Economic Brief

June 2015, EB15-06

Did Banking Reforms of the Early 1990s Fail? Lessons from Comparing Two Banking Crises

By Eliana Balla, Helen Fessenden, Edward Simpson Prescott, and John R. Walter

New Richmond Fed research on community and midsize banks evaluates the Federal Deposit Insurance Corporation Improvement Act (FDICIA) and Basel I by comparing failures in the 1986–92 period to those in 2007–13. Banks greatly increased commercial real estate lending between the two banking crises, but higher capital mitigated this risk. Failure rates in the recent crisis were mainly driven by the severity of the economic shocks. However, higher capital did not help contain FDIC losses, which were much larger in the recent crisis. One possible explanation is limitations in the accounting triggers used by FDICIA's prompt corrective action requirement.

In the late 1980s and early 1990s, nearly 1,000 banks failed, as did hundreds of thrifts. In response to this crisis, policymakers implemented a series of reforms designed to improve the safety and soundness of the banking system. Two of the most significant were the increased capital requirements that came out of the 1988 Basel Accord and changes to the handling of troubled banks under the Federal Deposit Insurance Corporation Improvement Act (FDICIA) of 1991.

The two most important reforms in FDICIA were a requirement that the FDIC resolve a failing bank through the least-costly means possible and a mandate that a bank's regulator intervene if the bank's regulatory capital falls below designated thresholds. The motivation behind this pre-emptive provision, known as "prompt corrective action" (PCA), was to move beyond the widespread practice in the 1980s of forbearance—that is, allowing troubled institutions to stay open in hopes their financial position would recover. When a struggling bank was granted forbearance, the delay often meant that the eventual costs to the FDIC following its failure would rise. The 1989 federal bailout of the thrift industry ultimately cost taxpayers more than $120 billion. The authors of FDICIA sought to avoid a repeat of this scenario.

This *Economic Brief* discusses new research by three of its authors (Balla, Prescott, and Walter), who compared the causes of bank failures and FDIC losses in periods before and after the reforms.

A Tale of Two Downturns

While U.S. economic performance was strong in the late 1980s, interrupted by only a mild recession in 1990–91, there were severe downturns in several regions of the country. The collapse

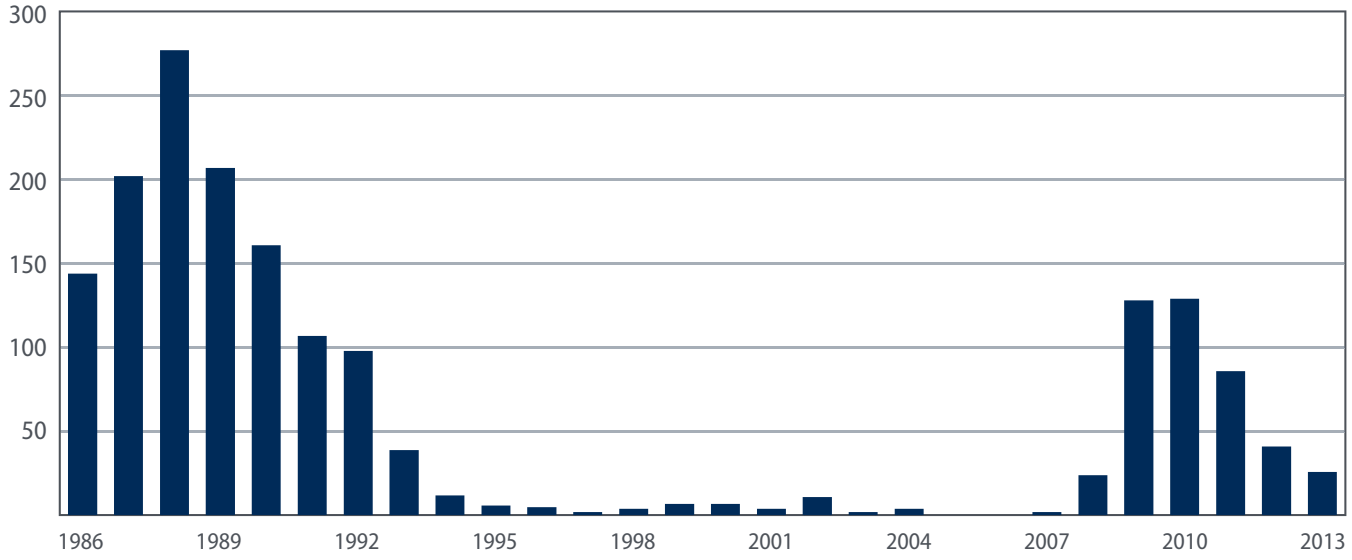
of oil prices in the mid-1980s hurt states like Texas, while New England experienced a collapse of real estate prices around 1990. These regional downturns were a significant factor in the troubles faced by commercial banks during this period. From 1986 through 1992, nearly 1,000 commercial banks failed. In contrast, the 2007–08 financial crisis was part of a national downturn that was much more severe. Nevertheless, the fraction of commercial banks that failed was similar to that of the earlier period. From 2007 through 2013, when there were roughly half the number of banks of the earlier period, 403 commercial banks failed. (See Figure 1.)

Balla, Prescott, and Walter compared these two periods by estimating models of bank failure and FDIC losses for each banking crisis, focusing on established (as opposed to newly chartered) community and midsize banks.[1] Their goal was to assess whether the regulatory reforms of the early 1990s made a difference to bank failure rates and FDIC losses. For community and midsize banks, they found that on many dimensions the two crises were quite alike. The same bank characteristics that predicted failure in the previous crisis predicted failure in the later one. Banks were less likely to fail if they were funded substantially by core deposits, had more capital, held more in securities, or were large institutions. Not surprisingly, banks headquartered in states that had bigger drops in housing prices and bigger increases in unemployment failed more often, as did those with more nonperforming loans. Furthermore, banks that did more commercial real estate (CRE) lending and construction and land development (CLD) lending, in particular, were also more likely to fail.

Despite these similarities, there were several significant differences between the two periods. One of the most striking was the increased concentration of CRE and CLD lending by community and midsize banks. For the banks in the researchers' sample, CRE lending rose from 6 percent to 21 percent of banks' loans in the years between the two crises, while CLD lending jumped from 4 percent to 22 percent. What is noteworthy and less well known is that while the volume of CRE lending increased markedly over the intervening years, banks also were building up their defenses against insolvency. For the banks in this sample, average capital ratios rose from 8.5 percent in the 1980s to 11 percent two decades later. The researchers found that these higher capital levels partially offset the risk posed by the rise in real estate lending.

Not only did real estate concentrations change between the two periods, but the degree and scope of the economic shocks—drops in housing prices and

Figure 1: Number of Commercial Bank Failures by Year



Source: FDIC Historical Statistics on Banking, Failures and Assistance Transactions Database

increases in unemployment levels at the state level—differed as well. In particular, the economic shocks were much larger in the later period than they were in the earlier period, when they were more regional in nature.

To isolate the role of the economic shocks, the researchers performed a counterfactual analysis in which they took banks with the mix of characteristics in one period and subjected them to the economic shocks of the other period. They found that banks with the characteristics of those in late 1985—for example, types of lending, size of assets, and capital ratios—would have failed at a much higher rate if they had experienced the more severe state-level economic shocks of 2007–13. Conversely, banks with the characteristics of those in late 2006 would have failed at a much lower rate under the shocks from 1986–92, which were less harsh. The actual failure rate in the first period, 5.6 percent, would have jumped to 11.6 percent if the economic effects of 2007–13 were applied. Meanwhile, the actual failure rate in the more recent downturn, 4.6 percent, would have dropped to 1.4 percent under the conditions of 1986–92.

The analysis suggests that community and midsize banks were better prepared for the recent crisis than they were for the previous one. It also suggests that despite the increased concentration in real estate lending by community and midsize banks, the large numbers of failures were mainly due to bad luck in the form of a very deep national recession. Indeed, if they had experienced economic shocks like those of the late 1980s, the crisis would have been relatively mild for them. Higher capital holdings, primarily the result of PCA and Basel I, helped reduce the chance of failure as banks faced the massive shocks of 2007–13 and countered the increased chance of failure from increased lending in riskier sectors such as CRE and CLD. By this measure, the reforms in the earlier period improved the regulation of community and midsize banks.

Where PCA Fell Short

While the researchers' analysis of bank failures implies that PCA and the other reforms may have helped reduce failure probabilities, it also suggests that PCA fell short as a tool for reducing FDIC losses on failed banks. The FDIC's loss ratio was about 24 percent of a failed bank's assets in 2007–13 compared with only 14 percent in 1986–92, once these ratios are weighted for bank size.[2] (The loss ratio is the FDIC's losses on a failed bank divided by the assets of that bank.)

The researchers did not identify a particular set of bank characteristics that fully explain the large increase in FDIC losses. However, their analysis suggests two complementary factors were at work. First, while capital levels were higher leading into the recent crisis, helping reduce failure probabilities, this extra capital provided only a small buffer for losses in those cases when a bank failed. Second, market values of bank assets can differ from their book values, sometimes dramatically. In the recent crisis, which saw a sudden drop in real estate prices and a corresponding fall in loan collateral values, asset book values may have significantly lagged market values.

The difference between book and market values is particularly relevant for the operation of the PCA provision of FDICIA. Before the Act, regulators had some leeway in deciding when to place a bank into FDIC receivership. As noted above, this flexibility led to widespread forbearance. FDICIA, by contrast, required regulators to restrict a bank's activities (such as bonus or dividend payments) if its book capital fell below certain levels. A bank is considered well capitalized and faces no restrictions if its risk-based capital ratio is 10 percent or more; its Tier 1 risk-based capital ratio is 6 percent or more; and its leverage ratio is 5 percent or more. If these ratios drop below specific targets, regulators enforce restrictions and designate the bank as undercapitalized, significantly undercapitalized, or critically undercapitalized. In the last case, the trigger is a ratio of equity-to-total assets of 2 percent or less, and the bank generally must go into receivership or conservatorship within 90 days. The FDIC then handles the disposition, which usually means transferring the bank's liabilities and selling some or most of its assets to another bank, usually with FDIC assistance.[3]

In such cases, the cost borne by the FDIC largely depends on how much it must pay to the acquirer

to take over the failed bank as well as the FDIC's receivership costs.[4] The price the acquirer is willing to accept, in turn, is based on factors such as the quality of assets, the value of the failed bank's charter, its core deposits, and any loss-sharing agreement reached with the FDIC. Notably, in the more recent crisis, most of the banks that went into receivership still had positive equity capital, but the losses to the FDIC were nevertheless enormous by historical standards. This suggests that failed banks' market values were far less than their book values.

In the 2007–13 period, the average capital ratio of failed banks in the quarter before failure was positive, about 1.5 percent. Since that is close to the 2 percent cutoff, the PCA requirement was carried out as intended. However, as noted above, the resulting losses were far greater as a percentage of assets than they were during 1986–92, when the capital level of a typical failing bank was negative 2 percent. In other words, the extra equity capital required by PCA capital triggers did not provide much of an extra buffer to absorb losses. (See Figure 2.)

Another Possible Indicator

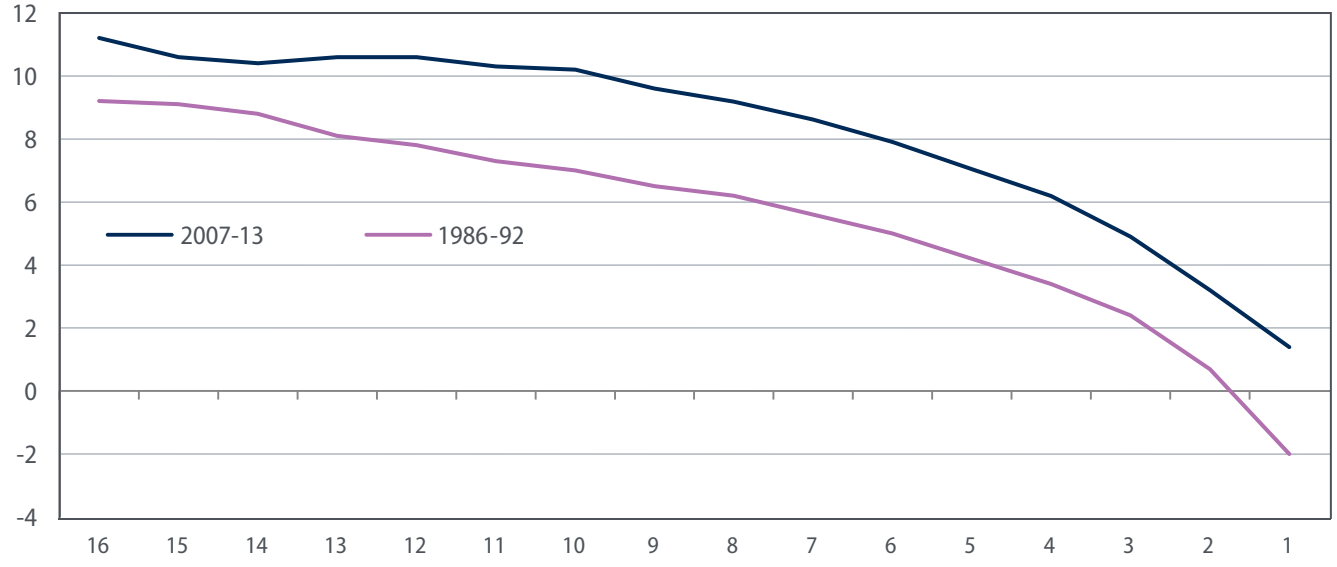
Possibly related to the difference in book and market value of assets is an item on banks' balance sheets called interest accrued but not yet received. The researchers found that in both periods, the ratio of this variable to bank assets strongly predicts both the chance of failure and the scale of losses.[5]

Interest accrued but not yet received is an asset on the balance sheet that measures interest income that the bank has recognized on an accrual basis even though it has not yet received cash payments. This variable can measure benign situations—for example, an agricultural loan in which income is accrued throughout the growing season but no cash payment arrives until harvest time. However, the account also can measure loans that are delinquent but have not yet been put on nonaccrual status. Typically, a bank has some discretion with how it categorizes delinquent or potentially delinquent loans. There could be situations where it is clear that the loan will not repay, but the bank does not treat it that way. In these cases, this accounting variable may serve as a red flag that additional losses on loans are forthcoming even though book value measurements do not reflect them yet.

Conclusion

For community and midsize banks, the two banking crises look surprisingly similar—despite differences in the severity of economic shocks and divergent policy responses. The same mix of factors predicted bank insolvencies as well as FDIC losses: capital levels, size, security holdings, CRE and CLD lending,

Figure 2: Average Capital Ratios of Failed Banks in the 16 Quarters Prior to Failure



Source: Consolidated Reports of Condition and Income (Call Reports)

nonperforming loans, core deposits, and key economic and housing indicators. The main distinction between the two episodes was the severity of economic shocks, which was the most important factor in determining the chance of bank failure. Although the increased concentration in commercial real estate lending since the 1980s also contributed to additional risk, this was mitigated by banks' higher capital levels, which were due primarily to the financial reforms of the early 1990s. The researchers' analysis suggests that the poor performance of the community and midsize banks in the recent crisis was due more to the misfortune of a historically deep recession than to their high real estate lending concentrations.

While PCA and other reforms may have helped reduce failure probabilities, they did not seem to help reduce FDIC losses on failed banks. FDICIA's PCA provisions often did lead to closure before a bank had negative capital, but they did not prevent sizeable losses in those cases when accounting values—that is, those related to the intervention trigger—significantly lagged market values. ■

Eliana Balla is a lead financial economist in the Supervision, Regulation and Credit Department at the Federal Reserve Bank of Richmond. Helen Fessenden is an economics writer, Edward Simpson Prescott is a senior economist and vice president, and John R. Walter is a senior economist and research advisor in the Bank's Research Department.

Endnotes

[1] See Eliana Balla, Edward Simpson Prescott, and John R. Walter, "Did the Financial Reforms of the Early 1990s Fail? A Comparison of Bank Failures and FDIC Losses in the 1986-92 and 2007–13 Periods," Federal Reserve Bank of Richmond Working Paper No. 15-05, May 2015.

[2] This adjustment takes into account the loss absorption capacity provided from book equity, if there is any, at the time of failure. If the ratios are equally weighted—that is, not adjusted for the size of the bank—they are 22 percent for 1986–92 and 30 percent for 2007–13. See Balla, Prescott, Walter, Table 1.

[3] See John R. Walter, "Closing Troubled Banks: How the Process Works," Federal Reserve Bank of Richmond *Economic Quarterly*, Winter 2004, vol. 90, no. 1, pp. 51–68.

[4] If a failed bank finds no buyer and the FDIC has to pay off insured depositors, the FDIC has to absorb those losses instead. During the more recent crisis, the federal government increased FDIC insurance coverage from $100,000 to $250,000.

[5] Some of the literature on FDIC losses has identified the importance of this variable, but its connection to bank failure has not been previously identified. See John F. Bovenzi, and Arthur J. Murton, "Resolution Costs of Bank Failures," *FDIC Banking Review*, September 1988, vol. 1, pp. 1-13.