DEPOSIT GROWTH SLOWS AND OFFICE DECLINE CONTINUES

2018 Summary of Deposits Highlights

The 2018 Summary of Deposits Survey (SOD) showed that FDIC-insured institutions reported an increase in deposits and a decrease in offices over the past year. The decrease in the number of offices continues a trend that began a decade earlier. The number of offices operated by both community banks and noncommunity banks has decreased, but the office opening and closing patterns of these two types of institutions has differed markedly. During the year ended June 2018, currently operating noncommunity banks added offices through bank acquisitions but closed far more offices than they opened. In contrast, currently operating community banks added offices through acquisitions and opened still more offices, on net, during the year.

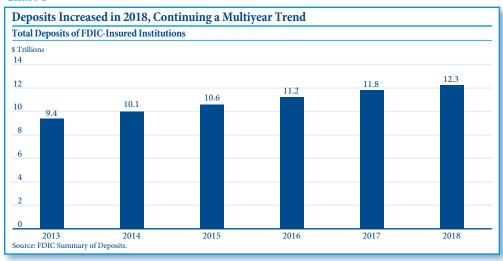
This article will describe these trends in detail and will follow up FDIC analysis that examined factors likely associated with bank office closures.³ This article looks at the association between office closures and changes in profitability and efficiency. Analysis of Call Report data indicates that banks that closed offices at higher rates between 2013 and 2018 reported improved efficiency ratios and stronger profitability. Other banks reported smaller improvements in efficiency ratios and profitability, with little difference between banks that increased offices and banks that reduced offices at a slower rate.

The decision to open or close offices reflects bank-specific factors, and the experience at one group of banks cannot be assumed to be relevant for other banks. The analysis presented in this article should be viewed as further context for the decisions that bank executives made to close offices.

Total Deposits of FDIC-Insured Institutions Continue to Increase

Total deposits held by FDIC-insured institutions increased from \$11.81 trillion in June 2017 to \$12.26 trillion in June 2018—an increase of \$450 billion or 3.8 percent (Chart 1).⁴ The rate of deposit growth over the year was slower than the 5.4 percent five-year average annual growth rate for the period ended in 2018.⁵ Deposits increased even though the number of institutions declined from 5,787 to 5,541 and the number of offices declined from 89,839 to 88,053. Deposits per institution increased 8.4 percent to \$2.2 billion in 2018. Deposits per office increased 5.9 percent from \$131 million in 2017 to \$139 million in 2018.

Chart 1



¹ "Deposits" refers to deposits in domestic offices of FDIC-insured institutions—meaning offices located in the United States, U.S. territories, and possessions. U.S. offices of foreign institutions and their deposits are not included.

² Community banks are identified using criteria in the *FDIC Community Banking Study*, December 2012, https://www.fdic.gov/regulations/resources/cbi/report/cbi-full.pdf. The merger adjustment that is the basis for this statement about patterns of openings and closings is explained in detail in this article.

 $^{^3}$ See Nathan Hinton, Derek Thieme, and Angela Woodhead, "Factors Shaping Recent Trends in Banking Office Structure for Community and Noncommunity Banks," FDIC Quarterly 11, no. 4 (2017): 31–40, $\underline{\text{https://www.fdic.gov/bank/analytical/quarterly/2017-vol11-4/fdic-v11n4-3q2017-article1.pdf}.$

⁴ All figures are as of June 30 in each year and all growth rates are between SOD filings, which report data as of June 30 each year. ⁵ The five-year compound annual growth rate represents the average annual rate of growth that would produce the net change over five years. For simplicity, it will be referred to here as "five-year annual growth."

Deposit Growth Slows at Community and Noncommunity Banks Nationally

Both community and noncommunity banks reported a decline in merger-adjusted deposit growth rates during the year ended June 2018.⁶ Year-over-year merger-adjusted deposit growth at community banks was 4.9 percent, slightly less than their five-year annual deposit growth rate of 5.1 percent. For noncommunity banks, year-over-year merger-adjusted deposit growth was 3.6 percent, well below their five-year annual deposit growth rate of 5.5 percent. Between 2013 and 2018, noncommunity banks increased total deposits by 30.8 percent from \$7.988 billion to \$10.445 billion, and community banks increased deposits 28.3 percent from \$1.417 billion to \$1.818 billion on a merger-adjusted basis.

The Number of U.S. Bank Offices Continues to Decline

The number of offices operated by FDIC-insured institutions has declined steadily since June 2009. The trend continued during the year ended in June 2018 as the number of offices declined by 1,786 (2.0 percent) to 88,053. This is the second-fastest rate of decline in U.S. bank offices since the trend began and exceeds the five-year annual decline of 1.8 percent. The number of offices operated by FDIC-insured institutions has declined by 8,277, or 8.6 percent, over the past five years.

Using SOD Deposit Data for Geographic Research Requires Caution

The Summary of Deposits (SOD) is a unique source of information about the number and physical locations of the tens of thousands of bank offices across the United States. The SOD data also include a dollar amount of deposits for each bank office. Methods used by banks for attributing deposits to bank offices may differ considerably from bank to bank, as described below. Accordingly, researchers should be cautious about using SOD data to draw firm conclusions about the geographical distribution of banking activity.

The full reporting instructions for the SOD can be found at https://www.fdic.gov/regulations/ resources/call/sod-reporting-instructions.pdf.

The relevant reporting instructions are to the right.

Institutions should assign deposits to each office in a manner consistent with their existing internal record-keeping practices. The following are examples of procedures for assigning deposits to offices:

- Deposits assigned to the office in closest proximity to the account holder's address
- Deposits assigned to the office where the account is most active
- Deposits assigned to the office where the account was opened
- Deposits assigned to offices for branch manager compensation or similar purposes

Other methods that logically reflect the deposit-gathering activity of the financial institution's branch offices may also be used. It is recognized that certain classes of deposits and deposits of certain types of customers may be assigned to a single office for reasons of convenience or efficiency. However, deposit allocations that diverge from the financial institution's internal record-keeping systems and grossly misstate or distort the deposit-gathering activity of an office should not be utilized.

⁶Throughout this article, merger adjustment refers to analysis that measures the component of growth of a cohort of banks that is not attributable to mergers or designation changes. Community bank designations are as of June 2018, and mergers over the period are treated as if they had already occurred at the beginning of the period. For example, if deposit growth is being calculated from 2013 to 2018 and Bank A, a noncommunity bank, acquired Bank B, a community bank, in 2015, then deposits of Bank B are treated as noncommunity bank deposits between 2013 and the date it was acquired.

The Decline in the Number of Offices Is Slowest in Rural Counties

As shown in Table 1, the total number of U.S. bank offices has declined for both community banks and noncommunity banks and for all three county types—metropolitan, micropolitan, and rural. Table 1 also shows that an overwhelming majority of U.S. bank offices—roughly 70,000 out of 88,000—are in metropolitan counties. The 8.8 percent five-year reduction in the number of offices in metropolitan counties accounted for most of the total reduction in the number of offices in the United States.

The reduction in the number of offices operated by community banks in metropolitan counties has been particularly pronounced: 15.3 percent in the past five years. This does not mean that community banks in metropolitan counties closed 15.3 percent of offices in that time, but rather that 15.3 percent of their offices closed, became offices of noncommunity banks through mergers, or were reclassified from a community bank to a noncommunity bank. Banking industry consolidation among both community and noncommunity banks has been the primary driver of this trend. As discussed in the next section, a very different picture emerges when controlling for the effects of mergers and movement of banks between community and noncommunity bank designations.

The number of bank offices has declined the least in rural counties: 6.6 percent between 2013 and 2018, compared with an 8.8 percent reduction in metropolitan counties and an 8.7 percent reduction in micropolitan counties. Community bank offices have declined less in rural counties than in more populated areas, while noncommunity bank offices have declined the most in rural counties. While rural counties have had the smallest decline in office numbers, an office closure in a rural county is felt more keenly by a community than a closure in a metropolitan county, since rural bank offices are fewer in number and often serve large geographic areas.

Table 1

Number of U.S. Banking Offices, June 2013 to June 2018									
Designation		2013	2014	2015	2016	2017	2018	% Change 2013 to 2018	
Metro	All Banks	76,302	75,035	73,893	72,728	71,058	69,568	-8.8%	
	Noncommunity Bank	54,272	53,816	53,082	52,666	51,807	50,910	-6.2%	
	Community Bank	22,030	21,219	20,811	20,062	19,251	18,658	-15.3%	
Micro	All Banks	10,763	10,573	10,378	10,214	10,014	9,831	-8.7%	
	Noncommunity Bank	4,574	4,507	4,517	4,420	4,358	4,252	-7.0%	
	Community Bank	6,189	6,066	5,861	5,794	5,656	5,579	-9.9%	
Rural	All Banks	9,265	9,104	8,991	8,882	8,767	8,654	-6.6%	
	Noncommunity Bank	2,645	2,561	2,500	2,437	2,420	2,340	-11.5%	
	Community Bank	6,620	6,543	6,491	6,445	6,347	6,314	-4.6%	
All	All Banks	96,330	94,712	93,262	91,824	89,839	88,053	-8.6%	
	Noncommunity Bank	61,491	60,884	60,099	59,523	58,585	57,502	-6.5%	
	Community Bank	34,839	33,828	33,163	32,301	31,254	30,551	-12.3%	

Source: FDIC Summary of Deposits.

Note: Counties are labeled metropolitan, micropolitan, or rural, depending on whether they are located in areas designated by the U.S. Census Bureau as Metropolitan Statistical Areas or as Micropolitan Statistical Areas. Metropolitan Statistical Areas have a core urban area with more than 50,000 inhabitants. Micropolitan Statistical Areas have urban clusters with 10,000 to 50,000 inhabitants. All other areas are considered rural.

⁷ Counties are labeled *metropolitan*, *micropolitan*, or *rural* depending on whether they are located in areas designated by the U.S. Census Bureau as Metropolitan Statistical Areas or as Micropolitan Statistical Areas. Metropolitan Statistical Areas have a core urban area with more than 50,000 inhabitants. Micropolitan Statistical Areas have urban clusters with 10,000 to 50,000 inhabitants. All other areas are considered rural.

Most of the offices in rural counties (73.0 percent) are operated by community banks, which tend to maintain their number of offices—especially on a merger-adjusted basis, as discussed in the next section. The difference in the five-year reductions in the total number of rural county bank offices—11.5 percent for noncommunity banks versus 4.6 percent for community banks—means that community banks have increased their relative prominence in rural counties, notwithstanding banking industry consolidation. Community banks serve an important purpose by providing banking services in counties with few other bank offices.

The bank office trends described in this article have implications for the location and availability of banking services. Community banks serve as the only physical banking presence in 20.0 percent of the 3,142 U.S. counties. In contrast, noncommunity banks serve as the only physical banking presence in 4.6 percent of U.S. counties (Table 2). In 122 counties, there is only one bank office. Of these counties, 85 have a community bank office, and 97 are rural.

Table 2

County Description	Number	Percent
Counties With Community Bank and Noncommunity Bank Offices	2,339	74.4%
Counties With Only Community Bank Offices	627	20.0%
Counties With Only Noncommunity Bank Offices	143	4.6%
Counties Without Offices	33	1.1%
Total of Counties in 50 States and District of Columbia	3,142	100%
Counties With Only One Office—Community Bank	85	2.7%
Counties With Only One Office—Noncommunity Bank	37	1.2%
Total of Counties With Only One Office	122	3.9%

Noncommunity Banks Are Driving the Decline in the Number of Offices Table 1 shows changes in the number of offices operated by community and noncommunity banks by county type over the past five years. The changes reflect not only the effects of office openings or closings, but also the effects of banks acquiring other banks, and the effects of changes in designations between community and noncommunity banks. To analyze the office opening and closing patterns of the currently operating (June 2018) group of community and noncommunity banks, it is necessary to control for mergers and reclassification of banks between the two designations.

For example, mergers, purchases, and sales can cause an office to change designations. Without controlling for those effects, it may appear that community banks are closing offices when in fact their offices may have become noncommunity bank offices because the bank was merged into a noncommunity bank or the offices were purchased by a noncommunity bank. Another reason offices may change designation is that community banks may be reclassified as noncommunity banks, in which case their office designations would change. Similarly, noncommunity banks may be reclassified as community banks.

Bank office data can be "merger adjusted" to control for those effects. Merger adjusting data involves fixing community bank or noncommunity bank designations as of the most recent period (June 2018) and holding those designations constant through the period analyzed. A community bank that was reclassified as a noncommunity bank between June 2017 and June 2018 is treated as a noncommunity bank beginning in June 2017, and noncommunity banks that became community banks are similarly treated as community banks for the entire period. Individual offices of institutions that were acquired by a community bank in the year ended June 2018 are treated as community bank offices as of June 2017 and as noncommunity bank offices if they were acquired by a noncommunity bank. These adjustments are intended to more accurately reflect decisions by executives of currently operating banks to open or close offices.

This analysis reveals stark differences in the patterns of office openings and closings of currently operating noncommunity and community banks. During the year ended June 2018, noncommunity banks acquired offices from other banks but closed far more offices than they acquired. In contrast, currently operating community banks acquired offices and opened more offices, on net, during the year.

Table 3

Community Banks Added Offices and Noncommunity Banks Closed Offices, June 2017 to June 2018										
Designation	Offices of June 2018 Bank Group in June 2017	Offices of Banks Acquired	Office Total June 2017, Merger- Adjusted	New Offices Opened	Offices Closed	Net Offices Purchased or Sold	Number of Offices in June 2018			
Community Banks	29,832	619	30,451	585	500	15	30,551			
Noncommunity Banks	57,886	1,481	59,367	404	2,254	-15	57,502			
Total	87,718	2,100	89,818	989	2,754	0	88,053			

Source: FDIC Summary of Deposits.

Table 3 shows that between June 2017 and June 2018, community banks opened 585 new offices, purchased 15 offices from noncommunity banks, and closed 500 offices. On net, the June 2018 group of community banks added 100 offices during the year in addition to the 619 individual bank offices that they acquired through mergers. The aggregate decline in the total number of community bank offices during the year was a result of the acquisition of community banks by noncommunity banks or the reclassification of community banks as noncommunity banks by the FDIC. In short, community banks active as of June 30, 2018, increased their total number of offices during the year. In contrast, the June 2018 group of noncommunity banks closed far more offices than they purchased, acquired through mergers, or opened, and reduced their net number of offices by 1,865.8

⁸ An additional 21 offices were closed without an acquisition or were acquired by nonbanks, and are not included in the offices of either community banks or noncommunity banks as of June 2018. The total change in the number of offices is –1,865 (change for noncommunity banks) + 100 (change for community banks) – 21 (offices of institutions that left the banking industry), or –1,786.

Most Community and Noncommunity Banks Report No Change in Their Number of Offices A greater percentage of noncommunity banks changed the number of offices they operated between June 2017 and June 2018 than did community banks. On a merger-adjusted basis, 55.5 percent of noncommunity banks reported the same number of offices in both periods, 11.7 percent reported an increase in offices, and 32.9 percent reported a decrease in offices. On the other hand, 86.9 percent of community banks reported the same number of offices in both periods, 8.1 percent reported an increase in offices, and only 5.0 percent reported a decrease in offices. Because community banks make up the majority of banks, more banks industry-wide increased offices (463 banks) than reduced offices (397 banks). However, banks that reduced offices shed more than 2,000 of them, while the banks that increased offices did so by only 610, resulting in a decline in total offices nationally. Of the 397 banks that reduced offices, 10 banks accounted for a loss of more than 1,000 offices.

Average Efficiency and Profitability Improved at Banks That Reduced Number of Offices As mentioned, the trend of net declines in the number of offices of FDIC-insured institutions continued in 2018. The *FDIC Quarterly* previously reported that population migration, improved mobile technology, mergers, and effort by management to reduce premises expenses are possible reasons for the decline in the number of bank offices. This section further analyzes the association between reductions in offices and subsequent changes in the efficiency and profitability of institutions.

The direct effect of closing offices is that institutions have lower fixed costs and fewer expenses, which implies that profitability and efficiency will improve as long as nothing else changes. However, closing offices may cause a bank to lose customers who are inconvenienced by the closing. The loss of customers could reduce revenue, profitability, and efficiency.

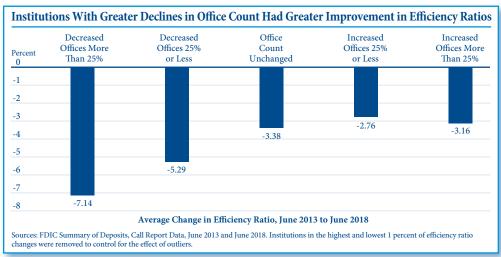
This analysis looks first at the efficiency ratio of institutions over time on a merger-adjusted basis. ¹⁰ Institutions that generate more revenue while incurring a given amount of noninterest expense are considered more efficient than institutions that generate the same level of revenue while incurring more noninterest expense. Therefore, a *lower* efficiency ratio indicates *greater* efficiency. Chart 2 shows that institutions that closed more offices than they opened improved their efficiency ratios on average. Overall, institutions that reduced offices by more than 25 percent over the past five years reduced their efficiency ratios more than other institutions. Closing offices reduces premises expenses, which are a component of total noninterest expense, so reducing office counts would lead to improved efficiency as long as revenue does not fall following the closures.

Importantly, this result does not mean that any institution that reduces its number of offices will improve its efficiency—it indicates only that, for those particular institutions, reducing the number of offices over this five-year period has been associated with improved efficiency ratios.

⁹ See footnote 3.

 $^{^{10}}$ In this case the data needed to be adjusted for mergers because otherwise the number of offices of institutions would be highly affected by merger activity, as all of the offices of acquired institutions would typically be reported as belonging to the acquiring institution immediately after the merger. The efficiency ratio is total noninterest expense (not including amortization or impairment of goodwill or other intangible assets) divided by noninterest income plus net interest income, multiplied by 100. For example, if a bank had \$1.1 million in noninterest expense, \$100,000 in impairment losses and amortization of intangible assets, \$1 million in net interest income, and \$1 million in noninterest income, its efficiency ratio would be ((\$1.1 million - \$100,000)/(\$1 million + \$1 million)) x 100, or 50.

Chart 2



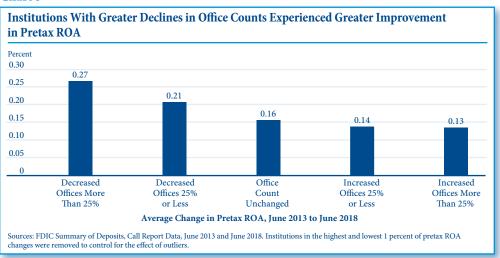
Efficiency and profitability are not the same. Analyzing (on a merger-adjusted basis) the association between office closures and changes in pretax return on assets (ROA) is one way to evaluate the effect of office closures on profitability. Pretax ROA shows the amount of an institution's income divided by its asset base, which controls for the fact that larger institutions generate more total income than do smaller institutions. Income is measured before taxes to make comparisons of all FDIC-insured institutions more meaningful, because tax rates vary from year to year, across states, and by tax status (such as the tax status of an S-corporation). Higher pretax ROA indicates higher profitability. Chart 3 shows that pretax ROA increased the most at institutions that closed the largest percentages of offices.

By definition, pretax ROA increases when the ratio of total pretax income to total assets increases. Consequently, pretax ROA could rise as a result of higher pretax income, a decline in total assets, or a combination of the two. Offices are part of the premises and fixed assets component of bank balance sheets. In addition to reducing premises expense, closing offices may involve the sale of land and buildings owned by the bank, allowing the proceeds to be invested in assets that potentially earn a greater return.

¹¹ For example, two institutions with the same amount of pretax income could have different values of pretax ROA. If institutions A and B each have \$1 million in pretax income, and institution A has \$10 million in total assets, while institution B has \$100 million in total assets, then pretax ROA is 10 percent (\$1 million / \$10 million) for institution A and 1 percent (\$1 million / \$100 million) for institution B.

¹² S-corporations do not pay federal taxes at the business level; all income is passed through to the owners and then taxed as individual income. Institutions with other corporate structures pay tax at the business level.

Chart 3



The preceding analysis suggests that banks that closed more offices than they opened reduced their fixed expenses and fixed assets without sacrificing income, on average. Again, this does not suggest that *any* bank will increase its efficiency and profitability by closing offices. Charts 2 and 3 show that the institutions that increased their office networks by more than 25 percent did not necessarily sacrifice efficiency or profitability by doing so—there was little or no difference between changes in efficiency or profitability of institutions that increased offices by more than 25 percent and changes in the efficiency or profitability of institutions that had no increase in the number of offices. Further, institutions may add offices as a *result* of high efficiency or high profitability. Some successful institutions may be more willing or more able to reach new customers, or offer better service, by expanding their office networks, which could explain why the differences in changes in efficiency and profitability were relatively small between institutions that increased their number of offices and institutions that maintained the same number of offices over the five-year period.

Importantly, the decision to change the number of offices is one of many decisions made by bank executives that that can affect profitability. This analysis suggests a relationship between office closures and improved profitability, but further analysis is needed to definitively establish a direct relationship, since many factors could affect bank profitability.

Conclusion

The decline in the number of bank offices that began during the year that ended in June 2010 continued during the year ended in June 2018. The number of offices declined more slowly in rural counties, which tend to have fewer bank offices, than in more densely populated counties. Noncommunity banks, which tend to operate in more densely populated areas, closed offices at a faster rate than did community banks. Many factors, including a careful comparison of costs and benefits, influence decisions by bank executives to open or close offices.

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