeled as agricultural specialists in 1990 continued to have the same label in at least 28 of the subsequent 30 years.

For the reasons discussed above, this tendency to remain attached to their roots is most pronounced among community-bank agricultural specialists headquartered in rural areas. Chart 4.21 shows this by juxtaposing the pattern of community-bank agricultural specialists headquartered in growing metropolitan areas against the pattern of agricultural specialists headquartered in declining rural areas. Of the agricultural specialists in declining rural areas, 60 percent remained agricultural specialists throughout the entire 30–year period 1990–2019, whereas the comparable rate for agricultural specialists based in growing metro areas was only 23 percent.

Chart 4.20



Source: FDIC.

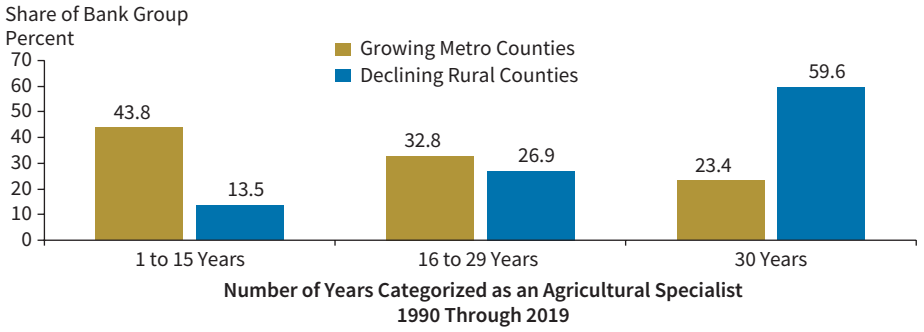
Notes: Sample only includes banks open from January 1, 1990, through year-end 2019, that were considered a community bank during all quarters of 1990 and 2019, and were also considered an agricultural specialist in any quarter during 1990. Because of seasonality in agricultural lending, a bank is considered as having been an agricultural specialist in a given year if it was identified as an agricultural specialist in any quarter during that year.

[21] Anderlik and Cofer (2014). The FDIC defines counties as growing, declining, and accelerated declining on the basis of 30-year population trends.

[22] Anderlik and Walser (2004).

[23] Of these banks, 1,130 were identified as community banks in the quarter in which they were established, and 302 as noncommunity banks.

Chart 4.21



Source: FDIC.

Notes: Sample only includes banks open from January 1, 1990, through year-end 2019, that were considered a community bank at all quarters in 1990 and 2019, and were also considered an agricultural specialist in any quarter during 1990. Because of seasonality in agricultural lending, a bank is considered as having been an agricultural specialist in a given year if it was identified as an agricultural specialist in any quarter during that year. Metro counties are counties that are part of a metropolitan statistical area; rural counties are counties that are not part of a metropolitan statistical area or micropolitan statistical area. Growing counties had an increase in population between 1980 and 2010; declining counties had a decrease in population between 1980 and 2010.

Community-Bank Agricultural Specialists Remain Committed to Agricultural Lending Through Agricultural Economic Cycles

In 2012, when the first FDIC Community Banking Study was published, a decade-long boom in U.S. agriculture was nearing its apex, buoyed by steep increases in commodity prices and farmland values. At that time, farm financial conditions and community-bank agricultural credit quality were as favorable as they had been in many decades. But in the years after 2013, when farm incomes reached their peak, the agricultural sector endured lower prices, weaker returns, and gradually deteriorating financial conditions.[24] Fortunately, most agricultural specialists maintained strong capital levels and loan loss reserves while simultaneously keeping in check their concentrations in farmland-secured lending. As a result, they had the strength and capacity to manage the rising stress in the farming sector, partly by cooperatively working with their borrowers to restructure operating shortages using the borrowers' strong equities in farmland.[25]

As their annual growth in loan volume has demonstrated, community-bank agricultural specialists have been strongly committed to lending to producers through the peaks and valleys of agriculture operating returns (Chart 4.22). In the period 2000–2019, they experienced only two quarters when aggregate agricultural production loan volume was lower than it had been in the same quarter one year earlier; those two quarters were fourth quarter 2016 (a decline of .08 percent from fourth quarter 2015) and first quarter 2017 (a decline of 0.81 percent from first quarter 2016). Never, however, did the group see a similar quarterly decline in aggregate farmland-secured loans. Noncommunity banks, on the other hand, demonstrated far greater volatility in lending activity through the sector's peaks and valleys; in particular, they were far more prone to pull back on agricultural loan volume as performance weakened. The largest noncommunity banks saw production loan volumes decline in a total of 25 quarters between 2000 and 2019, and farmland-secured loan volumes decline in 9 quarters. As Chart 4.22 shows, these declines occurred often during dips in U.S. farm income.

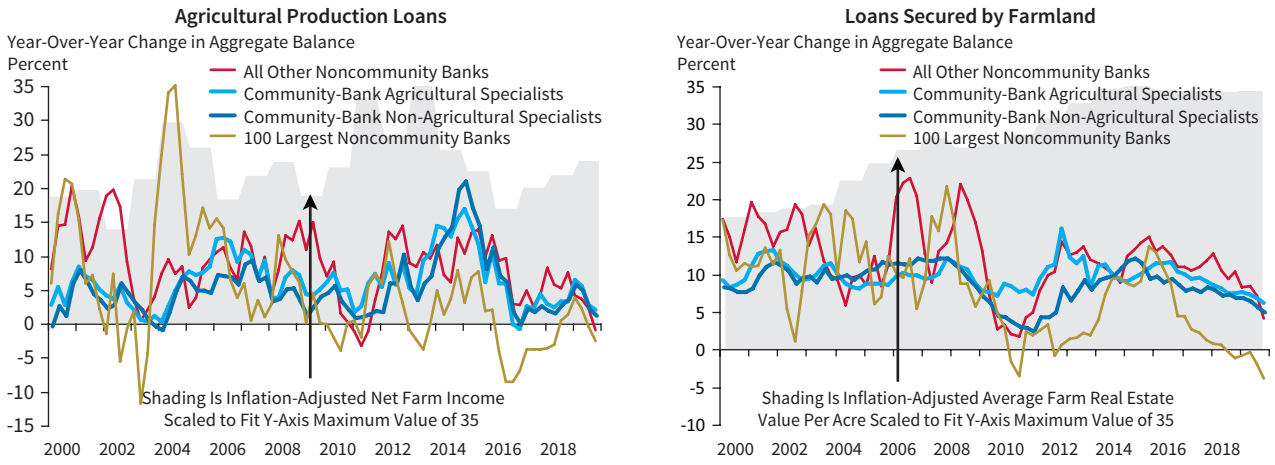
Among community banks, although agricultural specialists and nonagricultural specialists showed similar growth patterns in their agricultural lending and therefore presumably similar commitment to the agriculture sector throughout the course of its ups-and-downs, from a risk perspective the nonspecialists tend to have far less at stake because of much smaller agricultural concentrations.

[24] Reflective of the ongoing stress, the farm sector's aggregate working capital balance declined by more than one-third from 2014 to 2020, and its aggregate debt-to-asset ratio rose from 11.4 percent in 2013 to a forecasted 14 percent for 2020. See U.S. Department of Agriculture. Farm Balance Sheet and Financial Ratios, U.S.

[25] This assertion is based on many anecdotal accounts reported by examiners from the FDIC and other bank regulatory agencies, agricultural bank officers, and representatives of industry trade groups.

Chart 4.22

Year-Over-Year Growth in Agricultural Production and Farmland-Secured Loans, First Quarter 2000 Through Fourth Quarter 2019



Source: FDIC.

Notes: Data are quarterly figures from March 31, 2000 through year-end 2019. The bank sample only includes institutions operating throughout the entire period, and grouping designations are based on group designation as of year-end 2019.

The big difference, however, is not between the two community-bank groups—agricultural specialists and nonagricultural specialists—but between both groups, on the one hand, and noncommunity banks, on the other hand. For regardless of exposure and risk in the community-bank sector, both groups are committed to the farm sector through good times and bad. Meanwhile, noncommunity banks—and especially the largest, for which agricultural lending is generally immaterial in proportion to their loan portfolios and capital—are prone to add and subtract credit exposure to the agricultural sector as the sector's performance outlook changes.

Agricultural Lending: Summary

Through their lending activities, community-bank agricultural specialists are important to the nation's agricultural sector and rural communities. Although representing a small percentage of all commercial banks and an even smaller percentage of industry assets, they provide more than one-third of all agricultural credit funded by commercial banks. Agricultural specialists tend to be small, yet by tending to the credit needs of many small and mid-sized farmers, they are a backbone of their communities. Importantly, they are highly committed to meeting those farmers' credit needs even during periods of agricultural stress beyond their borrowers' control. Finally, by remaining committed to their agricultural roots, community-bank agricultural specialists keep banking alive in many rural areas whose demographic and economic profiles leave them unapproached by de novo activity.

Box 4.3 Agricultural Lending and the COVID-19 Pandemic

The COVID-19 pandemic disrupted the agricultural sector, with reduced demand and mismatches and bottlenecks in the food-supply chain causing commodity prices to fluctuate widely. COVID-19 outbreaks among workers caused temporary closures of dozens of large meat-processing plants in April and May, which created a backlog of market-ready animals. These processing issues drove animal prices much lower while at the same time drove meat prices higher for consumers. Closures of schools and restaurants cut demand for milk and dairy products, and some dairy farmers were forced to dump milk as a result. Crop and livestock prices fell sharply between March and June; prices have since rebounded to varying degrees. Strong sales commitments from export countries for corn, soybeans, and pork have been positive news since mid-2020.

In December 2020, the U.S. Department of Agriculture forecasted net farm income to increase from $84 billion in 2019 to $120 billion in 2020. However, the forecast included a $24 billion, or 107 percent, increase in direct federal farm payments to a record $46 billion. Most of the increased assistance was pandemic-related. The forecast also included a $5 billion reduction in expenses. Without the added direct payments and lower expenses, forecasted 2020 net farm income would be much lower at $90 billion, but still 8 percent above 2019's income level.

Chapter 5: Regulatory Change and Community Banks

The period 2008 through 2019 was one of intense regulatory activity, much of which affected community banks. So numerous were the new regulations that keeping current with them would have challenged any bank, but especially a small bank with limited compliance resources. Some of these regulatory actions created new obligations for banks, but many of them benefited banks. Some applied only to specific classes of banks (such as national banks or federal thrifts), many applied only to specific activities or products, and some were technical clarifications or changes to the scope of various exemptions or exceptions. A common feature of these rules, however, is that the affected banks needed to understand them. Putting aside any consideration of the substantive effects of these rule changes, their large number and scope make clear that merely being knowledgeable about changes in bank regulation can be, by itself, an important and potentially daunting task for any bank.

Regulatory changes notwithstanding, community banks *in aggregate* have exhibited strong financial performance since the crisis, as noted in Chapter 1 of this study, and aggregate community bank loan growth has been strong. Yet as will be discussed in this chapter, the pace of regulatory change and the volume of actions make plausible the idea that some community banks, and particularly the smaller institutions among them, may have elected to exit particular business lines, or even the banking industry itself, partly because of costs associated with regulatory compliance. The pace of regulatory change may have been one among a number of factors contributing to three post-crisis developments: a high proportion (compared with other time periods and other banks) of small mortgage lenders that reduced their residential mortgage holdings, the record rates at which community banks were exiting the banking industry in the years leading up to 2019, and an apparent increase in the target asset size of new small banks as reflected in their initial equity.

Not included in the chapter is an analysis of the public policy goals of banking laws and regulations or how well they have been achieved. Implicit to the presentation, however, is the belief that a thriving community bank sector is worth preserving. If policy makers share that belief, bank regulation should achieve statutory goals in a way that accommodates, to the extent appropriate, the business models of community banks.

In analyzing the effects of bank regulation on community (or other) banks, it is important to recognize that the conclusions reached are not definitive, given three inherent challenges: decisions in banking are driven by many factors other than regulation; community-bank aggregates may mask behavioral responses within segments of the industry; and the goals of regulation extend far beyond the effects on banks. For details on these three challenges, see Box 5.1.

Box 5.1 Three Big Challenges to Pinning Down the Effects of Bank Regulation on Banks

The three most significant challenges to any attempt to determine the effects of bank regulation on banks of any size are as follows:

First, bank decisions are driven by many factors other than regulation. Those include decisions related to staffing and operations, the extent of involvement in particular business lines, or even entry into or exit from the banking industry itself. The many factors besides regulation that bear on these decisions could include the state of loan demand, interest rates, or the ability to attract stable retail deposits; changes in technology; changes in customer demographics; challenges with arranging for appropriate management succession; or consolidation of businesses in a bank's market area.[a]

Second, community bank aggregates may mask behavioral responses within segments of the industry. For example, a particular type of lending may display a steady upward trend for community banks in the aggregate, but a more complete picture might reveal that regulatory developments caused some smaller community banks to exit that type of lending, with the lending then migrating to larger community banks. Another example might be an aggregate flat trend for noninterest expense, which *might* mean no increase in regulatory compliance costs, or it might reflect changes in bank behavior in response to regulation, with banks reallocating staff time or product mix, or adopting new technologies, to avoid an increase in noninterest expense.

continued on page 5-2

[a] For a discussion of how business consolidation may affect banks, see Brennecke, Jacewicz, and Pogach (2020).

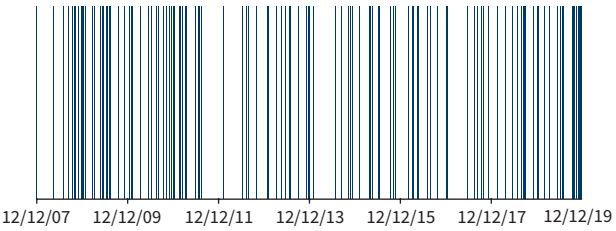
Box 5.1, continued from page 5-1

A third difficulty in quantifying the effects of bank regulation is that the goals of regulation extend far beyond the effects on banks. A partial list of statutory goals underlying the development of the U.S. bank regulatory framework includes promoting the financing of government activities, providing for a national currency, promoting a reliable payments system, ensuring sound and lawful bank operations, promoting financial stability, protecting bank depositors or other creditors while limiting the cost of the federal banking safety net and determining who bears that cost, protecting bank customers from unfair practices or illegal discrimination, combating money laundering, avoiding monopoly or undue concentration, promoting lending, and supporting credit to underserved communities. Moreover, the very existence of a large body of bank regulation has given rise to the statutory and policy objective of simplifying regulation and ensuring that it is appropriately tailored to small, regulated entities.

In short, not only do bank regulations have potentially wide-ranging effects outside the banking industry, but the narrower effects on banks themselves can be difficult to pin down. This suggests that gaining perspective on banking trends requires a holistic perspective. The FDIC conducts a significant amount of banker outreach, meets regularly with its Community Bank Advisory Committee, and benefits from public comments on its rules, including those received as part of the Economic Growth and Regulatory Paperwork Reduction Act process. Given the important challenges and caveats associated with the analysis, this chapter should be viewed as part of an ongoing dialogue about community bank regulation and not as a source of firm and final conclusions.

The remainder of the chapter begins with a brief review of the level and trend of noninterest expense ratios at community banks, since that category would typically include direct expenses associated with regulatory compliance. That review is followed by an overview of the major changes to federal regulations and programs affecting community banks, starting with the three broad categories of rules and programs most directly tied to the 2008–2013 banking crisis: deposit insurance and other federal financial dealings with banks, capital adequacy rules, and residential mortgage and servicing rules. The chapter continues with observations about community-bank exit and entry as possible indicators of overall effects of regulatory changes. A summary follows, to be followed in turn by a brief discussion of regulatory changes that have occurred as a result of the COVID-19 pandemic. An appendix—elaborated on in the next paragraph—extends the chapter.

Chart 5.1



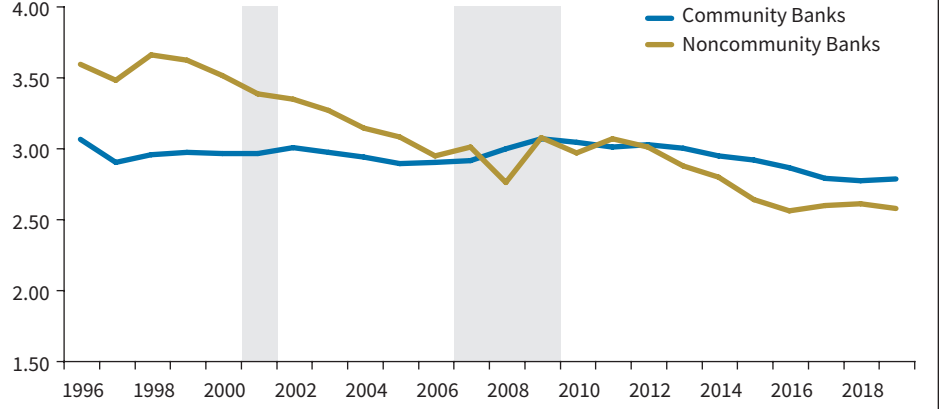
Source: Agency websites.
Note: Bars mark the announcement dates of 157 substantive final rules or federal programs affecting community banks that were issued by the FDIC, Federal Reserve, OCC, CFPB, Treasury, or FinCen. Rule changes depicted include burden reducing rules and federal financial support programs benefitting banks. The chronology starts with the creation of the Federal Reserve's Term Auction Facility in December 2007 and ends at year-end 2019.

Appendix B contains a chronology and a brief description of selected federal rules and programs that applied to community banks and were put in place from late December 2007 to year-end 2019. The chronology is limited almost entirely to substantive final rules and federal programs of the FDIC, Board of Governors of the Federal Reserve System (Federal Reserve), Office of the Comptroller of the Currency, Consumer Financial Protection Bureau, and the Department of the Treasury, including rules of the Financial Crimes Enforcement Network (FinCEN). The appendix generally does *not* include the following: Call Report changes; changes to accounting standards; tax changes; supervisory guidance; statements of policy; changes in state laws or regulations; ministerial rules such as inflation adjustments, rules issued in connection with changes in regulatory authority from one agency to another, or technical changes to agency procedures; or rules that apply exclusively to large or internationally active banks. Rules issued by multiple agencies, and rules issued as both interim final and final, are counted only once.

Even with these restrictions, the appendix lists 157 final rules and programs applying to community banks, an average of 1 every 28 days during the 2008–2019 period (Chart 5.1).[1]

[1] Rules finalized after 2019 are not covered in this chapter or its appendix, apart from a reference in a concluding text box to selected pandemic-related regulatory actions taken in 2020.

Chart 5.2



Source: FDIC.
Note: Full year noninterest expense as percent of average trailing 5-quarters assets, 1996–2019. Gray bars denote recession periods.

Noninterest Expense Is Highest at Small Community Banks

The assessment of the effects of regulatory changes will benefit from a preliminary examination of trends in noninterest expense. Noninterest expense includes expenses for salary, premises, legal and consulting fees, information technology (including ensuring the security of that technology), and a variety of other noninterest expenses. Direct expenses associated with regulatory compliance often fall within this category, and therefore changes in, or levels of, noninterest expense relative to banks' overall revenue and cost structures may provide indirect evidence of regulatory effects.

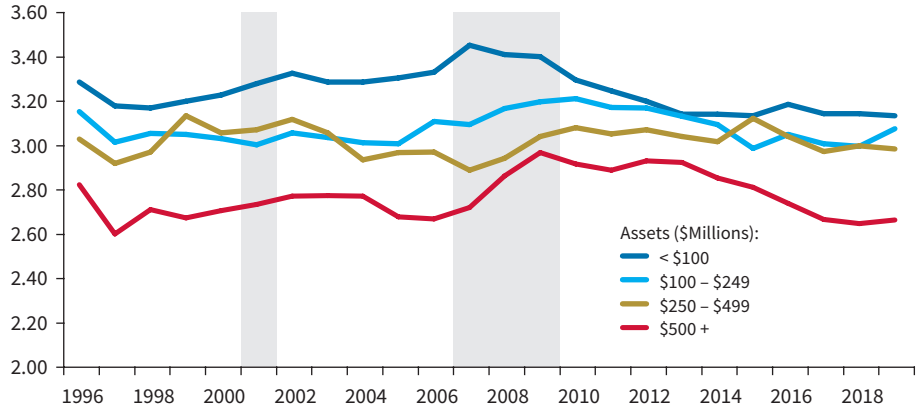
There are four important caveats to the discussion of noninterest expense. First, much of noninterest expense would be necessary to conduct a banking business even in the absence of regulation, so changes in the level and trend of noninterest expenses may reflect changes in the way banks do business that are unrelated to regulation. Second, the portion of noninterest expense attributable to regulatory compliance is unknown to researchers, and even bankers may have difficulty estimating these costs.[2] Third, as noted above, banks may respond to changes in regulation by changing their behavior to avoid regulatory costs, so that the effects of the regulatory change may not be evident in noninterest expense. Finally, banks may incur regulatory compliance costs that do not show up in noninterest expense. For example, bank staff time devoted to compliance may divert time from other strategic or revenue-generating activities.

Chart 5.2 depicts the trend in noninterest expense ratios at community versus noncommunity banks. The chart shows that notwithstanding the regulatory developments since 2008, community banks' aggregate noninterest expense ratios declined modestly. The chart also shows that community banks' noninterest expense ratios have been slower to decline than those of noncommunity banks. This may reflect a community bank business model involving more direct interaction with customers, in addition to fixed costs that are a higher percentage of small banks' cost-structures given their smaller asset size. Both of these factors may impose practical limits on how much noninterest expense ratios can be reduced. Thus, to the extent that there was an increase in expense arising from regulatory change, the effect may be greater relative to the overall cost structure of a typical community bank than to that of a large noncommunity bank.

As indicated in Chart 5.3, community banks are not a homogenous group with respect to their noninterest expense ratios. Smaller community banks have had substantially higher noninterest expense ratios than larger community banks. Noninterest expense ratios at

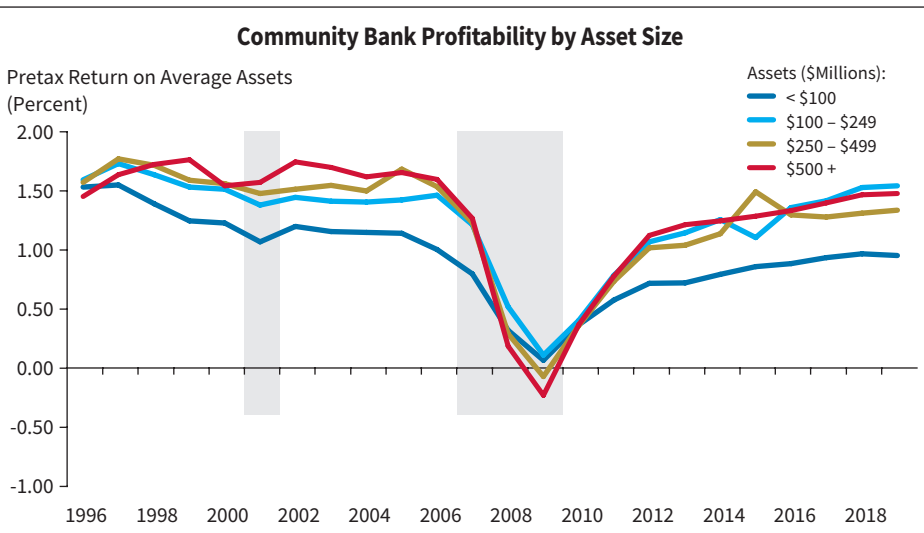
[2] Call Reports include line items for legal expense, consultant expense, and accounting and auditing expense, but reporting thresholds are such that many small banks need not report these items, and just as with other noninterest expenses, it is not possible to determine the portion of these expenses that banks would need to incur even in the absence of regulation.

Chart 5.3



Source: FDIC.
Note: Full year noninterest expense to average 5-quarter trailing assets, 1996–2019. Gray bars denote recession periods.

Chart 5.4



Source: FDIC.
Note: Full year pretax net income as percent of average 5-quarter trailing assets, 1996–2019. Gray bars denote recession periods.

community banks with assets less than $100 million, which at year-end 2019 constituted about 24 percent of all community banks, averaged 48 basis points higher during the years 1996–2019 than for community banks with assets greater than $500 million.[3] Smaller banks' higher expense ratios have a substantial negative effect on these banks' profitability: in 2019, noninterest expense ratios at community banks with assets less than $100 million were 47 basis points more than the ratios at community banks with assets above $500 million, while small banks' pretax return on assets was 53 basis points lower (Chart 5.4).

Charts 5.3 and 5.4 indicate that higher overhead and lower profitability at smaller community banks are not new developments of the post-crisis period. The charts make clear, however, that if higher noninterest expenses were the outcome of a regulatory change, that cost would weigh relatively more heavily on smaller banks. For example, in considering the profitability effects of a *hypothetical* (emphasis added) increase in bank staff that generates no

[3] Income and expense items in basis points are relative to average assets.

additional revenue, Feldman, Heinecke, and Schmidt (2013) estimated that "the median reduction in profitability for banks with less than $50 million in assets is 14 basis points if they have to increase staff by one half of a person."

None of this information bears on either the core profitability of community banks, or the variation over time in community bank profitability caused by economic factors, as discussed, for example in Fronk (2016). Instead, the discussion here highlights that the profitability of community banks in general, and smaller community banks in particular, reflects a higher proportion of noninterest expense in their cost structures and, given their smaller asset size, a greater sensitivity of profitability to any given increment of noninterest expense, including an increment to expense that might be necessary as a result of a change in regulation.

Deposit Insurance and Other Federal Financial Dealings With Banks Changed in Important Ways as a Result of the Financial Crisis

The regulatory actions that were the most immediate response to the 2008 financial crisis were those pertaining to the federal banking safety net that supported banks during the crisis, and that in some cases permanently benefited small banks relative to large banks. Many community banks borrowed from the Federal Reserve's Term Auction Facility (TAF), in which the Federal Reserve lent to banks against a broader range of collateral than was accepted at the Discount Window. Many community banks also participated in the U.S. Treasury's Capital Purchase Program (CPP), in which the Treasury invested in subordinated debt or preferred stock of viable banks and bank holding companies. In addition, community banks benefitted from the 2008 temporary increase in the standard deposit insurance limit to $250,000 (which was made permanent in 2010), and from the FDIC's Temporary Liquidity Guarantee Program (TLGP), whose two components were guarantees of holding company obligations, and temporary unlimited deposit insurance coverage of noninterest-bearing transaction accounts.[4]

A subsequent important change in deposit insurance arrangements was the statutory change in the assessment base from domestic deposits to assets minus tangible equity capital. Since large banks tend to obtain a greater proportion of their funding from non-deposit sources than do small banks, the change in the assessment base shifted some of the cost of deposit insurance assessments from small banks to large banks. For second quarter 2011, when the changes to the assessment base became effective, assessments for banks with less than $10 billion in assets were 33 percent lower in the aggregate than first quarter assessments, and those banks' share of total assessments decreased from about 30 percent to about 20 percent.

The allocation of the cost of building and maintaining the Deposit Insurance Fund (DIF) changed in other ways. The Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) increased the minimum reserve ratio of the fund from 1.15 percent to 1.35 percent, required that the reserve ratio reach that level by September 30, 2020, and required that the FDIC offset the effect of the increase on small banks. To implement these requirements, the FDIC imposed surcharges on large banks, generally those with assets greater than $10 billion. As of September 30, 2018, the reserve ratio exceeded the required minimum of 1.35 percent, and the surcharges were suspended. Furthermore, to implement the Dodd-Frank Act requirement that the FDIC offset the effect of the increase on small banks, the FDIC awarded $765 million in assessment credits to small banks for the portion of their regular assessments that contributed to growth in the reserve ratio between 1.15 percent and 1.35 percent. The FDIC remitted the final remaining assessment credits to small banks on September 30, 2020. The FDIC also made significant changes in deposit insurance pricing intended to more accurately reflect risk, so that a less risky bank does not subsidize activities of a riskier bank that could increase loss to the DIF. These changes were not statutorily required but reflected the FDIC's historical experience with the risk characteristics of failed banks.

The Federal Reserve also made important changes in its financial dealings with banks. The Federal Reserve announced in October 2008 that it would begin to pay interest on depository institutions' required and excess reserve balances. In 2016, the Federal Reserve implemented a statutory requirement by reducing the dividend paid to large banks (with assets greater than $10 billion) on their Federal Reserve bank stock from 6 percent, to the lesser

[4] A list of debt issuances guaranteed by the FDIC during the crisis pursuant to the Temporary Liquidity Guarantee Program can be found at https://www.fdic.gov/regulations/resources/tlgp/total_debt.html. The amount of noninterest-bearing transaction accounts guaranteed by the FDIC for the institutions that opted in to the Transaction Account Guarantee program can be found on Call Report schedule RC-O, memorandum item 4.

of 6 percent or the most recent ten-year Treasury auction rate before the dividend, while smaller banks' dividend rate remained at 6 percent. This latter change affects only banks that are members of the Federal Reserve System.

Changes in Capital Regulation Were Mainly but not Only About Implementation of Basel III

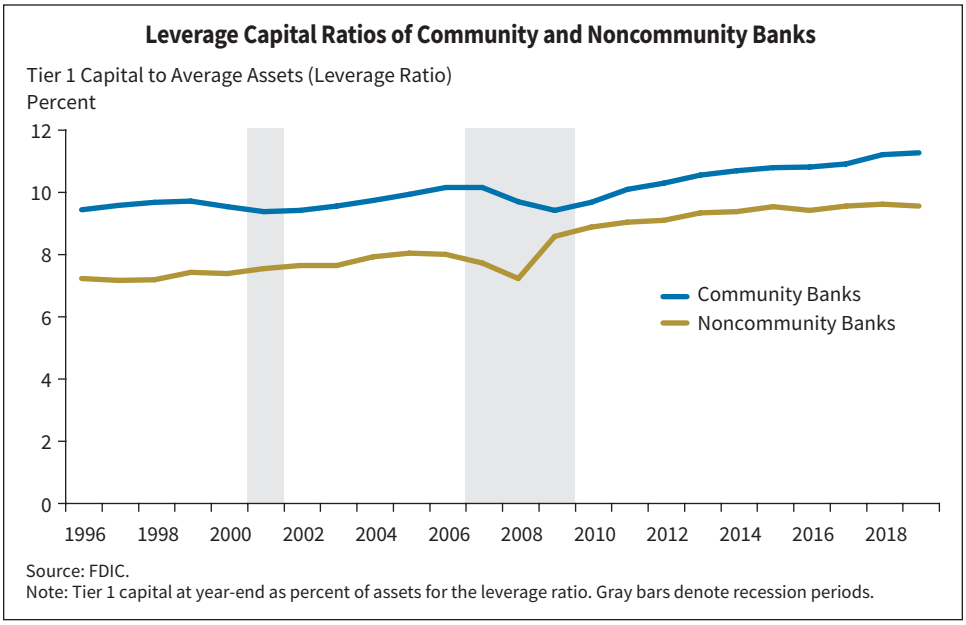
The most important change to capital adequacy regulation during the 2008–2019 period was U.S. implementation of a version of the Basel III capital framework. However, other important regulatory capital changes occurred during those years, including temporary capital relief measures during the 2008 financial crisis and risk-based capital changes implemented in response to a change in the accounting for certain securitized assets. Another important change was the statutory increase in the asset size threshold for the Federal Reserve's Small Bank Holding Company Policy Statement, from $500 million to $1 billion and then again to $3 billion. Bank and thrift holding companies subject to that policy statement are not subject to consolidated leverage- or risk-based capital requirements.[5] A 2019 rule implemented a statutory requirement to allow qualifying banks to opt in to a community bank leverage ratio framework, in which they are exempt from risk-based capital requirements if they operate subject to a higher leverage requirement than otherwise applies to them. The rule and its associated statute were intended to relieve extremely well-capitalized banks of the burden of calculating risk-based capital requirements. As of first quarter 2020, slightly less than 40 percent of the 4,327 eligible banks in the United States had chosen to adopt the community-bank leverage framework.

Under Basel III, Community Banks Built Capital More Than Noncommunity Banks, and Grew Their Loans Faster as Well

The U.S. banking agencies proposed the Basel III rule in 2012 and finalized it in 2013, with an effective date for most banks of January 1, 2015, and a phase-in period scheduled to end January 1, 2019 (year-end 2012 through year-end 2018 is referred to here as the Basel III response period). Broadly speaking, the new rules (1) increased the numerical level of *risk-based* capital requirements by 2 percentage points while leaving leverage requirements for most FDIC-insured institutions unchanged; (2) changed certain risk weights; and (3) restricted the recognition in regulatory capital of certain assets, and of certain debt instruments (Trust Preferred Securities) that were formerly included in regulatory capital for bank holding companies.

As background, banks must maintain capital at a specified minimum ratio of their assets. For community banks, *this simple leverage ratio requirement was not changed by Basel III.*

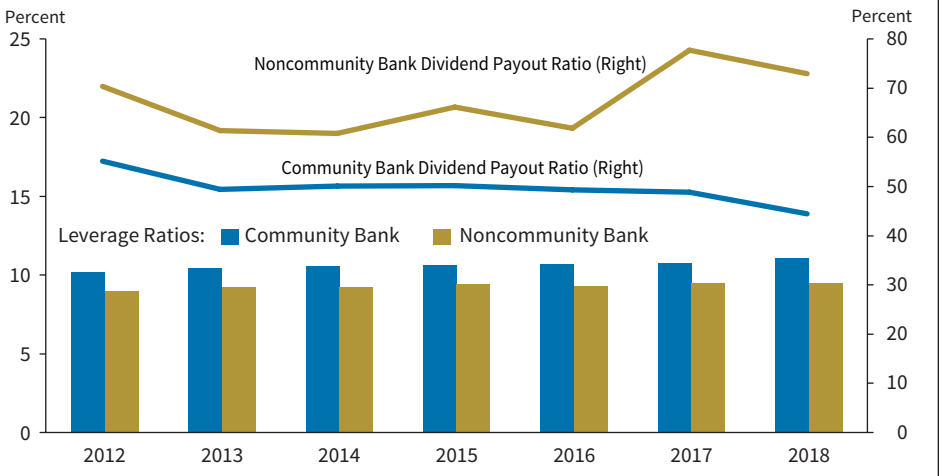
Chart 5.5



Source: FDIC.
Note: Tier 1 capital at year-end as percent of assets for the leverage ratio. Gray bars denote recession periods.

[5] The Small Bank Holding Company Policy Statement does contain exceptions whereby some bank holding companies with assets less than the size threshold may be subject to consolidated capital requirements.

Chart 5.6



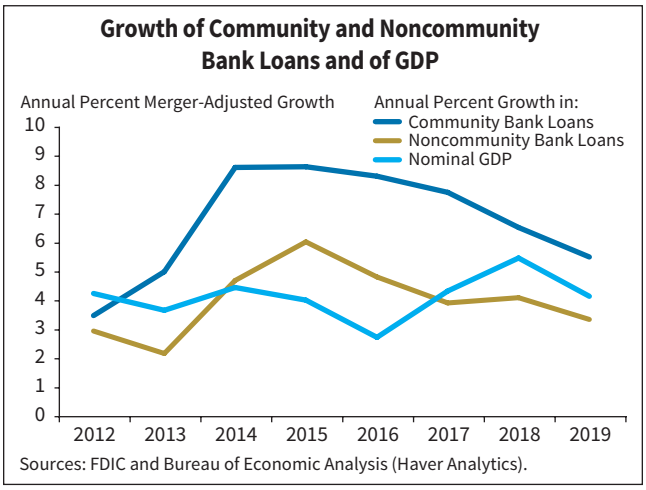
Source: FDIC.
Note: Leverage ratio is tier 1 capital to average assets. Dividend payout ratio is full-year dividends on common stock as percent of full year net income.

Throughout 2012–2019, community banks also had to ensure their capital exceeded specified ratios of so-called *risk-weighted* assets. Basel III increased the required risk-based ratios and changed some of the methods for calculating risk-weighted assets, and as a result, many banks held more capital. Because of its simplicity, the leverage ratio is the easiest way to describe how much capital banks hold, and it is used throughout this analysis to describe capital trends during the Basel III response period.

At year-end 2019, both community banks and noncommunity banks had leverage ratios higher than at any time since data were reported in this format, and about 2 percentage points higher than their banking crisis lows (Chart 5.5). Some of the increase in leverage ratios depicted in the chart is likely attributable to banks' rebuilding capital from the losses experienced in the crisis, and some is likely attributable to Basel III.

Chart 5.5 shows that during the Basel III response period, community banks had higher leverage ratios, and increased those ratios more, than did noncommunity banks. Chart 5.6 shows that dividend policies were an important driver of these trends. From 2013 forward, community banks' dividend payout ratios never exceeded 50 percent. The payout ratios of noncommunity banks were never less than 60 percent, partly explaining why noncommunity banks' leverage ratios remained at least a full percentage point less than the comparable ratios of community banks. Chart 5.7 shows that during 2012–2018, while community banks grew their capital more than

Chart 5.7



Sources: FDIC and Bureau of Economic Analysis (Haver Analytics).

noncommunity banks, they also grew their loans on a merger-adjusted basis faster than noncommunity banks and faster than nominal GDP. Charts 5.6 and 5.7 illustrate the important point that higher or increasing capital ratios do not automatically imply lower loan growth, because banks can increase their capital ratios by growing capital rather than by reducing loan growth.

New Basel III Regulatory Capital Deductions Did Not Affect Most Community Banks

With these broad comparisons to noncommunity banks for context, we now turn to a more specific discussion of Basel III relative to community banks. As indicated in Table 5.1, Basel III was proposed in 2012, published as a final rule in 2013, and phased in for community banks from January 1,

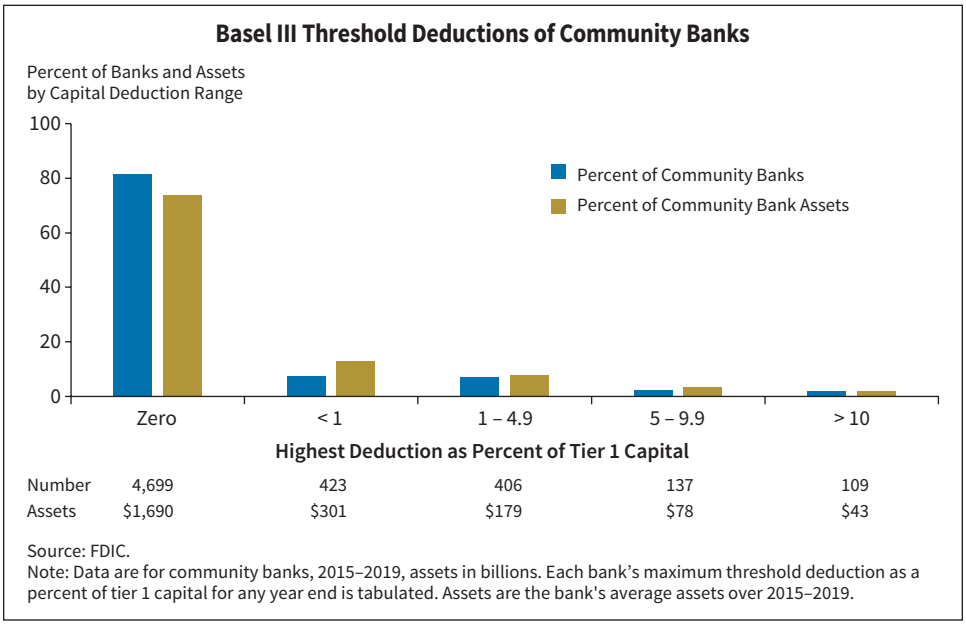
Table 5.1 Median Leverage Ratios of Community Banks, 2012–2018

Date (Year End of Each Year)	2012	2013	2014	2015	2016	2017	2018
Leverage Ratio (Percent)	9.90	10.12	10.25	10.40	10.46	10.54	10.87

Abbreviated Basel III chronology for banks not subject to the advanced approaches:
August 2012: proposed rule
July 2013: final rule published
January 1, 2014–December 31, 2014: old rule in effect
January 1, 2015–January 1, 2019: Basel III phase-in period*
*Certain originally scheduled deductions from regulatory capital were subsequently eliminated.

Source: FDIC.

Chart 5.8



Source: FDIC.
Note: Data are for community banks, 2015–2019, assets in billions. Each bank's maximum threshold deduction as a percent of tier 1 capital for any year end is tabulated. Assets are the bank's average assets over 2015–2019.

2015 to January 1, 2019. Table 5.1 tracks the year-by-year median leverage ratios of community banks during this time. Roughly speaking, by year-end 2018 the median community bank was operating with $11 in tier 1 capital per $100 in assets, up from $10 per $100 in 2012. Historical experience has been that banks with more capital have lower failure rates, as discussed, for example, in *Crisis and Response: An FDIC History, 2008–2013*.[6] All else equal, this aspect of Basel III should make community banks more resilient in periods of stress.

In addition to requiring a higher level of regulatory capital, Basel III tightened limits on the capital recognition of deferred tax assets and mortgage servicing assets, and introduced limits on the recognition of investments in the capital of other financial institutions.[7] An important part of the phase-in referenced in Table 5.1 was the gradual introduction of these deductions from regulatory capital, known as "threshold deductions." As Chart 5.8 indicates, these deductions did not affect most community banks: 80 percent of community banks never had a threshold deduction in any year-end through 2019. The chart also indicates that the deductions were material for some institutions, amounting (for example) to more than 10 percent of tier 1 capital for 109 institutions at some point during the years 2015–2019.

Healthy Community Banks Increased Capital Ratios by Retaining Earnings and Raising Capital, While Weaker Banks Were More Likely to Curtail Loan Growth

It is interesting to know how community banks effected the increase in capital ratios during the Basel III response period. Broadly speaking, a bank that increases its capital ratios must increase its capital by a larger percentage amount than it increases its loans or other assets. Some banks might do this by maintaining growth in their loans

[6] See page 123 of *Crisis and Response*.
[7] Mortgage servicing activity of community banks is discussed in the next section of this chapter.

Table 5.2 Components of Community Bank Capital Ratio Changes, 2012–2018

Community Banks That Were:	End of 2012				6-Year Total (Percent of 2018 Leverage Assets)			6-Year Growth (Percent)			End of 2018
	Number	Assets ($ Billions)	Leverage Ratio (Percent)	PDNA (Percent of Tier 1 Capital)	Inflow: Net Income	Inflow: Capital Raise	Outflow: Common Dividends	Tier 1 Capital	Leverage Assets	Loans	Leverage Ratio (Percent)
Less Than Well Capitalized	97	28	5.04	210	2.44	4.33	-0.60	157	26	40	10.23
Well Capitalized With:											
Low PDNA	2,992	767	10.70	8	6.36	0.75	-2.97	48	40	62	11.25
Medium PDNA	878	251	10.50	30	5.47	0.55	-2.63	36	28	43	11.16
High PDNA	339	102	9.03	87	4.00	1.44	-2.11	40	7	20	11.87
Well Capitalized Low PDNA With:											
High RBC	2,631	652	11.04	8	6.38	0.65	-2.97	44	38	61	11.54
Med RBC	323	107	8.75	9	6.25	1.20	-2.95	71	54	65	9.73
Low RBC	38	8	8.25	5	6.32	1.74	-2.81	96	66	72	9.71

Source: FDIC.
Note: Only includes community banks reporting at every year end from 2012 through 2018 that made no acquisitions. "Leverage assets" refers to "total assets for the leverage ratio" from Call Report schedule RC-R. Well capitalized banks are grouped in two ways. Past due and nonaccrual (PDNA) loan ratio - defined as 90 days past due, nonaccrual, and other real estate owned - grouped by less than 20 percent of tier 1 capital (Low PDNA), 20 percent to 50 percent of tier 1 capital (Med PDNA), and greater than 50 percent of tier 1 capital (High PDNA). High risk-based capital (High RBC) is tier 1 capital to risk-weighted assets greater than 12 percent, medium RBC (Med RBC) is tier 1 capital to risk-weighted assets between 10 and 12 percent, and low RBC (Low RBC) is tier 1 capital to risk-weighted assets below 10 percent. While net income, external capital raises, and outflows in the form of dividends on common stock are important factors explaining the change in equity capital from one time period to the next, they are not the only factors. The three inflow and outflow columns in this table are not intended to permit a complete reconciliation of the change in capital ratios from 2012 to 2018.

or other assets while retaining more of their earnings or raising capital externally, while others might not be willing or able to increase their capital but instead might grow their loans or other assets more slowly. Table 5.2 details the drivers of changes in capital ratios during 2012–2018 for 4,306 institutions that were community banks in 2012, that reported in every year-end through 2018, and that did not acquire another bank. Analyzing trends for this population of banks allows a focus on the capital management decisions of banks in continuous existence during the Basel III response period.

Before discussing Table 5.2 in any detail, it may be helpful to summarize the conclusions it appears to suggest. While community banks as a group increased capital in response to Basel III, healthy community banks do not appear to have curtailed loan growth in order to do this. For healthy banks, even those with relatively lower initial capital, earnings retention and capital raises were sufficient to increase capital ratios while maintaining strong loan growth. Banks with higher levels of troubled assets or that were less than well capitalized, generally had lower earnings available for retention. These banks generally had a greater need than other banks to increase their capital ratios. They did so with a combination of more substantial capital raises and slower loan growth than other banks.

In more detail, Table 5.2 depicts the 2012 and 2018 leverage ratios of various groups of banks, along with the inflows during the full six years from income and capital raises, and the outflows from dividends, expressed in units of the 2018 leverage ratio. Thus, for example, the 97 banks in row 1, which were less than well capitalized in 2012 under the old rules, increased their leverage ratios from about 5 percent to about 10.2 percent during the six years, with about 4.3 percentage points of the 5.2 percentage point increase contributed by capital raises. Another way of accounting for the increase in leverage ratios is that it reflects faster growth of capital than of assets, and these growth rates, along with that of loans, are also reported. Thus, for example, these 97 banks grew their loans 40 percent during the six years and their assets 26 percent, but roughly doubled their leverage ratios because their capital increased by 157 percent.

The next three rows segment the 4,209 well-capitalized community banks by the ratio of noncurrent loans and leases plus other real estate to assets as of year-end 2012. The two groups with higher levels of troubled assets started the period with lower leverage ratios, earned less income over the period, and grew their leverage ratios through a combination of higher capital raises, somewhat lower dividends, and somewhat slower loan growth. Some of the banks in these two groups may have been subject to supervisory directives to limit growth at some point during the six years.

The last three rows limit the focus to 2,992 well-capitalized community banks with low levels of troubled assets. Their approaches to capital management during the six years were more likely to reflect "pure" responses to Basel III, without a separate motive to build capital coming from high volumes of troubled assets or supervisory directives. The table segments these generally healthy banks by their initial tier 1 risk-based capital ratios. Banks in the low and medium capital groups were those that had chosen to manage to lower capital ratios, but then may have had an impetus from Basel III to increase those ratios in order to maintain what they viewed as an appropriate cushion above the new Basel III requirements. The importance of the last three rows is that while the banks in the two lower capital groups did increase their leverage ratios more than the banks in the higher capital group, they did so with earnings retention and comparatively higher capital raises, while maintaining higher rates of loan growth than any other subset of banks considered in the table.

Institutions Resulting From Community Bank Mergers Generally Had Lower Capital Ratios Than Before the Mergers

Table 5.3 provides information about the capital effects of mergers during acquisition years. The table shows that acquirers generally had lower leverage ratios than the banks they acquired, especially toward the end of the 2012–2019 period; that acquirers raised capital and paid dividends at rates that exceeded community bank averages during acquisition years; and that on a merger-adjusted basis, leverage ratios of the resulting entities were typically lower than before the acquisition. Higher dividends and capital raises may reflect anticipated merger-related benefits such as those derived from eliminating duplicative overhead costs over time. With regard to the reduction in leverage ratios, it is possible that acquirers tended to have greater focus on growth and return-on-equity than did the non-acquiring banks depicted in Table 5.2. Whatever the reason, the effects of acquisitions on community bank leverage ratios ran directionally counter, albeit modestly, to the general increase in leverage ratios reported in Table 5.2.

Table 5.3 Leverage Ratios, Capital Ratios, and Dividends in Community Bank Mergers, 2013–2019

	CBs Acquiring During Year			CBs Acquired During Year								
Year	Number	Leverage Assets (Billions, as of Prior Year End)	Leverage Ratio (Percent, as of Prior Year End)	Number	Leverage Assets (Billions, as of Prior Year End)	Leverage Ratio (Percent, as of Prior Year End)	Year-Ago Leverage Ratio (Merger-Adjusted Percent)	One Year Change in Leverage Ratio (Merger-Adjusted, Percentage Points)	Acquiring Banks' Capital Raise (Percentage Points)	CB Average Capital Raise (Percentage Points)	Acquiring Banks' Average Dividend Payout Ratio (Percent)	CB Average Dividend Payout Ratio (Percent)
2013	146	$95	9.46	164	$31	9.67	9.51	0.01	0.42	0.17	57	50
2014	166	$137	10.20	186	$39	10.00	10.15	-0.16	0.46	0.19	83	49
2015	196	$198	10.05	219	$46	10.40	10.12	-0.31	0.45	0.18	65	50
2016	191	$194	10.38	204	$47	10.28	10.36	-0.24	0.61	0.22	70	50
2017	146	$151	10.28	169	$47	10.60	10.36	-0.07	0.73	0.32	76	47
2018	178	$254	10.07	201	$55	10.89	10.22	-0.05	0.75	0.25	54	45
2019	157	$220	10.55	171	$53	12.02	10.84	-0.60	0.69	0.29	81	51

Source: FDIC.

Note: CB = Community Bank. Leverage assets is "total assets for the leverage ratio" from Call Report schedule RC-R. Change in leverage ratio is the difference from the prior year (for example, in the last row, -0.60 signifies that the year end 2019 leverage ratio for the acquiring banks was 10.24 percent). Capital raise is sum of net sale of stock and other transactions with stockholders, in percentage points of leverage assets as of the year end for the row. Dividend Payout Ratio is dividends on common stock as a percent of net income during acquisition year. Table includes affiliated and unaffiliated acquisitions but no failed bank acquisitions. For this table, a community bank is a bank that meets the community bank definition at any of the year ends from 2013 to 2019.

Many Important New Regulations Dealt With 1–4 Family Residential Mortgage Lending and Servicing

Between July 2008 and November 2019, largely in response to laws enacted to address abuses in subprime and alternative residential mortgage lending and mortgage servicing, federal agencies issued 36 distinct substantive final rules governing various aspects of 1–4 family residential mortgage lending and mortgage servicing (in this chapter, any reference to "mortgages" refers to 1–4 family residential mortgages). The peak of this rule-writing activity occurred in January 2013, when the Consumer Financial Protection Bureau (CFPB) issued six substantive final rules (five alone and one jointly with other agencies) addressing residential mortgage lending and servicing. Changes to the residential mortgage and mortgage servicing rules, based on their sheer number and scope, have a strong claim to being viewed as the most important of the post-crisis regulatory changes.

Broadly and collectively, the mortgage rules addressed matters including but not limited to: (1) establishing disclosure, registration, and qualification standards for mortgage loan originators, and the bases on which mortgage originators could be compensated; (2) defining high-cost mortgages and capping or prohibiting certain fees and loan terms for them, and requiring borrowers for those mortgages to receive housing counseling; (3) establishing ability to repay standards with which a defined class of Qualified Mortgages was presumed to comply; (4) requiring appraisals, including—for certain higher-priced mortgages—a physical inspection of the interior of the property; (5) excepting small rural lenders from certain requirements; and (6) providing that, on a time-limited basis, mortgages sold to the federal housing enterprises were deemed Qualified Mortgages.

The servicing rules, among other things: (1) prohibited a number of specific mortgage servicing practices; (2) prohibited foreclosures while an application for a mortgage modification was under review; (3) required servicers to inform borrowers who missed two consecutive payments about loss-mitigation options to retain their homes; and (4) included exceptions from certain requirements for servicers that service 5,000 or fewer loans that they or an affiliate originated. For context regarding the importance of the small servicer exemption, CFPB (2019) estimated that as of year-end 2015, 95 percent of servicers that were depository institutions serviced 5,000 or fewer loans.[8]

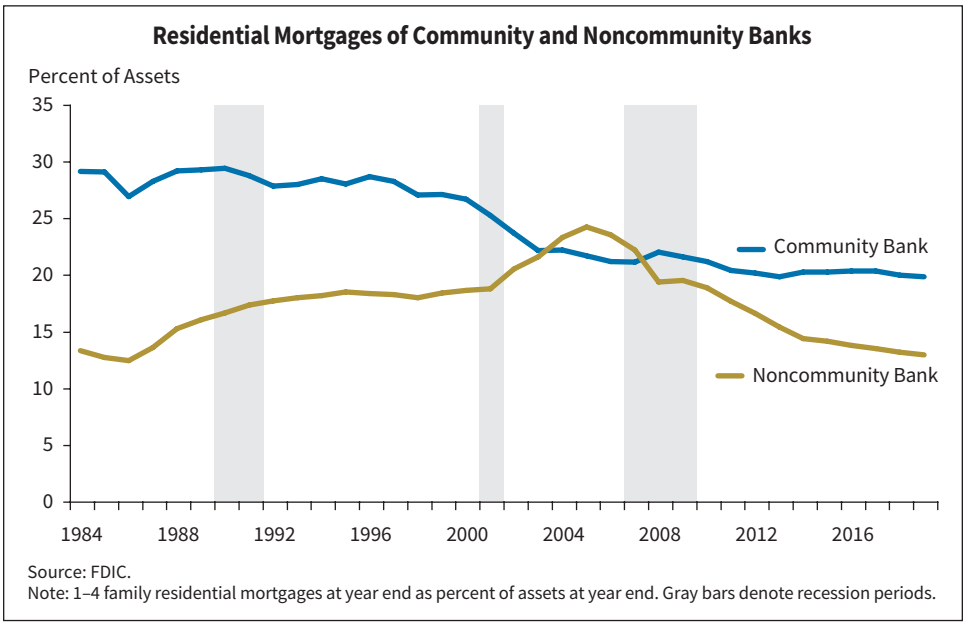
Community Banks' Mortgage Growth Has Outpaced Growth of U.S. Mortgages Outstanding and Growth of Mortgages of Noncommunity Banks

Community bank mortgage lending since the banking crisis needs to be considered in the context of broader mortgage trends. First, the bursting of the pre-crisis housing bubble left an imprint in the data that still existed at year-end 2019: the total volume of outstanding 1–4 family residential mortgages in the United States declined for seven years starting in 2008 and, while slowly recovering, as of year-end 2019 it remained just below the 2008 peak of $11.3 trillion. Second, at year-end 2019 the housing government-sponsored enterprises (GSEs) and GSE mortgage pools held 63 percent of outstanding U.S. 1–4 family residential mortgages, a historic high. It is possible that the Qualified Mortgage safe harbor for loans sold to GSEs contributed to the growth of GSE holdings. Third, at least among the largest originators and servicers of 1–4 family residential mortgages, the share of nonbank firms increased in the years before 2019.[9]

Despite the generally subdued backdrop for aggregate residential mortgage lending during the post-crisis period, and notwithstanding the new regulations, community banks as a group continued to grow their residential mortgage portfolios. As of year-end 2019, over 99 percent of community banks reported some level of 1–4 family residential mortgages, a percentage that has held steady for many years. As Chart 5.9 shows, between 2011 and 2019, the dollar weighted average mortgage loan to asset ratio of community banks held steady at about 20 percent and was only slightly down from its 2005 level of 22 percent shortly before housing prices reached their pre-crisis peak. This steady trend contrasts sharply with the decline in the same ratio for noncommunity banks. And, notably, between 2012 and 2019, the merger-adjusted growth of residential mortgage loans on the balance sheet at community banks far exceeded the merger-adjusted growth of mortgage loans of noncommunity banks and the overall growth of U.S. 1–4 family residential mortgage loans outstanding (Chart 5.10).

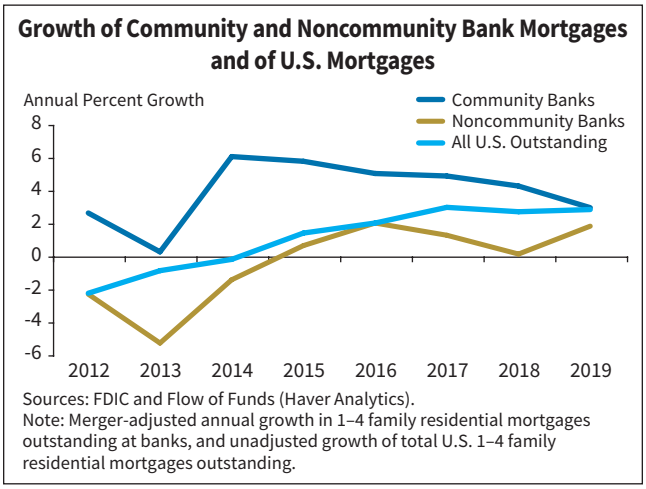
[8] See page 106 of CFPB (2019).
[9] Shoemaker (2019).

Chart 5.9



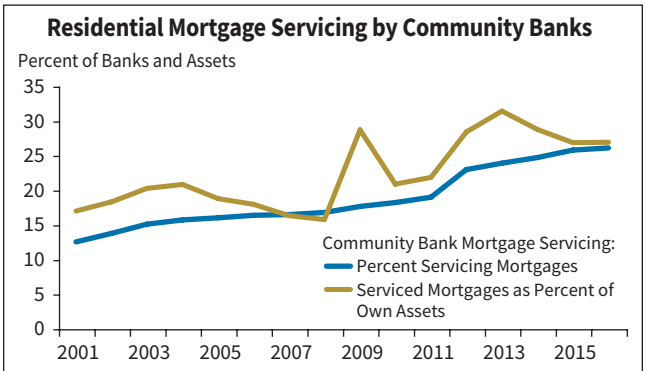
Source: FDIC.
Note: 1–4 family residential mortgages at year end as percent of assets at year end. Gray bars denote recession periods.

Chart 5.10



Sources: FDIC and Flow of Funds (Haver Analytics).
Note: Merger-adjusted annual growth in 1–4 family residential mortgages outstanding at banks, and unadjusted growth of total U.S. 1–4 family residential mortgages outstanding.

Chart 5.11



Source: FDIC.
Note: Servicing refers to servicing of residential mortgages.
"Serviced mortgages as percent of own assets" is computed only for banks servicing mortgages. Most community banks stopped reporting these items starting in 2017 with the introduction of the new FFIEC Call Report 051.

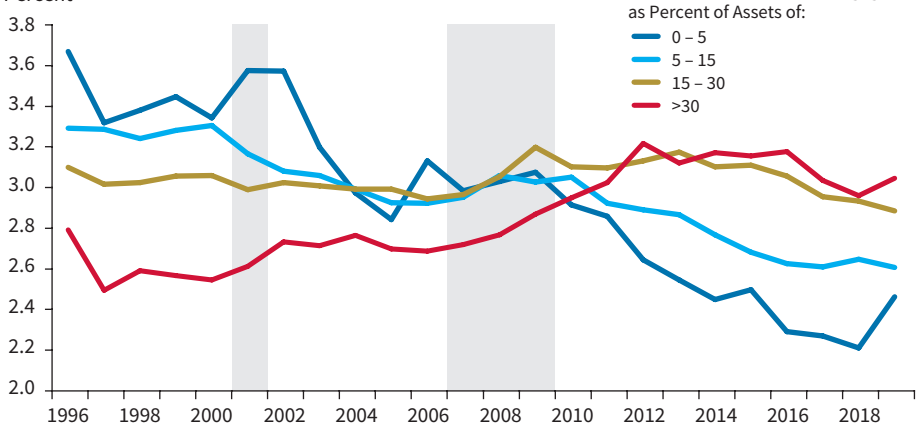
Moreover, the percentage of community banks that service 1–4 family residential mortgages owned by others (a category that includes mortgages those banks originated and sold to a GSE with servicing retained) increased more or less steadily from 2001 to 2016, the last year most institutions reported these data, going from about 11 percent of community banks in 2001 to about 26 percent in 2016 (Chart 5.11).[10] Data that were still being reported in 2019 provided no indication that community bank mortgage servicing had dropped off after 2016. Specifically, the percentage of community banks reporting servicing fees of any kind, including mortgage servicing fees, stood at 35 percent through 2019, slightly above its 2016 level.

Noninterest Expense of Mortgage Specialists Increased Relative to Other Banks After the Banking Crisis

The relatively robust continued participation of community banks in mortgage lending and servicing depicted in Charts 5.9–5.11 should not be taken to suggest that the mortgage and servicing rules had no effects on community banks. As noted above in Box 5.1, aggregate banking trends can mask developments affecting subsets of the industry. We consider—and find some evidence that may be consistent with—two effects. One is the possibility

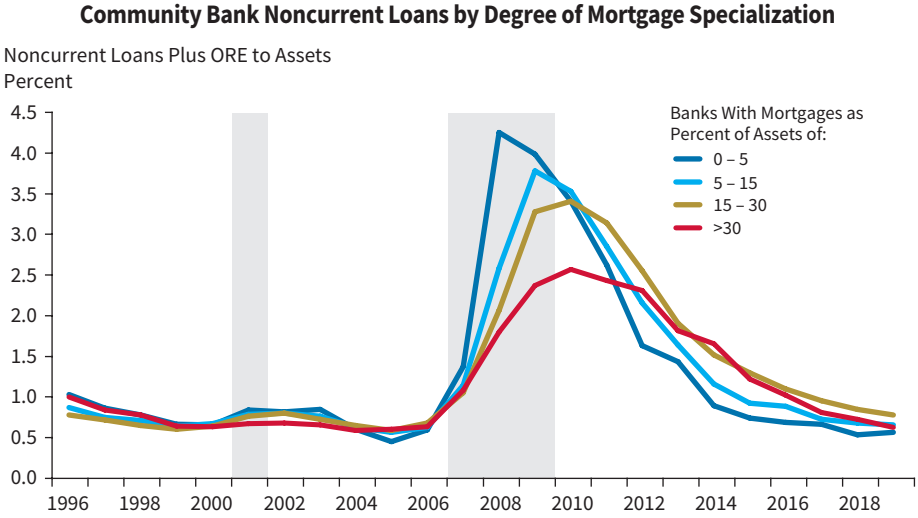
[10] Most community banks began reporting using the FFIEC 051 Call Report form in 2017. That form does not include the mortgage servicing information depicted in Chart 5.11.

Chart 5.12



Source: FDIC.
Note: Full year noninterest expense as percent of average 5-quarter trailing assets; mortgages refers to 1–4 family residential mortgages. Gray bars denote recession periods.

Chart 5.13



Source: FDIC.
Note: "Noncurrent" is 90 days or more past due or nonaccruing. "ORE" is other real estate owned. "Mortgages" is 1–4 family residential mortgages. Gray bars denote recession periods.

that the new mortgage and servicing rules caused banks in the mortgage-lending business to incur greater expense for regulatory compliance. The other is the possibility that the desire to avoid such increased expense caused some banks, particularly those with smaller mortgage programs, to reduce or exit mortgage lending.

It seems probable that banks with a substantial commitment to mortgage lending would be most likely to stay in the business and absorb whatever additional compliance costs are necessary, and probable also that any associated increase in noninterest expense could be most readily observed for them.[11] Chart 5.12 depicts noninterest expense trends at community banks segmented into four groups according to residential mortgage lending concentration relative to assets. Banks with residential mortgage concentrations greater than 30 percent of assets

[11] The author is indebted to Nathan Hinton and Kevin Anderson, whose internal FDIC research in 2016 analyzed noninterest expense of community bank mortgage specialists compared with community banks having other degrees of residential mortgage concentration. Their research included preparing charts similar to Charts 5.12 and 5.13 in this chapter.

are deemed mortgage specialists. The chart depicts an inversion in noninterest expense ratios across the groups over time. The two highest mortgage concentration groups had the two lowest expense ratios pre-crisis, but post-crisis they had the two highest expense ratios. Mortgage specialists had the lowest noninterest expense ratios pre-crisis, and from 2014 to 2019 had the highest.

The post-crisis inversion of the relationship between noninterest expense ratios at mortgage specialists and other banks is optically consistent with the hypothesis that mortgage-related compliance costs increased as a result of the post-crisis regulations, but other factors may have been as or more important. Mortgage specialists may have been more likely to focus on building technological capabilities to compete with online and mobile technologies pursued by others in this segment. Also, as indicated in Chart 5.13, increases in noncurrent loans and other real estate during the crisis, while not as pronounced at banks with higher concentrations in residential mortgages as they were at other banks, lingered longer. Higher levels of these troubled assets at banks in the two highest mortgage concentration groups for much of the post-crisis period may be part of the reason that the noninterest expense ratios of these two groups stayed higher than at other banks during the period 2013–2019.

An Unusually High Percentage of Small Mortgage Lenders Reduced Their Mortgage Holdings in the Years After the Banking Crisis

We next consider the possibility that some banks reduced or exited the mortgage business to avoid regulatory compliance costs associated with the new rules. The results of banker surveys suggest this possibility. In one survey (American Bankers Association (2016)), for example, 33 percent of respondents in 2014, and 24 percent of respondents in 2015, stated that regulation was having an "extreme negative impact" on their residential mortgage lending business. Other surveys and anecdotal reports stated that many community banks were considering exiting mortgage lending altogether.

The results shown in Charts 5.9–5.11 make clear that community banks, in the aggregate, have by no means exited residential mortgage lending. Nevertheless, it is possible that some community banks may have done so, and Call Report data will help us explore this possibility. The analysis will shed only indirect light on the subject. Call Reports of most small banks do not contain data on mortgage originations (Box 5.2 discusses the limitations—for our purposes—of Home Mortgage Disclosure Act data on mortgage originations).[12] Since mortgages can stay on a bank's balance sheet for many years, declines in outstanding mortgage balances or mortgage interest income from one year to the next *may* mean the bank exited the business, or may mean more mortgages paid off that year than were originated, or that mortgages were sold rather than held. Given these limitations, the analysis will view sustained annualized reductions in mortgage balances over a period of years as an imperfect proxy for a strategic decision to scale back or exit mortgage lending. The analysis evaluates whether substantial annualized reductions in mortgage balances were more likely for banks that either were small in absolute size, or had small mortgage operations relative to their size. This approach is intended to evaluate the idea that increases in regulatory compliance costs may have made it less economical to operate a small mortgage business.

Box 5.2 Home Mortgage Disclosure Act Data: Findings and Coverage Limitations

Unless banks are exempt under Regulation C, they must report originations of 1–4 family residential mortgages pursuant to the Home Mortgage Disclosure Act (HMDA). Research on mortgage trends based on HMDA data generally does not find aggregate reductions in originations of purchase residential mortgage loans among reporting banks during the post-crisis period (see, for example, Bhutta and Ringo (2016)).

Among the banks exempt from HMDA reporting, however, are those that do not have a home office or branch in a metropolitan statistical area, and those that originated fewer than 25 home purchase loans in either of the two preceding years. This exclusion of small and rural mortgage lenders from reporting serves to limit the usefulness of HMDA data for purposes of this chapter.

For the current HMDA reporting criteria, see Federal Financial Institutions Examination Council, "A Guide to HMDA Reporting: Getting it Right," at https://www.ffiec.gov/hmda/pdf/2020guide.pdf.

[12] Call Report schedule RC-P requires reporting of mortgage originations by banks with assets exceeding $1 billion or banks that originated more than $10 million of mortgages in each of the two preceding quarters. Call Report form FFIEC 051, filed by most community banks, does not include schedule RC-P.

Table 5.4 Changes in Mortgage Holdings of Community Banks, 1995–2019

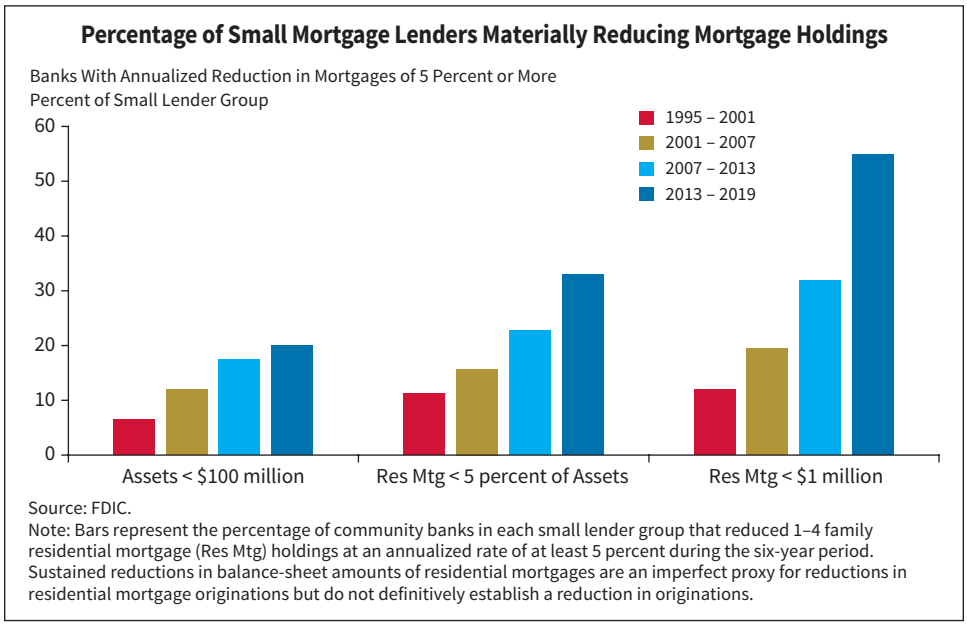
Date Range (Year End of Each Year)	Annualized Change in 1–4 Family Mortgage Loan Portfolio	Number of Community Banks	Share of Community Banks (Percent)	Average Community Bank Assets (Millions $)	Past Due and Nonaccrual Loans and Other Real Estate Owned as a Share of Assets (Percent)	Share of Community Banks With Positive Growth in Other Loans (Percent)
As of December 31, 2013						
2013–2019	Increase	4,371	69	353	1.43	91
	-0.1 Percent to -4.9 Percent	938	15	253	2.16	79
	-5.0 Percent to -9.9 Percent	339	5	234	4.13	63
	Less Than -10 percent	362	6	223	2.45	60
As of December 31, 2007						
2007–2013	Increase	4,665	61	239	0.86	70
	-0.1 Percent to -4.9 Percent	1,514	20	250	1.14	44
	-5.0 Percent to -9.9 Percent	693	9	229	1.25	38
	Less Than -10 percent	444	6	246	2.32	37
As of December 31, 2001						
2001–2007	Increase	6,095	71	177	0.66	92
	-0.1 Percent to -4.9 Percent	1,277	15	143	0.74	80
	-5.0 Percent to -9.9 Percent	509	6	169	0.85	70
	Less Than -10 percent	436	5	211	1.08	60
As of December 31, 1995						
1995–2001	Increase	8,433	81	123	0.88	93
	-0.1 Percent to -4.9 Percent	830	8	114	1.08	81
	-5.0 Percent to -9.9 Percent	359	3	143	1.35	80
	Less Than -10 percent	311	3	125	1.96	65

Source: FDIC.
Note: Table does not include community banks that stopped reporting in 1996, 2002, 2008, or 2014 or that did not hold 1–4 family mortgages at year ends 1995, 2001, 2007 or 2013. For such banks no annualized change in mortgage holdings could be calculated. Mortgage changes are annualized so that cumulative changes during the full date ranges would be larger.

Table 5.4 considers four six-year periods, and groups the community banks existing at the beginning of each of the four periods according to their annualized percentage change in residential mortgages during that period, or during their remaining existence, whichever was shorter. Thus, for example, a bank in the mortgage growth category corresponding to annualized reductions of 10 percent or more would have reduced its mortgages by well over 50 percent if it existed for all six years of a period, a reduction that quite possibly reflected its exit from the business. Banks that reported no mortgages at the start of a period, or that stopped reporting within one year of the start of a period are not included, since no annualized change in mortgages could be computed for them.

Table 5.4 indicates that with regard to community bank reductions in mortgage holdings, there are a number of similarities between the post-crisis period and earlier periods. For example, in both the six post-crisis years starting in 2013 and the six pre-crisis years starting in 2001, about 26 percent of community banks had annualized reductions in mortgage holdings. In all four of the six-year periods, community banks that reduced mortgage holdings tended to have higher levels of noncurrent loans and other real estate. In all periods except for the banking crisis, the majority of community banks with annualized reductions in mortgages had annualized increases in their other loans. This suggests that the reasons for the reductions in mortgage loans may often have been specific to that business line rather than to bank-wide or local economic issues. Examples of issues specific to mortgages in the post-crisis period could include, for example, risks associated with holding long-maturity assets on balance sheet in a low interest rate

Chart 5.14



Source: FDIC.
Note: Bars represent the percentage of community banks in each small lender group that reduced 1–4 family residential mortgage (Res Mtg) holdings at an annualized rate of at least 5 percent during the six-year period. Sustained reductions in balance-sheet amounts of residential mortgages are an imperfect proxy for reductions in residential mortgage originations but do not definitively establish a reduction in originations.

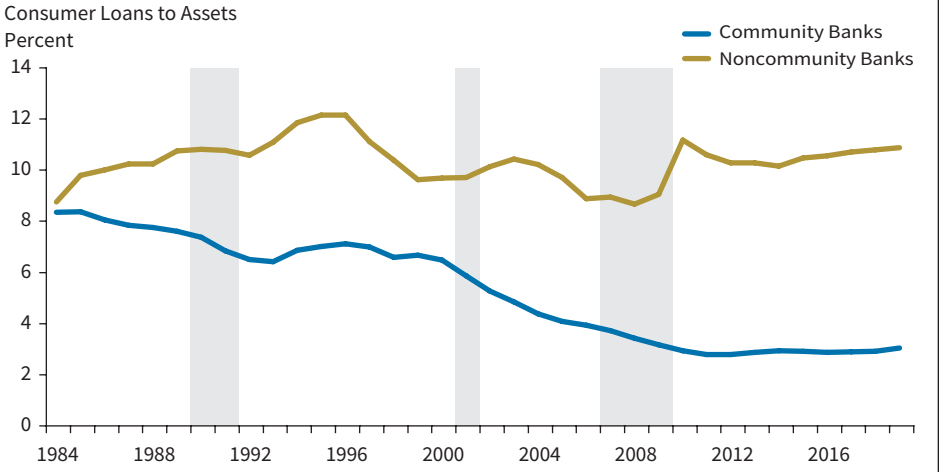
environment. Similar to the overall picture suggested by Charts 5.9 and 5.10, however, the overall picture suggested by Table 5.4 does not support the idea that unusual numbers of community banks *in the aggregate* were exiting mortgage lending during the post-crisis period.

Table 5.4 does, however, suggest that during the post-crisis period, the size distribution of banks that were reducing their mortgage holdings became skewed toward smaller banks. Specifically, during 2013–2019 the average asset size of community banks with annualized increases in mortgage holdings was $353 million, exceeding by at least $100 million the average asset size of community banks that reduced their mortgage holdings. In the other three periods, in contrast, no systematic differences in asset size are evident in the table between banks that were reducing their mortgages and those that were increasing them.

In fact, Chart 5.14 indicates, during the post-crisis period small mortgage lenders reduced their mortgage holdings with greater frequency than in any previous period. To anticipate the discussion, the chart suggests that operating a small mortgage program or making mortgages as an occasional customer accommodation may be becoming less economical over time. The chart gives information about three possible definitions of a small mortgage lender, and the patterns are robust to the definition used: community banks with assets less than $100 million, those with mortgages less than 5 percent of assets, and those with total mortgages outstanding less than $1 million. The chart reports the proportion of banks in each of these small-lender groups that subsequently reduced their mortgage holdings at an annualized rate of 5 percent or more during the period. The proportion of small lenders substantially reducing their mortgages increased with each successive six-year period, and has been much higher during the post-crisis period even than during the 2008–2013 banking crisis. During the post-crisis period, moreover, while about 11 percent of all community banks had annualized reductions in mortgages of 5 percent or more (Table 5.4), over 30 percent of community banks with mortgages less than 5 percent of assets, and over 50 percent of community banks with mortgages less than $1 million, had annualized reductions of this magnitude.

In short, during the post-crisis period small mortgage lenders had sustained material reductions in mortgage lending more frequently than larger community bank mortgage lenders did, and more frequently than small mortgage lenders had in previous periods. There may be many reasons for a bank's balance-sheet holdings of mortgages to exhibit a sustained decrease, including increased sales to the GSEs (as noted above, increased sales to GSEs may themselves be driven by regulatory considerations given the Qualified Mortgage safe harbor for such loans, or by a desire to avoid the interest-rate risk associated with holding mortgages on the balance sheet). Nonetheless, the strong connection between reduced mortgage holdings and banks' asset size and scope of mortgage operations suggests there may be factors at work that are making it less economical for a bank to have a small mortgage lending function. The factors that most

Chart 5.15



Source: FDIC.
Note: Consumer loans (which do not include 1–4 family residential mortgage loans) at year end as percent of assets, 1984–2019. Gray bars denote recession periods.

readily suggest themselves are changes in financial and information technology (including increased competition from nonbank entities) that promote commoditization of retail lending, and regulatory compliance costs resulting from the large volume of new mortgage rules. It is not possible to draw firm conclusions about the relative importance of these factors.

Many Important New Rules Addressed Consumer Credit and Retail Payments

Another important group of rules implemented in the 2008–2019 period addressed the broad category of consumer credit and retail payments. Appendix B identifies and summarizes 27 distinct final rules in this category, rules that, broadly speaking, created rights and protections for consumers, and obligations for lenders, related to credit cards and other consumer credit, the use of credit reports, customer overdrafts, gift and prepaid cards, remittances, and retail foreign exchange.

Although consumer loans constituted less than 3 percent of community bank assets throughout the post-crisis period (Chart 5.15), almost all community banks have at least some consumer loans and need to be aware of changes to consumer regulations.

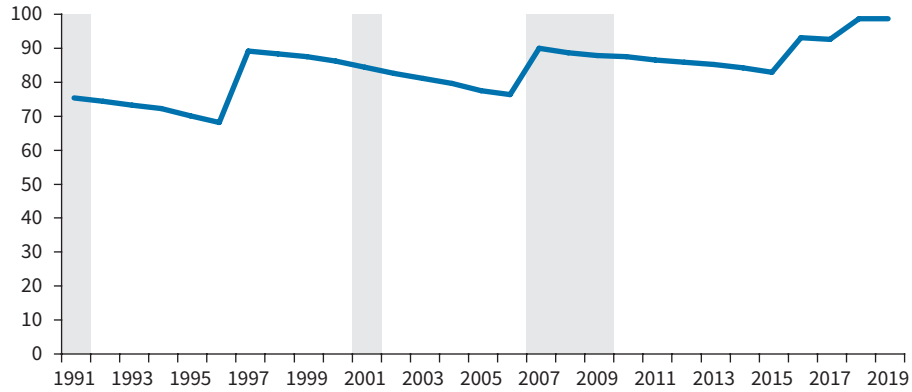
Requirements specific to credit card lending applied to a relatively small set of community banks. About 16 percent of community banks reported credit card loans in 2019, down from about 30 percent in 2001. And even for community banks that did report credit card loans, throughout the 2001–2019 period those balances totaled less than one-half of 1 percent of those banks' assets.

New disclosure and opt-in requirements regarding overdraft programs are likely relevant to most community banks. Starting in 2015, institutions with assets of $1 billion or more that offer one or more consumer deposit account products have had to report overdraft charges on consumer accounts. The percentage of community banks in this size group reporting overdraft fees declined from 83 percent in 2015 to 77 percent in 2019, while the amount of such fees (for banks reporting them) decreased modestly during the same period, dropping from 11 basis points of deposits to 9 basis points of deposits.[13] Downward pressure on service charges appears to be a long-term trend. From 2001 through 2019, deposit service charges at community banks decreased from 38 basis points of deposits to 19 basis points of deposits; the corresponding decrease at noncommunity banks was from 67 basis points to 28 basis points.

International remittance transfers, which historically had been exempt from federal consumer protection laws, became subject to a disclosure and consumer

[13] The overdraft fees reported by this category of institutions are reported on Call Report schedule RI, memorandum item 15. a), "Consumer overdraft-related service charges levied on those transaction account and nontransaction savings account deposit products intended primarily for individuals for personal, household, or family use."

Chart 5.16



Source: FDIC.
Note: Some banks qualifying for an 18-month examination cycle based on their asset size may be examined more often based on supervisory considerations. The asset size threshold at year end 2019 was $3 billion.
Gray bars denote recession periods.

protection regime, although institutions making fewer than 100 remittances per year were exempt from these requirements. At mid-2019, about 10.5 percent of community banks reported providing more than 100 international remittances per year, up slightly from 9 percent at mid-2014.[14]

Numerous Other Regulations Were Finalized During the Years 2008–2019

This brief overview of the remaining rules listed in Appendix B may be taken as a reminder that there were many important rule changes during 2008–2019 with which community banks had to be familiar.

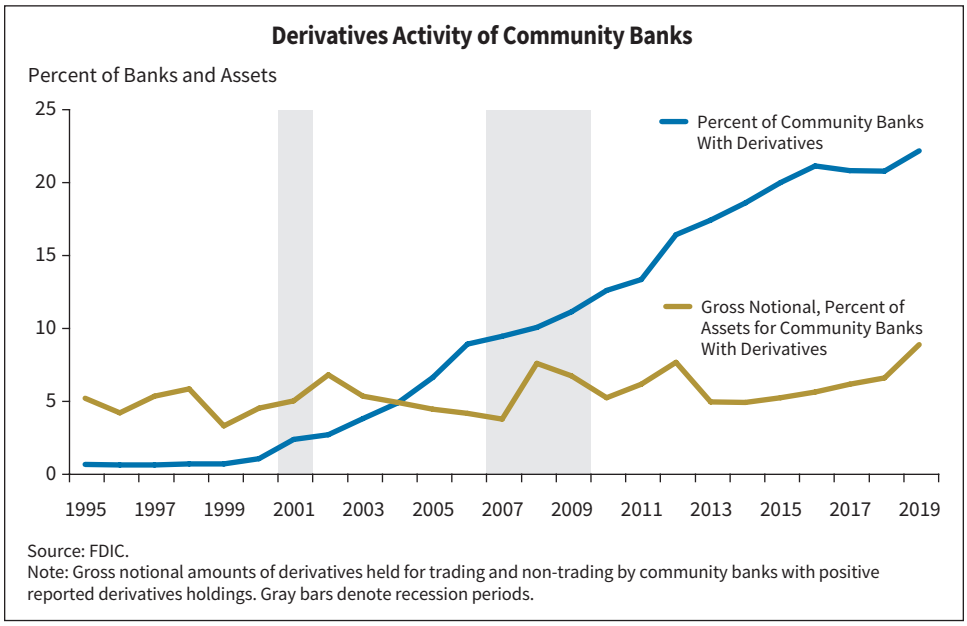
The Federal Banking Agencies Implemented Important Changes to Safety-and-Soundness Regulations

There were a number of regulatory changes to safety-and-soundness rules affecting small banks during the period 2008–2019, many of them statutory. Derivatives exposures were incorporated into the national bank legal lending limit; regulations governing banks' permissible investments were de-linked from credit ratings; a portion of reciprocal deposits was excluded under certain circumstances from being defined as brokered deposits; and the maximum asset threshold for eligibility for an 18-month examination cycle (rather than a 12-month cycle) was increased from $500 million to $1 billion and later to $3 billion. As of year-end 2019, more than 98 percent of community banks met the asset size threshold for an 18-month examination cycle (Chart 5.16). In 2019, the loan size threshold above which federally related mortgage loans require an appraisal was increased from $250,000 to $400,000 for residential mortgages and from $250,000 to $500,000 for commercial mortgages.

Other important safety-and-soundness rule changes affected community banks to varying degrees. Risk retention rules, which require securitizers to retain a 5 percent loss exposure to assets they securitize unless one of numerous exceptions applies, likely directly affect few community banks, but those interested in becoming active securitizers would need to be knowledgeable about these rules. The Volcker Rule's statutory prohibition on proprietary trading and ownership or sponsorship of hedge funds or private equity funds was finalized in 2013, and in 2018 it was statutorily rescinded for most banks with assets below $10 billion. Similarly, company-run stress testing requirements for banks with assets greater than $10 billion were implemented in 2012, but the asset threshold was statutorily raised in 2018. Very large community banks or those considering acquisitions that would cause them to exceed $10 billion in assets would have needed to comply with or consider these stress-testing requirements.

[14] These data are reported only on the June 30 Call Report.

Chart 5.17



Source: FDIC.
Note: Gross notional amounts of derivatives held for trading and non-trading by community banks with positive reported derivatives holdings. Gray bars denote recession periods.

Bank Secrecy Act and Law Enforcement Responsibilities Increased

Banks have responsibilities to take actions and provide information in support of law enforcement, and three rules put in place since 2008 increased these responsibilities. One was a requirement that U.S. financial firms that participate in designated payment systems (a group that includes most banks) establish and implement policies and procedures that are reasonably designed to prevent payments to gambling businesses in connection with unlawful internet gambling. The second established specific suspicious activity reporting and information collection requirements on providers of prepaid access devices such as cards, although the requirements generally exempted small balance products (balances below $1000). The third was the customer due diligence rule, which requires financial institutions to identify and verify the identity of the beneficial owners of companies opening accounts, understand the nature and purpose of customer relationships in order to develop customer risk profiles, and conduct ongoing monitoring to identify and report suspicious transactions and, on a risk basis, to maintain and update customer information.

Some Rules Were Related to the FDIC's Responsibilities for Resolving Failed Banks

Some rules were driven by the FDIC's resolution responsibilities. A 2008 rule introduced the requirement for institutions to disclose to their deposit sweep customers how their sweeps would be treated by the FDIC in the event of the bank's failure. Another 2008 rule, amended in 2017, requires that banks in a troubled condition, upon written notice from the FDIC, be able to provide specified information regarding their Qualified Financial Contracts (or QFCs, which include swaps, securities financing transactions, and repurchase agreements) to the FDIC on request as of the end of a business day. The QFC rule does not appear to have had any ancillary effect of dampening community banks' use of derivatives: on the contrary, the proportion of community banks that hold derivatives increased fairly steadily from about the year 2000 through 2019 (Chart 5.17).

The Dodd-Frank Act Made Two Important Changes to the Pricing of Bank Products and Services

The mortgage and consumer credit rules described above contain a number of fee limits or regulatory requirements that are triggered by levels of fees or interest rates. Two other notable rules from the 2008–2019 period dealt with the pricing of bank products or services. In 2011 the Federal Reserve implemented the Dodd-Frank Act's limits on the interchange fees of banks with assets greater than $10 billion, an asset size group that has included some community banks. Also in 2011, the Dodd-Frank Act's repeal of the statutory prohibition against banks' paying interest on demand deposits took effect.

Some Rules Affect Bank Competition and Industry Structure

Some rules reflect statutory goals for the avoidance of undue concentration or anti-competitive practices in banking. One such rule from the 2008–2019 period implemented the Dodd-Frank Act's prohibition on acquisitions if the resulting company would have more than 10 percent of all U.S. financial institution liabilities. Another rule from 2019 eased restrictions on management interlocks by permitting a management official to serve at two unaffiliated banks unless both have more than $10 billion in assets, or unless both operate in the same geographic area.

Significant Requirements Took Effect Regarding Financial Reporting and Auditing

A significant development during the 2008–2019 period was a 2009 FDIC rule applicable to insured institutions with assets exceeding certain thresholds. Consistent with the Sarbanes-Oxley Act, the rule, among other things: (1) requires disclosure of an institution's internal control framework and material weaknesses; (2) requires management's assessment of compliance with laws and regulations; (3) clarifies the independence standards applicable to accountants; (4) establishes a variety of requirements regarding audit committees; and (5) establishes criteria for institutions to comply with the requirements at a holding company level. For a holding company's insured subsidiaries to be able to satisfy the audit requirements at the holding company level, the assets of the subsidiaries must be at least 75 percent of the holding company's consolidated assets. Institutions covered by the rule are generally those with at least $1 billion in assets for purposes of internal control assessments and at least $500 million for purposes of other requirements.

More recently, in 2019, the federal banking agencies expanded the eligibility of institutions that could file the most streamlined version of the Call Report, the FFIEC 051, to include insured depository institutions with total assets of less than $5 billion that do not engage in certain complex or international activities.

Other Regulations Addressed Flood Insurance, Back-Office Functions, and Other Matters

Appendix B documents 13 other rules (or in a few cases interagency questions and answers) from the 2008–2019 period dealing with assorted other consumer protection and community development matters. Among the more significant of these were two rules that together implemented the flood insurance provisions of the Biggert-Waters Act, which among other things clarified when banks could and should accept private flood insurance policies. Several rules during the 2008–2019 period addressed back-office functions, including issues arising from the banking system's ongoing migration from paper-based to electronic payments. These included rules dealing with paper and electronic check processing and dispute resolution, funds availability, the settlement cycle for securities transactions, and other matters.

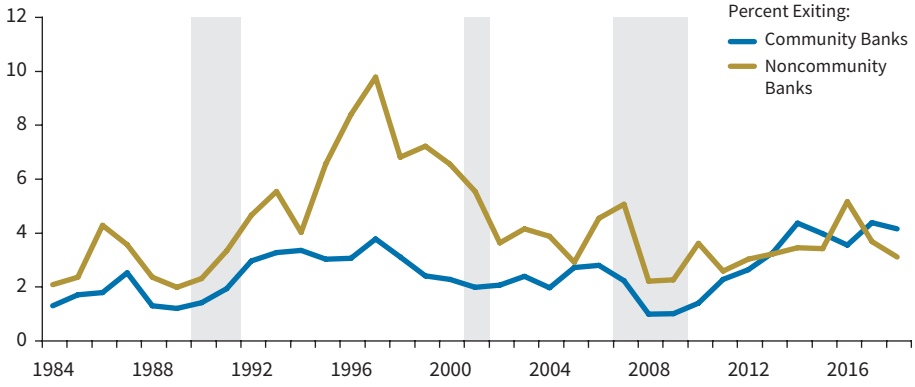
Community Bank Exit and Entry May Have Been Affected by the Pace of Regulatory Change

This analysis of regulatory changes has focused on individual rules and individual balance-sheet and income-statement categories, thus far without consideration of the possible totality of effects. Trends in bank exit and entry may shed light on such total or cumulative effects. Rates of exit from the banking industry, and entry into it, can be viewed as high-level indicators of how bankers view the economic prospects of banking franchises given a wide range of factors, including regulatory changes.

A previous section of this chapter showed that smaller community banks have had higher proportionate noninterest expense than larger community banks and that any given increment of overhead expense would weigh more heavily on their bottom lines. Accordingly, it is not unreasonable to think that changes in regulatory requirements that involve a significant learning curve, legal or consulting fees, or additional staff time could tend to depress small-bank profitability relative to other banks, with the indirect result of encouraging some small banks to exit the banking industry, or of discouraging the chartering of new small banks.

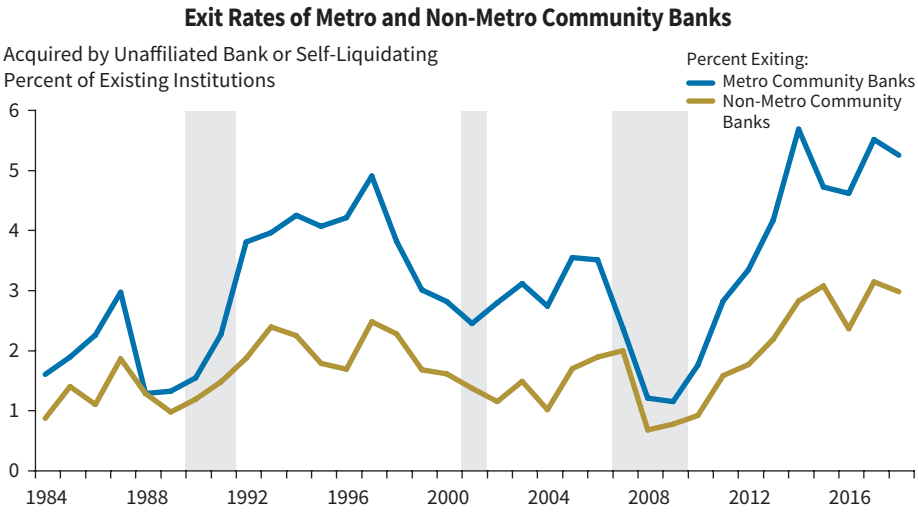
As Chapter 2 notes, banking consolidation has been underway since the 1980s, with the most rapid rate of consolidation occurring in the late 1990s. But whereas the consolidation of the 1990s had been driven by the ongoing relaxation of branching restrictions, a relaxation that resulted in consolidation of many multi-bank holding companies under a smaller number of charters, a new and important factor in the decline in the number of institutions since the 2008–2013 banking crisis was the relative dearth of new charters. Chapter 2 also notes that

Chart 5.18



Source: FDIC.
Note: Percent of all banks existing at year end that were acquired by an unaffiliated institution or self-liquidated within the next year. Gray bars denote recession periods.

Chart 5.19

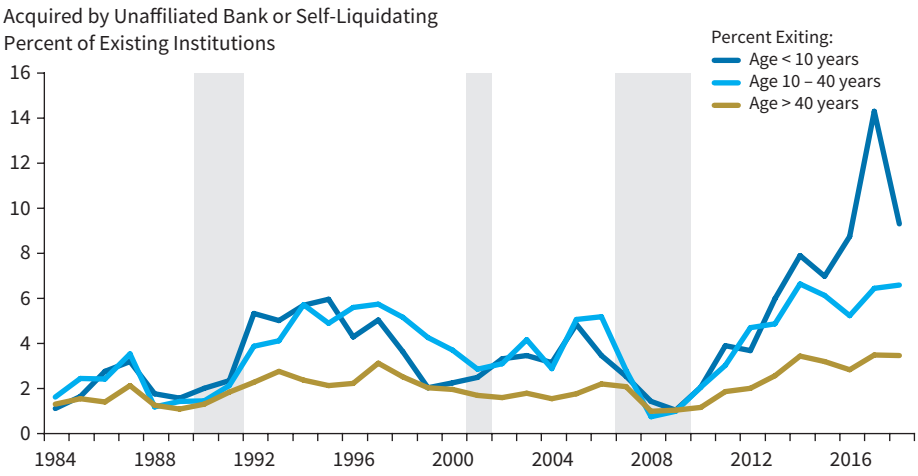


Source: FDIC.
Note: Percent of all banks existing at year end that were acquired by an unaffiliated institution or self-liquidated within the next year. Gray bars denote recession periods.

consolidation is not purely a community-bank trend—for in fact noncommunity banks have consolidated at faster rates than community banks—and in addition that when community banks have been acquired, the acquirers have mostly been other community banks.

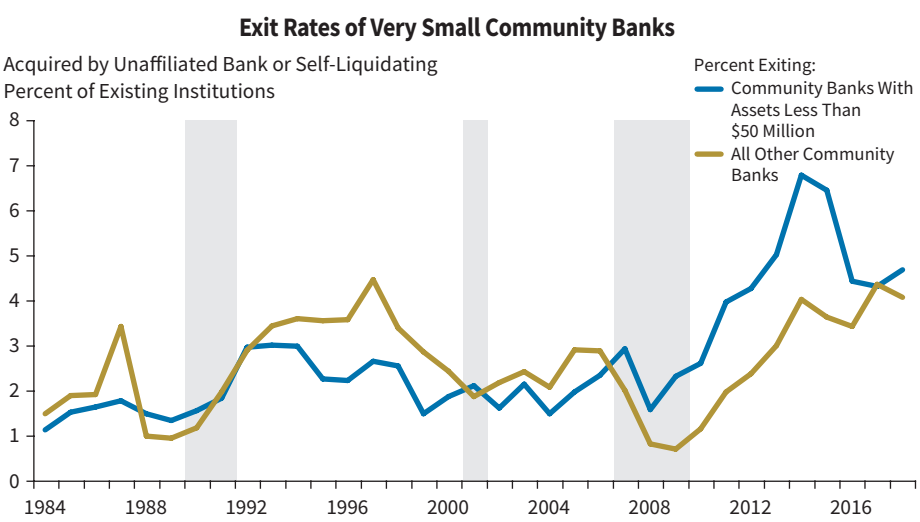
The two post-crisis developments with which this section of the present chapter is concerned are the historically high proportion of community banks exiting the banking industry in the years 2014–2019, and an apparent increase in the target asset size of new small banks as reflected in their initial equity. Chart 5.18 depicts the annual percentages of community banks exiting the banking industry, either through acquisition by an unaffiliated institution or by self-liquidation. This type of exit would seem to reflect a decision by bank ownership that the bank's continued existence as an independent entity was no longer financially advantageous. The chart shows that community banks were exiting the banking industry at the fastest rates since 1984 (although, as the chart also makes clear, not as fast as exit rates sometimes observed for noncommunity banks), with an average exit

Chart 5.20



Source: FDIC.
Note: Percent of all banks existing at year end that were acquired by an unaffiliated institution or self-liquidated within the next year. Gray bars denote recession periods.

Chart 5.21

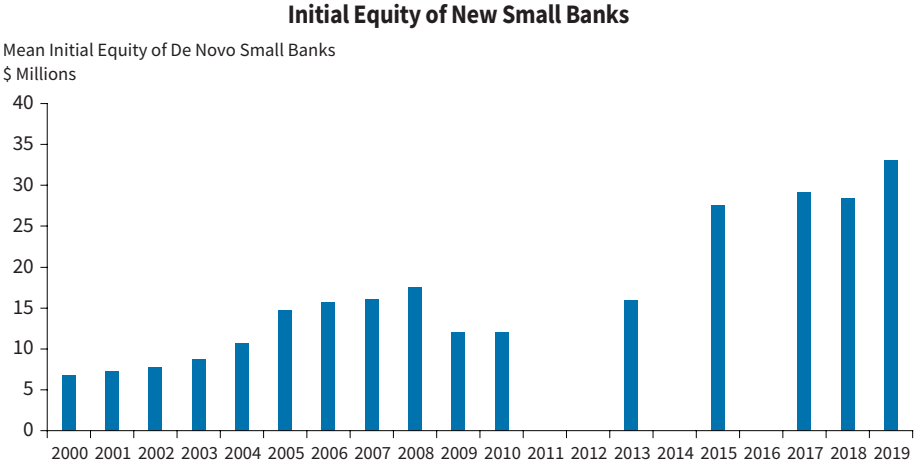


Source: FDIC.
Note: Percent of all banks existing at year end that were acquired by an unaffiliated institution or self-liquidated within the next year. Gray bars denote recession period.

rate between 2014 and 2019 of just over 4 percent, compared with the previous high of 3.7 percent in 1997. Post-crisis exit rates were particularly high for metro banks (Chart 5.19); for young banks (Chart 5.20—for this chart, young banks are defined as those less than ten years old; accordingly, they were chartered shortly before or during the 2008–2013 banking crisis); and for the very smallest banks (Chart 5.21). These charts also make clear, however, that for community banks that are rural, older, or larger in size, post-crisis exit rates also were at or near historic highs.

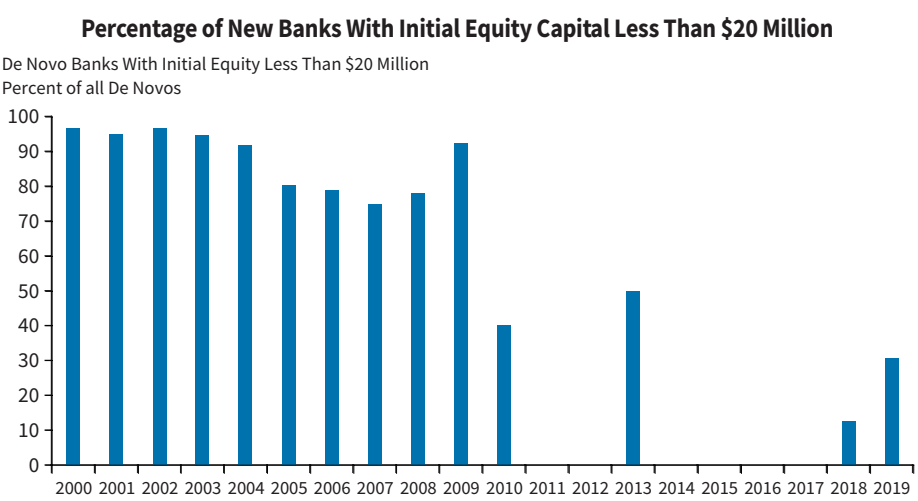
Regulatory factors also have been asserted to affect entry into the banking industry. Many commentators have stated that the decline in the number of new charters after the 2008–2013 banking crisis was caused partly by the regulatory environment, while other commentators have emphasized economic factors. Adams and Gramlich (2014), for example, contains an analysis of economic factors underlying chartering activity. Rather than re-examining an issue that has been studied at length elsewhere, we consider how market perceptions have

Chart 5.22



Source: FDIC.
Note: Equity capital reported as of banks' first Call Report filing, analysis limited to de novo banks with initially reported equity capital less than $100 million. There were no de novo banks in 2011, 2012, 2014 and 2016. Three new bank charters established in 2011 in connection with bank failures are not included in this chart as de novo banks.

Chart 5.23



Source: FDIC.
Note: There were no de novo banks in 2011, 2012, 2014, and 2016. In 2015 and 2017 there were de novo banks but none with initial equity less than $20 million. Three new bank charters established in 2011 in connection with bank failures are not included in this chart as de novo banks.

changed as reflected by initial investment in new banks. Chart 5.22 provides indirect evidence that the target asset size of new small banks increased during the post-crisis period. The chart displays the mean equity reported in the first quarterly financial reports of new banks, as a proxy for the owners' initial capital investment. New banks with initial equity of more than $100 million are not included, since their relative infrequency and large size would mask patterns of interest for smaller banks. Mean initial equity for these smaller banks increased, somewhat abruptly and discontinuously, from $11.8 million during the period 2000–2010 to $29.6 million starting in 2015.

The marked rise in initial equity is not attributable to inflation, which was muted, or to changes in regulatory capital requirements, for those requirements had not changed enough to explain a change in initial capital of this magnitude. Inasmuch as initial equity is intended to allow the bank to achieve and support its planned asset size, it appears reasonable to suppose that the relatively few new banks chartered after the crisis had higher

projected asset sizes than new banks chartered before the crisis. The trends in Chart 5.22 suggest that proponents of new banks believed that the scale of operations needed to make a new bank successful had increased in the post-crisis period. An increase in the target size of new banks, in turn, could plausibly be associated with scale economies, attributable at least partly to regulatory compliance costs.[15]

The preceding discussion should not be taken to imply that new small banks can no longer be chartered or cannot be successful. As indicated in Chart 5.23, in 2018 and 2019 some banks were chartered with initial equity of less than $20 million, a level of initial equity that had characterized the overwhelming majority of new banks chartered in the years 2000–2009.

Summary

Bankers have sometimes characterized the regulatory costs they incur as being difficult to attribute to any one set of rules, but as the cumulative effect of many rules. The review in this chapter and its appendix of a partial list of regulatory actions taken by six federal agencies (often implementing statutory mandates from Congress) from 2008 through 2019 makes clear that merely keeping current on banks' regulatory requirements as they evolve cumulatively through time is a daunting task for anyone, and certainly for a small bank with modest staff and resources.

Regulatory compliance costs may be one of a number of factors contributing, for example, to higher rates of exit from the banking industry by community banks; to an apparent increase in the target asset size of new small banks; or to a pronounced increase in the proportion of small residential mortgage lenders that are reducing their residential mortgage holdings. Most likely other factors are also very important contributors to these trends, and we draw no conclusions about the importance of any of these other factors compared with changes in regulatory compliance costs. Business consolidation is occurring in many industries, not just banking, and larger companies in those industries may tend to favor larger banks. Keeping pace with new technologies also may be easier for larger banks. Challenges in arranging for appropriate management succession, sometimes in situations involving the generational transfer of family-owned banks, in which the following generation is not interested in taking on the operation of the family's bank, have been cited by some bankers as a factor that may influence some banks to seek an acquirer. Commoditization of retail lending also likely favors larger financial firms whose average cost structures are lower and that deploy new technology.

A shared characteristic of some of the important factors driving developments in banking—changes in customer demographics, in the nature of marketplace competition, in technology, and in regulation—is that all are factors external to a bank that can cause the bank to have to change the way it does business. All may involve a need for evolving capabilities, consultants, or other specialized staff, and all may involve relatively higher fixed costs or generally greater challenges for smaller institutions. Such factors evolve continually, making it hard from financial data alone to know whether—and in what degree—to attribute any particular trend to changes in regulation, or to one or more of the other factors.

Finally, it is important to emphasize that this study views regulations only through the lens of their effects on community banks; a discussion of the policy goals Congress has sought to achieve with its statutes, or how well the regulations have achieved those goals, is beyond the scope of the analysis. Observations in this study about the effects of rules on community banks should thus not be taken as criticisms of those rules. The overall thrust of the analysis, however, does support the idea that if the societal benefits of a thriving community banking sector are to be preserved, it is important that regulations achieve their public policy goals in ways that accommodate, to the extent appropriate, the business models and learning curves of smaller institutions with limited compliance resources.

[15] See Jacewitz, Kravitz, and Shoukry (2020) for a recent analysis of bank scale economies.

Box 5.3 Regulatory Developments During the COVID-19 Pandemic

A brisk pace of regulatory activity has continued during the pandemic, with a focus on rules and programs that encourage and facilitate banks' provision of financial services to their customers. An important statutory backdrop for some of the pandemic-related rules was the Coronavirus Aid, Relief, and Economic Security (CARES) Act, a $2.2 trillion economic relief package signed into law on March 27, 2020. Examples of pandemic-related rules and federal programs affecting community banks include:

- Establishing the Federal Reserve's Paycheck Protection Program Liquidity Facility to provide liquidity to banks to support their participation in the PPP;
- Extending the regulatory capital transition period for banks adopting the Current Expected Credit Loss Accounting Standard;
- Temporarily reducing the Community Bank Leverage Ratio threshold to 8 percent as required by the CARES Act;
- Modifying capital rules to neutralize the regulatory capital effects of banks' participating in the PPP, and establishing a zero-percent risk weight for those loans as required by the CARES Act;
- Deferring certain required real-estate appraisals and evaluations for up to 120 days after loan closing; and
- Modifying FDIC deposit insurance premiums to mitigate the effects of banks' participating in the PPP.

Chapter 6: Technology in Community Banks

From mobile banking to online lending, financial technology is reshaping how customers want to bank and how banks can deliver products and services. For community banks at the forefront of this movement, the latest technology-enabled products and services have become a necessity rather than a luxury. Other banks, meanwhile, have charted a more conservative course, adopting new technology only after it has settled into mainstream banking. Somewhere in between the early and late adopters lie the thousands of community banks that operate under different business models in different environments throughout the United States.

This chapter differentiates community banks on the basis of their technology offerings, thereby contributing to a better understanding of the factors that influence, and are influenced by, banks' decisions to adopt technology. Existing research in combination with responses to the Conference of State Bank Supervisors 2019 National Survey of Community Banks reveals several factors that were related with the adoption of technology. Among these factors were a bank's characteristics, its economic and competitive environment, and the attitudes and expectations of its leadership. In particular, larger community banks and those with higher revenues to assets were most likely to have adopted certain technologies.

Future research into technology adoption will broaden our understanding of the key drivers, barriers, and risks associated with financial technology and its likely effect on the continuing success of community banking.

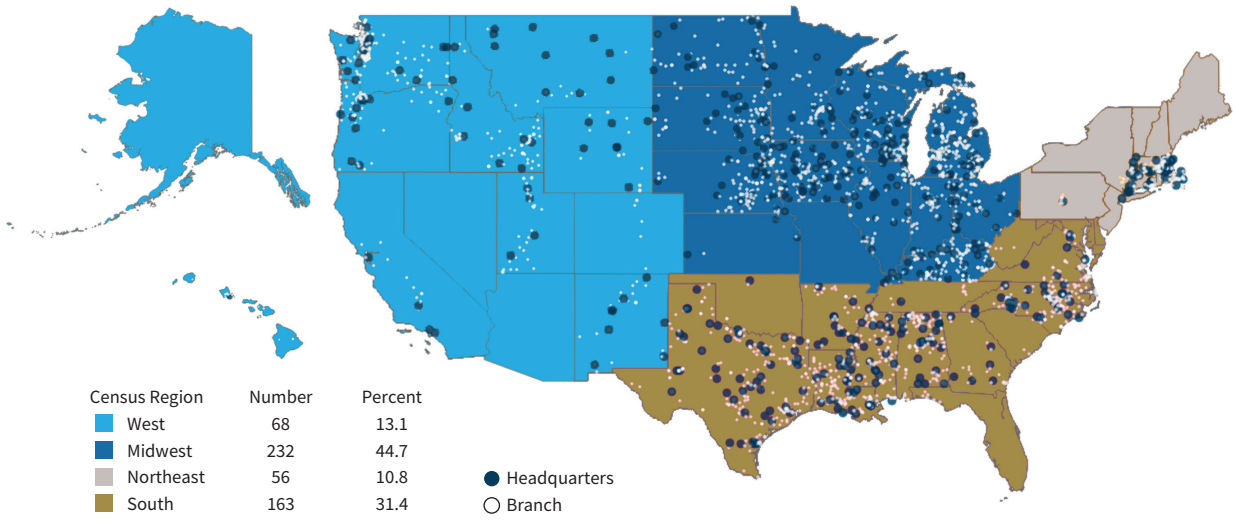
CSBS Survey Data Offer a Representative Look at Community Banks

Since 2015, the Conference of State Bank Supervisors (CSBS) has conducted an annual national survey of community banks to quantify underlying trends and issues of importance. The 2019 survey, conducted between April and June of that year, generated responses from 519 institutions that met the definition of "community bank" using Call Report data as of March 31, 2019.[1]

The banks examined in this chapter generally reflected the overall population of community banks at the time of the survey. Respondents were spread across the country, with branches in 43 states and the District of Columbia (Map 6.1). Table 6.1 shows that in distribution by size (as measured by total assets and number of branches),

Map 6.1

CSBS Survey Respondents by Location, First Quarter 2019



Sources: FDIC and Conference of State Bank Supervisors.
Note: No respondents had their headquarters or a branch in Alaska.

[1] For its survey, the CSBS defined "community bank" as an institution with less than $10 billion in total assets. Differences between that definition and the definition used in this study resulted in the exclusion of 52 institutions from the findings discussed in this chapter, relative to the summary of the survey results published by the CSBS.

Table 6.1 Comparison of Surveyed Banks and All Community Banks by Asset Size and Number of Branches, First Quarter 2019

(Percent of Total)	Community Banks	
	In Survey	All
Total Assets		
Less Than $100 Million	18.3	25.1
$100 Million to $200 Million	24.9	23.9
$200 Million to $500 Million	30.1	29.2
$500 Million to $1 Billion	14.1	12.6
More Than $1 Billion	12.7	9.3
Number of Branches		
1 Branch	12.1	19.1
2 to 4 Branches	38.5	39.7
5 to 9 Branches	28.5	24.6
10 to 19 Branches	14.8	11.7
20 to 49 Branches	5.2	4.3
50 or More Branches	0.8	0.7

Sources: FDIC and Conference of State Bank Supervisors.

the surveyed community banks generally reflected the distribution of all community banks. As of March 31, 2019, on average, community banks in the CSBS survey held about $36 million more in assets than all community banks, and operated one more branch than all community banks; these differences, however, were comparatively small—4 percent and 12 percent of a standard deviation, respectively.[2]

Adoption of Certain Technologies Varied Among Community Banks

Technology has a long history in banking, yet the data necessary to quantify its adoption and use are hard to obtain, particularly data on community banks. On the Call Report, banks do not report their use of, or spending for, technology, and information available through other regulatory filings is often not comparable across entities or is not required of many smaller institutions.

Therefore, this chapter relies on responses to the CSBS survey that indicated whether a community bank offered specific technology-enabled products or services at the time of the survey. The products and services covered by the survey included three that help banks in lending (online loan applications, online loan closure, and automated loan underwriting) and four that provide additional functionality to deposit accounts among other functions (remote deposit capture, interactive teller machines (ITMs), electronic bill payment, and mobile banking). A general description of each technology is included in Box 6.1. Several of the technologies date from the early to middle 2000s,[3] whereas others, such as online loan closure and ITMs, emerged in the middle to late 2010s. Overall, among community banks participating in the 2019 CSBS survey, adoption rates ranged from 4.8 percent for online loan closure to 90.9 percent for mobile banking (Chart 6.1).[4]

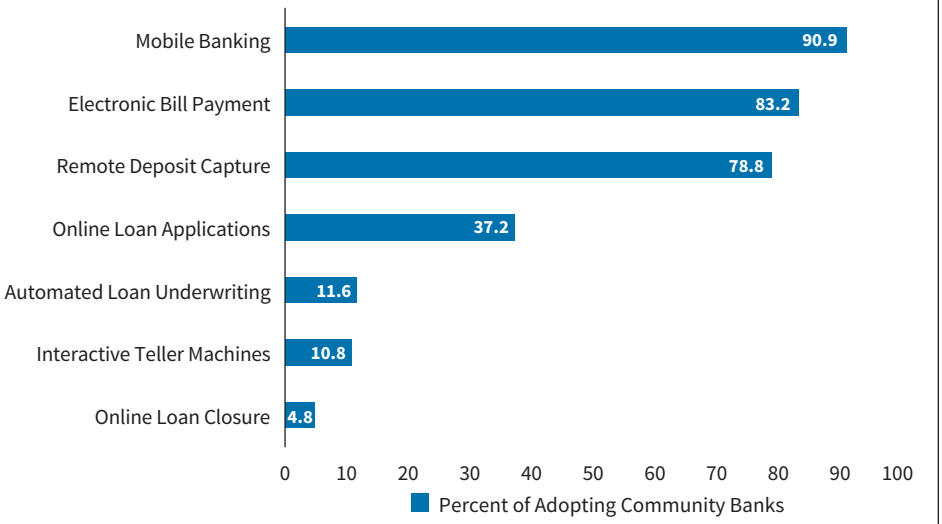
In addition to looking at whether community banks offered a technology-enabled product or service, the chapter combines the seven technology offerings into one general technology-adoption measure. Specifically, the measure categorizes each community bank as a "low," "medium," or "high" adopting bank on the basis of the number and type of technology products and services (out of the seven included in the survey) that the bank offered at the time of the survey. Products and services that were less common (those with an adoption rate of less than 50 percent) received greater weight than those that were more common (those with an adoption rate of greater than 50 percent) so that banks that were "early adopters" of one or more less common technologies were more likely to be defined as high-adopting banks. For more detail, see Box 6.1.

[2] Unless otherwise specified, this chapter uses Call Report data from March 31, 2019, the quarter immediately preceding the collection of survey data. This contrasts with other chapters of this study, which generally use data through year-end 2019.

[3] For example, Wells Fargo was one of the first U.S. banks to introduce mobile banking in 2001, although the bank discontinued the service shortly thereafter. Other large banks, including Citibank, Bank of America, and Wachovia, added similar services beginning in 2006 and 2007. See Hamilton (2007). First Tennessee Bank in Memphis was one of the first financial institutions to implement remote deposit capture in 2003 as a way to expand its deposit base. The Check Clearing for the 21st Century Act, which took effect in 2004, paved the way for the further development of remote deposit capture by allowing image-based "substitute checks" to serve as the legal equivalent of an original check. See FDIC, "Remote Deposit Capture: A Primer" (2009).

[4] In addition to stating whether their bank offered a specific technology-enabled product or service, survey respondents indicated whether they planned to offer, or to exit or substantially limit, the product or service within the next 12 months. For purposes of this chapter, adoption status includes only a bank's reported offering at the time of the survey and does not account for intentions.

Chart 6.1



Source: Conference of State Bank Supervisors.

Box 6.1. Process for Creating a General Technology-Adoption Measure

The CSBS survey asked community banks to state their intentions toward the seven technology-enabled products and services listed below.[a]

Automated loan underwriting – platform that retrieves and processes borrower data through a computer-programmed underwriting system to arrive at a logic-based loan decision

Electronic bill payment – ability for customers to transfer funds from a transaction or credit-card account to a creditor, vendor, or individual

Interactive teller machines – machines that provide customers with direct, real-time access to a bank teller via a video link

Mobile banking – service that allows customers to access account information and conduct transactions with their institution remotely via a mobile device (cell phone, tablet, etc.)

Online loan applications – portal for potential borrowers to electronically share items, such as identifying information, income, and bank account data, needed to process a loan application

Online loan closing – ability to electronically sign and complete documentation necessary to finalize a loan (note that some states do not allow full remote online notarization)

Remote deposit capture – service that allows a customer to remotely scan checks and transmit the images or data to a bank for posting and clearing

Each of these technology products and services were categorized as either "more common" (if offered by more than half of community bank respondents to the CSBS survey as shown in Chart 6.1) or "less common" (if offered by fewer than half of community bank respondents).

Table 6.1.1 includes a 5x4 matrix that depicts the number of community banks that offered different combinations of "more common" and "less common" technologies. For example, the cell in the first numbered column and row indicates that 14 community banks in the survey offered none of the "less common" or "more common" technologies; whereas, the last numbered column and row indicates that two community banks offered all four of the "less common" technologies and all three of the "more common" technologies.

continued on page 6-4

[a] The definitions included in this chapter are for informational purposes. Community banks participating in the CSBS survey used their own interpretations when indicating whether the bank offered a product or service.

Box 6.1, continued from page 6-3

Next, each cell and its corresponding banks were labelled "low-adopting" (tan-shaded cells in Table 6.1.1), "medium-adopting" (dark gold-shaded cells)," or "high-adopting" (dark blue-shaded cells.) The labels were chosen in a manner that divided banks evenly among the categories, to the extent possible, to allow for more equal comparisons across groups. Labels were also chosen so that "high-adopting" banks were more likely to offer a greater number of technologies and be early adopters of "less common" products and services. The result of the process by which the low-, medium-, and high-adopting schema was arrived at is depicted in the right-hand table of Table 6.1.1.

Table 6.1.1 Number of Technologies Offered by Adoption Category, 2019

"More Common" Technologies	"Less Common" Technologies					
	0	1	2	3	4	Total
0	14	2	1	0	0	17
1	32	5	1	1	0	39
2	78	28	8	0	1	115
3	154	132	48	12	2	348
Total	278	167	58	13	3	519

	Number	%
Low-Adopting Banks	131	25.2
Medium-Adopting Banks	193	37.2
High-Adopting Banks	195	37.6

Sources: FDIC and Conference of State Bank Supervisors.

Research and Survey Responses Link Several Factors With Technology Adoption

Existing research has identified several characteristics that differentiated banks that adopted earlier technologies from those that did not. Studies of the ATM and internet banking, for example, found that larger banks adopted the technologies at a faster pace. Internet adoption was also associated with improved profitability, higher deposit service charges, increased use of certain deposits, and higher average employee wages.[5] Research on general technology expenditures found that increased spending in previous years led in later years to greater output—as measured by loans, deposits, and number of branches—as well as to higher bank employment, even after bank size was accounted for.[6]

Research also identifies several external factors linked to technology adoption. Competition, as measured by the adoption decisions of nearby competitors, appeared to influence banks' decisions to adopt the ATM and mobile banking applications.[7] Studies documenting a "digital divide" between age groups and between urban and rural areas suggest that certain aspects of a bank's environment may also play a role in the bank's adoption decisions to the extent that those aspects reflect differences in customer demand for technology.

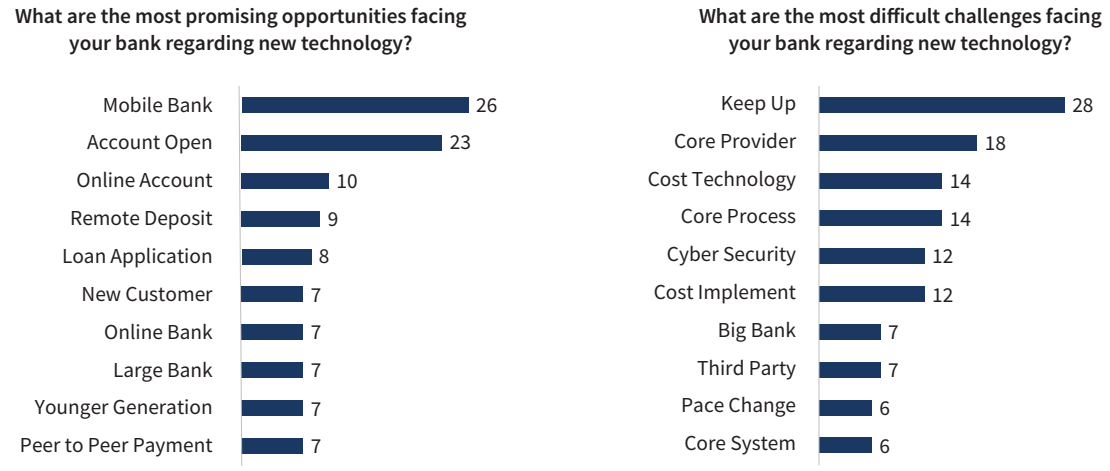
In addition to previous research, the CSBS survey data offer another perspective on factors that may be relevant to the adoption of financial technology. When asked to describe the "most promising opportunities facing your bank regarding new technology," community banks focused more on their customers than on other potential benefits, such as cost savings and efficiency gains. Phrases referencing customer-facing services, such as "mobile bank," "remote deposit," and "online account," were among those most often used by survey respondents (Chart 6.2). The frequent appearance of the phrases "account open," "new customer," and "younger generation" further suggest that some community banks saw customer opportunities that extended beyond the banks' existing base, and these banks might have been motivated by the potential for growth. The opportunities cited by community banks did not differ significantly among low-, medium-, and high-adopters, as defined above.

As Chart 6.2 also shows, community banks frequently referenced cost, as well as the phrase "keep up," to describe the "most difficult challenges" presented by new technology. In some cases, banks used the phrase "keep up" in the context of "keeping up" with competitors—

[5] Hannan and McDowell (1984); DeYoung, Lang, and Nolle (2007); Sullivan and Wang (2013); Dahl, Meyer, and Wiggins (2017).
[6] Feng and Wu (2019).
[7] Dos Santos and Peffers (1998); He (2015).

Chart 6.2

Most Common Phrases Characterizing Technology's Opportunities and Challenges



Sources: FDIC and Conference of State Bank Supervisors.
Notes: Counts are based on the number of institutions that used a given phrase; 417 community banks responded with at least one opportunity; 440 community banks responded with at least one challenge; response rates did not vary significantly between low-, medium-, and high-adopting banks.

often larger banks. In other cases, community banks referred to the challenge of "keeping up" with the rapid pace of technology development.

References to cost were linked with technology, in general, as well as with the implementation of technology. In addition to appearing in the most-common phrases, cost was also the single word most frequently used by all community banks to describe challenges (Figure 6.1). Use of the word "cost" was highest among low technology adopters, but not by a significant margin: the word was mentioned in just under half (48 percent) of the responses provided by low-adopting banks, but also by about 40 percent of high adopters.

Unlike their descriptions of opportunities and apart from costs, responses from low- and high-adopting community banks differed with respect to the challenges presented by technology. As Figure 6.1 also shows, low-adopting banks more frequently used words such as "security," "regulation," "risk," and "compliance," relative to high-adopting banks. High-adopting banks, on the other hand,

Figure 6.1

Most Common Single Words Describing Hardest Challenges of New Technology

Sources: FDIC and Conference of State Bank Supervisors.
Notes: Sized on the basis of the percentage of institutions using the word at least once in their response; 440 community banks responded with at least one challenge; response rates did not vary significantly by adoption category.

more often used words such as "core," "provider," and "vendor," which are associated with third-party service providers and, particularly, with core service providers. Across all community banks, 46 (mostly medium- and high-adopting banks) cited their core systems or core service providers when describing the most difficult challenges of new technology. Specifically, when referring to their core systems, community banks noted limited access to desired products and services, integration with current systems, a lack of alternative providers, and speed to implementation.

To further explore how banks that adopted technology differed from those that did not, the chapter now examines the links between technology adoption and factors identified above: a bank's size and revenues; the relationship between adoption and loans, deposits, growth, and performance; the role played by a bank's environment; and the role played by leadership's attitudes and expectations.

Community Banks With More Assets and Revenues Were Greater Technology Adopters

Existing research on the adoption of earlier technologies, as well as the large number of survey responses that mentioned cost, suggest that a bank's size and resources were major determinants of its decision to adopt or not adopt different technologies.

Bank Size Was the Strongest Indicator of Technology Adoption

Size may be associated with the adoption of technology if larger banks benefit from economies of scale by spreading the fixed costs of adopting technology over a wider customer base. Banks also tend to hire more employees as they grow in size, making it easier for some workers to specialize in technology-specific functions, such as development and maintenance, vendor research and selection, risk management, and compliance. Although many people associate economies of scale with large regional and national banks, other work cited by this study found that community banks generally realize most of the benefits of scale by the time they reach $600 million in assets.[8] This makes it plausible to suggest that economies of scale do not just benefit the largest noncommunity banks and that large community banks may have had an advantage over their smaller peers when deciding to adopt technology.

[8] Jacewitz, Kravitz, and Shoukry (2020).

> "Small bank with a small number of customers makes it difficult to justify the cost of new products."
> *—(Low-adopting) community-bank president*
>
> "The cost of technology is prohibitive as well as the implementation and training of staff to utilize technology to its full potential."
> *—(High-adopting) community-bank executive*
>
> "Vendors move to[o] slow and for smaller banks we are pushed to back of line."
> *—(Medium-adopting) community-bank president*

Larger banks may also benefit from greater bargaining power when purchasing technology. For example, a technology service provider may be more willing to customize a product or service for a larger institution because of the additional income and exposure the provider would receive, while offering little to no flexibility to a smaller institution.

On the other hand, bank size may have less of an effect on technology adoption if the cost of adopting a certain technology has declined over time. This decline may be due to recent technologies' need for less hardware or to the possibility of obtaining cheaper or more widely available technology through service agreements with third parties. For further discussion of how banks obtain technology, see Box 6.2.

On average, high-adopting community banks in the CSBS survey were larger than low- and medium-adopting banks. The average high adopter reported assets that were $324 million greater than medium adopters and $535 million greater than low adopters.[9] (Differences in the median were smaller, but still large, with the median high-adopting bank holding $228 million more assets than the median medium-adopting bank and $344 million more assets than the median low-adopting bank.)

Differences in technology adoption were most evident between the largest and smallest community banks. Only 6 percent of community banks with assets less than $100 million were high adopters, compared with 70 percent

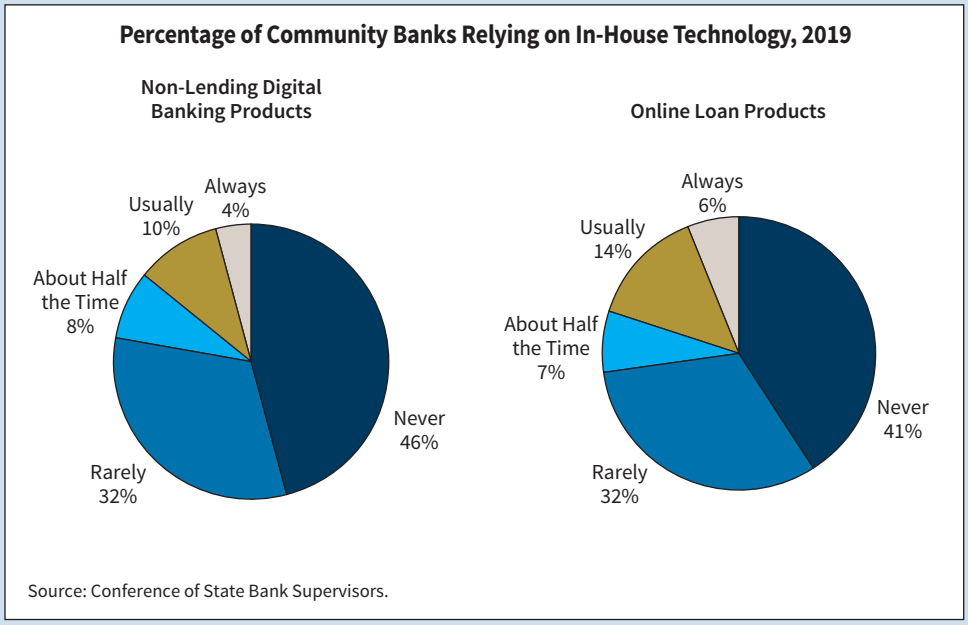
[9] For some bank factors described in the chapter, including asset size, data that deviated significantly from those of other survey respondents (the reported value was less than or greater than the reported values for 99 percent of responders) were modified to equal the value reported by a community bank at the 1st or 99th percentile. This was done to limit the effect of outlying data without removing it completely.

Box 6.2 Ways That Banks Obtain Technology

Banks obtain new technology in a number of ways. They build it in-house, buy it through merger and acquisition or direct investment, "rent" it by contracting with outside providers including core service providers, or share in it by partnering with other financial and nonfinancial institutions. These pathways are not new, yet much is unknown about the extent to which community banks use each approach.

Data from the CSBS survey indicate that community banks seldom build or buy technology for use in-house. Over three-quarters (78 percent) of community banks participating in the survey responded that they "rarely" or "never" relied on in-house technology for non-lending digital banking products and services (Chart 6.2.1). Of the 218 community banks that offered at least one lending-related technology, almost three-quarters (73 percent) responded that they "rarely" or "never" relied on in-house technology for online loan products. Responses did not vary significantly by adoption category (or, in the case of lending-related technologies, there were too few low-adopting banks for any distinctions to be drawn).

Chart 6.2.1



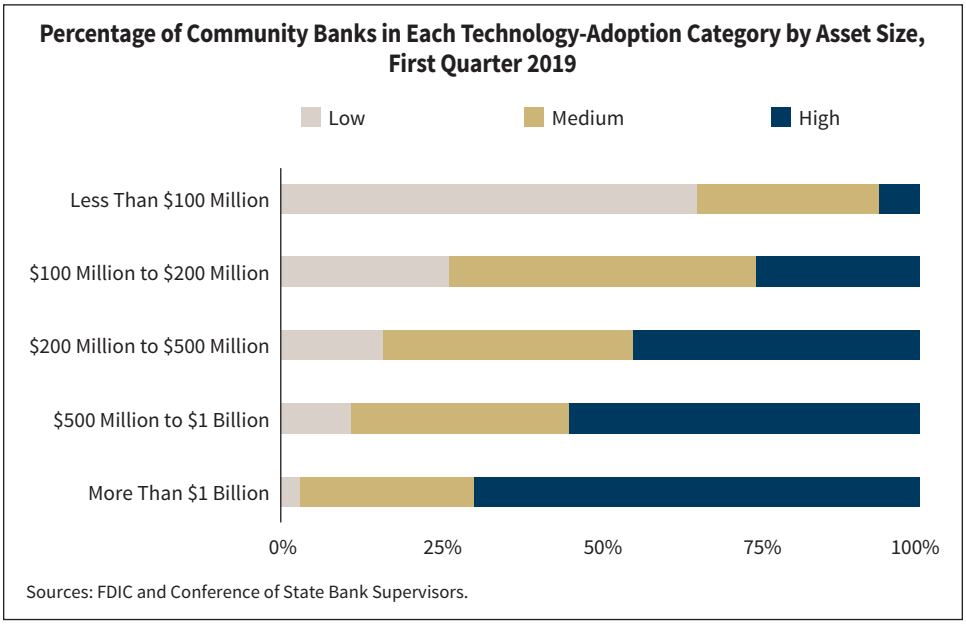
Source: Conference of State Bank Supervisors.

In contrast, 94 percent of community banks in the CSBS study had relationships with outside providers of digital banking products and services. Among respondents with at least one such relationship, 41 percent of high-adopting community banks sought to expand those relationships, compared with 39 percent of medium-adopting banks and 24 percent of low-adopting banks.

The frequent use of outside technology service providers suggests that further research into these relationships could deepen the understanding of how community banks obtain technology and may reveal additional factors that influence technology adoption. Future work should include the role of core service providers and should attempt to discover whether the challenges expressed by community banks and referenced briefly in this chapter are exceptions, or may be associated with broader differences in technology adoption. As stated by one community-bank executive, "We are currently captive to our core provider and can only move as fast as they are willing to go. We have many initiatives (e.g., debit card tokenization) that are effectively stalled while we wait for [core service provider]."

Future work could also consider whether and how assistance from external sources—for example, shared innovation labs and accelerators, such as the Alloy Labs Alliance and the ICBA ThinkTECH Accelerator—has facilitated community banks' adoption of technology.

Chart 6.3



Sources: FDIC and Conference of State Bank Supervisors.

Table 6.2 Adoption Rates for the Largest and Smallest Community Banks

	Less Than $100 Million	All	More Than $1 Billion
Online Loan Applications	15.8	37.2	60.6
Online Loan Closing	3.2	4.8	6.1
Mobile Banking	62.1	90.9	100.0
Electronic Bill Payment	65.3	83.2	89.4
Automated Loan Underwriting	4.2	11.6	33.3
Interactive Teller Machines	2.1	10.8	21.2
Remote Deposit Capture	45.3	78.8	98.5

Sources: FDIC and Conference of State Bank Supervisors.

of community banks with assets of more than $1 billion (Chart 6.3). Similarly, the adoption rate for each of the seven technology-enabled products and services among the smallest community banks was below the comparable rate for all community banks in the survey. The opposite was true for banks with assets of more than $1 billion (Table 6.2).

Community Banks With Higher Revenue Were Also Greater Technology Adopters

To adopt new technology, banks of all sizes require resources, including staff, knowledge, time, and funding. To the extent that the costs of these resources take up a greater portion of available budgets, community banks may be less willing or less able to adopt technology compared with banks with fewer resource constraints.

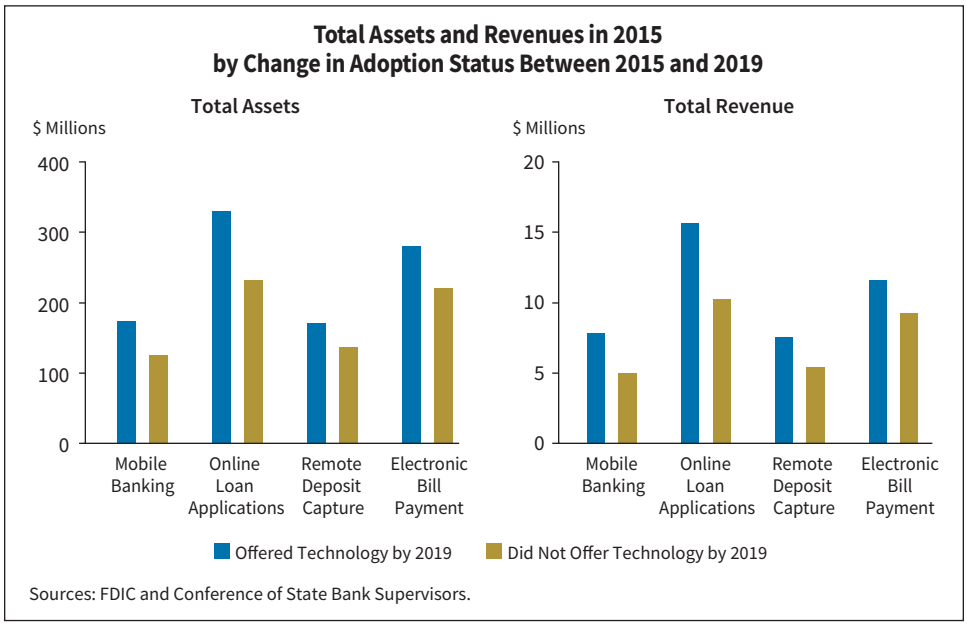
Revenue is one indicator of the ongoing resources that a community bank may have available if it is to invest in new technology. While highly correlated with asset size, revenue may be used as a separate measure to account for banks that earned higher yields on their assets or substantial fee income, which banks would be able to direct toward technology. When taken as a share of assets, total revenue was, on average, 0.3 percentage points greater for high-adopting banks than for low-adopting banks (for a discussion of net income, see section below on performance). When high-adopting banks with between $100 million and $200 million in total assets are compared with low-adopting banks of the same size, the high-adopting banks earned 16 percent more revenue (in dollars) than low-adopting banks.[10]

"Our budget will never compete with larger banks' budgets."
—(Medium-adopting) community-bank executive

"Small banks do not have the resources to implement and manage new and upcoming technologies. We must wait until the products have been implemented by others and proven to be acceptable from a cost and risk standpoint."
—(Low-adopting) community-bank president

[10] There were roughly equal numbers of low-adopting and high-adopting community banks with between $100 million and $200 million in total assets.

Chart 6.4



Sources: FDIC and Conference of State Bank Supervisors.

Bank Size and Resources May Have Influenced Technology Adoption, or Been Influenced by It, or Both

Of the factors examined in this chapter, size and resources—as measured by assets and revenues—had the greatest ties to technology adoption. This naturally raises the question of whether and how much these factors predated banks' adoption of technology or whether they arose afterward. For example, a larger bank may have been more likely to adopt technology because of the lower marginal costs associated with economies of scale. It is also possible that the bank used technology to expand its offerings and enter into new markets, leading to increased size and revenues through growth.

This question is hard to answer with the data available, yet there is at least some evidence that differences in asset size and revenues predated, and thus potentially influenced, community banks' technology adoption decisions. As mentioned above, CSBS has conducted a survey in each year since 2015. Although the same banks did not participate in each survey, some overlap existed between years. Chart 6.4 compares two groups of community banks that participated in either the 2015 or 2016 survey and reported that their bank did not offer a particular technology product or service at that time. When the same banks were surveyed again in 2018 or 2019, the first group (indicated by the blue bars in Chart 6.4) reported a change in their adoption status (i.e., the bank offered the technology), while the second group (gold bars) reported no change (i.e., the bank did not offer the technology.)[11] For the four technologies included in the survey every year, banks that changed their adoption status and began to offer the technology had, on average, higher assets and higher revenue in 2015 (before adoption).

As discussed in the next section, compared with other community banks in the survey, the 2019 cohort of low-adopting banks has also experienced slower asset growth in each year from 2015 to 2018. However, without additional data, it is unclear whether these differences existed before technology adoption, or whether the adoption of technology increased asset growth, or both.

Other Bank Characteristics Were Also Associated With Technology Adoption

While community banks that adopted technology were most distinguishable by their larger size and higher revenues, other characteristics identified in the research and survey responses were also associated with technology adoption.

[11] Of community banks that reported their adoption status in 2015 or 2016 and again in 2018 or 2019, 78 banks did not offer electronic bill payment in the earlier period, 96 did not offer mobile banking, 114 did not offer remote deposit capture, and 235 did not offer online loan applications. By 2019, 60 had adopted electronic bill payment (18 had not), 70 had adopted mobile banking (26 had not), 64 had adopted remote deposit capture (50 had not), and 65 had adopted online loan applications (170 had not).

"[Most promising opportunity is to] expand commercial deposit and commercial loan growth."
- (Low-adopting) community-bank president

"Bank is at historically high loan volumes and historically high loan commitments. New technology can help overhead from not increasing too much."
- (Medium-adopting) community-bank executive

Total Loans Mattered More Than Loan Type

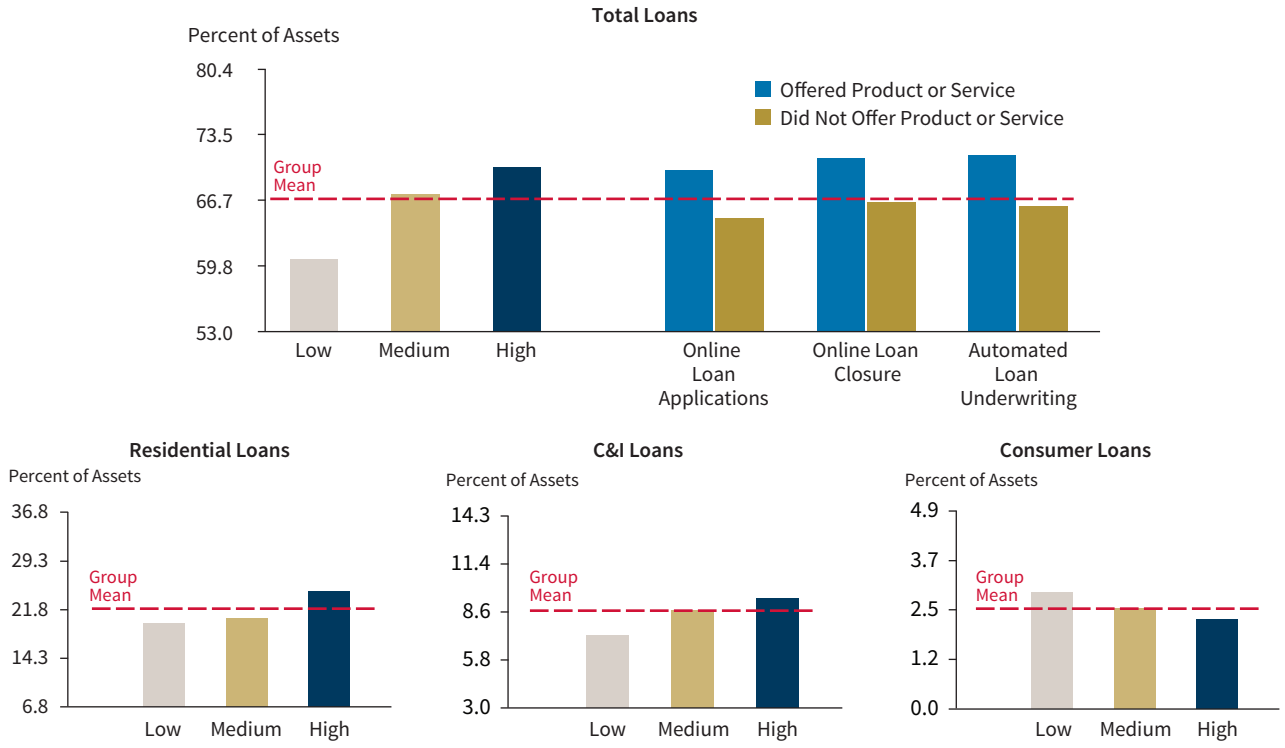
Loans constitute about two-thirds of a typical community bank's assets. Technology offers an opportunity to build on and improve this critical function by increasing the speed and convenience of the application process and producing faster underwriting decisions. Community banks with larger loan books may find these benefits more attractive, compared with their costs, than banks with fewer loans. Technology may also allow banks to increase their lending through new and expanded products and entry into new markets. In both cases, we would expect high-adopting community banks to report higher loans to assets than low-adopting banks.

As expected, among community banks in the CSBS survey, technology adoption was associated with higher shares of loans to assets. Chart 6.5 shows that high-adopting banks held, on average, 10 percent more loans as a share of assets than did low-adopting banks. A higher proportion of loans to assets was not associated with any single technology. Comparing the individual offerings among all community banks in the survey, one sees that for each of the lending-related technologies—online loan applications, online loan closure, and automated loan underwriting—banks that offered a product or service (indicated by the light blue bars in Chart 6.5) had a higher share of loans to assets than those that did not (gold bars).

As also shown in Chart 6.5, high-adopting banks held a greater percentage of their assets in residential loans and C&I loans, and a lesser percentage of their assets in consumer loans, than did low- and medium-adopting

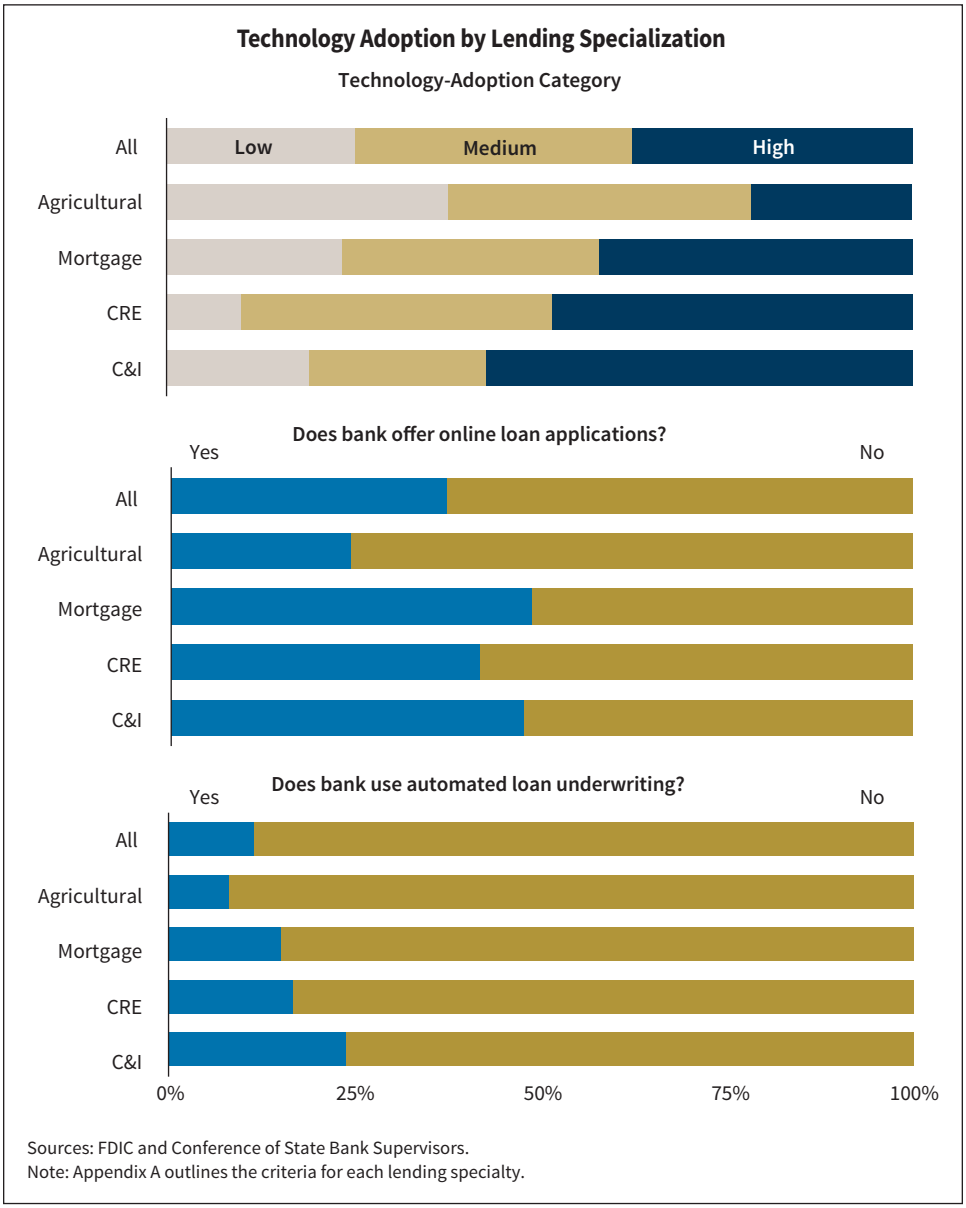
Chart 6.5

Total Loans as Share of Assets by Technology-Adoption Category and Product or Service Offering, First Quarter 2019



Sources: FDIC and Conference of State Bank Supervisors.
Note: To indicate the significance of the differences between the technology adoption categories, the y-axis of each chart was scaled to be roughly one standard deviation below and above the mean for all community banks in the survey.

Chart 6.6



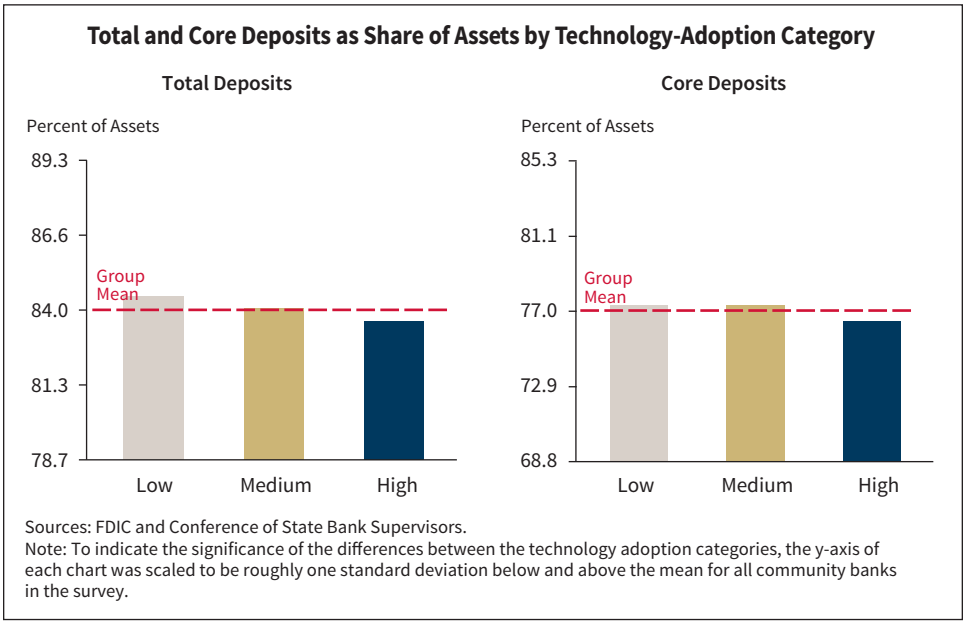
Sources: FDIC and Conference of State Bank Supervisors.
Note: Appendix A outlines the criteria for each lending specialty.

banks.[12] The differences between low- and high-adopting banks—0.7 percent of assets for consumer loans, 2.2 percent for C&I loans, and 4.9 percent for residential loans—were not as large as the difference mentioned above for total loans to assets. Nonetheless, these findings suggest possible dissimilarities in the benefits, costs, or availability of technology between the three loan types.

Another way to examine whether technology adoption varied by lending type is to compare community banks that specialized in certain types of lending. High-adopting banks made up the greatest percentage of C&I specialists, relative to the other lending specializations (Chart 6.6). These banks were also more likely to have adopted online loan applications and automated loan underwriting, compared with all community banks. If one assumes that community-bank business lending typically involves a more hands-on process, as suggested in Chapter 4, these findings may be unexpected. However, these results may reflect the use of technology in *parts* of the lending process (since the portion of the application process that is online or the degree to which underwriting is automated

[12] Residential mortgage lending consists of loans secured by 1–4 family or multifamily (5 or more) residential properties. Consumer loans consist of loans to individuals for household, family, and other personal expenditures—for example, credit card loans, student loans, and automobile loans.

Chart 6.7



Sources: FDIC and Conference of State Bank Supervisors.
Note: To indicate the significance of the differences between the technology adoption categories, the y-axis of each chart was scaled to be roughly one standard deviation below and above the mean for all community banks in the survey.

was not specified by survey respondents). Or the results may also reflect increased competition from nonbanks, as indicated by a 2020 study that found small businesses were 12 percentage points more likely to receive financing through a fintech or online lender in 2018 than in 2016, with a nearly equal decline in the likelihood of borrowing from a bank lender.[13]

In contrast, high-adopting banks were least represented among agricultural specialists. Such a result is not surprising, given that agricultural specialists tend to be smaller and therefore (as previously indicated) less likely to adopt technology. Agricultural lending may also be more specialized, making automation and online processes less effective or harder to implement.

Technology Was Not Associated With Deposits

Community banks fund most of their assets with deposits, and banks in the CSBS survey were no exception: in first quarter 2019, on average, 84 percent of their assets were funded with deposits. Given the important role of deposit funding, we might expect technology, particularly technology that enhances the functionality of deposit accounts, to be more prevalent in institutions with larger ratios of deposits to assets. For community banks in the CSBS survey, however, deposits as a share of assets did not vary widely by technology-adoption category (Chart 6.7). For low-adopting banks, deposits as a share of assets was less than a percentage point higher relative to medium- and high-adopting banks. Core deposits, which make up the bulk of community-bank deposits, were slightly favored by low-adopting and medium-adopting banks relative to high-adopting banks; when measured as a share of deposits, however, core deposits varied by less than one-half of 1 percentage point between the technology adoption categories.[14] Even for the individual product and service offerings, results were mixed. Shares of total deposits and core deposits were higher for community banks that adopted mobile banking and electronic bill payment but were lower for banks that adopted remote deposit capture and ITMs.

Low-Adopting Banks Generally Had Slower Growth in Assets and Deposits

As mentioned above, community banks frequently cited customers and customer growth as promising opportunities that could follow from the adoption of technology. Therefore, we might expect assets and deposits to grow faster for banks that adopted technology.

[13] The study uses the terms "fintech lender" and "online lender" interchangeably to refer to any nonbank online lender, as reported in the Federal Reserve's Small Business Credit Survey. Barkley and Schweitzer (2020).

[14] Core deposits were calculated according to the definition in the Uniform Bank Performance Report—i.e., as the sum of all transaction accounts, nontransaction money-market deposit accounts (MMDAs), nontransaction other savings deposits (excluding MMDAs), and nontransaction time deposits of $250,000 and less, minus fully insured brokered deposits of $250,000 and less.

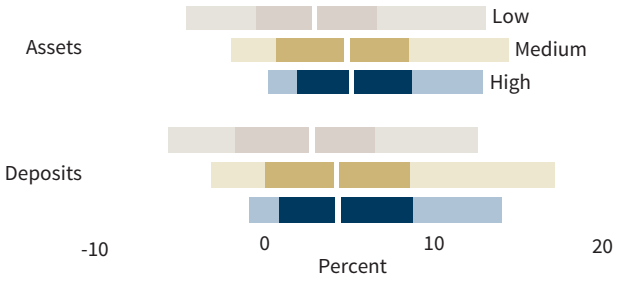
"We have a lot of room for growth and improvement with new technology."

—(High-adopting) community-bank executive

"[Most promising opportunity regarding new technology is] [m]arket opportunity to increase market share by expanding banking services [and] by utilizing ITMs to control cost of doing so."

—(High-adopting) community-bank president

Chart 6.8



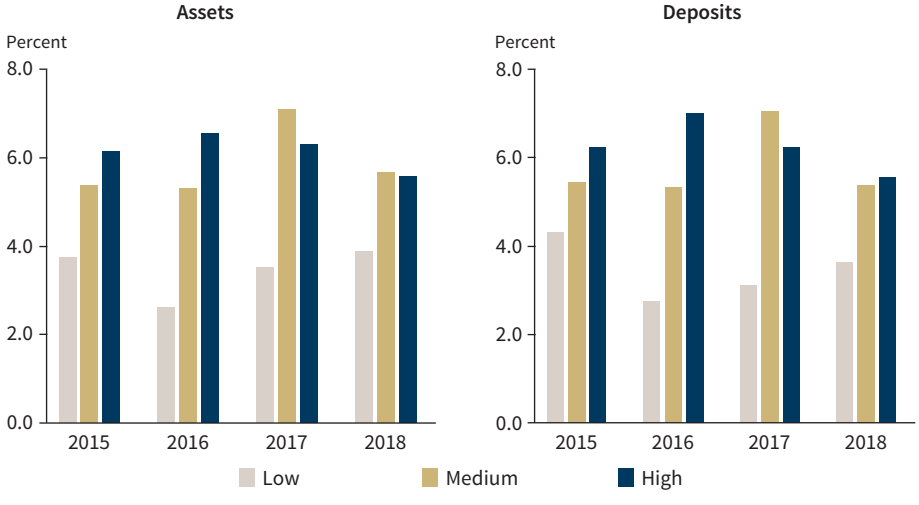
Sources: FDIC and Conference of State Bank Supervisors.
Note: Lighter shades indicate the interdecile range (10th to 90th percentile); darker shades indicate the interquartile range (25th to 75th percentile).

Among community banks participating in the CSBS study, high-adopting banks experienced higher average growth in both assets and deposits relative to medium- and low-adopting banks. For high-adopting banks, asset growth from the first quarter of 2018 to the first quarter of 2019 was 6.3 percent, on average, compared with 6.1 percent for medium-adopting banks and 4.4 percent for low-adopting banks. Over the same four quarter period, deposits in high-adopting banks grew by an average of 6.1 percent, slightly more than the average for medium-adopting banks (5.9 percent) and significantly more than the 3.4 percent growth experienced by low-adopting banks.

The difference between low adopters and high adopters was most pronounced at the lower ends of the growth distribution (Chart 6.8). With respect to assets, high-adopting banks had significantly higher growth at the 10th and 25th percentiles, growing 0.2 percent and 1.9 percent, respectively, compared with -4.7 percent and -0.5 percent for low-adopting banks. Similarly, for deposits, high-adopting banks at the 10th and 25th percentiles grew by -0.9 percent and 0.8 percent, respectively, which was much higher than the -5.7 percent and -1.8 percent growth experienced by low-adopting banks.

As Chart 6.9 shows, the difference in growth between low- and high-adopting banks did not appear transitory. From 2015 to 2018 low-adopting banks, as defined in 2019, grew their assets between 1.7 and 3.9 percentage points slower

Chart 6.9



Sources: FDIC and Conference of State Bank Supervisors.

than high-adopting banks. For deposits, the difference in year-over-year growth between the two groups ranged between 1.9 percent and 4.3 percent over the same period. There was no consistent pattern in the difference in asset and deposit growth between medium- and high-adopting banks from 2015 to 2018. Although growth during 2015 and 2016 favored high-adopting banks, medium-adopting banks outpaced high-adopting banks in 2017 for both assets and deposits and in 2018 for assets.

> "Utilizing new technologies also helps to improve productivity and efficiencies, which are necessary in order to remain profitable and competitive."
>
> *—(Low-adopting) community-bank president*

> "We are excited to look into the AI platforms and see how this can help our bank's profits and reduce our salary expenses."
>
> *—(Low-adopting) community-bank president*

High-Adopting Community Banks Outperformed Other Banks in the Survey, but the Reasons Were Unclear

Performance may be associated with technology adoption to the extent that it indicates a greater or lesser capacity for the bank to invest in technology or if banks that adopt technology become more efficient or more adept at marketing or pricing products and services. Table 6.3 shows that high-adopting community banks in the CSBS survey were more likely to be profitable and experience earnings gains in 2018, relative to low- and medium-adopting banks. High adopters earned a pre-tax return on average assets that was 21 basis points greater than the return of low-adopting banks, on average, with 99.5 percent of high adopters generating positive net income, compared with 95.4 percent for low adopters. High adopters reported annual growth in net income that was 7.7 percentage points higher than the comparable reported growth of low adopters, and nearly 8 percent more high-adopting banks increased their earnings from the previous year. Differences between medium- and high-adopting banks followed a similar pattern but were smaller in magnitude. Compared with high adopters, 0.5 percent fewer medium-adopting banks were profitable and 1.3 percent fewer experienced earnings gains in 2018.

Comparing the components of return on assets, it appeared that noninterest income was mainly responsible for the higher returns experienced by high-adopting banks. In

Table 6.3 Average Performance Measures by Technology-Adoption Category, 2018

	All	Low	Medium	High
Net Income (Pretax), 2018:				
Percent With Positive Net Income (Profitable)	98.3	95.4	99.0	99.5
Year-Over-Year Growth, Percent	22.1	19.3	19.0	27.0
Percent of Institutions With Earnings Gains	74.9	69.5	76.0	77.3
Percent of Average Assets	1.23	1.09	1.27	1.30
Components of Return on Assets (Percent of Average Assets)				
Interest Income	4.13	4.07	4.20	4.09
Interest Expense	0.57	0.56	0.58	0.56
Noninterest Income	0.68	0.54	0.62	0.83
Service Charges on Deposit Accounts	0.18	0.18	0.20	0.16
Noninterest Expense	2.93	2.91	2.86	3.02
Expenses for Salaries and Benefits	1.69	1.62	1.66	1.76
Cost of Earning Assets (bp)	62	61	63	61
Net Interest Margin (bp)	389	382	396	388
Average Cost of Interest-Bearing Deposits (bp)	74	75	76	72
Efficiency Ratio	68.3	69.8	67.4	68.1

Sources: FDIC and Conference of State Bank Supervisors.
Notes: Basis point (bp) = 1/100th of 1 percent; efficiency ratio is equal to noninterest expense as a share of operating income.

2018, noninterest income as a percentage of average assets was 29 basis points higher for high-adopting banks than for low-adopting banks and 21 basis points higher than for medium-adopting banks. This difference, however, was not associated with higher service charges on deposit accounts, as earlier research on transactional websites had suggested, and instead was attributable mainly to "other noninterest income."

For high-adopting banks compared with other banks in the survey, the higher return associated with noninterest income was partially offset by a higher ratio of noninterest expense to average assets. The difference in noninterest expense largely arose because of a 10 to 14 basis point differential in expenses for salaries and employee benefits. Higher staff costs for high-adopting banks contradicts the argument that technology—specifically, automation—reduces staff time devoted to manual processes but coincides with the theory that banks use technology as a complement to, rather than a substitute for, human capital. It is also possible that more specialized and potentially more expensive expertise was needed to adopt technology, resulting in higher costs for salaries and benefits for high-adopting banks relative to low- and medium-adopting banks.

There were minimal differences in interest income and interest expense between the adoption categories. Similarly, technology adoption did not appear to bear any relationship to cost of earning assets, net interest margin, average cost of interest-bearing deposits, or efficiency ratio. This may be because the technologies included in the survey did not translate to differences in these measures, or it may be because any differences have not yet materialized. As one community-bank president said, "In the short term, it [technology] does not improve the efficiency ratio, but in the long term the bank may be rewarded by the retention of younger customers and the future business opportunities they may provide."

Environmental Factors Were Linked to Technology Adoption

The environment a community bank operates in can affect customer demand, the ability to hire employees, and current and future resources, all of which may play a role in a bank's decision of whether to adopt technology. On the other hand, with the power to connect banks and customers virtually, the concept of "environment" as

> "Being in a more rural area, customers don't require the newest technology as soon as other areas and there is less local competition."
>
> *—(Low-adopting) community-bank president*

defined by a bank's physical location may no longer apply in the same manner as it has in the past.[15]

Differences between urban and rural consumers in their demands and capabilities may affect a community bank's decision to adopt or not adopt technology. For example, a "digital divide" between rural and urban Americans has been documented for many years, with 2019 data from the National Telecommunications and Information Administration showing a 6 percentage point differential between urban and rural areas in the share of people using the internet at home. This difference increased to 8 percentage points for smartphone use.[16] Survey data collected in 2017 by the Pew Research Center found that rural adults were less likely to have multiple devices with internet access, less likely to use the internet on a daily basis, and more likely to never go online, compared with suburban and urban counterparts.[17]

Table 6.4 shows that among community banks in the CSBS survey, the probability of being a low-technology adopter increased from 28 percent to 39 percent if the bank was located in a rural area (defined in the data as "other area"). Conversely, the probability of being a low-technology adopter decreased from 51 percent to 43 percent if the bank was located in an urban area (defined in the data as "metropolitan area"). The higher share of low adopters among rural community banks persisted even after differences in asset size were accounted for. The opposite pattern was true for the likelihood that a community bank was a high adopter, although in this case, for banks of similar asset size, location in a rural or urban area had less of an effect.

Community banks in areas with low population or economic growth may be less likely to invest in technology if those banks are concerned that slow growth will limit their future revenue or customer base. Similarly,

[15] In this chapter, unless otherwise specified, environmental factors were measured on the basis of the location of a community bank's main office.
[16] National Telecommunications and Information Administration (2020).
[17] Perrin (2019).

Table 6.4 Characteristics of Bank Environment by Technology-Adoption Category

	All Banks in Survey	Low-Adopting Banks	Medium-Adopting Banks	High-Adopting Banks
Main Office Location (Percent in Each Category):				
Metropolitan Area (Urban Area)	51.1	42.7	48.7	59.0
Micropolitan Area	21.0	18.3	20.2	23.6
Other Area (Rural Area)	27.9	38.9	31.1	17.4
Population Growth:				
Cumulative Annual Growth From 2010 to 2018, Percent	0.22	0.13	0.19	0.31
Located in a Depopulating County (2010 to 2018)	42.2	51.1	40.4	37.9
Median Age of Local Population (2018)				
In Years	39.9	40.8	39.3	39.9
Located in County in the Highest (Oldest) Quartile	25.4	36.6	18.1	25.1
Located in County in the Lowest (Youngest) Quartile	22.7	16.8	26.4	23.1
Cumulative Annual GDP Growth From 2010 to 2018 (Percent)	3.09	2.85	3.04	3.31
"Greatest Single Challenge" Facing Bank is Business Conditions	7.1	9.7	5.8	6.7
Average Competitors Within 10 Miles (Percent in Each Category):				
Less Than 2	8.1	16.8	7.8	2.6
2 to 5	24.5	32.1	26.4	17.5
5 to 10	28.6	29.8	25.4	30.9
10 to 25	29.9	16.0	32.1	37.1
More Than 25	8.9	5.3	8.3	11.9
Share of Deposits Within 10 Miles (Percent in Each Category):				
Less Than 10 Percent	30.2	24.4	32.8	31.4
10 Percent to 33 Percent	44.7	37.4	43.8	50.5
More Than 33 Percent	25.1	38.2	23.4	18.0
"Greatest Single Challenge" Facing Bank is Competition	14.9	12.4	12.7	19.0

Sources: FDIC, Conference of State Bank Supervisors, and Bureau of Economic Analysis.
Note: Counties in the youngest 25 percent are those where the median age is 36.6 years or below; counties in the oldest 25 percent are where the median age is 42.5 years or above (see Chapter 3 in this study).

banks may be less likely to prioritize technology if they are located near fewer customers who demand or use it—for example, areas with a higher median age.[18] On the other hand, such banks may also be motivated to adopt technology to expand into growing markets or to attract and retain younger customers, as indicated by multiple community banks in the CSBS survey.

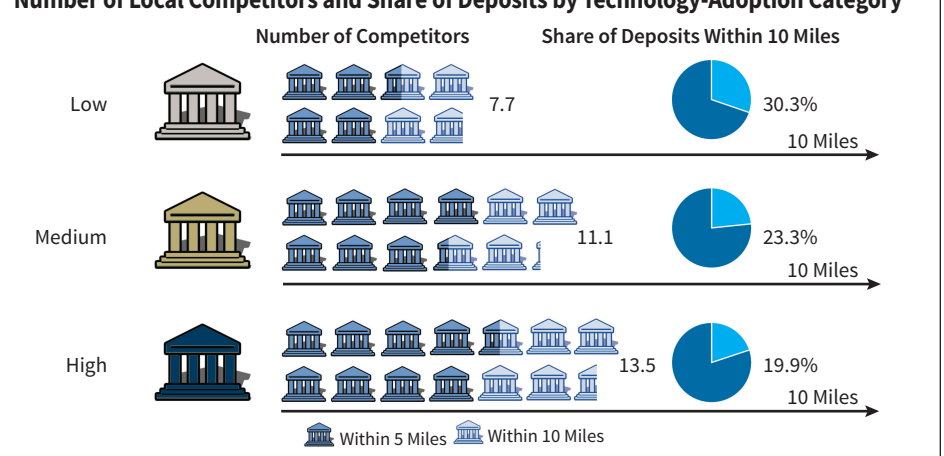
On average, high-adopting community banks in the CSBS survey were located in counties with higher economic growth, as measured by the cumulative annual growth rate (CAGR) for GDP. Between 2010 and 2018 the average county-level CAGR for high-adopting banks was 3.3 percent, compared with 3.0 percent for medium-adopting banks and 2.9 percent for low-adopting banks (Table 6.4). When banks of similar asset size were compared, the difference between high- and low-adopting banks narrowed slightly but did not

"Mobile deposit has helped retain some of our younger customers as they go off to the big cities to college."
—(Low-adopting) community-bank president

"Another challenge is to persuade the senior generations (baby boomers my age and older) to accept and utilize the new technology."
—(Low-adopting) community-bank president

[18] Vogels (2019). Another online survey conducted in 2019 found that 62 percent of those ages 18 to 29 banked using a mobile app compared with 22 percent of those ages 55 to 64 and 7 percent of those 65 and older. American Bankers Association (2019).

Chart 6.10



Sources: FDIC and Conference of State Bank Supervisors.
Note: "Competitor" is defined as any bank (including noncommunity banks and community banks not included in the CSBS survey) that operated a branch within 5 or 10 miles. Because community banks may operate branches in multiple areas, number of competitors and share of deposits were calculated as the simple average of all full-service branches operated by the bank as of June 30, 2019.

disappear. Low-adopting banks were also more likely to cite "business conditions" as the greatest single challenge facing their bank. The pattern did not hold for all adoption categories, however, since high-adopting banks were more likely to cite this challenge than medium-adopting banks.

Other local factors, such as median age and population growth, did not have a strong tie to technology adoption. From 2010 to 2018, while low-adopting banks were more often located in counties with negative population growth (51 percent, as opposed to 40 percent for medium-adopting banks and 38 percent for high-adopting banks) and with a slower average CAGR, these differences disappeared after asset size was accounted for. Similarly, when banks of similar size were compared, differences in the average median age and the share of banks located in the youngest and oldest counties by quartile declined in magnitude.

Responses to the CSBS survey indicate that competition was a consideration for community banks, with most respondents viewing banks located within their market as their greatest source of competition.[19] Therefore, we might expect the level of competition within a bank's market—as measured by the number of banks (including noncommunity banks) operating within a certain distance and by the share of local deposits held by the bank—to play a role in technology adoption. Community banks with a larger share of local deposits or that operate in close proximity to fewer banks would likely feel less pressure to adopt new technology, compared with banks that have a smaller share of deposits and a greater number of local competitors.

> "We invest in and use technology because the market place requires us to do so."
>
> *—(High-adopting) community-bank executive*
>
> "New technologies of every kind offer our bank a better opportunity to stay competitive with the large regional banks and the money-center banks."
>
> *—(Medium-adopting) community-bank executive*

Using data on deposits and location by branch from the FDIC's Summary of Deposits survey, low-adopting banks tended to operate in markets with fewer average competitors per bank branch. (For this chapter, a community bank's market was the five- and ten-mile radius surrounding each of the bank's branches.) Using this measure, low-adopting banks faced an average of 7.7 competitors, compared with 11.1 competitors for medium-adopting banks and 13.5 competitors for high-adopting banks (Chart 6.10). Low-adopting banks also operated in markets where they held 10.4 percent

[19] Over 15 percent of CSBS survey respondents (including those not examined in this chapter) selected competition as the "single greatest challenge" facing their bank; only core deposit growth (22 percent) and regulation (16 percent) registered more responses. For all but two products and services (wealth management/retirement services and payment services), over 75 percent of respondents indicated that their greatest source of competition came from institutions with a headquarters, a branch, or a satellite office in their market.

more deposits as a share of all the deposits held by banks within ten miles, compared with high-adopting banks. This difference decreased only marginally after bank size was accounted for.

Attitudes Toward Technology and Expectations About Profitability and Expansion Played a Role in Adoption Decisions

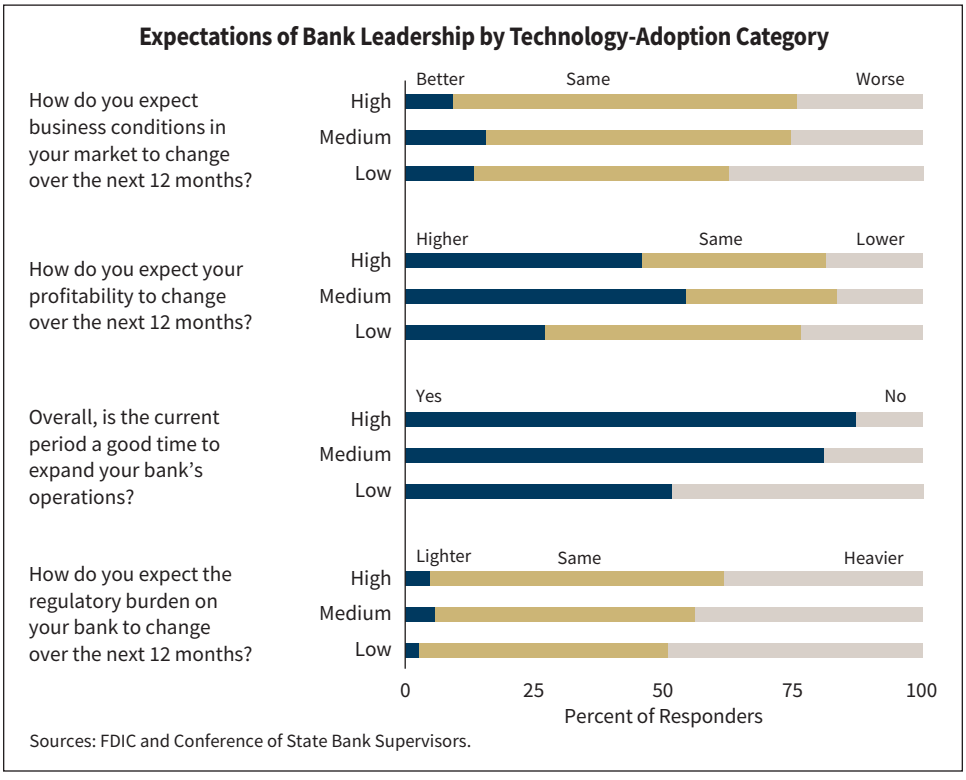
Not surprisingly, technology adoption differed depending on the importance a bank attributed to technology. For example, 81 percent of high-adopting banks responded that technology adoption was either "important" or "very important," compared with 71 percent of medium-adopting banks and 56 percent of low-adopting banks. With respect to technology leadership, 32 percent of high-adopting banks felt that it was "important" or "very important" to be a leader in new or emerging technologies, compared with 28 percent for medium-adopting banks and 14 percent for low-adopting banks. The fact that most banks, including high adopters, stated that technology adoption—but not technology leadership—was important aligns with the analysis above indicating that community banks were generally focused on "keeping up" rather than leading in technology. The findings also suggest that technology adoption goes beyond a bank's characteristics and its environment to include, in addition, the bank's attitudes toward technology.

> "Community banks have the opportunity to show and prove to customers that their technology can rival that of much larger banks."
>
> *—(Medium-adopting) community-bank executive*

> "Community banks survive on quality, personal customer service, not technology advancements."
>
> *—(Low-adopting) community-bank president*

Further, technology adoption varied by attitudes and expectations not directly related to technology. Chart 6.11 displays responses to four questions about a bank's expectations for business conditions, profitability, and regulatory burden over the next 12 months, as well as the bank's overall outlook for expansion. In each case, low-adopting banks tended to have more-pessimistic views than did medium-and high-adopting banks. The largest differences appeared in expectations for future profitability and outlook for expansion. The percentage of low adopters that believed profitability would be higher over the next 12 months trailed the percentage of high-

Chart 6.11



Sources: FDIC and Conference of State Bank Supervisors.

adopting banks by nearly 19 percentage points and trailed medium-adopters by 27 percentage points. Just over half of low-adopting banks believed that the current period (at that time, spring 2019) was a good time to expand bank operations, compared with 81 percent of medium-adopting banks and 87 percent of high-adopting banks.

Future Research Will Yield Greater Insights Into Technology Adoption

To explore how banks that adopted technology differed from those that did not, this chapter has examined several characteristics of community banks, their environment, and the attitudes and expectations of their leadership. For respondents to the CSBS survey, size and revenue were the main factors differentiating low adopters, medium adopters, and high adopters among community banks. Other factors, including a bank's expectations and attitudes toward technology, its ratio of loans to assets, and its competitive environment, were also relevant, but not as much as size and revenue.

In the future, the FDIC plans to undertake additional research to overcome some of the limitations of this chapter. First, the measure used to differentiate "low," "medium," and "high" adopting banks cannot account for the length of time that a community bank offered or used a particular technology or for the quality and functionality of the technology. In the future, such information could be collected and analyzed to determine whether specific components or uses of technology were associated with the factors studied here and whether these associations varied by early and late adopters.

Second, while these findings include some evidence of directional effects, data collected over a longer period may help us distinguish between two types of effect: the effects of different factors on a bank's decision to adopt technology, and the effects of adopting technology on those factors. In addition, ongoing data collection will help us not only identify changes in adoption patterns over time but also incorporate new technologies as they become available. The former is particularly relevant given the short- and long-term changes in technology use and adoption that may arise from the COVID-19 pandemic (see Box 6.3).

Third, further research may explore whether the factors explored in this chapter, as well as others, may affect the decisions of different subsets of community banks to adopt or not adopt technology. Such work may also help inform policy discussions on other topics—for example, deposit flight from depopulating rural areas. A comparison of the technology profiles of community banks located in rural areas with a declining population could help determine whether certain technologies helped some banks in those areas retain customers or attract out-of-market deposits.

Finally, future research should incorporate data from all community banks to the greatest extent possible. While community banks participating in the CSBS survey generally reflected the wider population, any differences could prevent the broader application of findings reported in this chapter. For example, the CSBS survey did not include responses from community banks with national charters or from banks in every state. Such banks may approach their technology adoption decisions differently; therefore, it would benefit future researchers if these differences were eliminated as much as possible.

As the primary federal regulator for most community banks, the FDIC encourages further research into factors that may have influenced, or may have been influenced by, a community bank's technology adoption decisions. The FDIC also encourages further research in the use of technology in community banks in general. Ongoing research and data collection is needed to keep pace with rapidly evolving technology and to better understand the benefits and risks of community banking in a digital age.

Box 6.3 Technology Adoption and the COVID-19 Pandemic

The COVID-19 pandemic has given rise to a defining change for community banks: a broader use of technology, both at present and for the future. The pandemic has resulted in branch closures, stay-at-home orders, and a general desire to limit direct contact, all of which has increased the use of computers, mobile phones, and other smart devices to complete financial services transactions. To meet growing demand, community banks have used both direct investment and contracts with technology service providers and fintechs to accelerate their adoption of technologies that enable such services as remote deposit, online applications, peer-to-peer payments, and electronic signatures.

Some community banks, for example, used technology to help manage the unprecedented volume of loan applications received in response to the Small Business Administration's (SBA) Paycheck Protection Program (PPP).[a] Over the span of a few months, community banks provided billions of dollars of needed credit to small and medium-sized enterprises through the program, with 3,843 community banks holding over $148 billion in PPP loans as of June 30, 2020. Arguably, technology facilitated this lending by allowing some community banks to accept applications and supporting documentation online, process applications faster, and submit files for SBA approval.[b] As the PPP moves into its next phase, community banks are also seeking the aid of technology to automate loan forgiveness applications.[c]

Not all accounts from community bankers and borrowers about using technology to assist with PPP lending were positive, however, nor is it clear that technology increased the use or efficiency of the program. Reports of difficulties connecting with SBA's systems (E-Tran) and last-minute changes to the program, including a ban on robotic data entry systems, suggested a limit to the effectiveness of technology.[d] Nonetheless, at least among community banks in the 2019 CSBS survey, those identified in this chapter as high-technology adopters showed greater participation in the program, with PPP loans totaling 6.5 percent of assets, compared with 5.7 percent of assets for medium-adopting banks and 5.0 percent of assets for low-adopting banks. Future research may better identify the extent to which technology facilitated PPP lending as well as other credit during the pandemic.

The degree to which banks continue after the pandemic to rely on technology investments and partnerships made during the pandemic remains unknown; however, it seems unlikely that customers' use of technology will return to pre-pandemic levels even after branches and the economy resume normal operations. In a PriceWaterhouseCoopers (PwC) survey of 6,000 U.S. bank customers conducted in May and June 2020, 24 percent stated they were less likely to use their bank's branch offices. In addition, following months of remote work, banks (like many other businesses) may consider permanent changes to workspaces, which could have long-term effects on branch structure and operating expenses.

It is also possible that because of the pandemic, technology adoption by community banks will decrease. Banks that experience financial hardship may have reduced ability and desire to invest in new technology, a development suggested by the findings of this chapter associating revenues and local economic growth with technology adoption. And post-pandemic, some community banks may experience less of a decline to branch traffic, a development suggested by the number of respondents to the PwC survey who indicated they were likely to continue using branch offices, including for services that can be done remotely.

[a] As discussed in previous chapters, the PPP provided a federal guarantee for low-interest forgivable loans made to eligible businesses by bank and nonbank lenders.
[b] Groenfeldt (2020).
[c] Cross (2020).
[d] Price (2020).

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Appendix A: Study Definitions

Summary of FDIC Research Definition of Community Banking Organizations

Community banks are designated at the level of the banking organization.

(All charters under designated holding companies are considered community banking charters.)

Exclude: Any organization with:

— No loans or no core deposits

— Assets held in foreign branches ≥ 10% of total assets

— More than 50% of assets in certain specialty banks, including:

- credit card specialists
- consumer nonbank banks[1]
- industrial loan companies
- trust companies
- bankers' banks

Include: All remaining banking organizations with:

— Total assets < indexed size threshold[2]

— Total assets ≥ indexed size threshold, where:

- Loan to assets > 33%
- Core deposits to assets > 50%
- More than 1 office but no more than the indexed-maximum number of offices[3]
- Number of large MSAs with offices ≤ 2
- Number of states with offices ≤ 3
- No single office with deposits > indexed maximum branch deposit size.[4]

Lending Specialty Groups Defined for Analysis of FDIC-Insured Community Banks

Lending Specialty Group	Definition
Mortgage Specialists	Holds residential mortgage loans greater than 30 percent of total assets
Consumer Specialists	Holds credit card lines and other loans to individuals greater than 20 percent of total assets
CRE Specialists	Holds construction and development (C&D) loans greater than 10 percent of assets OR total CRE loans (C&D, multifamily, and secured by other commercial properties) greater than 30 percent of total assets
C&I Specialists	Holds C&I loans greater than 20 percent of total assets
Agricultural Specialists	Holds agricultural production loans plus loans secured by farm real estate greater than 20 percent of total assets
Multi-Specialists	Meets more than one of the single-specialty definitions above OR holds either retail loans or commercial loans greater than 40 percent of total assets
No Specialty	All other institutions

Source: FDIC.
Note: All specialty groups require the institution to hold loans greater than 33 percent of total assets.

[1] Consumer nonbank banks are financial institutions with limited charters that can make commercial loans or take deposits, but not both.

[2] Asset size threshold indexed to equal $250 million in 1985 and $1.65 billion in 2019.

[3] Maximum number of offices indexed to equal 40 in 1985 and 94 in 2019.

[4] Maximum branch deposit size indexed to equal $1.25 billion in 1985 and $8.24 billion in 2019.

Appendix B: Selected Federal Agency Actions Affecting Community Banks, 2008–2019

The federal agency actions listed in this appendix were compiled on a best efforts basis from the websites of the Federal Deposit Insurance Corporation, Board of Governors of the Federal Reserve System, Office of the Comptroller of the Currency, Consumer Financial Protection Bureau, and the Department of the Treasury, including the Financial Crimes Enforcement Network, and are intended as a high-level summary of actions by federal regulatory agencies, taken from late December 2007 through year-end 2019, that affected community banks. Changes to Call Reports are excluded, except for one listing pertaining to the new FFIEC 051 Call Report. Also excluded is supervisory guidance, except for a model Privacy Act notice and a few Interagency Questions and Answers about flood insurance and the Community Reinvestment Act. Still other excluded categories include Statements of Policy, tax and accounting changes, changes in state law or regulation, inflation adjustments, actions affecting only internal agency procedures, rules relating to the transfer of authority from one agency to another, and rules applying only to large or internationally active banks. Where a rule is issued by multiple agencies separately, or in both interim-final and final form, only one listing is included. Links are to the announcing press release where available, or to Federal Register notices where a press release is not available. Agency actions are grouped by broad topic area; these groupings are for expositional purposes only, and do not have any official significance. The groupings are:

- deposit insurance and other federal financial dealings with banks;
- capital adequacy;
- residential mortgage lending and servicing, including Home Mortgage Disclosure Act requirements;
- consumer credit and retail payments;
- general safety-and-soundness;
- Bank Secrecy Act and law enforcement;
- bank failure resolution;
- pricing of bank products and services;
- competition and banking industry structure;
- financial reporting and auditing;
- other agency actions related to consumers and communities; and
- back-office functions.

Rule summaries in this table, which may paraphrase or quote directly from announcing press releases or Federal Register notices without attribution, are deemed accurate but are not intended to be relied upon for legal or regulatory purposes.

Deposit Insurance and Other Federal Financial Dealings with Banks	
December 12, 2007	The Federal Reserve announced the availability of the Term Auction Facility, a program whereby the Federal Reserve would provide term credit to banking organizations against a wider range of collateral than was accepted at its Discount Window (Press Release).
September 26, 2008	The FDIC issued a rule simplifying the insurance coverage of revocable trust accounts by eliminating the concept of "qualifying" beneficiaries and allowing for coverage of virtually any named beneficiary (Press Release).
October 6, 2008	The Federal Reserve announced that it would begin to pay interest on depository institutions' required and excess reserve balances at the Federal Reserve Banks (Press Release).
October 7, 2008	The FDIC announced a temporary increase in the standard maximum deposit insurance amount from $100,000 to $250,000 pursuant to legislation (this change would be made permanent by law in July 2010) (Press Release).
October 14, 2008	The FDIC implemented the Temporary Liquidity Guarantee Program (TLGP) to guarantee, for a fee, certain bank and holding company obligations, and to implement temporary, unlimited deposit insurance coverage for noninterest-bearing transaction accounts of participating institutions (Press Release).
October 14, 2008	The Treasury announced the availability of its Capital Purchase Program, under which Treasury would purchase up to $250 billion of senior preferred shares of banking organizations, on standardized terms and subject to restrictions on executive compensation and other matters (Press Release).
December 2, 2008	The FDIC issued a rule governing the payment of deposit insurance assessment dividends when the DIF exceeded 1.35 percent of insured deposits (Federal Register Notice).
December 16, 2008	The FDIC issued a rule that increased deposit insurance assessments uniformly by 7 basis points (Press Release).

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March 2, 2009	The FDIC issued a rule that modified aspects of its risk-based deposit insurance assessment system and announced in an interim rule a special deposit insurance assessment (Financial Institution Letter).
May 22, 2009	The FDIC finalized the special deposit insurance assessment in modified form, setting the assessment at 5 basis points on assets minus tier 1 capital (Press Release).
November 12, 2009	The FDIC issued a rule requiring insured institutions to prepay three years of deposit insurance assessments (Press Release).
November 9, 2010	The FDIC implemented a statutory requirement to provide temporary unlimited deposit insurance coverage of noninterest-bearing transaction accounts through the end of 2012 (Press Release).
December 14, 2010	The FDIC issued a rule setting its designated reserve ratio at 2 percent of estimated insured deposits (Press Release).
February 7, 2011	The FDIC issued a rule that, among other things, implemented a statutory requirement to change the definition of the assessment base from adjusted domestic deposits to average consolidated total assets minus average tangible equity (Press Release).
November 24, 2014	The FDIC issued a rule conforming certain definitions in its assessments regulations to terms used in the Basel III revised capital framework (Financial Institution Letter).
June 18, 2015	The Federal Reserve implemented a rule amending Regulation D (Reserve Requirements of Depository Institutions) to make changes to the calculation of interest payments on excess balances maintained by depository institutions at Federal Reserve Banks (Press Release).
February 18, 2016	The Federal Reserve implemented a statutory requirement by reducing the dividend paid to large banks (with assets greater than $10 billion) on their Federal Reserve bank stock from 6 percent, to the lesser of 6 percent or the most recent ten-year Treasury auction rate prior to the dividend, while smaller banks' dividend rate remained at 6 percent (Press Release).
March 15, 2016	The FDIC issued a rule to establish a surcharge of 4.5 cents per $100 of the assessment base on insured institutions with assets greater than $10 billion, implementing a statutory requirement that the assessment cost of increasing the insurance fund from 1.15 percent of insured deposits to its required level of 1.35 percent of insured deposits should be borne by large institutions rather than by the vast majority of community banks that have assets less than $10 billion, and providing assessment credits to insured institutions of less than $10 billion for the portion of their regular assessments that contribute to growth in the reserve ratio from 1.15 percent to 1.35 percent (Press Release).
April 26, 2016	The FDIC issued a rule revising the methodology used to determine risk-based assessment rates for small banks to better differentiate risk (Press Release).
April 5, 2018	The FDIC issued a rule that made minor technical changes to its assessments regulation (Federal Register Notice).
July 16, 2019	The FDIC issued a rule to allow for alternatives to signature cards for establishing the deposit insurance coverage of joint accounts (Press Release).
November 27, 2019	The FDIC issued a rule providing that small bank assessment credits would be applied when the DIF exceeds 1.35 percent of insured deposits instead of 1.38 percent of insured deposits (Federal Register Notice).
December 6, 2019	The FDIC issued a rule that made conforming changes to its assessments regulation to accommodate the community bank leverage ratio framework (Federal Register Notice).
Capital Adequacy	
October 16, 2008	The Federal Reserve issued a rule permitting bank holding companies to include without limit in tier 1 capital senior perpetual preferred stock issued to the Treasury Department (Press Release).
October 17, 2008	The federal banking agencies announced they would allow banks to treat losses on Fannie Mae and Freddie Mac preferred stock as ordinary losses rather than capital losses for regulatory capital purposes, as if a tax change of October 3, 2008, had been enacted in the third quarter (Press Release).
December 16, 2008	The federal banking agencies issued a rule reducing the amount of the regulatory capital deduction of goodwill by the amount of deferred tax liabilities to reflect the maximum exposure to loss in the event of a write-down of goodwill (Press Release).
March 17, 2009	The Federal Reserve issued a rule extending until 2011 the period of time in which BHCs may include cumulative perpetual preferred stock and trust preferred securities in tier 1 capital up to 25 percent of total core capital elements (Press Release).

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May 22, 2009	The Federal Reserve issued rules indicating that senior perpetual preferred stock issued by bank holding companies to the Treasury would count as tier 1 capital, and that subordinated debt issued by S-corps and mutual bank holding companies to the Treasury would not count as debt for purposes of the Small Bank Holding Company Policy Statement (Press Release).
June 26, 2009	The federal banking agencies issued a rule providing that mortgage loans modified under the Making Homes Affordable Program would generally have the same risk weight as they had before modification (Press Release).
January 21, 2010	The federal banking agencies issued a rule defining the risk-based capital treatment of exposures brought onto bank balance sheets as a result of Financial Accounting Standards No. 166 and 167 (Press Release).
June 13, 2011	The Federal Reserve issued a rule that allows small bank holding companies that are S-Corps or that are organized in mutual form to exclude subordinated debt issued to Treasury under the Small Business Lending Fund (SBLF) from treatment as "debt" for purposes of the debt-to-equity standard under the Federal Reserve Board's Small Bank Holding Company Policy Statement (Press Release).
July 2, 2013	The federal banking agencies issued rules implementing aspects of the Basel III risk-based capital framework. Among other things, the new rules increased by 2 percentage points the agencies' tier 1 risk-based capital Prompt Corrective Action thresholds defining adequately capitalized and well capitalized banks, introduced a new "common equity tier 1" risk-based capital requirement, tightened the definition of regulatory capital by limiting inclusion of mortgage servicing rights, deferred tax assets and investments in the capital instruments of other financial institutions, excluded future issuances of trust-preferred securities (TruPS) from the tier 1 capital of bank holding companies while grandfathering the tier 1 capital treatment of existing TruPS for bank holding companies with assets less than $15 billion, established a new risk-based capital treatment of securitizations that does not rely on credit ratings (implementing a statutory requirement to eliminate references to credit ratings), and changed selected risk weights, including establishing a 250 percent risk weight for amounts of mortgage servicing rights, deferred tax assets, and investments in the capital instruments of other financial institutions that were not deducted from tier 1 capital. For most banks (other than advanced approaches banks), the new rules were effective January 1, 2015 (Press Release).
January 14, 2014	The federal banking agencies issued rules establishing that banks' holdings of TruPS as investments were not prohibited by the Volcker Rule when those TruPS were those intended to be grandfathered under the Basel III rule (Press Release).
April 9, 2015	The Federal Reserve issued a rule implementing a statutory requirement to increase the asset threshold used in determining eligibility under its Small Bank Holding Company Policy Statement (SBHCPS) from $500 million to $1 billion. BHCs subject to the SBHCPS are not subject to leverage requirements or risk-based capital requirements at the consolidated BHC level. The rule also expanded the applicability of the policy statement to savings and loan holding companies (Press Release).
November 21, 2017	The federal banking agencies issued rules delaying from taking effect the fully phased-in Basel III deductions for mortgage servicing rights, deferred tax assets and investments in the capital instruments of other financial institutions (those deductions had been subject to a multi-year phase-in starting in 2015) (Press Release).
August 28, 2018	The Federal Reserve issued a rule implementing a statutory requirement to increase the asset threshold used in determining eligibility under its Small Bank Holding Company Policy Statement from $1 billion to $3 billion, thereby exempting most BHCs in this size class from being subject to leverage requirements or risk-based capital requirements at the consolidated BHC level (Press Release).
December 21, 2018	The federal banking agencies issued rules permitting banking organizations the option to phase in over three years the day-one impact on regulatory capital of implementing the new Current Expected Credit Loss accounting standard (Press Release).
July 9, 2019	The federal banking agencies issued rules increasing (for banks not subject to the advanced approaches) the amounts of mortgage servicing rights, deferred tax assets, and investments in the capital instruments of other financial institutions that are includable in tier 1 capital. Under the rule, each of these types of exposures can constitute up to 25 percent of tier 1 capital (rather than the previous 10 percent limit), and the previous 15 percent combined limit on the sum of the three types of exposures was eliminated (Press Release).
October 29, 2019	The federal banking agencies issued rules implementing the statutorily mandated option for qualifying banks with assets less than $10 billion to adopt a Community Bank Leverage Ratio (CBLR) framework. The rule set the CBLR at 9 percent. Banks that elect this option will not be subject to risk-based capital requirements unless their tier 1 leverage ratios fall below 9 percent for a period of time (Press Release).
November 19, 2019	The federal banking agencies issued rules finalizing the risk-based capital treatment of High Volatility Commercial Real Estate (HVCRE) exposures as required by statute. The rules also clarified the risk-based capital treatment of land development loans to facilitate the construction of 1–4 family dwellings. Under the rule, such loans would be considered HVCRE and receive a 150 percent risk-weight (Press Release).

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Residential Mortgage Lending and Servicing, Including Home Mortgage Disclosure Act Requirements	
July 14, 2008	The Federal Reserve issued a rule applying to a newly defined category of "higher-priced mortgage loans." The rule prohibits a creditor from making a loan without regard to borrowers' ability to repay the loan from income and assets other than the home's value, in part based on an analysis of repayment ability based on the highest scheduled payment in the first seven years of the loan; requires creditors to verify borrowers' income and assets; bans prepayment penalties if the payment can change in the initial four years and otherwise provides that a prepayment penalty period cannot last for more than two years; and requires creditors to establish escrow accounts for property taxes and homeowner's insurance for all first-lien mortgage loans. For any residential mortgage, regardless of whether the loan is higher-priced, creditors may not coerce a real estate appraiser to misstate a home's value; must provide a good faith estimate of loan costs within three days after loan application, for all mortgages and not just purchase mortgages, and may not charge fees prior to such disclosures (except a reasonable fee for obtaining a credit history); and servicers must not pyramid late fees, must credit payments on receipt and must provide a payoff statement on request (Press Release).
October 20, 2008	The Federal Reserve revised the rules for reporting price information on higher priced mortgages under Regulation C to be consistent with its July 2008 rule. Spreads and thresholds will be based on a survey-based estimate of APRs on comparable mortgages rather than comparable Treasury yields (Press Release).
May 8, 2009	The Federal Reserve issued a rule implementing a statutory requirement for a seven-day waiting period between a customer's receipt of required disclosures and the loan closing, and an additional three-day wait if the APR changes outside of certain tolerances after the initial disclosure, with the customer having a right to expedite these timelines in case of personal financial emergency (Press Release).
November 16, 2009	Pursuant to a statutory requirement, the Federal Reserve issued a rule requiring that notice be given to borrowers when their mortgage loan has been sold or transferred (Press Release).
July 28, 2010	Six federal agencies issued a rule implementing statutory requirements for the registration of mortgage loan originators. The rule requires residential mortgage loan originators who are employees of agency-regulated institutions to be registered with the Nationwide Mortgage Licensing System and Registry (registry). The registry is a database created by the Conference of State Bank Supervisors and the American Association of Residential Mortgage Regulators to support the licensing of mortgage loan originators by the states. Residential mortgage loan originators must furnish to the registry information and fingerprints for background checks. The statute generally prohibits employees of agency-regulated institutions from originating residential mortgage loans unless they register with the registry. Each originator will have a unique identifier that will enable consumers to access employment and other background information about that originator from the registry. Under the rule, registered mortgage loan originators and agency-regulated institutions must provide these unique identifiers to consumers (Press Release).
August 16, 2010	The Federal Reserve issued a rule that applies to mortgage brokers, the companies that employ them, and mortgage loan officers employed by depository institutions and other lenders. The rule prohibits loan originator compensation based on the interest rate or other loan terms, other than the amount of the loan (this is intended to prevent loan originators from increasing their own compensation by raising the consumers' loan costs); prohibits a loan originator that receives compensation from the consumer from also receiving compensation from the lender or another party; and prohibits loan originators from directing or "steering" a consumer to accept a mortgage loan that is not in the consumer's interest in order to increase the originator's compensation (Press Release).
August 16, 2010	The Federal Reserve issued a rule pursuant to statutory requirements that require lenders to disclose how borrowers' regular mortgage payments can change over time. The rule requires lenders' disclosures to include a table displaying the initial interest rate and monthly payment; the maximum rate and payment possible in the first five years; a worst case example of the maximum rate and payment over the life of the loan; and the fact that consumers might not be able to avoid increased payments by refinancing their loans. The rule also requires lenders to disclose features such as balloon payments or options to make only minimum payments that will cause loan amounts to increase (Press Release).
October 18, 2010	The Federal Reserve amended its Truth in Lending regulations to ensure that real estate appraisals used in assigning home values are based on the appraiser's independent professional judgment and that creditors and their agents pay customary and reasonable fees to appraisers, implementing a statutory requirement (Press Release).
December 22, 2010	The Federal Reserve issued a rule clarifying certain disclosure requirements associated with an earlier interim final rule (Press Release).
January 31, 2011	Six federal agencies announced that the Nationwide Mortgage Licensing System and Registry would begin accepting federal registrations. The announcement noted that the rules include an exception for mortgage loan originators that originated five or fewer mortgage loans during the previous 12 months and who have never been registered; those loan originators would not be required to complete the federal registration process (Press Release).

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February 23, 2011	The Federal Reserve issued a rule that implemented a statutory provision requiring escrow on jumbo first liens if the annual percentage rate (APR) is 2.5 percentage points or more above the average prime offer rate, rather than the former threshold of 1.5 percentage points established in the Federal Reserve's July 2008 rule (Press Release).
January 10, 2013	The Consumer Financial Protection Bureau (CFPB) issued a rule implementing statutorily required ability-to-repay (ATR) requirements for all new residential mortgages along with certain safe harbors. In general, lenders must document a borrower's employment status; income and assets; current debt obligations; credit history; monthly payments on the mortgage; monthly payments on any other mortgages on the same property; and monthly payments for mortgage-related obligations. Lenders must evaluate and conclude that the borrower can repay the loan, not just based on introductory or teaser rates but over the life of the loan. Lenders will be presumed to have complied with the ATR rule if they issue "Qualified Mortgages." These mortgages limit points and fees; do not exceed 30 years and do not have interest-only or negative amortization features; and generally will have borrower debt-to-income ratios less than or equal to 43 percent. The rule stated that for a temporary period, loans that do not have a 43 percent debt-to-income ratio but meet government affordability or other standards—such as that they are eligible for purchase by the Federal National Mortgage Association (Fannie Mae) or the Federal Home Loan Mortgage Corporation (Freddie Mac)—will be considered Qualified Mortgages. For higher-priced qualified mortgages, borrowers can rebut the presumption that they had the ability to repay the loan by establishing that they did not have this ability. For lower-priced qualified mortgages, borrowers can only challenge whether the loan met the definition of a qualified mortgage (Press Release).
January 10, 2013	The CFPB issued a rule applying to high-cost mortgages. For these mortgages, the rule generally bans balloon payments except for certain types of loans made by creditors serving rural or underserved areas, and bans penalties for paying the loan early; bans fees for modifying loans, caps late fees at four percent of the payment that is past due, generally prohibits closing costs from being rolled into the loan amount, and restricts the charging of fees when consumers ask for a payoff statement; prohibits encouraging a consumer to default on an existing loan to be refinanced by a high-cost mortgage; and requires consumers to receive housing counseling before taking out a high-cost mortgage. The rule also implements a statutory provision that generally extends the required duration of an escrow account on high-priced mortgage loans from a minimum of one year to a minimum of five years, except for some loans made by creditors that operate predominantly in rural or underserved areas (Press Release).
January 17, 2013	The CFPB issued a rule addressing mortgage servicing. The rule prohibits servicers from starting a foreclosure proceeding if a borrower has already submitted a complete application for a loan modification or other alternative to foreclosure and the application is still pending review. Servicers cannot make the first notice or filing required for the foreclosure process until a mortgage loan account is more than 120 days delinquent. Servicers must let borrowers know about their "loss mitigation options" to retain their home after borrowers have missed two consecutive payments. Servicers must provide delinquent borrowers with access to employees responsible for helping them. These personnel are responsible for alerting borrowers to any missing information on their applications, telling borrowers about the status of any loss mitigation application, and making sure documents get to the right servicing personnel for processing. The servicer must consider all foreclosure alternatives available from the mortgage owners or investors to help the borrower retain the home. Servicers cannot steer borrowers to those options that are most financially favorable for the servicer. Servicers must consider and respond to a borrower's application for a loan modification if it arrives at least 37 days before a scheduled foreclosure sale. If the servicer offers an alternative to foreclosure, it must give the borrower time to accept the offer before moving for foreclosure judgment or conducting a foreclosure sale. Servicers cannot foreclose on a property if the borrower and servicer have come to a loss mitigation agreement, unless the borrower fails to perform under that agreement. Servicers must provide regular statements which include: the amount and due date of the next payment; a breakdown of payments by principal, interest, fees, and escrow; and recent transaction activity. Servicers must provide a disclosure before the first time the interest rate adjusts for most adjustable-rate mortgages and must provide disclosures before interest rate adjustments that result in a different payment amount. Servicers must have a reasonable basis for concluding that a borrower lacks property insurance before purchasing a new policy. If servicers buy the insurance but receive evidence that it was not needed, they must terminate it within 15 days and refund the premiums. Servicers must credit a consumer's account the date a payment is received and must credit partial payments in a "suspense account" to the borrowers account once the amount in such an account equals a full payment. Servicers must generally provide a response to consumer requests for the payoff balances of their mortgage loans within seven business days of receiving a written request. Servicers must generally acknowledge receipt of written notices from consumers regarding certain errors or requesting information about their mortgage loans. Generally, within 30 days, the servicer must: correct the error and provide the information requested; conduct a reasonable investigation and inform the borrower why the error did not occur; or inform the borrower that the information requested is unavailable. Servicers must store borrower information in a way that allows it to be easily accessible. Servicers must have policies and procedures in place to ensure that they can provide timely and accurate information to borrowers, investors, and in any foreclosure proceeding, the courts. The rule makes certain exemptions for small servicers that service 5,000 or fewer mortgage loans that they or an affiliate either own or originated. These small servicers are mostly community banks and credit unions servicing mortgages for their customers or members (Press Release).

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January 18, 2013	The CFPB issued a rule implementing statutory provisions requiring that lenders give consumers a copy of each appraisal or other home value estimate free of charge (although a lender generally may still charge the consumer a reasonable fee for the cost of conducting the appraisal or other estimate). The rule also requires that creditors inform consumers within three days of receiving an application for a loan of their right to receive a copy of all appraisals. Creditors are required to provide the copies of appraisal reports and other written home-value estimates to consumers promptly, or three days before closing, whichever is earlier. The rule applies to first-lien mortgages (Press Release).
January 18, 2013	The CFPB issued a rule addressing steering incentives of mortgage loan originators. The rule prohibits compensation that varies with the loan terms; prohibits loan originator compensation by both the consumer and another person such as the creditor; sets qualification standards for loan originators including character, fitness, and financial responsibility reviews, criminal background checks, and training to ensure they have the knowledge about the rules governing the types of loans they originate; and generally prohibits mandatory arbitration of disputes related to mortgage loans and the practice of increasing loan amounts to cover credit insurance premiums. The mandatory arbitration provisions would ultimately be overturned (Press Release).
January 18, 2013	The CFPB and five other federal agencies issued a rule addressing appraisal requirements for higher-priced mortgage loans. The rule requires creditors to use a licensed or certified appraiser who prepares a written appraisal report based on a physical visit of the interior of the property; requires creditors to provide consumers with a free copy of any appraisal report; and if the seller acquired the property for a lower price during the prior six months and the price difference exceeds certain thresholds, the rule requires creditors to obtain a second appraisal at no cost to the consumer (this requirement is intended to address fraudulent property flipping by seeking to ensure that the value of the property legitimately increased). The rule exempts qualified mortgages, temporary bridge loans and construction loans, loans for new manufactured homes, and loans for mobile homes, trailers, and boats that are dwellings. The rule also has exemptions from the second appraisal requirement to facilitate loans in rural areas and other transactions (Press Release).
May 29, 2013	The CFPB amended its January 2013 ATR rule by exempting certain nonprofit and community-based lenders that work to help low- and moderate-income consumers obtain affordable housing; extending Qualified Mortgage status to certain loans that small creditors (including community banks and credit unions that have less than $2 billion in assets and each year make 500 or fewer first-lien mortgages) hold in their own portfolios even if the consumers' debt-to-income ratio exceeds 43 percent; providing a two-year transition period during which small lenders can make balloon loans under certain conditions and those loans will meet the definition of Qualified Mortgages; allowing small creditors to charge a higher APR for certain first-lien Qualified Mortgages while maintaining a safe harbor for the ATR requirements; and excluding compensation paid by a lender to a loan originator from counting towards the points and fees threshold used for identifying Qualified Mortgages (Press Release).
July 10, 2013	The CFPB amended its ability to repay and servicing rules. The rule clarifies and amends how several factors can be used to calculate a consumer's debt-to-income ratio; explains that CFPB servicing rules do not preempt the field of possible mortgage servicing regulation by states; clarifies which serviced mortgage loans will be considered in determining whether a servicer qualifies as small; and clarifies the standards that a loan must meet to be a Qualified Mortgage if the creditor is underwriting it based on GSE or agency guidelines (Press Release).
September 13, 2013	The CFPB issued revisions to some of its January 2013 mortgage rules. Among other things, the rule clarifies what servicer activities are prohibited in the first 120 days of delinquency; outlines procedures for obtaining follow-up information on loss-mitigation applications; makes it easier for servicers to offer short-term forbearance plans for delinquent borrowers who need only temporary relief without going through a full loss-mitigation evaluation process; clarifies best practices for informing borrowers about the address for error resolution documents; pending further study, exempts all small creditors, even those that do not operate predominantly in rural or underserved counties, from the ban on high-cost mortgages featuring balloon payments so long as the loans meet certain restrictions; makes it easier for certain small creditors to continue qualifying for an exemption from a requirement to maintain escrows on certain higher-priced mortgage loans; makes clarifications about financing of credit insurance premiums; and clarifies the circumstances under which a loan originator's or creditor's administrative staff acts as loan originators (Press Release).
November 20, 2013	The CFPB issued a rule requiring new mortgage disclosure forms that replaced then-existing federal disclosures; establishing when the new forms are to be given to the consumer; and limiting how the final deal can change from the original loan estimate. Under the rule, consumers will receive a Loan Estimate within three business days after they submit a loan application, replacing the early Truth in Lending statement and the Good Faith Estimate; and they will receive a Closing Disclosure, replacing the final Truth in Lending statement and the HUD-1 settlement statement, three business days before closing (Press Release).

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December 12, 2013	The CFPB and five other federal agencies issued a rule exempting a subset of higher-priced mortgage loans from appraisal requirements. Under the rule, loans of $25,000 or less and certain "streamlined" refinancings are exempt from the appraisal requirements; loans secured by an existing manufactured home and land will be subject to the appraisal requirements; loans secured by a new manufactured home and land will be exempt only from the requirement that the appraiser visit the home's interior; and for loans secured by manufactured homes without land, creditors will be allowed to use other valuation methods without an appraisal (Press Release).
July 8, 2014	The CFPB issued a rule clarifying that adding the name of an heir to the mortgage of a deceased borrower does not trigger the ability-to-repay requirements (Press Release).
October 22, 2014	The CFPB finalized a rule that helped some nonprofit organizations meet the servicing rule's requirements for the small servicer exemption; that helped some nonprofit organizations continue to extend certain interest-free, forgivable loans, also known as "soft seconds," without regard to the 200-mortgage loan limit in the rule while still retaining their exemption from the rule; and that clarified the circumstances in which, through January 10, 2021, a lender can refund points and fees after the loan has closed so as to avoid exceeding the cap on points and fees for a Qualified Mortgage (Press Release).
January 20, 2015	The CFPB issued a rule that extended the deadline within which creditors are required to provide a revised Loan Estimate to within three business days after a consumer locks in a floating interest rate, rather than on the same day as required in the original rule. The rule also created a space on the Loan Estimate form where creditors could include language informing consumers that they may receive a revised Loan Estimate for a construction loan that is expected to take more than 60 days to settle (Press Release).
April 30, 2015	The CFPB and five federal agencies issued a rule implementing statutory requirements to develop standards for appraisal management companies. The rule primarily affects state supervision of these companies and a very small number of banks that own or control such companies (Press Release).
September 21, 2015	The CFPB issued amendments to some of its mortgage rules to, among other things, expand the origination test in the definition of small creditor to creditors originating 2,000 or fewer first lien mortgages per year rather than 500 and exclude loans held in portfolio by the creditor and its affiliates, clarify that the $2 billion asset test includes the assets of mortgage-originating affiliates, expand the definition of rural areas and provide a look-up tool to help creditors identify whether a location is rural, and provide additional time (until April 1, 2016) for small creditors' balloon loans to be considered Qualifying Mortgages (Press Release).
October 15, 2015	The CFPB issued a rule implementing statutory changes to data collection under the Home Mortgage Disclosure Act (HMDA). New items required to be reported by covered institutions include the property value, term of the loan, and the duration of any teaser or introductory interest rates; and information about mortgage loan underwriting and pricing, such as an applicant's debt-to-income ratio, the interest rate of the loan, and the discount points charged for the loan. The rule also requires that covered lenders report, with some exceptions, information about all applications and loans secured by dwellings, including reverse mortgages and open-end lines of credit. Small depository institutions located outside a metropolitan statistical area remain excluded from coverage, and in addition, under the rule small depository institutions that have a low loan volume (less than 25 closed-end loans and less than 100 open-end loans over each of the two preceding calendar years) will no longer have to report HMDA data (Press Release).
March 22, 2016	The CFPB issued a rule implementing a statutory provision that provides broader eligibility for lenders serving rural or underserved areas to originate balloon-payment qualified and high-cost mortgages. Under the rule, a small creditor will be eligible for balloon payment and high-cost balloon payment exemptions from the Qualifying Mortgage rule and will not be required to collect escrow for those loans if it originates at least one covered mortgage loan on a property located in a rural or underserved area in the prior calendar year (Press Release).
August 4, 2016	The CFPB issued a rule that, among other things, requires mortgage servicers to provide certain borrowers with foreclosure protections more than once over the life of the loan; expands consumer protections to surviving family members upon the death of a borrower; requires servicers to provide borrowers in bankruptcy periodic statements with specific information tailored for bankruptcy, as well as a modified written early intervention notice to let those borrowers know about loss mitigation options; requires servicers to notify borrowers when loss mitigation applications are complete; clarifies obligations of a new servicer when servicing is transferred; clarifies servicers' obligations to avoid dual-tracking and prevent wrongful foreclosures; and clarifies when a borrower becomes delinquent (Press Release).
August 24, 2017	The CFPB issued a rule temporarily changing certain HMDA data reporting requirements (Press Release).
September 20, 2017	The CFPB issued a rule providing greater flexibility and clarity to certain mortgage lenders regarding the collection of data about race (Press Release).
October 4, 2017	The CFPB issued a rule that, among other things, gives servicers a longer, ten-day window to provide required early intervention notices to certain consumers at risk of foreclosure who have requested a cease in communication under the Fair Debt Collection Practices Act (Press Release).

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August 31, 2018	The CFPB issued a rule providing a number of technical clarifications regarding HMDA data reporting exemptions in light of burden-reducing statutory changes (Press Release).
October 10, 2019	The CFPB issued a rule that, among other things, extended until January 1, 2022, the CFPB's temporary HMDA reporting threshold, announced in 2017, for reporting open-end lines of credit. Under the rule, financial institutions that originated fewer than 500 open-end lines of credit in either of the two preceding calendar years will not need to collect and report data with respect to open-end lines of credit (Press Release).
November 15, 2019	The CFPB issued a rule clarifying screening and training requirements for financial institutions that employ loan originators with temporary authority. The rule clarifies that the lender is not required to conduct the screening and ensure the training of loan originators with temporary authority, but instead may rely on the screening and training performed by the state as part of its review of the individual's application for a state loan originator license (Press Release).
Consumer Credit and Retail Payments	
December 18, 2008	The Federal Reserve issued a rule prohibiting certain credit card practices by placing limits on interest rate increases during the first year or on pre-existing balances, forbidding "two-cycle billing," requiring that consumers receive a reasonable amount of time to make payments, and limiting fees on subprime cards. The Federal Reserve also revised the disclosures credit-card and revolving-credit customers must receive (Press Release).
July 2, 2009	Seven federal agencies jointly issued a rule establishing duties of entities that furnish information to credit reporting agencies, including the duty to investigate disputes in certain instances at a customer's request (Press Release).
July 15, 2009	The Federal Reserve issued a rule requiring lenders to provide written notice to credit card customers 45 days before increasing an interest rate or making other significant changes in terms, notifying them of their ability the cancel the card before the terms take effect, and specifying statements be mailed at least 21 days before the payment due date (Press Release).
November 12, 2009	The Federal Reserve issued a rule prohibiting financial institutions from charging customers fees for paying overdrafts on automated teller (ATM) transactions and one-time debit card transactions unless the customer opts into, and receives disclosures about, the institution's overdraft program (Press Release).
December 22, 2009	The Federal Reserve and Federal Trade Commission (FTC) issued rules requiring creditors to provide consumers with a notice when the creditor provides credit on less favorable terms than it provides credit to other customers, based on a credit report. Customers who receive such notices will be able to obtain a free copy of their credit report to check its accuracy. As an alternative, creditors may provide consumers with a free credit score and information about the score (Press Release).
January 12, 2010	The Federal Reserve amended aspects of its December 2008 credit card rule, and prohibited the issuance of a credit card to a borrower under the age of 21 unless that person has the ability to make the payments or obtains the signature of a parent or co-signer with the ability to do so. The rule also requires creditors to obtain a customer's consent before charging fees for transactions that exceed the credit limit, and prohibits creditors from allocating payments in a way that maximizes interest charges (Press Release).
March 23, 2010	The Federal Reserve issued a rule placing restrictions on the fees and expiration dates associated with gift cards. The rules are designed to protect customers against unexpected costs and require that terms and conditions be clearly stated. Inactivity fees are not permitted unless the customer has not used the card for at least one year, may not be charged more frequently than once per month, and cards may not expire in less than five years after issuance or last use (Press Release).
May 28, 2010	The Federal Reserve issued a rule making clarifications and technical changes to two of its earlier rules regarding overdraft services (Press Release).
June 15, 2010	The Federal Reserve issued a rule prohibiting late fees on credit cards of more than $25 unless the borrower has been repeatedly late or the lender can demonstrate the fee is justified by the costs the lender incurs; prohibiting penalty fees exceeding the dollar amount of the late payment; prohibiting inactivity fees; prohibiting multiple fees based on a single late payment; and requiring lenders to reconsider whether interest rate increases since January 1, 2009, were warranted (Press Release).
August 11, 2010	The Federal Reserve issued a rule implementing a statutory extension of the effective date of certain required gift card disclosures provided several conditions are met (Press Release).
March 18, 2011	The Federal Reserve issued a rule prohibiting credit card applications from requesting "household income" (but instead individual income as that more specifically reflects the borrower's ability to pay); stating that waiving interest for a period of time does not exempt lenders from the requirements of the Credit Card Act (Credit Card Accountability Responsibility and Disclosure Act of 2009); and stating that fees charged before an account is opened count toward the Credit Card Act's fee limitations (i.e., that fees cannot exceed 25 percent of the account's initial credit limit) (Press Release).

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March 25, 2011	The Federal Reserve issued a rule that implemented a statutory requirement to expand coverage of truth-in-lending rules to all consumer loans of up to $50,000, with future inflation adjustments, up from the earlier threshold of $25,000. As an exception to these thresholds, truth in lending rules continued to apply to student loans and loans secured by real property regardless of amount (Press Release).
July 6, 2011	The Federal Reserve and FTC issued a rule revising the content requirements for risk-based pricing notices that customers must receive if a credit score is used in setting material terms of credit or in taking adverse action. The rule also revised certain model notices lenders can use to satisfy the disclosure requirements (Press Release).
July 12, 2011	The FDIC issued a rule describing the requirements that must be satisfied for FDIC-supervised banks to enter into retail foreign exchange transactions with customers. Pursuant to a statutory requirement, a financial institution for which there is a federal regulatory agency shall not enter into retail foreign exchange transactions except in compliance with rules established by the relevant regulatory agency. The rule required banks wishing to enter in a foreign exchange business to, among other things, obtain the written consent of the FDIC, maintain records, and provide risk disclosure statements to customers (Federal Register Notice).
January 20, 2012	The CFPB issued a rule implementing a statutory requirement for providers of international remittances to disclose the exchange rates and fees associated with the transactions and to investigate disputes and remedy errors. International money transfers were generally excluded from consumer protection regulations prior to the Dodd Frank Act (Press Release).
August 7, 2012	The CFPB amended its January 2012 remittance rule to exempt remittance providers making fewer than 100 remittances per year from being subject to the rule (Press Release).
March 22, 2013	The CFPB issued a rule reversing the provision of the Federal Reserve's March 2011 credit card rule which included fees charged before account opening in the Credit Card Act's overall cap on fees. As a result of a court injunction blocking the 2011 provision from taking effect, the CFPB rule eliminated it (Press Release).
April 29, 2013	The CFPB issued a rule modifying the Federal Reserve's March 2011 credit card rule with respect to applications from stay-at-home spouses or partners. The CFPB rule stated that lenders can consider such a spouse's or partner's reasonably anticipated income (Press Release).
April 30, 2013	The CFPB amended its remittance rule by making the disclosure of foreign taxes or fees charged by the receiving institution optional, provided that the remittance provider disclosed that such fees might apply, and by stating that the remittance provider is not liable for losses that result from the sender furnishing incorrect information about the recipient (Press Release).
August 22, 2014	The CFPB amended its remittance rule by extending a temporary statutory exception allowing institutions to estimate third-party fees and exchange rates when providing remittance transfers to their account holders for which they cannot determine exact amounts, and making technical and clarifying changes related to error resolution procedures, permissible methods to deliver disclosures, and other matters (Press Release).
October 20, 2014	The CFPB issued a rule providing that institutions can post privacy notices online instead of mailing them, if, among other things, they only share customer data in a way that does not trigger opt-out requirements. Institutions using this option must use model disclosure forms (Press Release).
April 15, 2015	The CFPB issued a rule temporarily suspending a requirement that each quarter certain credit card issuers send their agreements to the CFPB, which publishes them in a public database on its website. Card issuers' obligations to post these agreements on their own publicly available websites remained unaffected. The Credit Card Act requires that credit card issuers post consumer credit card agreements on their websites as well as submit those agreements to the CFPB. These agreements feature general terms and conditions, pricing, and fee information (Press Release).
October 5, 2016	The CFPB issued a rule providing protections for prepaid account users. The rule requires financial institutions to limit consumers' losses when funds are stolen or cards are lost and to investigate and resolve errors and give consumers free access to account information; requires "Know Before You Owe" disclosures about fees and terms for prepaid accounts; and provides protections similar to those for credit cards if consumers are allowed to use credit on their accounts (Press Release).
October 5, 2017	The CFPB issued a rule applying ability to pay requirements for certain short-term or high-cost loan products such as payday loans, vehicle title loans, deposit advance products, or some longer term balloon loans, and restricting lenders' ability to debit payments on such loans from a borrower's bank account. Most common types of bank loans were specifically exempted (Press Release).
January 25, 2018	The CFPB amended its 2016 prepaid accounts rule by, among other things, providing that error resolution and liability limitation protections apply prospectively, after a consumer's identity has been verified; creating a limited exception to the prepaid account rule for certain business relationships involving prepaid accounts linked to traditional credit card products; and allowing negative balances on prepaid accounts in certain circumstances without triggering Regulation Z requirements (Press Release).

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August 10, 2018	The CFPB finalized a rule implementing a legislative provision under which institutions would not have to provide a privacy notice. The conditions are that no opt-out rights are triggered by the institution's privacy policy and no changes have been made to the privacy policy since the most recent disclosure sent to consumers (Press Release).
September 12, 2018	The CFPB issued a rule implementing statutory amendments to consumers' rights under the Fair Credit Reporting Act. The rule applies to credit reporting agencies but would affect banks' ability to access credit reports if a customer has requested a freeze on access to these reports based on a possibility of identity theft (Press Release).
General Safety-and-Soundness	
April 24, 2008	The OCC issued a rule making a number of technical burden-reducing changes to its regulations (Press Release).
May 29, 2009	The FDIC issued a rule changing its definition of how interest rates substantially exceeding prevailing interest rates would be defined for purposes of implementing the statutory prohibition on banks that are less than well capitalized soliciting and accepting deposits at such "substantially exceeding" interest rates. Under the rule, the FDIC would post a national rate for deposits of various types and maturities based on information it received from a data vendor, and a deposit interest rate would "substantially exceed" if it exceeds the corresponding national rate by more than 75 basis points. The earlier definition of substantially exceeds had been based on a comparison to Treasury yields (Press Release).
June 20, 2012	The OCC issued a rule that incorporated derivatives exposures and securities financing transactions into its legal lending limit regulation, as required by statute. The rule included a lookup table approach to limit burden to small institutions (Press Release).
July 24, 2012	The FDIC issued a rule governing permissible investments of federal and state savings associations, eliminating references to credit ratings as required by statute. A similar OCC rule was issued in June of the same year (Federal Register Notice).
October 9, 2012	The Federal Reserve issued rules implementing the Dodd Frank Act's requirements for company-run stress tests for banking organizations with consolidated assets exceeding $10 billion. The FDIC and OCC issued substantively similar rules. The rules were relevant to large community banks whose actual or planned assets might have exceeded $10 billion as a result of organic growth or merger (Press Release).
December 10, 2013	Five federal agencies issued rules implementing section 619 of the Dodd Frank Act, also known as the Volcker Rule. The rule prohibited all banking organizations from engaging in proprietary trading as it defined that term, and from owning or sponsoring hedge funds and private equity funds as it defined those terms. On the same day, the Federal Reserve announced that banking organizations would have until July 21, 2015, to conform their activities to the new rule. That conformance period subsequently was extended by one year, and again by a second year (Press Release).
October 22, 2014	Six federal agencies issued a rule implementing statutory risk retention requirements for securitizations. The rule requires securitizers to retain at least 5 percent of the credit risk of securitizations, subject to a number of exceptions. While the rule is not relevant to most community banks, a community bank that wished to become an active securitizer would need to determine whether, or how, the rule applies (Press Release).
October 30, 2015	Five federal agencies issued a rule exempting certain end users of derivatives that are small banks from statutory requirements for margin requirements for non-cleared swaps (Press Release).
February 19, 2016	The federal banking agencies issued a rule expanding the set of institutions eligible for an 18-month examination cycle. The maximum asset threshold for eligibility was increased from $500 million to $1 billion, along with other qualifying factors, as a result of a statutory change (Press Release).
December 15, 2016	The OCC issued a rule that implemented a variety of technical burden-reducing changes to its regulations (Press Release).
December 28, 2016	The OCC issued a rule prohibiting national banks from investing in or dealing in commercial or industrial metals (Press Release).
April 2, 2018	The federal banking agencies issued a rule increasing the threshold for commercial real estate transactions that require an appraisal from $250,000 to $500,000 (Press Release).
July 6, 2018	The federal banking agencies issued a statement explaining, among other things, that company-run stress tests would no longer be required for institutions with assets between $10 billion and $100 billion, as a result of the agencies' implementation of a statutory requirement (Press Release).
August 23, 2018	The federal banking agencies issued a rule expanding the set of institutions eligible for an 18-month examination cycle. The maximum asset threshold for eligibility was increased from $1 billion to $3 billion, along with other qualifying factors, as a result of a statutory change (Press Release).

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December 19, 2018	The FDIC issued a rule implementing a statutory requirement that the FDIC exempt a portion of reciprocal deposits from being defined as brokered deposits under certain circumstances (Press Release).
May 24, 2019	The OCC issued a rule permitting federal savings associations to elect to operate with national bank powers and be subject to national bank obligations. The rule implemented a statutory requirement (Press Release).
July 9, 2019	Five federal agencies issued a rule implementing a statutory exemption of most small banks (banks with $10 billion or less in total consolidated assets and total trading assets and liabilities of 5 percent or less of total consolidated assets) from the Volcker Rule (Press Release).
September 27, 2019	The federal banking agencies issued a rule to increase the threshold for residential real estate transactions requiring an appraisal from $250,000 to $400,000 (Press Release).
Bank Secrecy Act and Law Enforcement	
November 12, 2008	The Federal Reserve and Treasury issued a rule to implement statutory requirements regarding unlawful internet gambling. The rule requires U.S. financial firms that participate in designated payment systems (including most banks) to establish and implement policies and procedures that are reasonably designed to prevent payments to gambling businesses in connection with unlawful internet gambling, provides examples of such policies and procedures, and describes the regulatory enforcement framework (Press Release).
December 4, 2008	The Financial Crimes Enforcement Network (FinCEN) of the U.S. Treasury issued a rule to simplify the requirements for depository institutions to exempt their eligible customers from currency transaction reporting (Press Release).
July 26, 2011	FinCEN issued a rule that put in place suspicious activity reporting, and customer and transactional information collection requirements on providers and sellers of certain types of prepaid access devices such as plastic cards, mobile phones, electronic serial numbers, key fobs, and other mechanisms that provide a portal to funds that have been paid for in advance and are retrievable and transferable. The rule generally exempted small balance products and was issued pursuant to a statutory requirement (Press Release).
December 3, 2013	The FinCEN and the Federal Reserve announced a rule amending the definitions of "funds transfer" and "transmittal of funds" under regulations implementing the Bank Secrecy Act (Press Release).
May 5, 2016	FinCEN issued a Customer Due Diligence rule requiring financial institutions to identify and verify the identity of the beneficial owners of companies opening accounts; understand the nature and purpose of customer relationships to develop customer risk profiles; and conduct ongoing monitoring to identify and report suspicious transactions and, on a risk basis, to maintain and update customer information. With respect to the new requirement to obtain beneficial ownership information, financial institutions will have to identify and verify the identity of any individual who owns 25 percent or more of a legal entity, and an individual who controls the legal entity (Press Release).
Bank Failure Resolution	
July 17, 2008	The FDIC issued a rule clarifying how it computes deposit account balances for deposit insurance purposes, and requiring institutions to disclose to sweep customers how their sweeps would be treated by the FDIC in the event of the bank's failure (Financial Institution Letter).
December 18, 2008	The FDIC issued a rule requiring that, upon written notification from the FDIC, an insured bank in a troubled condition must produce immediately at the close of processing of the institution's business day, for a period provided in the notification, the electronic files for certain Qualified Financial Contracts' (QFCs) position and counterparty data; electronic or written lists of QFC counterparty and portfolio location identifiers, certain affiliates of the institution and the institution's counterparties to QFC transactions, contact information and organizational charts for key personnel involved in QFC activities, and contact information for vendors for such activities; and copies of key agreements and related documents for each QFC. The rule allows 60 days from the written notification for an institution to comply and includes provision for additional requests for delay, and includes a de minimis provision such that institutions with fewer than 20 QFC contracts need only have the capability to update records on a daily basis rather than actually provide the records to the FDIC (Financial Institution Letter).
July 31, 2017	The FDIC issued a rule expanding the QFC recordkeeping requirements (to conform to certain U.S. Treasury regulations) for large insured institutions (assets greater than $50 billion) and, for all other institutions, adding and deleting a limited number of QFC data requirements and making certain formatting changes with respect to the QFC recordkeeping requirements (Federal Register Notice).

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Pricing of Bank Products and Services	
May 20, 2009	The Federal Reserve issued a rule liberalizing the number and type of transfers a customer can make between savings and checking accounts, and making it easier for community banks to earn interest on excess balances at Federal Reserve banks (Press Release).
June 29, 2011	The Federal Reserve issued a rule establishing standards for debit card interchange fees and prohibiting network exclusivity arrangements and routing restrictions, as required by statute. Under the rule, the maximum permissible interchange fee that an issuer may receive for an electronic debit transaction is the sum of 21 cents per transaction and 5 basis points multiplied by the value of the transaction. A related rule allows for an upward adjustment of no more than 1 cent to an issuer's debit card interchange fee if the issuer develops and implements policies and procedures reasonably designed to achieve certain fraud-prevention standards. If an issuer meets these standards and wishes to receive the adjustment, it must certify its eligibility to receive the adjustment to the payment card networks in which it participates. In accordance with the statute, issuers that, together with their affiliates, have assets of less than $10 billion are exempt from the debit card interchange fee standards. The rule prohibits all issuers and networks from restricting the number of networks over which electronic debit transactions may be processed to less than two unaffiliated networks. Issuers and networks are also prohibited from inhibiting a merchant's ability to direct the routing of the electronic debit transaction over any network that the issuer has enabled to process them (Press Release).
July 14, 2011	The Federal Reserve issued a rule implementing a statutory requirement to repeal Regulation Q, Prohibition Against Payment of Interest on Demand Deposits. The rule was effective July 21, 2011 (Press Release).
Competition and Banking Industry Structure	
November 5, 2014	The Federal Reserve issued a rule implementing a statutory prohibition on acquisitions if the resulting company has more than 10 percent of all U.S. financial institution liabilities (Press Release).
October 2, 2019	The federal banking agencies issued a rule increasing the major assets threshold in the management interlocks rule to $10 billion. The major assets prohibition had previously precluded a management official of a depository organization with total assets exceeding $2.5 billion (or any affiliate of such an organization) from serving at the same time as a management official of an unaffiliated depository organization with total assets exceeding $1.5 billion (or any affiliate of such an organization), regardless of the location of the two depository organizations. Under the rule, the $1.5 billion and $2.5 billion thresholds are changed to $10 billion respectively. Other prohibitions in the management interlocks rule, that prevent a management official from serving at the same time as a management official of an unaffiliated depository organization in the same community or relevant metropolitan statistical area, remained unchanged (Press Release).
Financial Reporting and Auditing	
June 23, 2009	The FDIC issued a rule applicable to covered insured institutions that, among other things: requires disclosure of the internal control framework and identified material weaknesses; requires management's assessment of compliance with laws and regulations to disclose any noncompliance; clarifies accountant independence standards; requires certain communications to audit committees; establishes retention requirements for audit working papers; specifies audit committee's duties regarding the independent public accountant, including ensuring that audit engagement letters do not contain unsafe and unsound limitation of liability provisions; requires boards of directors to employ written criteria for evaluating audit committee members' independence; and states that the assets of a holding company's bank subsidiaries must be at least 75 percent of the holding company's consolidated assets for its bank subsidiaries to be able to satisfy the audit requirements at the holding company level. Covered insured institutions are generally those with at least $1 billion in assets for purposes of internal control assessments and at least $500 million for purposes of other requirements (Financial Institution Letter).
November 30, 2010	The FDIC issued a rule revising its securities disclosure regulations applicable to state nonmember banks with securities required to be registered under section 12 of the Securities Exchange Act of 1934 (Exchange Act). The rule cross-references changes in regulations adopted by the Securities and Exchange Commission (SEC) into the provisions of the FDIC's securities regulations (Federal Register Notice).
May 6, 2016	The FDIC issued a rule requiring insured State savings associations and subsidiaries of such State savings associations that act as transfer agents for qualifying securities to register with the FDIC, similar to the registration requirements applicable to insured State nonmember banks and subsidiaries of such banks (Federal Register Notice).
March 20, 2019	The FDIC issued a rule removing certain disclosure requirements applicable to State nonmember banks. The disclosures being removed had been made redundant by the availability of more timely and complete information available in Call Reports or on the FDIC's website (Financial Institution Letter).

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June 17, 2019	The federal banking agencies announced pursuant to a statutory requirement that they would permit insured depository institutions with total assets of less than $5 billion that do not engage in certain complex or international activities to file the most streamlined version of the Call Report, the FFIEC 051 Call Report. The previous asset size threshold for use of the FFIEC 051 Call Report was $1 billion. Institutions had begun using the new Call Report as of the March 31, 2017, report date (Press Release).
Other Agency Actions Related to Consumers and Communities	
August 21, 2008	The OCC issued a rule to encourage public welfare investments by national banks (Press Release).
January 6, 2009	The federal banking agencies issued revised Interagency Questions and Answers Regarding Community Reinvestment that, among other things, encouraged financial institutions to take steps to help prevent home mortgage foreclosures. The agencies use Questions and Answers to assist institutions in compliance with the agencies' Community Reinvestment Act (CRA) regulations and provide related information to financial institutions and the public (Press Release).
July 21, 2009	Six federal agencies issued revised Interagency Questions and Answers Regarding Flood Insurance. The Questions and Answers, which relate to the agencies' flood insurance rules, provided technical information on a number of matters (Press Release).
July 30, 2009	The Federal Reserve issued a rule requiring that private education lenders provide disclosures about loan terms and features at time of application and that they must also disclose information about federal student loan programs that may offer less costly alternatives. Additional disclosures are required when the loan is approved and when consummated (Press Release).
November 17, 2009	Eight federal agencies released a final model privacy notice form intended to make it easier for consumers to understand how financial institutions collect and share information about consumers. Under the Gramm-Leach-Bliley Act, institutions must notify consumers of their information-sharing practices and inform consumers of their right to opt out of certain sharing practices. The model form can be used by financial institutions to comply with these requirements (Press Release).
September 29, 2010	The federal banking agencies issued a rule revising their Community Reinvestment Act regulations to implement statutory factors that CRA ratings must consider, including making low-cost higher education loans to low-income borrowers (Press Release).
December 15, 2010	The federal banking agencies issued rules changing their Community Reinvestment Act regulations to support stabilization of communities affected by high foreclosure levels (Press Release).
November 15, 2013	The federal banking agencies issued revised Interagency Questions and Answers Regarding Community Reinvestment that focused on how banks' support to community development activities may contribute to an outstanding CRA rating (Press Release).
June 22, 2015	Five federal agencies issued rules implementing statutory flood insurance requirements. The rule requires institutions to escrow flood insurance premiums and fees for loans secured by residential improved real estate or mobile homes made on or after January 1, 2016, unless the loan qualifies for a statutory exception; exempts certain institutions from this escrow requirement if they have total assets of less than $1 billion; requires institutions to provide certain borrowers the option to escrow flood insurance premiums and fees; exempts detached structures that are not residences from the requirement to purchase flood insurance (although lenders may choose to require flood insurance); implements statutory provisions regarding force placement by clarifying that regulated lending institutions have the authority to charge a borrower for the cost of force-placed flood insurance coverage beginning on the date on which the borrower's coverage lapses or becomes insufficient; and identifies when a lender must terminate force-placed flood insurance coverage and refund payments to a borrower (Press Release).
July 15, 2016	The federal banking agencies issued revised Interagency Questions and Answers Regarding Community Reinvestment to assist institutions in compliance with the agencies' CRA regulations with respect to various matters (Press Release).
November 20, 2017	The federal banking agencies issued rules amending their respective Community Reinvestment Act regulations to conform to changes made by the CFPB to Regulation C, which implements the Home Mortgage Disclosure Act (such consistency has been a practice since 1995, and is intended to make the rules less burdensome), and to eliminate obsolete references to the Neighborhood Stabilization Program (Press Release).

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February 12, 2019	Five federal regulatory agencies issued rules to implement statutory provisions requiring regulated institutions to accept certain private flood insurance policies in addition to National Flood Insurance Program policies. The rule requires that regulated lending institutions accept private flood insurance policies that satisfy criteria specified in law; allows institutions to rely on an insurer's written assurances in a private flood insurance policy stating the criteria are met; clarifies that institutions may, under certain conditions, accept private flood insurance policies that do not meet the criteria; and allows institutions to accept certain flood coverage plans provided by mutual aid societies, subject to agency approval (Press Release).
Back-Office Functions	
September 24, 2009	The Federal Reserve issued a rule revising its Regulation S, governing the reimbursable costs for financial institutions' providing customer records in response to government agency requests (Press Release).
May 31, 2017	The Federal Reserve issued a rule revising its Regulation CC. The rule creates a framework for electronic check collection and return and creates new warranties for electronic checks, which will result in a consistent warranty chain regardless of the check's form. As with existing rules for paper checks, the parties may, by mutual agreement, vary the effect of the amendments' provisions as they apply to electronic checks and electronic returned checks. The final amendments also modify the expeditious-return and notice of nonpayment requirements to create incentives for electronic presentment and return (Press Release).
June 1, 2018	The FDIC and OCC issued rules to shorten the standard settlement cycle for securities purchased or sold by OCC-supervised and FDIC-supervised institutions. The rule requires banks to settle most securities transactions within the number of business days in the standard settlement cycle followed by registered broker dealers in the United States unless otherwise agreed to by the parties at the time of the transaction. In doing so, the rule aligns the settlement cycle requirements of the OCC, FDIC, and Board of Governors of the Federal Reserve System. On September 5, 2017, the securities industry in the United States transitioned from a standard securities settlement cycle of three business days after the date of the contract, commonly known as T+3, to a two-business-day standard, or T+2 (Press Release).
September 12, 2018	The Federal Reserve issued a rule further amending its Regulation CC. The rule addresses situations where there is a dispute as to whether a check has been altered or was issued with an unauthorized signature, and the original paper check is not available for inspection. This rule adopts a presumption of alteration for disputes between banks over whether a substitute check or electronic check contains an alteration or is derived from an original check that was issued with an unauthorized signature of the drawer (Press Release).
November 15, 2018	The Federal Reserve issued a rule amending its Regulation J, which among other things governs the collection of checks by the Federal Reserve banks and the obligations of parties that send and receive payment items to and from those banks. The amendments clarify and simplify certain provisions of Regulation J, remove obsolete provisions, and align the rights and obligations of sending banks, paying banks, and Federal Reserve Banks (Reserve Banks) with the Board's amendments to Regulation CC to reflect the virtually all-electronic check collection and return environment (Press Release).
June 24, 2019	The Federal Reserve and the CFPB jointly published amendments to Regulation CC that implement a statutory requirement to adjust for inflation the amount of funds depository institutions must make available to their customers (Press Release).

Federal Deposit Insurance Corporation

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