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# UNDERSTANDING BANK FAILURES IN THE CURRENT ECONOMIC ENVIRONMENT

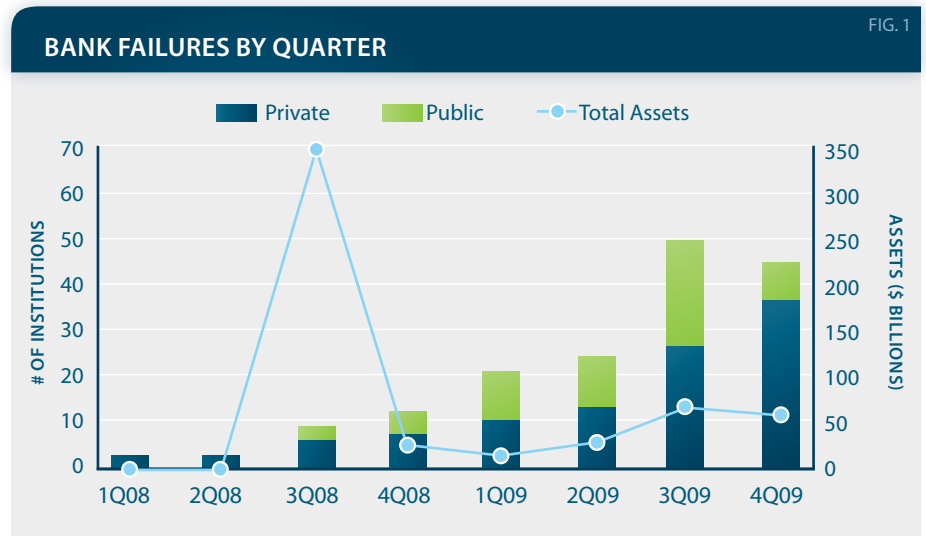
*A Review of the 2008 & 2009 Bank Failures*

America's financial system endured a period of tremendous turbulence during 2008 and 2009. The housing bubble burst, Wall Street nearly collapsed, unemployment breached 10%, and a nationwide recession was declared. Banks were significantly affected by precipitous increases in noncurrent loans, deep losses, and capital erosion. Many of the nation's largest banks received capital injections from the U.S. Treasury Department; however, many banks were not deemed strong enough or important enough to the financial system to receive government aid.<sup>1</sup> During 2008 and 2009, the United States experienced 165 bank failures, 140 of which occurred in 2009 (See Figure 1). Management decisions relating to growth, asset composition, and capital structure contributed to the demise of many banks. Additional trends relating to location, capital, and asset quality were also identified in the failed banks.

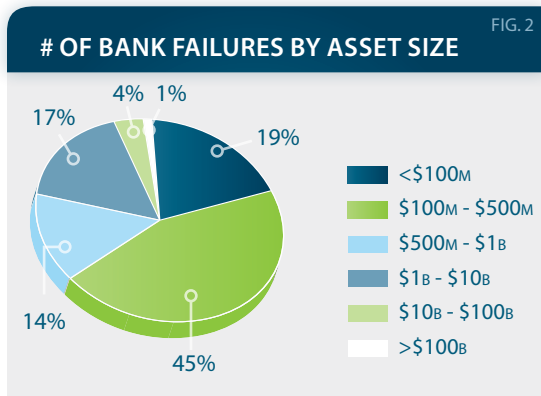
During 2008 and 2009, the United States experienced 165 bank failures.

### COMMON CHARACTERISTICS

While each bank failure involved a unique array of damaging circumstances, most banks that failed exhibited a number of common characteristics.



Source: SNL Financial LC, 2010

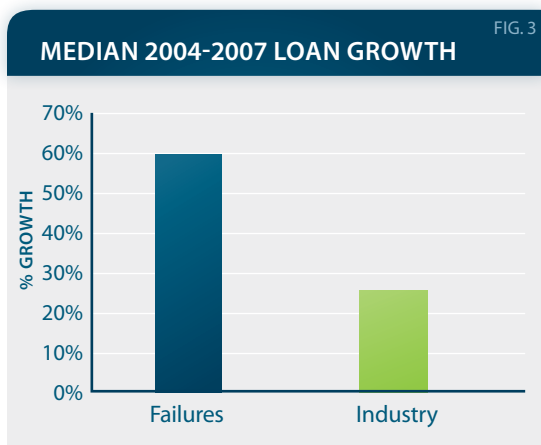


Source: SNL Financial LC, 2010

#### Ownership & Size

Many of the 2008 and 2009 bank failures were of small, private institutions (See Figure 2). However, compared to the overall banking industry, a disproportionate amount of the failed banks were larger, publicly traded institutions. The median asset size of the failures was \$271 million, while the median size of all banks in the 2007 industry was \$132 million.<sup>ii</sup> Publicly traded institutions comprised less than a quarter of the 2007 industry; however, more than one-third of the failed banks were either publicly traded or owned by a publicly traded bank holding company at the time of failure.

Failures of new banks, classified as *de novo*, represented another trend in recent bank failures. *De novo* banks accounted for 18% of the failures and only 12% of the 2007 industry. Georgia and Florida, in particular, had a large number of *de novo* banks. At the end of 2007, 26% and 33% of Georgia and Florida's banks were classified as *de novo*, compared to just 12% of the industry.



Source: SNL Financial LC, 2010

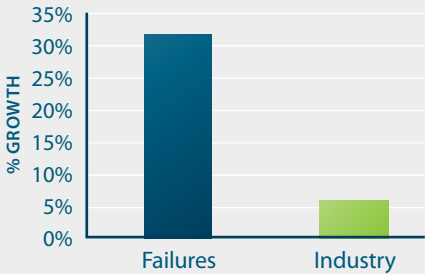
#### Loan Growth, Composition & Funding

Rapid loan growth, especially in the years leading up to the financial crisis, was a trait frequently observed in the institutions that failed. Nearly a third of the failed banks experienced more than 100% loan growth from 2004 to 2007. The median growth for the failures during this time period was 60%, while the median in the industry was 25% (See Figure 3). Growth was particularly problematic when driven by expansion in riskier loan portfolios, such as construction and land development loans (See Figure 4).

Concentrations of real estate loans represented another source of financial stress for banks. Problems were most severe for banks lending in high growth market areas, which later experienced the steepest declines in property values. California and Florida both faced real estate bubbles in multiple markets

**CONSTRUCTION LOANS** FIG. 4

MEDIAN CONSTRUCTION & LAND DEVELOPMENT LOANS (2007)



Source: SNL Financial LC, 2010

A concentration in construction loans was by far the most reoccurring theme among recent bank failures. Banks that failed in 2008 and 2009 held a median level of construction and land development loans of 32% in 2007, compared to 7% in the industry. A bank is considered to have a concentration in construction loans when the loans comprise more than 20% of the bank's total loan portfolio. Of the banks that failed in Georgia, 90% held this high concentration, while 100% of the failed banks held at least 10% construction loans.

followed by a crash in real estate prices. Los Angeles, San Diego, and Tampa all experienced more than a 40% decline in real estate prices from peak to trough, while Miami saw nearly a 50% decline.<sup>1</sup> As property values declined nationwide, much of the real estate collateral securing these loans was suddenly significantly overvalued. This left many banks with concentrations of real estate loans particularly vulnerable to default.

Also proven to be problematic was the excessive reliance on noncore funding sources<sup>2</sup> to fund aggressive growth. Funding from noncore sources accounted for the majority of total liabilities in more than a third of the failed banks. Less than 10% of the 2007 industry utilized noncore funding sources for more than 50% of liabilities

**2007 CHARTERS BY STATE** FIG. 5

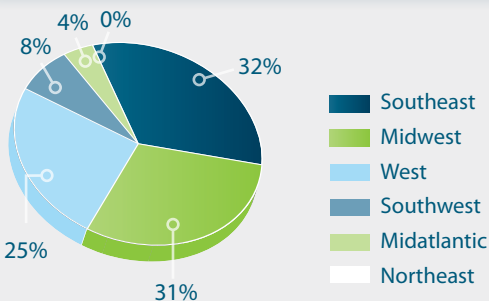
| STATE     | # OF CHARTERS |
|-----------|---------------|
| ILLINOIS  | 668           |
| TEXAS     | 658           |
| MINNESOTA | 441           |
| IOWA      | 391           |
| MISSOURI  | 360           |

Source: SNL Financial LC, 2010

*Geography*

More than half of the 2008 and 2009 bank failures occurred in just four states, Georgia (30), California (22), Illinois (22), and Florida (16). More specifically, the Atlanta and Los Angeles markets were amongst the hardest hit metropolitan areas in the country for bank failures. Most failures in Georgia and California occurred near these two cities. Contributing to the outsized number of Illinois bank failures was the large number of banking charters headquartered in Illinois. In 2007, Illinois had the most bank and thrift charters of any other state (See Figure 5), with more than twice as many as Georgia, California, or Florida. There were no bank failures in the Northeast, and very few in the Mid Atlantic (See Figure 6).

**# OF BANK FAILURES BY REGION** FIG. 6



Source: SNL Financial LC, 2010

*Capital & Asset Quality*

Capital deficiencies and asset quality erosion, early in the credit cycle, were also common factors of recent bank failures. In the banks' last quarterly financial statement before failure ("at failure") nearly every bank was operating below the regulatory requirements to be "well capitalized." On average, the banks that failed had reported three consecutive quarters below "well capitalized"<sup>3</sup> immediately prior to failure. Additionally, 80% of the banks were operating under formal enforcement actions<sup>4</sup> at the time of failure, which often reference capital deficiencies or require banks to attain certain capital levels.

Asset quality problems were another sign of distress. At failure, the median level of nonperforming assets<sup>5</sup> was 14%. A year prior to failure, the median

was 4.3%. This compares to the December 2007 and 2008 industry averages of 0.54% and 1.05%. Only six banks failed after reporting less than 3% nonperforming assets on their last regulatory report. The Texas Ratio<sup>6</sup>, which takes into account both the bank’s capital levels and asset quality, is regarded as a highly predictive ratio in analyzing bank failures (See Figure 7).

*Investment Securities*

Losses in banks’ securities portfolios also contributed to multiple bank failures. Many securities types were subject to ratings downgrades and falling market values during the financial crisis. Fannie Mae and Freddie Mac<sup>7</sup> preferred stock experienced a significant decline in value when these Government Sponsored Enterprises were placed into conservatorship by the U.S. Government in September 2008. Mortgage-backed securities not issued or guaranteed by an agency of the U.S. Government also experienced fair value declines when the underlying mortgages serving as collateral went into default. Trust preferred securities, a hybrid security between debt and equity, lead to further losses for the industry. Banks were forced to mark down holdings of troubled securities to market values, which caused substantial declines in capital levels.

One third of the banks that failed in 2009 realized securities losses in 2008, while just 18% of banks in the 2008 industry experienced losses. Losses in banks’ securities portfolios were particularly high in Illinois, where almost two-thirds of the 2009 bank failures experienced securities losses. Most banks with troubled investment portfolios also had problems in their loan books. However, the additional strain on capital caused by the securities losses further weakened the banks, and contributed to the failures.

*“No insured depositor has ever lost a penny of insured deposits—and none ever will.”*  
 - Sheila Bair, FDIC Chairman

**THE TEXAS RATIO**

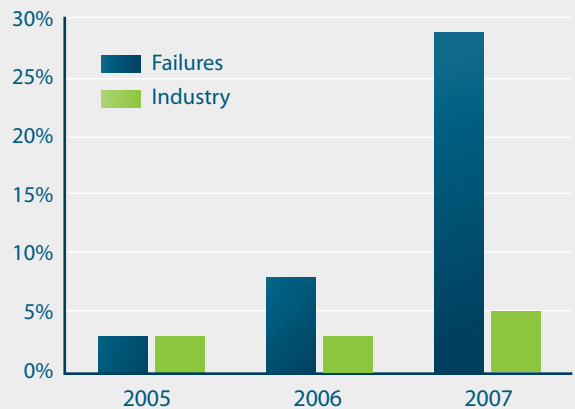
FIG. 7

The Texas Ratio was developed during the savings and loan crisis in 1980’s. While studying banks in Texas, analysts recognized that when the ratio of problem loans to capital rose above 100%, failure generally followed.

A Texas Ratio above 100% has been identified as having a strong correlation with bank failure. Only eighteen of the recent bank failures had both positive equity and a Texas Ratio below 100% at the time of failure. Nearly half of the failed banks had a Texas Ratio above 50% a year before they failed. Just 2% and 8% of the industry in December 2007 and 2008 had Texas Ratios above 50%.

A sharp increase in the Texas Ratio is also an indication of distress. Of the 2008 and 2009 bank failures, the median Texas Ratio in 2006 was 7.1%. In 2007 the median was 27.9%, and at failure the median Texas Ratio was 251%. In the banking industry, the median Texas Ratios in 2006 and 2007 were 3.4% and 5.0%, respectively.

**TEXAS RATIO 2005 - 2007**



Source: SNL Financial LC, 2010

*Resolution*

In a November 2009 press release issued by the FDIC, Chairman Sheila Bair stated, “No insured depositor has ever lost a penny of insured deposits – and none ever will.”<sup>iii</sup> In the event of a bank failure, the FDIC is appointed as

*While environmental factors certainly contributed to the demise of many banks, the performance of a bank is significantly influenced by management decisions.*

receiver<sup>iv</sup> and will seek the “least costly” resolution.<sup>v</sup> Generally, the FDIC will either find a buyer for the failed institution or issue a payout of all insured deposits. The FDIC was able to find a buyer in 93% of the 2008 and 2009 failures. When no buyer could be found for uninsured deposits, uninsured depositors may not have recovered the full amount of their deposit from the FDIC. In this event, uninsured depositors may file a claim with the FDIC for the uninsured portion of their deposit, and the FDIC will distribute the recovery of a failed bank’s assets according to rules established within the Federal Deposit Insurance Act.<sup>vi</sup>

The failures have been costly to the deposit insurance fund. The FDIC has employed several strategies to increase liquidity in the fund, including imposing a special assessment on all banks and most recently requiring banks to prepay three years of insurance premiums.<sup>vii</sup> In addition, the FDIC holds a \$100 billion line of credit with the U.S. Treasury, which could be extended to \$500 billion with the approval of the Federal Reserve and the Treasury. These policies have assured that the deposit insurance fund will continue to protect depositors in the event of a bank failure.

*Conclusion*

As this paper was written, a growing amount of economic data suggested that the U.S. economy was recovering. Banks, too, began to show early signs of stabilization. However, bank performance generally lags broader economic data. The FDIC’s list of “problem” institutions<sup>8</sup> illustrates this trend. As of December 31, 2009, the list had climbed to 702 institutions (See Figure 8). In December 2009, FDIC Chairman Sheila Bair told CNBC that “we think bank failures will continue to go up next year,” and will peak in 2010.<sup>viii</sup> Bank failures are expected to remain high for at least the next two years.

While environmental factors certainly contributed to the demise of many banks, the performance of a bank is significantly influenced by management decisions. A strong management team will employ effective procedures and controls that can help a bank endure difficult operating environments. According to the FDIC, over 70% of banks reported a profit for the year ended December 31, 2009, despite the weak economy.<sup>ix</sup>

The common factors identified in the bank failures of 2008 and 2009 will likely be factors in future bank failures. However, new trends will arise over time, which will provide further insight to the understanding of bank failure causes.

FIG. 8

| PROBLEM INSTITUTIONS IDENTIFIED BY THE FDIC |                   |
|---|-------------------|
| YEAR  | # OF INSTITUTIONS |
| 2007  | 72                |
| 2008  | 252               |
| 2009  | 702               |

Source: FDIC, 2010

**FOOTNOTES**

- <sup>1</sup> According to data compiled by S&P/Case-Schiller, Los Angeles home prices declined 41.9% from September 2006 through May 2009. In San Diego, prices declined 42.3% from November 2005 through April 2009. In Tampa, prices declined 41% from July 2006 through May 2009, and in Miami prices declined 48.5% from December 2006 through May 2009.
- <sup>2</sup> Noncore funding sources include time deposits over \$100,000, all brokered deposits, Fed Funds purchased, repurchase agreements, and other borrowings, which include FHLB advances and commercial paper.
- <sup>3</sup> According to the FDIC, to be considered “well capitalized” a bank must have a leverage ratio above 5%, a Tier 1 capital ratio above 6%, and a total risk-based capital ratio above 10%.
- <sup>4</sup> A formal enforcement action is issued by the Federal Reserve, Federal Deposit Insurance Corporation (FDIC), Comptroller of the Currency (OCC), or Office of Thrift Supervision (OTS). According to the FDIC, a formal enforcement action is generally issued to a bank when the agency believes the bank is in an unsafe or unsound condition or is engaging in unsafe or unsound practices.
- <sup>5</sup> Nonperforming assets equals the sum of nonaccrual loans, plus loans 90 days or more past due and still accruing, plus other real estate owned, as a percent of total assets.
- <sup>6</sup> The Texas Ratio equals nonperforming assets, as a percent of tangible equity and loan loss reserves. The Texas Ratio is not meaningful for banks with negative equity.
- <sup>7</sup> The Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation are commonly known as Fannie Mae and Freddie Mac, respectively.
- <sup>8</sup> “Problem” institutions are those institutions with financial, operational, or managerial weaknesses that threaten their continued financial viability. The list is determined by federal regulators who assign a composite rating to each financial institution, based upon an evaluation of financial and operational criteria.

## END NOTES

- <sup>i</sup> The Department of the U.S. Treasury, [FinancialStability.gov](http://FinancialStability.gov).
- <sup>ii</sup> SNL Financial LC.
- <sup>iii</sup> "No Safer Place in the World for Your Money," FDIC Consumer News, Fall 2009. <http://www.fdic.gov/consumers/consumer/news/cnfall09/Fall09BW.pdf>.
- <sup>iv</sup> 12 U.S.C. 1821(c) Appointment of Corporation as Conservator or Receiver.
- <sup>v</sup> 12 U.S.C. 1823(b) (4) Least-Cost Resolution Required.
- <sup>vi</sup> 12 U.S.C. 1821(d) (11) (A) Depositor Preference.
- <sup>vii</sup> Federal Deposit Insurance Corporation: Deposit Insurance Fund Management, <http://www.fdic.gov/deposit/insurance/fund.html>.
- <sup>viii</sup> "Worst of Bank Failures Isn't Over Yet," 12/14/2009. <http://www.cnn.com/id/34415057/site/14081545>.
- <sup>ix</sup> "Quarterly Banking Profile" FDIC Quarterly, 2010, Volume 4, No.1. <http://www2.fdic.gov/qbp/2009dec/qbp.pdf>.

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