FINANCIAL INSTITUTIONS

Causes and Consequences of Recent Community Bank Failures

Statement of Lawrance L. Evans, Jr., Director
Financial Markets and Community Investment
FINANCIAL INSTITUTIONS

Causes and Consequences of Recent Community Bank Failures

Why GAO Did This Study

Between January 2008 and December 2011—a period of economic downturn in the United States—414 insured U.S. banks failed. Of these, 85 percent (353) were small institutions with less than $1 billion in assets. Small banks often specialize in small business lending and are associated with local community development and philanthropy. The failures of these banks have raised questions about contributing factors. Further, the failures have raised concerns about the accounting and regulatory requirements needed to maintain reserves large enough to absorb expected loan losses (loan loss allowances)—for example, when borrowers are unable to repay a loan (credit losses).

What GAO Found

Ten states concentrated in the western, midwestern, and southeastern United States—areas where the housing market had experienced strong growth in the prior decade—each experienced 10 or more commercial bank or thrift (bank) failures between 2008 and 2011. The failures of small banks (those with less than $1 billion in assets) in these states were largely driven by credit losses on commercial real estate (CRE) loans, particularly loans secured by real estate to finance land development and construction. Many of the failed banks had often pursued aggressive growth strategies using nontraditional, riskier funding sources and exhibited weak underwriting and credit administration practices. The Department of the Treasury and the Financial Stability Forum’s Working Group on Loss Provisioning observed that earlier recognition of credit losses could have potentially lessened the impact of the crisis. The accounting model used for estimating credit losses is based on historical loss rates, which were low in the prefinancial crisis years. In part due to these accounting rules, loan loss allowances were not adequate to absorb the wave of credit losses that occurred once the financial crisis began. Banks had to recognize these losses through a sudden series of increases (provisions) to the loan loss allowance that reduced earnings and regulatory capital. In December 2012, the Financial Accounting Standards Board issued a proposal for public comment for a loan loss provisioning model that is more forward looking and would incorporate a broader range of credit information. This would result in banks establishing earlier recognition of loan losses for the loans they underwrite and could incentivize prudent risk management practices. It should also help address the cycle of losses and failures that emerged in the recent crisis as banks were forced to increase loan loss allowances and raise capital when they were least able to do so.

The Federal Deposit Insurance Corporation (FDIC) used shared loss agreements to help resolve 281 of the 414 bank failures during the recent financial crisis to minimize the impact on the Deposit Insurance Fund (DIF). Under a shared loss agreement, FDIC absorbs a portion of the loss on specified assets of a failed bank that are purchased by an acquiring bank. FDIC officials, state bank regulators, community banking associations, and acquiring banks of failed institutions GAO interviewed said that shared loss agreements helped to attract potential bidders for failed banks during the financial crisis. FDIC compared the estimated cost of the shared loss agreements to the estimated cost of directly liquidating the failed banks’ assets and estimated that the use of shared loss agreements saved the DIF over $40 billion.

GAO analysis of metropolitan and rural areas where bank failures occurred and econometric analysis of bank income and condition data suggested that the acquisitions of failed banks by healthy banks mitigated the potentially negative effects of failures on communities. However, the focus of local lending and philanthropy may have shifted. Also, bank officials whom GAO interviewed noted that in the wake of the bank failures, underwriting standards had tightened. As a result, credit was generally most available for small business owners with good credit histories and strong financials. Further, the effects of bank failures could potentially be significant for communities that had been serviced by only one bank or where only a few banks remain.

View GAO-13-704T. For more information, contact Lawrence Evans, Jr. at (202) 512-4802 or evansl@gao.gov.
Chairman Johnson, Ranking Member Crapo, and Members of the Committee:

I am pleased to be here today as you examine lessons learned from recent community bank failures. Between January 2008 and December 2011, 414 insured U.S. commercial banks and thrifts (banks) failed. Of these, 85 percent (353) were small banks with less than $1 billion in assets. Banks of this size tend to be community banks with a relatively limited geographic scope of operations and often specialize in providing credit to local small businesses. Typically these banks are also associated with local community development, leadership, and philanthropy. The failures of these community banks, which were largely concentrated in certain parts of the country, occurred against the backdrop of the worst financial crisis since the Great Depression and raised a number of questions. Among these are the role played by local market conditions and related economic factors; the application of fair value accounting under generally accepted accounting principles (GAAP); and the potential effect on the communities where the banks were located, particularly in terms of credit availability, income and employment, and philanthropic activity.¹ In addition, these failures raise questions about the impact of the Federal Deposit Insurance Corporation’s (FDIC) methods for resolving failed banks on the Deposit Insurance Fund (DIF).

My remarks today are based on our January 2013 report on the impact of bank failures.² My statement will address (1) the factors that contributed to the failure of banks in states with 10 or more failures between 2008 and 2011, including the extent to which losses related to fair value accounting treatment affected the regulatory capital positions of failed banks; (2) market factors that affected FDIC’s choice of resolution method and the costs that the DIF incurred as a result of these methods; and

¹Fair value accounting is a financial reporting approach that requires or permits financial institutions to measure and report on an ongoing basis certain financial assets and liabilities at the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

²GAO, Financial Institutions: Causes and Consequences of Recent Bank Failures, GAO-13-71 (Washington, D.C.: Jan. 3, 2013). This report was mandated by Pub. L. No. 112-88, § 3, 125 Stat. 1899, 1902 (2012). As part of this act, the FDIC Inspector General (IG) was also required to conduct a separate study on the impact of bank failures.
(3) the effect of recent small bank failures on local communities. To address these issues, we analyzed bank income and condition data (call report data); reviewed inspectors general (IG) reports of individual bank failures; conducted econometric modeling; and interviewed officials from federal and state banking regulators, banking associations, banks, and market experts. We also coordinated with the FDIC Inspector General on its study. We conducted this performance audit from February 2012 to December 2012 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives.

Background

Ten states concentrated in the western, midwestern, and southeastern United States—all areas where the housing market had experienced strong growth in the prior decade—experienced 10 or more bank failures between 2008 and 2011 (see fig.1). Together, failures in these 10 states accounted for 72 percent (298), of the 414 bank failures across all states during this time period.
Within these 10 states, 86 percent (257) of the failed banks were small institutions with assets of less than $1 billion at the time of failure, and 52 percent (155) had assets of less than $250 million. Twelve percent (36) were medium-size banks with more than $1 billion but less than $10 billion in assets, and 2 percent (5) were large banks with assets of more than $10 billion at the time of failure.
In the 10 states with 10 or more failures between 2008 and 2011, failures of small and medium-size banks were largely associated with high concentrations of commercial real estate (CRE) loans, in particular the subset of acquisition, development, and construction (ADC) loans, and with inadequate management of the risks associated with these high concentrations. Our analysis of call report data found that CRE (including ADC) lending increased significantly in the years prior to the housing market downturn at the 258 small banks that failed between 2008 and 2011. This rapid growth of failed banks’ CRE portfolios resulted in concentrations—that is, the ratio of total CRE loans to total risk-based capital—that exceeded regulatory thresholds for heightened scrutiny established in 2006 and increased the banks’ exposure to the sustained downturn that began in 2007. Specifically, we found that CRE concentrations grew from 333 percent in December 2001 to 535 percent in June 2008. At the same time, ADC concentrations grew from 104 percent to 259 percent. The trends for the 36 failed medium-size banks were similar over this time period. In contrast, small and medium-sized banks that did not fail exhibited substantially lower levels and markedly slower growth rates of CRE loans and as a result had significantly lower concentrations of them, reducing the banks’ exposure.

With the onset of the financial crisis, the level of nonperforming loans began to rise, as did the level of subsequent net charge-offs, leading to a

---

3Regulators define CRE loans to include ADC loans that are secured by real estate to finance land development and construction, including new construction, upgrades, and rehabilitation. CRE loans also include unsecured loans to finance commercial real estate, loans secured by multifamily properties, and loans secured by nonfarm nonresidential property. ADC loans generally are considered to be the riskiest class of CRE loans because of their long development times and because they can include properties (such as housing developments or retail space in a shopping mall) that are built without firm commitments from buyers or lessees. By the time the construction phase is completed, market demand may have fallen, putting downward pressure on sales prices or rents, making ADC loans more volatile.

4Guidelines issued by federal banking regulators in 2006 described characteristics that would subject banks to greater regulatory scrutiny. These included an ADC concentration of more than 100 percent or a CRE concentration of more than 300 percent when there is an increase in the outstanding balance of the CRE portfolio of 50 percent or more during the prior 36 months. Concentrations in Commercial Real Estate Lending, Sound Risk Management Practices 71 Fed. Reg. 74,580 (Dec. 12, 2006).
decline in net interest income and regulatory capital.\textsuperscript{5} The rising level of nonperforming loans, particularly ADC loans, appears to have been the key factor in the failures of small and medium-size banks in the 10 states between 2008 and 2011. For example, in December 2001, 2 percent of ADC loans at the small failed banks were classified as nonperforming. With the onset of the financial crisis, the level of nonperforming ADC loans increased quickly to 11 percent by June 2008 and 46 percent by June 2011.\textsuperscript{6} As banks began to designate nonperforming loans or portions of these loans as uncollectible, the level of net charge-offs also began to rise. In December 2001, net charge-offs of ADC loans at small failed banks were less than 1 percent. By June 2008, they had risen to 2 percent and by June 2011 to 12 percent.

CRE and especially ADC concentrations in small and medium-size failed banks in the 10 states were often correlated with poor risk management and risky funding sources. Our analysis showed that small failed banks in the 10 states had often pursued aggressive growth strategies using nontraditional and riskier funding sources such as brokered deposits.\textsuperscript{7}

The IG reviews noted that in the majority of failures, management exercised poor oversight of the risks associated with high CRE and ADC concentrations and engaged in weak underwriting and credit administration practices. Further, 28 percent (84) of the failed banks had been chartered for less than 10 years at the time of failure and appeared

\textsuperscript{5}Net charge-offs are the total amount of loans that are removed from the balance sheet because they are uncollectible, less amounts recovered on loans previously charged off. Net interest income is the difference between the interest income recognized on earning assets and the interest expense on deposits and other borrowed funds. Increases in the loan loss allowance for credit losses on nonperforming loans are charged to the bank’s expenses on the income statement, thus reducing its net interest income. Reductions in a bank’s income are reflected in its earnings, which are included in retained earnings, a component of regulatory capital.

\textsuperscript{6}Nonperforming loans are defined as loans that are 90 days or more past due and loans on which the bank is no longer accruing interest. Institutions must estimate the credit losses on nonperforming loans and increase the loan loss allowance accordingly.

\textsuperscript{7}A “brokered deposit” is defined as a deposit obtained, directly or indirectly, from or through the mediation or assistance of a deposit broker. The broker pools large-denomination deposits from many small investors and markets the pooled deposits to financial institutions, usually in blocks nearing $100,000, and negotiates a higher rate for the pooled certificates of deposit. In contrast, core deposits are largely derived from a bank’s regular customer base, and are typically the most stable and least costly source of funding with the lowest interest rates.
in many cases to have deviated from their approved business plans, according to FDIC. Large bank failures in the 10 states were associated with some of the same factors as small bank failures—high-risk growth strategies, weak underwriting and risk controls, and excessive concentrations that increased these banks’ exposure to the real estate market downturn. The primary difference was that the large banks’ strategies generally relied on risky nontraditional residential mortgage products as opposed to commercial real estate.

To further investigate factors associated with bank failures across the United States, we analyzed data on FDIC-insured commercial banks and state-chartered savings banks from 2006 to 2011. Our econometric analysis suggests that across the country, riskier lending and funding sources were associated with an increased likelihood of bank failures. Specifically, we found that banks with high concentrations of ADC loans and an increased use of brokered deposits were more likely to fail from 2008 to 2011, while banks with better asset quality and greater capital adequacy were less likely to fail. An FDIC IG study issued in October 2012 found that some banks with high ADC concentrations were able to weather the recent financial crisis without experiencing a corresponding decline in their overall financial condition. Among other things, the IG found that these banks exhibited strong management, sound credit administration and underwriting practices, and adequate capital.

---

We excluded savings associations and insured branches of foreign banks from our analysis, because these institutions did not report data on key variables for the time period we analyzed. We collected data on characteristics that described a bank’s capital adequacy; asset quality; earnings; liquidity; ADC lending; multifamily real estate lending; nonfarm, nonresidential real estate lending; commercial real estate lending not secured by real estate; brokered deposits funding; and size. We then estimated the likelihood of failure as a function of these characteristics, controlling for factors that affected the likelihood of failure of all banks, such as the market for the banks’ products and services and overall economic conditions.

We found that losses related to bank assets and liabilities that were subject to fair value accounting contributed little to bank failures overall, largely because most banks’ assets and liabilities were not recorded at fair value. Based on our analysis, fair value losses related to certain types of mortgage-related investment securities contributed to some bank failures. But in general fair value-related losses contributed little to the decline in net interest income and regulatory capital that failed banks experienced overall once the financial crisis began.

We analyzed the assets and liabilities on the balance sheets of failed banks nationwide that were subject to fair value accounting between 2007 and 2011. We found that generally more than two-thirds of the assets of all failed commercial banks (small, medium-size, and large) were classified as held-for-investment (HFI) loans, which were not subject to fair value accounting. For example, small failed commercial banks held an average of 77 percent of their assets as HFI loans in 2008. At the same time, small commercial banks that remained open held an average of 69 percent in such loans. Failed and open small thrifts, as well as medium-size and large commercial banks, had similar percentages.

Investment securities classified as available for sale (AFS) represented the second-largest percentage of assets for all failed and open banks over the 5-year period we reviewed. For example, in 2008, small failed commercial banks held an average of 10 percent of their assets as AFS securities, while small open banks averaged 16 percent. Generally, AFS securities are recorded at fair value, but the changes in fair value impact earnings or regulatory capital only under certain circumstances. Some assets and liabilities, such as securities designated for trading, are measured at fair value on a recurring basis (at each reporting period), where unrealized gains or losses flow through the bank’s earnings in the income statement and affect regulatory capital. However, for certain other assets and liabilities that are measured at fair value on a recurring basis, such as AFS securities, unrealized fair value gains and losses generally do not impact earnings and thus generally are not included in regulatory capital calculations. Instead, these gains or losses are recorded through other comprehensive income, unless the institution determines that a decline in fair value below amortized cost constitutes an other-than-temporary impairment, in which case the instrument is written down to its fair value, with credit losses reflected in earnings.
impact regulatory capital, together these categories did not account for a significant percentage of total assets at either failed or open commercial banks or thrifts. For example, in 2008, trading assets, nontrading assets such as nontrading derivative contracts, and trading liabilities at small failed banks ranged from 0.00 to 0.03 percent of total assets.

As discussed earlier, declines in regulatory capital at failed banks were driven by rising levels of credit losses related to nonperforming loans and charge-offs of these loans. For failed commercial banks and thrifts of all sizes nationwide, credit losses, which resulted from nonperforming HFI loans, were the largest contributors to the institutions’ overall losses when compared to any other asset class. These losses had a greater negative impact on institutions’ earnings and regulatory capital levels than those recorded at fair value.

During the course of our work, several state regulators and community banking association officials told us that at some small failed banks, declining collateral values of impaired collateral-dependent loans—particularly CRE and ADC loans in those areas where real estate assets prices declined severely—drove both credit losses and charge-offs and resulted in reductions to regulatory capital. A loan is considered “collateral dependent” when the repayment of the debt will be provided solely by the sale or operation of the underlying collateral, and there are no other available and reliable sources of repayment. Data are not publicly available to analyze the extent to which declines in the collateral values of impaired collateral-dependent CRE or ADC loans drove credit losses or charge-offs at the failed banks. However, state banking associations said that the magnitude of the losses was exacerbated by federal bank examiners’ classification of collateral-dependent loans and evaluations of the appraisals banks used to support the impairment analyses of these loans. Federal banking regulators noted that regulatory guidance in 2009 directed examiners not to require banks to write down loans to an amount less than the loan balance solely because the value of the underlying collateral had declined. The regulators added that examiners were generally not expected to challenge the appraisals obtained by banks unless they found that any underlying facts or assumptions about the
The guidance also stated that in making decisions to write down loans, bank examiners were to first focus on the adequacy of cash flows to service the debt. If the sources of cash flows did not exist and the only likely repayment source was the sale of the collateral, then examiners were to direct the bank to write down the loan balances to the fair value of the collateral, less estimated costs to sell in certain circumstances. For example, one Federal Reserve official told us that some failed banks were extending ADC loans on an interest-only basis with no evidence that the borrower would be able to repay the principal and with underlying collateral whose value had declined by a very significant amount. In those cases, examiners questioned whether the banks would ever be repaid the principal owed. Under these circumstances, absent any evidence that the borrowers could pay through other means, the examiners would require a write-down.

\[^{12}\text{FDIC, Federal Reserve, OCC, OTS, the National Credit Union Administration (NCUA), and the Federal Financial Institutions Examination Council (FFIEC) State Liaison Committee, Policy Statement on Prudent Commercial Real Estate Loan Workouts (Oct. 30, 2009) (see for example, Federal Reserve SR 09-07 and FDIC FIL-61-2009). We reported in 2011 that interviews with officials from 43 banks in different parts of the country had identified multiple concerns with examiner treatment of CRE loans and related issues. GAO, Banking Regulation: Enhanced Guidance on Commercial Real Estate Risks Needed, GAO-11-489 (Washington, D.C.: May 19, 2011).}\]
A loan loss provision is the money a bank sets aside to cover potential credit losses on loans.\textsuperscript{13} The Department of the Treasury (Treasury) and the Financial Stability Forum's Working Group on Loss Provisioning (Working Group) have observed that the current accounting model for estimating credit losses is based on historical loss rates, which were low in the years before the financial crisis. Under GAAP, the accounting model for estimating credit losses is commonly referred to as an "incurred loss model" because the timing and measurement of losses are based on estimates of losses incurred as of the balance sheet date. In a 2009 speech, the Comptroller of the Currency, who was a co-chair of the Working Group, noted that in a long period of benign economic conditions, such as the years prior to the most recent downturn, historical loan loss rates would typically be low. As a result, justifying significant loan loss provisioning to increase the loan loss allowance can be difficult under the incurred loss model.

Treasury and the Working Group noted that earlier recognition of loan losses could have reduced the need for banks to recognize increases in their incurred credit losses through a sudden series of loan loss provisions that reduced earnings and regulatory capital. Federal banking regulators have also noted that requiring management at the failed banks to recognize loan losses earlier could have helped stem losses. Specifically, such a requirement might have provided an incentive not to concentrate so heavily in the loans that later resulted in significant losses. To address this issue, the Financial Accounting Standards Board has issued a proposal for public comment for a loan loss provisioning model that is more forward-looking and focuses on expected losses. This proposal would allow banks to establish a means of recognizing potential losses earlier on the loans they underwrite and could incentivize prudent risk management practices. Moreover, the proposal is designed to help address the cycle of losses and failures that emerged in the recent crisis.

\textsuperscript{13}GAAP requires financial institutions to maintain an allowance for loan losses (loan loss allowance) at a level that is appropriate to cover estimated credit losses incurred as of the balance sheet date for their entire portfolio of HFI loans. Under GAAP, institutions must recognize impairment on HFI loans when credit losses are determined to be probable and reasonably estimable. That is, when, based on current information and events, it is probable that an institution will be unable to collect all amounts due (i.e., both principal and interest) according to the contractual terms of the original loan agreement. An increase in the loan loss allowance results in a charge to expenses, termed a provision for loan losses (loan loss provision), except in the case where there are recoveries of amounts previously charged off. Loan loss provisions reduce the net interest income earned as part of a bank's earnings, and regulatory capital declines.
as banks were forced to increase loan loss allowances and raise capital when they were least able to do so (procyclicality). We plan to continue to monitor the progress of the ongoing activities of the standard setters to address concerns with the loan loss provisioning model.

FDIC is required to resolve a bank failure in a manner that results in the least cost to the Deposit Insurance Fund (DIF). FDIC’s preferred resolution method is to sell the failed bank to another, healthier, bank. During the most recent financial crisis, FDIC facilitated these sales by including a loss share agreement, under which FDIC absorbed a portion of the loss on specified assets purchased by the acquiring bank. From January 2008 through December 31, 2011, FDIC was appointed as receiver for the 414 failed banks, with $662 billion in book value of failed bank assets. FDIC used purchase and assumption agreements (the direct sale of a failed bank to another, healthier bank) to resolve 394 failed institutions with approximately $652 billion in assets. As such, during the period 2008 through 2011, FDIC sold 98 percent of failed bank assets using purchase and assumption agreements. However, FDIC only was able to resolve so many of these banks with purchase and assumption agreements because it offered to share in the losses incurred by the acquiring institution. FDIC officials said that at the height of the financial crisis in 2008, FDIC sought bids for whole bank purchase and assumption agreements (in which the acquiring bank assumes essentially all of the failed bank’s assets and liabilities) with little success. Potential acquiring banks we interviewed told us that they did not have sufficient capital to take on the additional risks that the failed institutions’ assets represented. Acquiring bank officials that we spoke to said that they would not have purchased the failed banks without FDIC’s shared loss agreements because of uncertainties in the market and the value of the assets. Because shared loss agreements had worked well during the savings and loan crisis of the 1980s and early 1990s, FDIC decided to offer the option of having such agreements as part of the purchase and assumption of the failed bank.

Shared loss agreements provide potential buyers with some protection on the purchase of failed bank assets, reduce immediate cash needs, keep assets in the private sector, and minimize disruptions to banking customers. Under the agreements, FDIC generally agrees to pay 80 percent for covered losses, and the acquiring bank covers the remaining 20 percent. From 2008 to the end of 2011, FDIC resolved 281 of the 414 failures (68 percent) by providing a shared loss agreement as part of the purchase and assumption. The need to offer shared loss agreements
diminished as the market improved. For example, in 2012 FDIC was able to resolve more than half of all failed institutions without having to offer to share in the losses. Specifically, between January and September 30, 2012, FDIC had agreed to share losses on 18 of 43 bank failures (42 percent). Additionally, some potential bidders were willing to accept shared loss agreements with lower than 80-percent coverage. As of December 31, 2011, DIF receiverships had made shared loss payments totaling $16.2 billion. In addition, future payments under DIF receiverships are estimated at an additional $26.6 billion over the duration of the shared loss agreements, resulting in total estimated lifetime losses of $42.8 billion (see fig. 2).^{14}

---

**Figure 2: Shared Loss Agreements Entered into by Year, 2008-2011**

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of shared loss agreements</th>
<th>Estimated lifetime losses (dollars in billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>3</td>
<td>$3.29</td>
</tr>
<tr>
<td>2009</td>
<td>90</td>
<td>19.92</td>
</tr>
<tr>
<td>2010</td>
<td>130</td>
<td>15.98</td>
</tr>
<tr>
<td>2011</td>
<td>58</td>
<td>3.65</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>281</strong></td>
<td><strong>$42.84</strong></td>
</tr>
</tbody>
</table>

Source: GAO analysis of FDIC data.

By comparing the estimated cost of the shared loss agreements with the estimated cost of directly liquidating the failed banks’ assets, FDIC has estimated that using shared loss agreements has saved the DIF over $40 billion. However, while the total estimated lifetime losses of the shared loss agreements may not change, the timing of the losses may, and payments from shared loss agreements may increase as the terms of the agreements mature. FDIC officials stated that the acquiring banks were being monitored for compliance with the terms and conditions of the shared loss agreements. FDIC is in the process of issuing guidance to the

---

^{14}FDIC reported that, as of December 31, 2012, DIF receiverships made shared-loss payments totaling $23.3 billion and are estimated to pay an additional $18.1 billion over the duration of the shared loss agreements, resulting in total lifetime losses of $41.4 billion. These data included shared-loss agreements associated with both the bank failures that occurred between 2008 and 2011 as well as the additional banks that failed in 2012.
acquiring banks reminding them of these terms to prevent increased shared loss payments as these agreements approach maturity.

The Impact of Bank Failures on Local Communities Was Mixed

Although the focus of local lending and philanthropy may have shifted, the acquisitions of failed banks by healthy banks appear to have mitigated the potentially negative effects of bank failures on communities. First, bank failures and failed bank acquisitions can have an impact on market concentration—an indicator of the extent to which banks in the market can exercise market power, by, for example, raising prices or reducing the availability of some products and services. But, we found that a limited number of metropolitan areas and rural counties were likely to have become significantly more concentrated.

We analyzed the impact of bank failures and failed bank acquisitions on local credit markets using data for the period from June 2007 to June 2012. We calculated the Herfindahl-Hirschman Index (HHI), a key statistical measure used to assess market concentration and the potential for firms to exercise their ability to influence market prices. The HHI is measured on a scale of 0 to 10,000, with values over 1,500 considered indicative of concentration. Our results suggest that a small number of the markets affected by bank failures and failed bank acquisitions were likely to have become significantly more concentrated. For example, 8 of the 188 metropolitan areas affected by bank failures and failed bank acquisitions between June 30, 2009, and June 29, 2010, met the criteria that indicate significant competitive concerns. Similarly, 5 of the 68 rural counties affected by bank failures during the same time period met the criteria. The relatively limited number of areas where concentration increased was generally the result of acquisitions by institutions that were not already established in the locales that the failed banks served. However, the effects could be potentially significant for those limited areas that had been serviced by one bank or where only a few banks remain.

15The HHI reflects the number of firms in the industry and each firm’s market share. It is calculated by summing the squares of the market shares of each firm competing in the market. The HHI also reflects the distribution of market shares of the top firms and the composition of the market outside the top firms. According to the Department of Justice and the Federal Trade Commission, markets in which the value of the HHI is between 1,500 and 2,500 points are considered to be moderately concentrated, and those in which the value of the HHI is in excess of 2,500 points are considered to be highly concentrated, although other factors also play a role.
Second, our econometric analysis of call report data from 2006 through 2011 found that failing small banks extended progressively less net credit as they approached failure, but that acquiring banks generally increased net credit after the acquisition, albeit more slowly.\(^\text{16}\) Officials from acquiring and peer banks we interviewed in Georgia, Michigan, and Nevada agreed.\(^\text{17}\) However, general credit conditions were generally tighter in the period following the financial crisis. For example, several bank officials noted that in the wake of the bank failures, underwriting standards had tightened, making it harder for some borrowers who might have been able to obtain loans prior to the bank failures to obtain them afterward. Several banks officials we interviewed also said that new lending for certain types of loans could be restricted in certain areas. For example, they noted that the CRE market, and in particular the ADC market, had contracted and that new lending in this area had declined significantly.

Officials from regulators, banking associations, and banks we spoke with also said that involvement in local philanthropy had declined as small banks approached failure but generally increased after acquisition. State banking regulators and national and state community banking associations we interviewed told us that community banks tended to be highly involved in local philanthropic activities before the recession—for example, by designating portions of their earnings for community development or other charitable activities. However, these philanthropic activities decreased as the banks approached failure and struggled to conserve capital. Acquiring bank officials we interviewed told us that they had generally increased philanthropic activities compared with the failed

\(^{16}\)We used an econometric model to estimate net credit extended by banks during a quarter as a function of the capital adequacy; asset quality; earnings; liquidity; ADC lending; nonfarm, nonresidential real estate lending; multifamily real estate lending; commercial real estate lending not secured by real estate; brokered deposits; size; and other factors. We also included indicators for each quarter to control for factors affecting net credit extension that are common to all banks at the same time, such as the regulatory environment, the state of the market for bank products and services, and the condition of the overall economy. We then used the results of our model to predict net credit extended by failing banks in the quarters leading up to their failure and by acquiring banks in the quarters following acquisition of a failed bank.

\(^{17}\)We chose to focus on these three states because they reflect the three major areas where the bank failures were concentrated—the southeast, southwest, and midwest. They reflect states with either highest numbers of bank failures or highest failure rates. They also reflect the economic conditions that contributed to the bank failures—high unemployment rates, and for two states, high declines in house prices.
community banks during the economic downturn and in the months before failure. However, acquiring banks may or may not focus on the same philanthropic activities as the failed banks. For example, one large acquiring bank official told us that the acquiring bank made major charitable contributions to large national or statewide philanthropic organizations and causes and focused less on the local community charities to which the failed bank had contributed.

Finally, we econometrically analyzed the relationships among bank failures, income, unemployment, and real estate prices for all states and the District of Columbia (states) for 1994 through 2011. Our analysis showed that bank failures in a state were more likely to affect its real estate sector than its labor market or broader economy. In particular, this analysis did not suggest that bank failures in a state—as measured by failed banks’ share of deposits—were associated with a decline in personal income in that state. To the extent that there is a relationship between the unemployment rate and bank failures, the unemployment rate appears to have more bearing on failed banks’ share of deposits than vice versa. In contrast, our analysis found that failed banks’ share of deposits and the house price index in a state appear to be significantly related to each other. Altogether, these results suggest that the impact of bank failures on a state’s economy is most likely to appear in the real estate sector and less likely to appear in the overall labor market or in the broader economy.18 However, we note that these results could be different at the city or county level.

18We measured bank failures in a state as the fraction of deposits in a state that were in banks that failed during the past year. This measure captures both the size of the failing banks and their share of the deposits (a proxy for their weight in a state), whereas the absolute number of failures or the simple failure rate does not. We measured income in a state using state personal income, adjusted for inflation. We measured unemployment in a state using the unemployment rate. We measured real estate prices using house price indices for single-family detached properties with conventional conforming mortgages. For each variable, we estimated the relationship between the variable, its past values, and past values of the other three variables. We used a technique that controlled for time-invariant characteristics of states and features of the national economy that affected all states at the same time and that allowed for the possibility that all four variables were jointly determined and affected by each other. We then used Granger causality tests to estimate the likelihood that the past values of each variable helped explain the current values of the other variables.
Chairman Johnson, Ranking Member Crapo, and Members of the Committee, this concludes my prepared statement. I would be happy to answer any questions that you may have at this time.

If you or your staff have any questions about this testimony, please contact Lawrance Evans, Jr. at (202) 512-4802 or evansl@gao.gov. Contact points for our Offices of Public Affairs and Congressional Relations may be found on the last page of this report. GAO staff who made key contributions to this testimony include Karen Tremba, Assistant Director; William Cordrey, Assistant Director; Gary Chupka, Assistant Director; William Chatlos; Emily Chalmers, Robert Dacey; Rachel DeMarcus; M’Baye Diagne; Courtney LaFountain; Marc Molino, Patricia Moye; Lauren Nunnally; Angela Pun, Stefanie Jonkman; Akiko Ohnuma; Michael Osman; and Jay Thomas.
This is a work of the U.S. government and is not subject to copyright protection in the United States. The published product may be reproduced and distributed in its entirety without further permission from GAO. However, because this work may contain copyrighted images or other material, permission from the copyright holder may be necessary if you wish to reproduce this material separately.
GAO’s Mission

The Government Accountability Office, the audit, evaluation, and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO’s commitment to good government is reflected in its core values of accountability, integrity, and reliability.

Obtaining Copies of GAO Reports and Testimony

The fastest and easiest way to obtain copies of GAO documents at no cost is through GAO’s website (http://www.gao.gov). Each weekday afternoon, GAO posts on its website newly released reports, testimony, and correspondence. To have GAO e-mail you a list of newly posted products, go to http://www.gao.gov and select “E-mail Updates.”

Order by Phone

The price of each GAO publication reflects GAO’s actual cost of production and distribution and depends on the number of pages in the publication and whether the publication is printed in color or black and white. Pricing and ordering information is posted on GAO’s website, http://www.gao.gov/ordering.htm.

Place orders by calling (202) 512-6000, toll free (866) 801-7077, or TDD (202) 512-2537.

Orders may be paid for using American Express, Discover Card, MasterCard, Visa, check, or money order. Call for additional information.

Connect with GAO

Connect with GAO on Facebook, Flickr, Twitter, and YouTube. Subscribe to our RSS Feeds or E-mail Updates. Listen to our Podcasts. Visit GAO on the web at www.gao.gov.

To Report Fraud, Waste, and Abuse in Federal Programs

Contact:

Website: http://www.gao.gov/fraudnet/fraudnet.htm
E-mail: fraudnet@gao.gov
Automated answering system: (800) 424-5454 or (202) 512-7470

Congressional Relations

Katherine Siggerud, Managing Director, siggerudk@gao.gov, (202) 512-4400, U.S. Government Accountability Office, 441 G Street NW, Room 7125, Washington, DC 20548

Public Affairs

Chuck Young, Managing Director, youngc1@gao.gov, (202) 512-4800 U.S. Government Accountability Office, 441 G Street NW, Room 7149 Washington, DC 20548

Please Print on Recycled Paper.