

December 2015

The community banks: The evolution of the financial sector, Part III

Martin Neil Baily and Nicholas Montalbano

Executive Summary

This report is the third installment of a series analyzing the ways in which the financial sector has changed since the financial crisis and the changes in financial regulations, notably the Dodd-Frank Act of 2010. [Part I](#) of this series examined the Big Four banks and [Part II](#) of this series examined a panel of 15 regional banks. This third part examines the community banks.

Community banks serve an important function in local communities and in the economy as a whole. They provide traditional banking services to local households and provide lending to nearby small businesses. Unlike larger banks which work with groups nationwide, community banks tend to obtain deposits and make loans locally. They service key segments of the commercial bank lending market, including agriculture, real estate, and small business loans. While the largest banks generate revenue from noninterest income sources such as trading, venture capital, and investment banking activities, community banks get most of their revenue from traditional banking activities.¹

In addition, these banks often engage in personal and nonstandardized lending since they have specialized knowledge and expertise of their communities and customers, leading to their being called “relationship” bankers. Because of these banks’ close relationship with small businesses, they can drive an important segment of economic growth. Compared to all other banks (and to credit unions), small banks devote the greatest share of their assets to small business loans.² The community banks use relationship banking while the larger banks rely more on a models-based approach.

There is an important caveat about community banks. Recall the lesson of the savings and loan crisis of the 1980s when small banks, whose lending was very concentrated in their local markets, were vulnerable to a local downturn (such as the Texas oil price bust of that period or the California housing cycle). Perhaps as a sign that community banks are aware of this problem, we find that prior to the crisis, they were placing a smaller fraction of their deposit base in loans than were the larger banks (thus hedging their bets). The crisis and its aftermath then widened this gap between deposits and loans by a significant margin. After the crisis, community banks have slowly begun to close the gap.

One reason for the high level of concern about community banks is that the number of such banks is declining and our research confirms that pattern. However, we find that it is only among the smallest banks (less than \$100 million) that we see this decline. These very small banks are such a tiny part of the banking sector that their impact on the overall economy has been rather limited.

Declining Number of Community Banks

We use the FDIC definition of community banks³ which does not just use fixed size limits to determine which banks belong in our sample. The FDIC incorporates other factors, such as the extent to which a bank uses the relationship approach and its geographic scope, into the equation.

As shown in Figure 1, the number of community banks has been steadily declining since 2003 (and before). This drop has been simultaneous with the consolidation of the banking industry as a whole, which has been underway since the 1980s.⁴ Most of the decline within the community banking industry has come from the steep drop in the smallest banking organizations.⁵ Banking organizations with total consolidated assets of less than \$100 million have dropped sharply while larger community banks (greater than \$300 million in total consolidated assets) have increased in number.

In 2003, banking organizations with less than \$100 million in assets (2009 dollars) totaled 3,255 and made up 43.7 percent of all community banks. In 2014, these figures dropped to 1,919 and 32.9 percent, respectively. While the number of banks in the \$100 million to \$300 million asset class decreased by a small margin, this asset class increased as a share of the community bank population, from 35.6 percent in 2003 to 38.8 percent in 2014. As shown in Figure 2, similar proportional

increases were found for all banking organizations with greater than \$100 million in consolidated assets, and those banks with \$300 million or more in assets grew modestly in number over this time period and grew even more strongly as a proportion of banks by asset class.

The decline in the smallest asset class of banks is significant and has persisted throughout the time sample, from 2003 to 2014. However, the post-crisis decline in the number of banks is not due to changes in the rate of exit from banking. In an important study by McCord and Prescott (2014, op cit.), they note that the exit rate of banks from 2008-2013 was not that different from the exit rate from 2002-2007.⁶ Crucially, they find that most of the decline in banks can be attributed to the lack of entry into commercial banking. New banks start small and either fail or eventually move into larger asset classes, and this lack of entry by what are called de novo banks has been the primary cause of the recent decline of the smallest banks. The authors conclude that there would have been 10.7 percent more banks in this smallest size class if pre-crisis entry patterns had prevailed.

Three possible reasons for the lack of new banks are restrictive banking regulations, a reduced interest margin, and weak demand for bank services. McCord and Prescott acknowledge the recent lower net interest

Figure 1: Number of Banks In Each Asset Class, 2003-2014

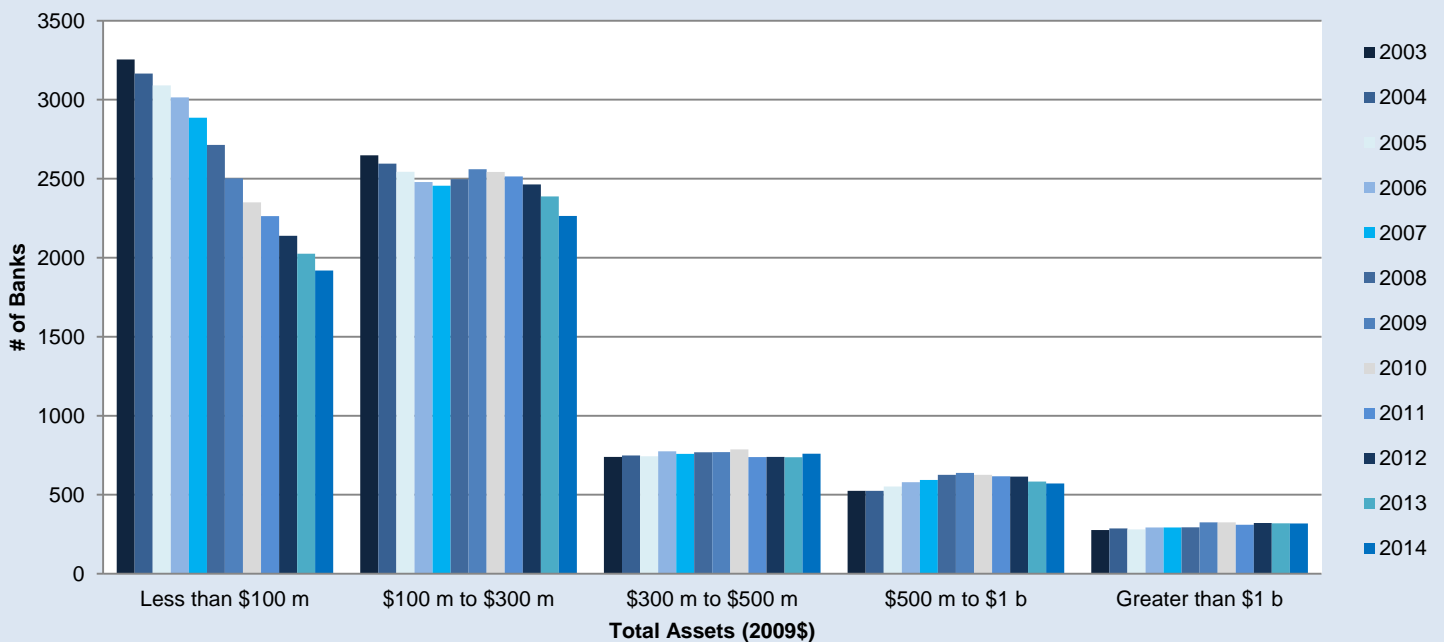
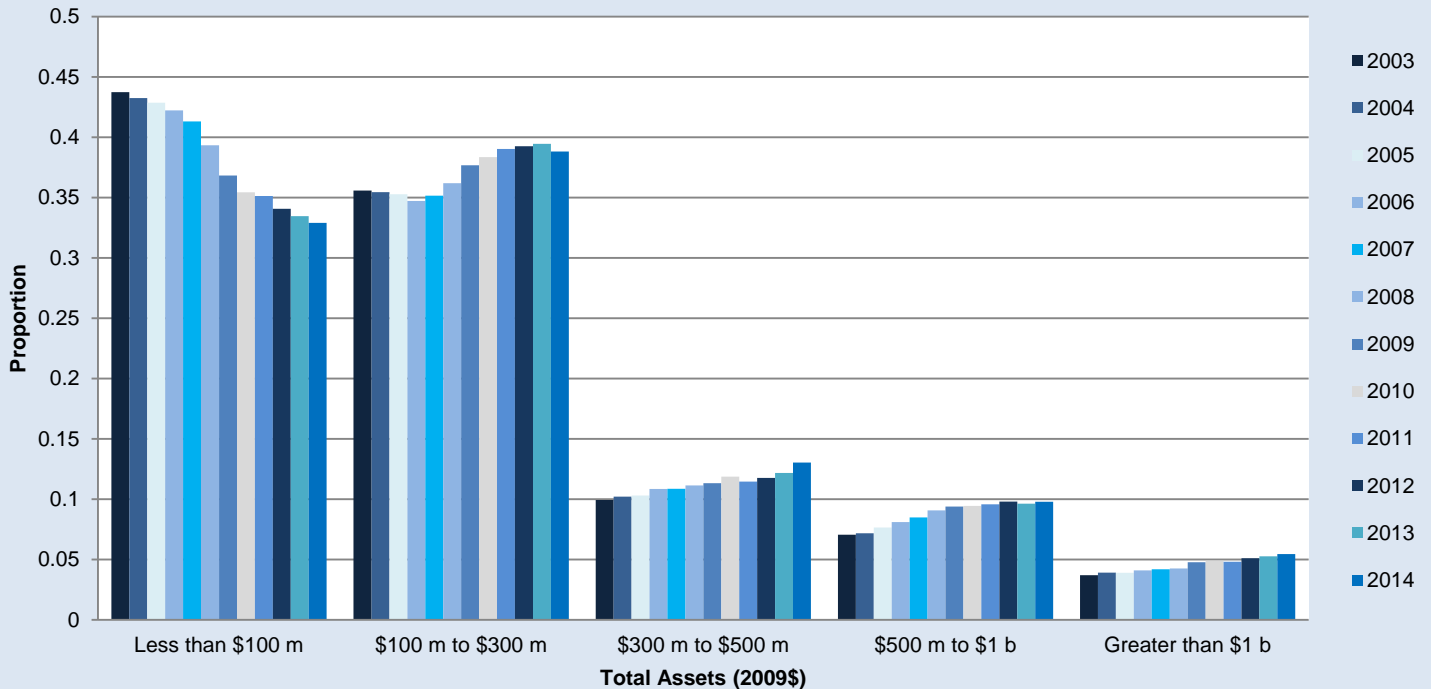


Figure 2: Percentage of Banks In Each Asset Class, 2003-2014



margin as a factor, but do not identify it as the main reason for lack of entry. They do find some evidence to support the view that regulation is more burdensome to smaller banks and that obtaining permission to open a new bank is slower and more difficult than before the crisis, but they do not find the evidence to be definitive. The third and probably most likely explanation for the lack of startup banks is the weak demand for bank services, and perhaps especially community bank services, in the recession and the slow recovery. As well as the direct recession effects, small banks face some structural problems with respect to their lending opportunities that we discuss further below.

Assets of the Community Banks

Figure 3 shows that total assets of the community banks increased strongly from \$1.62 trillion in 2003 to \$1.98 trillion in 2009, an increase of 22.5 percent (adjusted for inflation, the increase was 7 percent). Assets then fell slightly, 2.3 percent, between 2009 and 2010, before growing steadily in the subsequent years. The community banks avoided the prolonged or large-scale losses faced by other banks in the crisis. Looking at the level of assets after 2010, the rate of growth was quite slow, rising only 6.7 percent from the end of 2010 to 2014, roughly flat after inflation. The assets of the community banks recovered after the crisis but have grown slowly in the post-crisis period.

The growth in total assets of the community banks combined with the decline in the number of such banks means that the average size of banks has increased. In 2003, the average size of a community bank was \$195.6 million and by 2014 the average size was \$341.9 million. This result holds even when adjusting for inflation (total assets per bank rose by 74.8 percent while the GDP deflator rose by 23.9 percent).

Box A

For our analysis detailing the decline in smallest banking organizations, we use mid-year data from 2003 to 2014 on bank holding companies (BHC) and standalone commercial banks (those banks that are not a part of a holding company). This level of aggregation is typically used by regulatory agencies and gives us a more accurate picture of the size of each organization than would the individual banks. Total assets are then reported relative to 2009 dollars.

In the analysis of the banks' balance sheets we use end-of-year data at the individual bank level. This analysis uses aggregated levels across each category (e.g. total assets of all banks in the sample) so it is unimportant whether the observation is of an individual bank, or of the bank holding company—the totals will be summed up the same in either case. These totals are in nominal terms unless otherwise stated.

Our sample ranges from \$3.6 million to \$27.3 billion in total assets in 2014 and includes 6037 FDIC-insured charters. From here on, the individual FDIC-insured banks and thrifts will simply be referred to as "banks." More information on the dataset can be found in Appendix 1.

Figure 3: Community Banks' Asset Holdings, 2003-2014

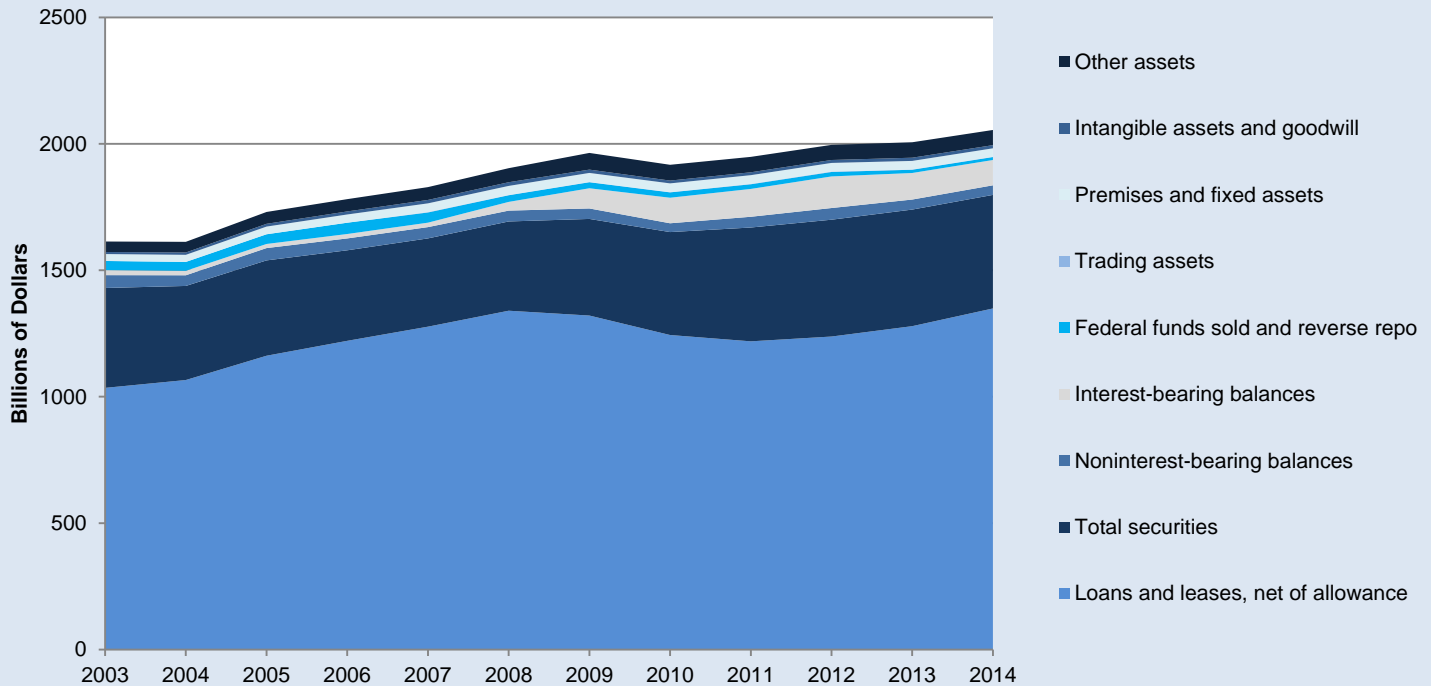
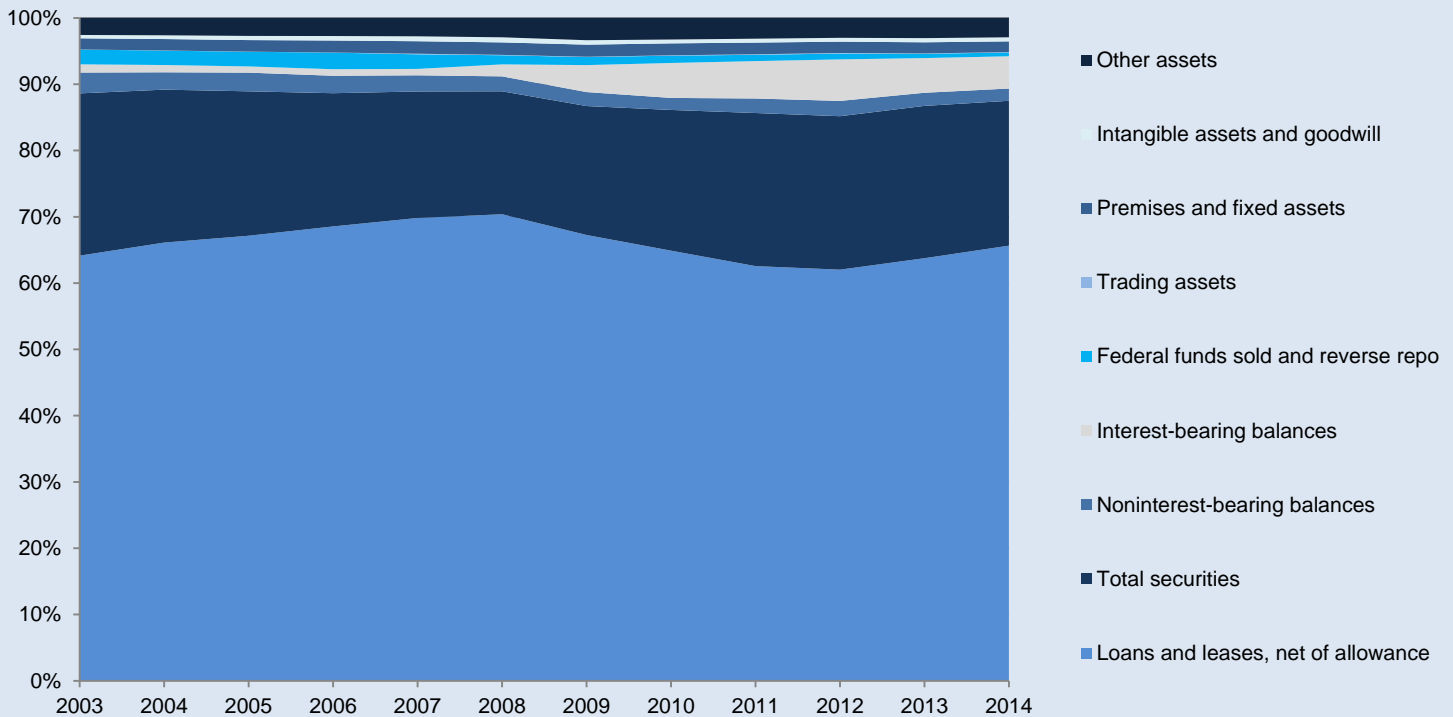


Figure 4: Community Banks Composition of Assets, 2003-2014



The holdings of securities by community banks had been on a steady decline from \$395 billion in 2003 to \$349 billion in 2007, dropping from 24.4 percent of total assets to 19.1 percent of total assets. The holdings began to increase again in 2008, growing from \$353 billion to \$462 billion from 2008 through 2012, and then leveling off after. In 2014, securities accounted for 21.8 percent

of total assets, up from 18.5 percent at the end of 2008. While both smaller and larger banks have increased their holdings of securities post-crisis, larger banks have increased their proportion by a larger amount.⁷ This could be due to the new Dodd-Frank regulations, which impose liquidity requirements on larger banks, but not smaller ones.

Simultaneous with the beginning of the Interest on Excess Reserves (IOER), interest-bearing balances began its increase at the end of 2008 and rose from \$35 billion to a peak of \$125 billion in 2012. It then reverted down to \$100 billion in 2014. This is somewhat similar to the pattern we saw in larger banks, where they began holding safe securities and reserves in the aftermath of the crisis.

Figure 4 details the composition of assets of the community banks. Similarly to the regional banks that we described in Part II of this series, the largest part of the assets of these banks is in loans and leases and the second largest type of assets is total securities. Loans and leases as a share of total assets increased steadily in the years leading up to the crisis, then fell to below pre-crisis levels post-2008. Since 2012, loans and leases as a share of total assets have been on the rise. In the years before the crisis, total securities as a share of total assets were on the decline, and interest-bearing balances made up only a tiny proportion of total assets. After 2008, as the amount of loans and leases decreased, total securities and interest-bearing balances made up a larger portion of the composition of assets, increasing from 18.5 percent in 2008 to 21.8 percent in 2014 and 1.8 percent in 2008 to 4.8 percent in 2014, respectively. The proportion of all the additional assets remained relatively constant throughout the time period, though the proportion of non-interest bearing assets did decline by a small amount.

Liabilities of the Community Banks

The liabilities structure of the community banks is relatively simple: it is comprised almost entirely of domestic deposits and other borrowed money. Domestic deposits make up about 90 percent of total liabilities, and other borrowed money accounts for another 4-9 percent, contrasting with the liabilities structure of the regional and Big Four banks, which have much more diverse portfolios of holdings. Notably, this means that total deposits play a larger role in the operations of the community banks than they do with the regional and big four banks. Figure 5 documents the rise in community banks' liability holdings between 2003-2014. Except for the small decline between 2009-2010, liabilities have grown steadily throughout this time period, although slowly in 2010-2014, matching the pattern of asset growth.

Figure 5 indicates that, like assets, total liabilities grew from 2003-2009 and then dropped in 2010. Total liabilities went from \$1.46 trillion in 2003 to \$1.78 trillion in 2009 and then down to \$1.74 trillion in 2010. It then resumed growing and reached \$1.84 trillion in 2014. The same trend was experienced by domestic deposits. Domestic deposits grew from \$1.29 trillion in 2003 to \$1.60 trillion in 2009 and then experienced a slight drop

Figure 5: Community Banks' Liability Holdings, 2003-2014

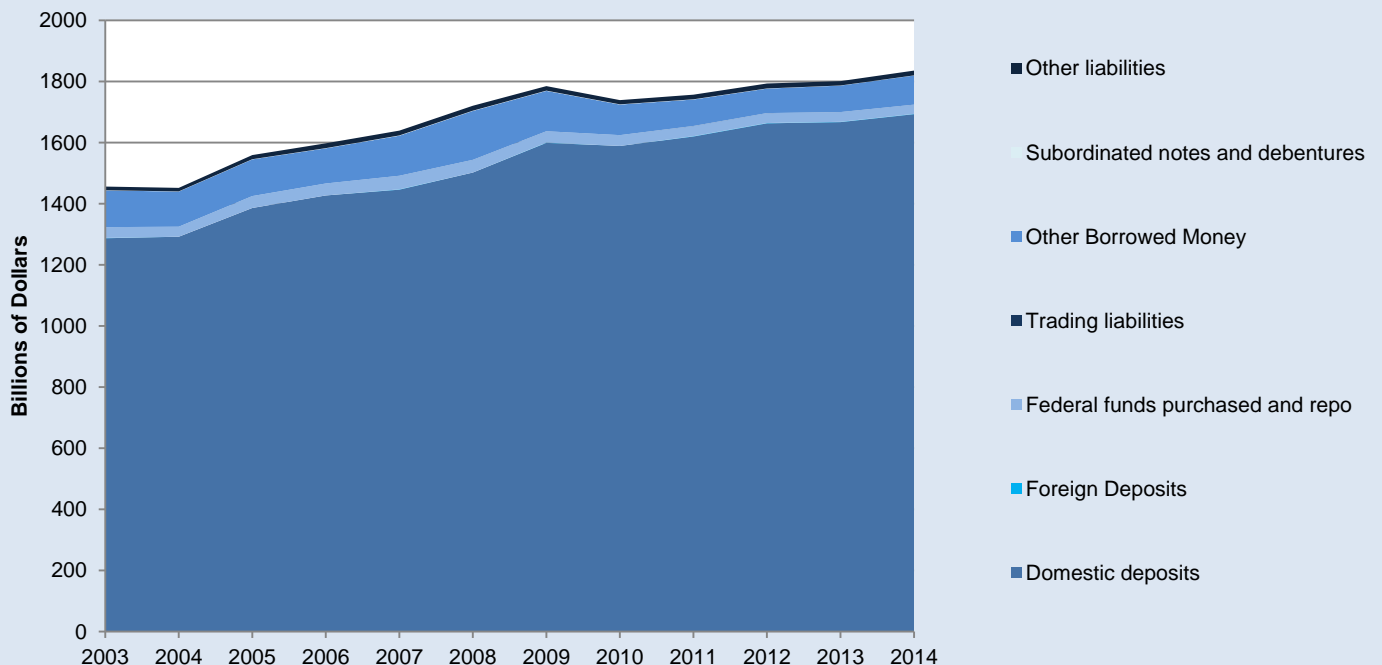
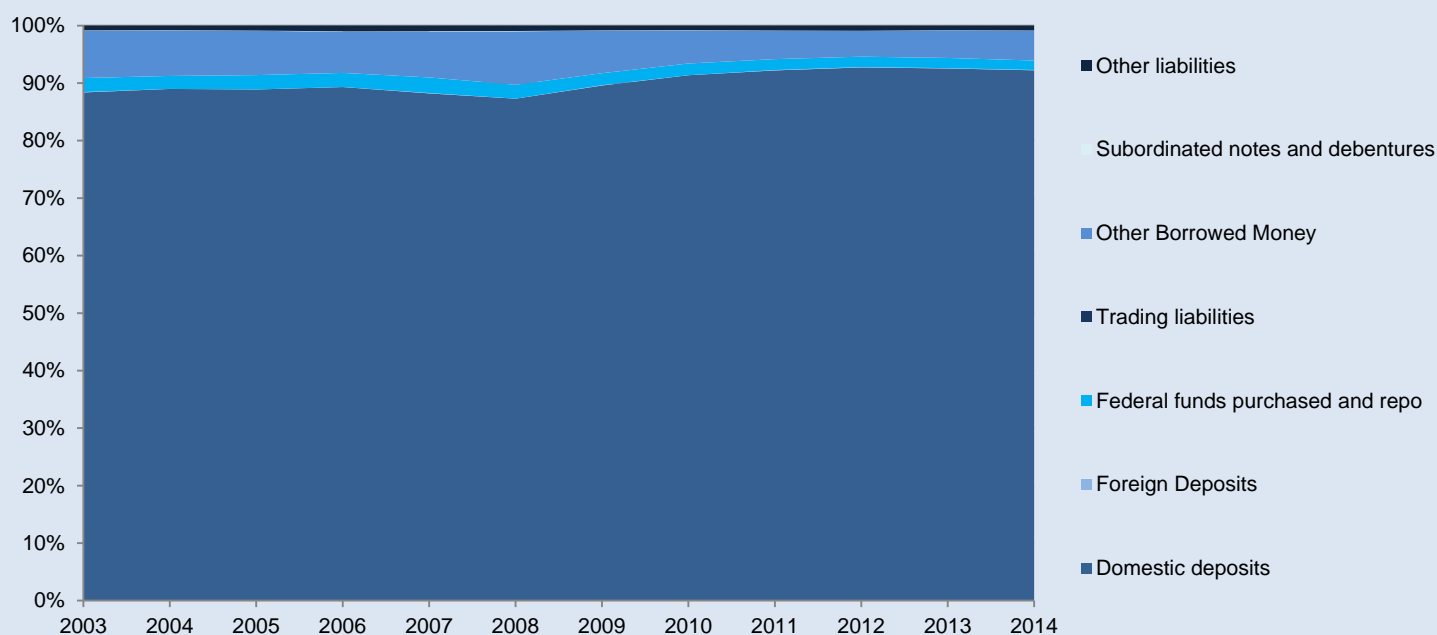


Figure 6: Community Banks' Composition of Liabilities, 2003-2014



to \$1.59 trillion in 2010. It then regained ground in 2011 by rising to \$1.62 trillion and has since continued to increase to \$1.69 trillion. Other borrowed money followed a different pattern. It increased from 2003 to 2008, growing from \$120 billion to \$160 billion but then reversed trend in 2009 as it began to decline. It eventually bottomed-out at \$80 billion in 2012.

Figure 6 shows that in the post-crisis years, the composition of liabilities looks largely similar to the composition in the pre-crisis years. The slight difference is that other borrowed money comprises a smaller percentage of total liabilities and domestic deposits comprise an even larger share of total liabilities.

Community Bank Securitization⁸

Securitization plays a relatively small role in the community banking model—this type of business is typically left to the larger banking organizations. As Figure 7 shows, it is interesting to note that the amount of securitization has been steadily increasing in the time period both before and after the crisis. In 2003, securitization business totaled \$7.9 billion and by 2014 it had risen to \$28.2 billion—still small even though fast-growing.

As seen from Figure 8, most of the securitization has occurred in the 1-4 Residential Loans category. In 2003, these loans accounted for 64 percent of all securitization business; between 2006-2007, they accounted for roughly 90 percent of all securitization business and then

from 2008-2014 they accounted for over 94 percent of securitization business, with a peak of 98 percent in 2011. 1-4 Residential Loans were also the most common securitization category for the regional and Big Four banks. Likewise, the second most popular category for all the banks was “other.” This category has risen and fallen periodically for the community banks. Recently, auto loans have increased their share to 4.5 percent in 2014.

Relation of Loans to Deposits

Given that community banks are known for their traditional banking activities—i.e. taking deposits and making loans—it is essential to look at that relationship. Among the Big Four and regional banks, we showed that loans and leases tracked nearly perfectly with deposits in the years leading up to the crisis. In both cases, we found that since the crisis, loans and leases have not kept up with deposits and in the case of the Big Four, the gap is widening.

Figure 9 shows results that are somewhat surprising and different from the other classes of banks. Before the crisis, there was a gap between deposits and loans and leases, indicating that the community banks were not lending out all of their deposit amounts. This gap may be because they saw greater profitability in putting some of their deposit base into other types of assets. Alternatively, the community banks may have been concerned about carrying too much risk because their lending is concentrated in their local communities.

Figure 7: Community Banks' Securitization Business

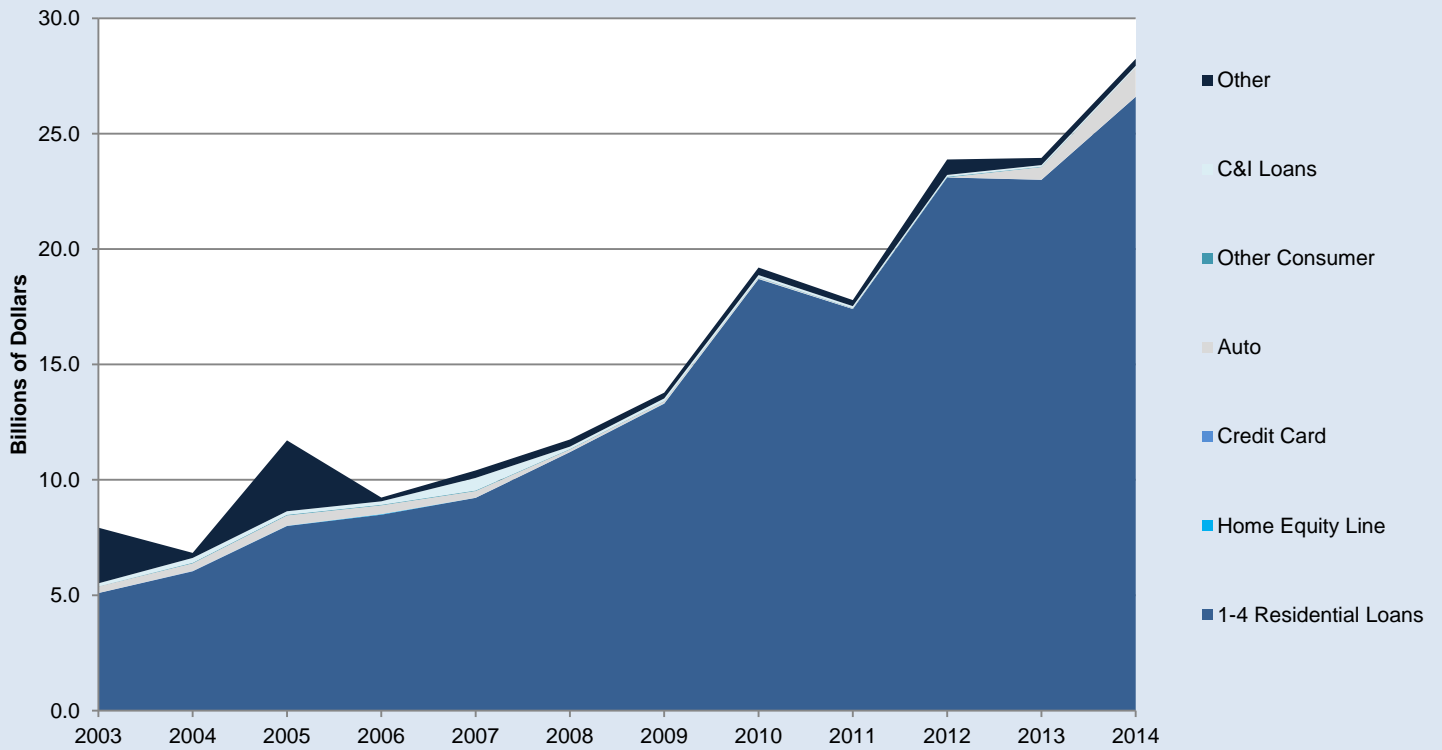
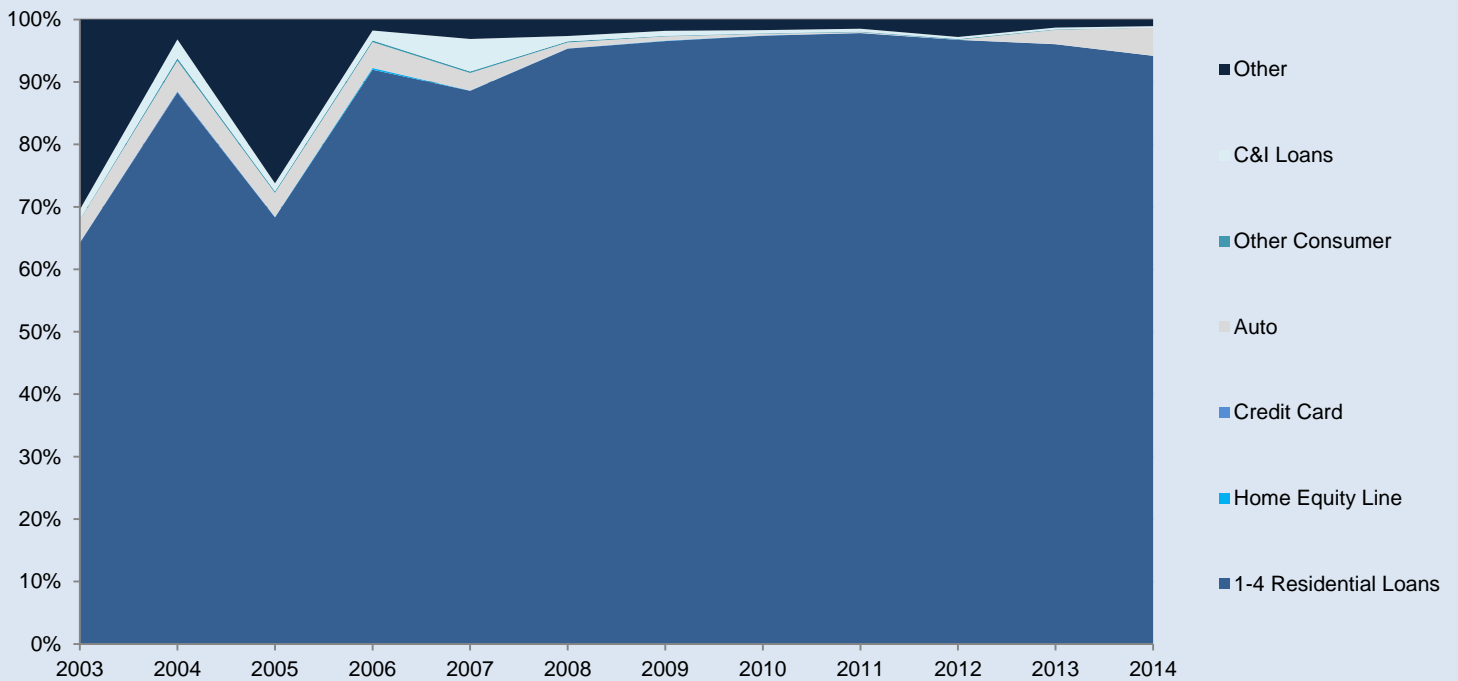


Figure 8: Community Banks' Composition of Securitization Business

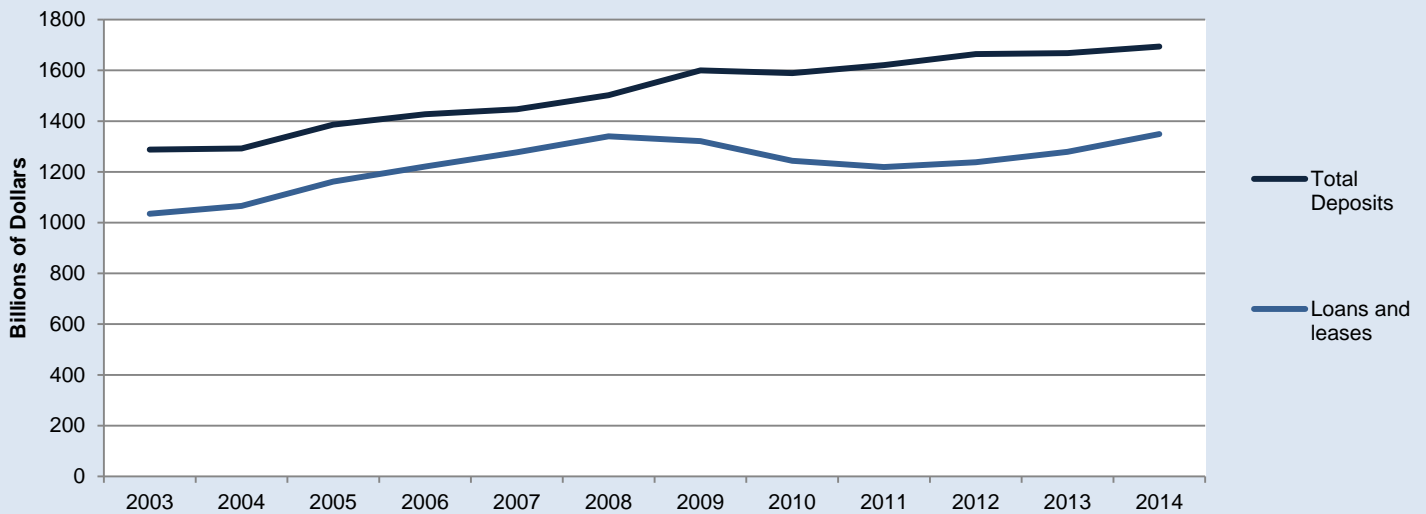


Between 2003-2008, the gap did narrow slightly as loans and leases grew slightly faster than deposits.

However, even in 2008, deposits exceeded loans and leases by about \$160 billion. In 2009, the gap grew even larger as loans and leases decreased slightly from \$1.340 trillion to \$1.321 trillion and total deposits increased from \$1.502 trillion to \$1.600 trillion as

consumers moved into safe insured accounts because of the crisis. From 2009-2011, loans and leases continued to decrease while total deposits returned to the original trend. We saw for the larger banks that there was a surge in deposits as a result of the flight to safety in the crisis and this shows up in the community banks also, but it is a much shorter-term phenomenon.

Figure 9: Community Banks' Growth of Deposits versus Loans, 2003-2014



After 2011, total deposits grew gradually and at a pace slower than their pre-crisis rate. Loans and leases bottomed out in 2011 at \$1.219 trillion and have slowly been regaining their pace, reaching \$1.349 trillion in 2014, an amount only \$9 billion higher than the level in 2008. We saw previously that the gap between deposits and loans that accompanied the surge in deposits continued to widen for the Big Four banks. For the regionals, the gap that opened up in the crisis stayed at about the same proportional level after the crisis as loans started to grow at about the same rate as deposits. For the community banks, we find that the gap between deposits and loans has been contracting post-2011 as these institutions seem to be returning to their pre-crisis pattern, although slowly.

As we noted earlier, there are few if any new community banks being started; the lending opportunities of community banks have dwindled and this may account for the gap between deposits and loans. Almost all the conforming mortgages are sold to Fannie Mae and Freddie Mac; credit card lending is dominated by big players such as Chase, Citi, Capital One, Amex and Discover; and similar forces may be impacting the market for auto loans and small business loans. For example, Well Fargo is making small business loans using new credit scoring metrics for these borrowers.

Two Key Factors for Community Banks in the Future

The first important issue for the future of these banks is the path of interest rates. Due to the dependence on traditional lending and deposit gathering, interest rate

margins play a critical role in determining the earnings of a community bank. Small banks tend to be hurt more by compression of interest margins than larger banks because they are unable to switch to other lines of business. We examine whether their margins have been squeezed and how this has impacted their net interest income and return on assets with the prolonged period of low rates. When eventually interest rates rise, the small banks may gain relative to the large banks because they typically have loyal “core deposits” that are not very price- (interest rate) sensitive. Therefore, they may be able to increase deposit rates by less than the increase in loan rates.

The second factor is the use of technology by large banks and the increasing popularity of nonbank lenders.⁹ As described in Jagtiani and Lemieux (2015, op cit.), large banks increasingly use technology in order to appeal to customers and compete for smaller commercial borrowers. In addition, borrowers are increasingly using nonbank lenders, which utilize new technologies and underwriting methods to provide small business loans quickly and electronically. These nonbank lenders are mostly unregulated, which provides them flexibility that is increasingly hard to come by for community banks under post-crisis regulations. Despite these difficulties, community banks are beginning to explore new opportunities. For example, banks are beginning to partner with nonbank lenders to fund qualifying loans initiated through online platforms. Partnerships with nonbank lenders, then, may provide new opportunities for community banks.

Community Bank Income¹⁰

Figure 10 shows the sources of community bank revenues net of interest expense, which have increased modestly—from \$60 billion in 2003 to \$69 billion in 2014, less than the increase in the price level – and also with some volatility. In both 2004 and 2008 there was a noticeable decline in income. Figure 11 shows the composition of income over the same time period. These banks’ total income comes almost entirely from traditional sources; it makes up over 90 percent of all income for the duration of the time sample. This is somewhat different from the regional banks, whose traditional income made up around 80 percent of all income, and even more different from the Big Four banks whose traditional income made up between 60 and 70 percent of all income for most of the time sample.

Figure 10: Community Banks' Sources of Income, 2003-2014

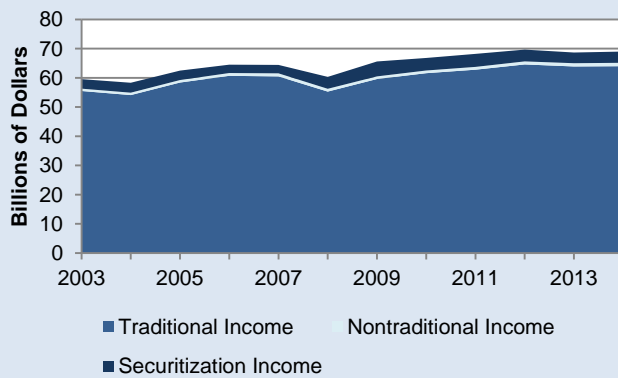
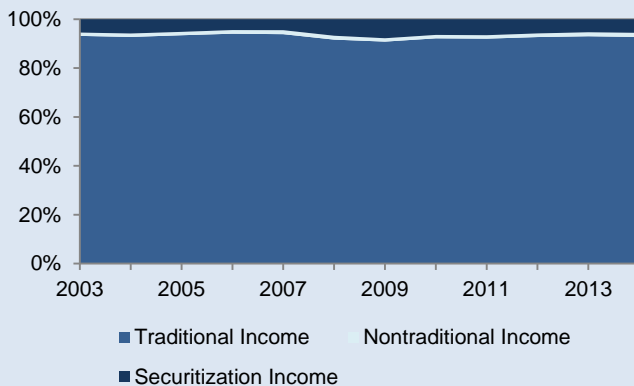


Figure 11: Community Banks' Composition of Income, 2003-2014



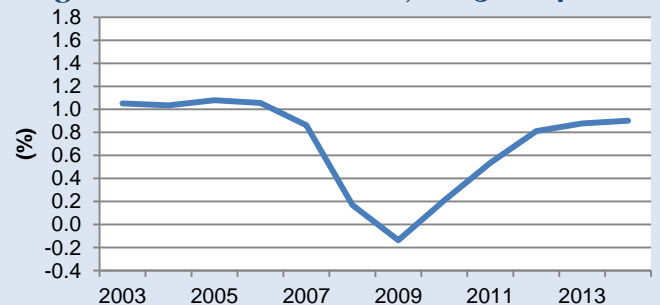
As expected, nontraditional income plays a much smaller role for the community banks than it does for the larger banks. These nontraditional income sources include items such as trading revenue and investment banking

revenue, which typically does not have much of a role in the community banking model. As such, nontraditional income comprises less than 2 percent of all income sources throughout the time sample. This stays in line with the statement that community banks generate most of their revenue from traditional lending and deposit gathering. Securitization income also makes up a modest share of total income, with its share remaining between 4-8 percent, with a peak of 7.8 percent in 2009.

Profitability and Efficiency

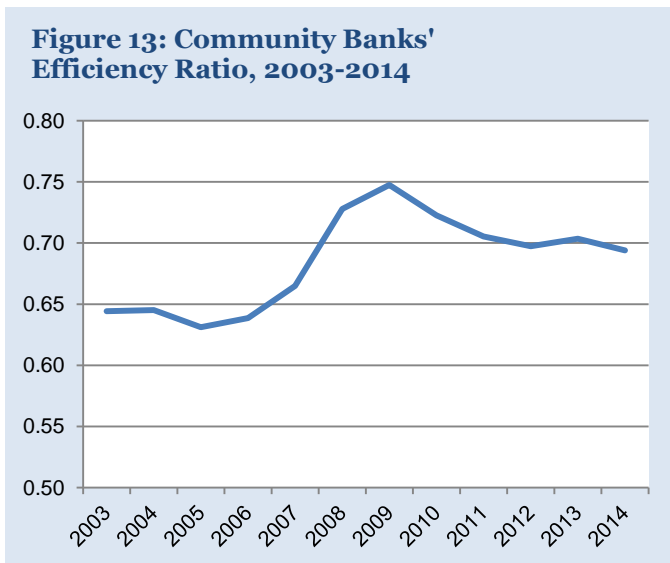
In order to detail the profitability of these banks further, it is useful to look at profits as a percent of assets, or return on assets (ROA). In Figure 12, we can see that return on assets follows a familiar pattern. In the pre-crisis years it was around 1.1 percent and it hovered around this point until the crisis hit in 2008 when it dropped sharply to a bottom of -0.1 percent in 2009. Despite recovering to reach 0.9 percent in 2014, profitability for community banks has still not reached its pre-crisis levels. This trend is almost identical to the one experienced by the regional and Big Four banks. The slight difference is that the community banks started at a lower level of profitability (about 1.1 percent compared to 1.7 percent for the regional banks) and did not dip as low as the larger banks (a bottom of about -0.1 percent compared to -0.8 percent for the regional banks). The return on assets for the community banks is lower overall than for the Big Four or for the regionals. However, their ROA has come back to a level closer to the pre-crisis level than was the case for the larger banks.

Figure 12: Return on Assets, 2003-2014



Another noteworthy measure of performance is the efficiency ratio. This is the ratio of noninterest expense to net operating revenue, and indicates how much net interest expense is incurred in order to generate a dollar

of revenue. The lower the efficiency ratio, the more efficient a bank is at generating revenue. Figure 13 shows how the efficiency ratio for the community banks has changed over time. In the pre-crisis years, the ratio remained relatively stable around 64 percent. Then during the crisis, the ratio shot up to a peak of 75 percent at the end of 2009. This means that pre-crisis, the banks were able to generate a dollar of revenue for every 64 cents of noninterest expenses, but in 2009 the banks were only able to generate a dollar for every 75 cents of noninterest expenses. Since the crisis, the ratio has retreated to around 70 percent, a less efficient level than was seen pre-crisis. In other words, community banks are experiencing higher noninterest expense and having a harder time generating revenue post-crisis. As a side note, community banks' efficiency ratios have increased relative to non-community banks from 1984-2011.¹¹



Sometimes, noninterest expenses (the metric used in the efficiency ratio) is seen as a general measure to try to analyze the burden of regulation on banks. However, it is a crude measure of regulatory costs because it includes a range of items and has no direct breakdown of compliance costs. In addition, compliance costs can be a rather abstract quantity since they can present themselves in a number of different ways. For instance they can come in the form of compliance-personnel hires, additional resources allocated to compliance, or more time spent by noncompliance employees on compliance. Compliance costs did not start with Dodd-Frank -- there were regulatory provisions that the banks had to comply with before the crisis or not directly tied to the crisis; for example, anti-money laundering rules and Sarbanes-Oxley. Therefore, quantifying "regulatory burden" can be quite a difficult task. However, one study¹² did attempt to investigate direct measures of cost and productivity for community banks after the recent Dodd-Frank legislation and found that there has been

increased regulatory burden for community banks following the Dodd-Frank Act.

Another way to try to analyze regulatory burden is through surveys. The FDIC, KPMG, and the St. Louis Fed have conducted surveys in order to try and parse the cost of regulatory compliance at community banks.¹³ All three studies have found the regulatory requirements to be impactful on the business of the community banks. The FDIC study pointed to an increase in community banks' staff, hired in response to regulatory requirements between 2002-2012. The 2014 KPMG Community Banking Survey found that regulatory and legislative pressures were the largest barrier to significant growth for the community banks. The study by Peirce et al. found that compliance costs and number of staff needed for compliance had increased, that small banks are concerned about the Bureau of Consumer Financial Protection and the new mortgage rules, that small banks are reconsidering whether to offer residential mortgages and home equity lines of credit, and that about 25 percent of the surveyed banks are considering mergers. Community banks seem to be conveying that despite efforts to be protected from some of the costs of Dodd-Frank, they are still feeling a decent amount of the regulation's impact.

Moving forward, the overall impact of the regulation may change as more clarity is gained regarding the new rules and how they will be enforced by the regulatory agencies and courts. Also, while it is important to note that according these studies, the post-crisis regulations have had an impact on the community banks, the findings are not as overwhelmingly pessimistic as we have detailed. In addition, there are stability benefits of regulations such as the Dodd-Frank Act.

Conclusion

Because the protection of community banks has been a continuing hot topic of discussion, especially in the context of post-crisis financial regulation, it is important to look in detail at these institutions' performance and their likelihood of long-term survival. The community banks performed well pre-crisis, although the number of very small banks has been declining for a long time. These banks took a hit during the crisis, and then slowly began to recover post-crisis but at levels generally lower than those experienced pre-crisis.

Critics of Dodd-Frank point to the lack of robust post-crisis community bank growth and believe protecting them may solve that growth problem. In describing the demise of the community bank, many note that the number of community banks has been declining, which

we find to be true, but this decline has been mostly confined to the smallest of community banks and can be largely explained by the lack of new entrants into the banking sector.

The story becomes even more intriguing given our findings that deposit-to-loans gap was larger for community banks pre-crisis, but has recovered relatively better than the large banks' gap post-2011. In addition, ROA has recovered significantly better for the community banks than it has for the larger regional and big four banks. These are two indicators in favor of the community banks performing relatively well in the post-crisis regulatory environment.

While the unintended impact on community banks of regulation targeted towards larger banks is a legitimate concern, the impact of this regulatory burden should be weighed in the context of its benefit to the overall banking industry and economy. Looking to the future, it will be crucial to see how the community banks react under a more traditional interest rate environment in order to get a better picture of how they will perform moving forward.

Endnotes

1. Baily, Martin Neil, Matthew S. Johnson, and Robert E. Litan. 2008. "The Origins of the Financial Crisis," Brookings (November). Retrieved from <http://www.brookings.edu/research/papers/2008/11/origins-crisis-baily-litan> on May 22, 2015.
2. LaVecchia, Olivia. 2015. "Small Business Loans as a Share of Assets, 2014," Institute for Local Self-Reliance, accessed via <https://ilsr.org/small-business-loans-as-share-of-assets-2014/> on Oct 2, 2015.
3. FDIC. 2012. "Community Banking Study," <https://www.fdic.gov/regulations/resources/cbi/report/cbi-full.pdf> Oct, 2015.
4. The decline started earlier than 2003. Roisin McCord and Edward Simpson Prescott show the number of independent banks declined strongly starting in the 1980s. "The Financial Crisis, the Collapse of Bank Entry, and Changes in the Size Distribution of Banks," *Economic Quarterly*, First Quarter 2014, pp. 23-50, Federal Reserve Bank of Richmond. See Figure 1.
5. In our analysis we report total assets relative to 2009 dollars to compare banks in real terms across years. In the McCord and Prescott (2014, op cit.) study, they report size measures relative to 2010 dollars and scale the data by the change in total bank assets between those years and 2010. By doing this they get a market share number, scaled by the size of the commercial banking industry in 2010. They get similar results to ours (they also find that the decline is largely due to the drop in banks with less than \$100 million in assets), but they get different magnitudes for the changes in each asset class.
6. However, the reasons for exits differed: in the earlier period exit was almost exclusively due to mergers and acquisitions, while in the later period the number of failures increased.
7. Though, the total percentage is similar: in 2014, both small and large banks held around 20 percent of their total assets in securities.
8. Section does not include data from community banks filing Thrift Financial Reports prior to 2012. See Appendix 1 for more information.
9. Jagtiani, Julapa, Catharine Lemieux. 2015. "Small Business Lending: Challenges and Opportunities for Community Banks – Before, During and After the Financial Crisis," presented at the Community Banking in the 21st Century Research and Policy Conference, Federal Reserve Bank of St. Louis, St. Louis, MO, Sept 30-Oct 1, 2015.
10. Section does not include data from community banks filing Thrift Financial Reports prior to 2012. See Appendix 1 for more information.
11. Jacewitz, Stefan and Paul Kupiec. 2012. "Community Bank Efficiency and Economies of Scale," retrieved from <https://www.fdic.gov/regulations/resources/cbi/report/cbi->

[eff.pdf](#) on Oct, 2015.

12. Cyree, Ken B. 2015. "The Direct Costs of Bank Compliance around Crisis-Based Regulation for Small and Community Banks," presented at the Community Banking in the 21st Century Research and Policy Conference, Federal Reserve Bank of St. Louis, St. Louis, MO, Sept 30-Oct 1, 2015.
13. KPMG. 2014. "Community Banking Survey: Seeking strategic advantage," retrieved from <https://www.kpmg.com/US/en/IssuesAndInsights/ArticlesPublications/DoDocumen/how-community-banks-are-driving-growth.pdf> on Oct 2, 2015.

Peirce, Hester, Ian Robinson, and Thomas Stratmann. 2014. "How are small banks faring under Dodd-Frank?" Working Paper No. 14-05, Mercatus Center at George Mason University. Retrieved from https://www.stlouisfed.org/~media/Files/PDFs/Banking/CBRC-2014/SESSION3_Peirce_Robinson_Stratmann.pdf on Oct 2, 2015.

Appendix

All of the data for this study is drawn from the FDIC's website. However, some of the banks were required to report Thrift Financial Reports (TFR) rather than Call Reports prior to 2012. This creates an issue for the income and securitization sections -- the TFR has different reporting sections than the Call Reports. Therefore, some of the data needed in the income and securitization sections are unavailable prior to the closing of the Office of Thrift Savings (OTS) (all other sections of the study are unaffected). To deal with the inconsistency in these sections, we drop all institutions that were not required to file the Call Report prior to 2012—these institutions are almost exclusively classified as thrifts. This gives us a consistent, but incomplete, dataset for the income and securitization

analysis. Therefore, the analysis for these sections should not be extended to include the thrifts defined as community banks in those years.

To find the aggregate data used in this study, go to the FDIC's website and search for "All SDI Data." The banks included as community banks can be found on the FDIC website under "FDIC Community Banking Study Reference Data." The community banks identified by the FDIC for each year are matched with the "All SDI data" in order to create our dataset. As noted above, this dataset is adjusted for the income and securitization analysis to exclude those reporting on the TFR prior to 2012. For additional queries about the data, please email nmontalbano@brookings.edu.