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

Eliana Balla Federal Reserve Bank of Richmond

Ned Prescott
Federal Reserve Bank of Cleveland

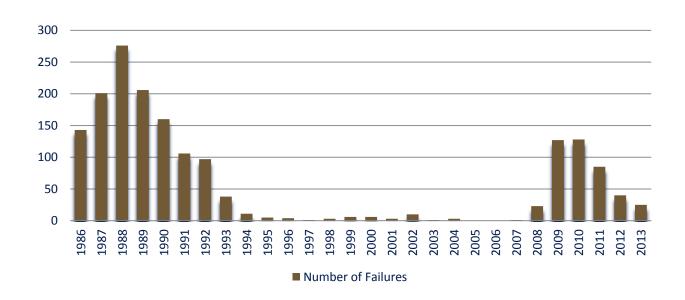
John Walter Federal Reserve Bank of Richmond

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Commercial Bank Failures 1986-2013



Note: There are about twice as many banks in 1988 as in 2010, so failure rates are similar across the two crises.





FDIC Losses Compared

FDIC Losses Measured as a Percentage of Failed Bank Assets Net of Book Equity

	1986-1992	2007-2013
Average Losses	20.3	25.2
Weighted by Assets	13.2	18.4

Notes:

Losses are as reported by the FDIC as of December 2014.

Sample only includes banks that were in existence at the beginning of each period and that are not *de novo* banks. Losses are higher for *de novo* banks, but they do not raise the averages much.





Structure of Presentation

- List three differences between the two periods
- Compare predictors of bank failures
- Compare predictors of losses to the FDIC
- Disentangle the relative importance of the three differences





Change 1: Increased CRE Concentrations for Small and Mid-Size Banks

	1985Q4	2006Q4
Securities	29	22
Ag loans	7	5
Consumer loans	12	5
C&I loans	12	10
Construction and land development loans	2	7
RE backed by 1-4 family properties	11	16
RE backed by nonfarm nonresidential properties	5	15

A small and mid-size bank is one with less than \$14.8 billion in assets in 1985 Q4 and less than \$50 billion in 2006 Q4. Each category of bank assets expressed as a percentage of total assets.





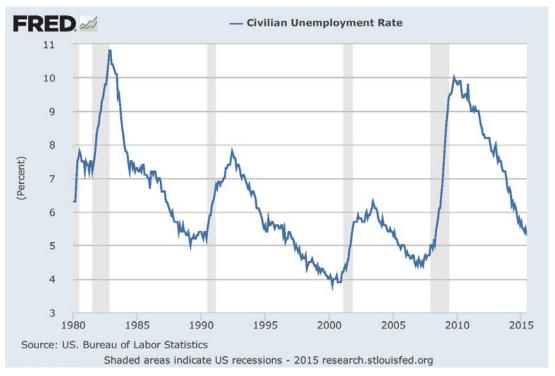
Change 1: Bank Balance Sheets

- Increased concentrations in:
 - commercial real estate lending
 - CLD lending
 - concentrations even bigger for failed banks
- But average capital higher
 - 1985 Q4 8.5%
 - 2006 Q4 11.0%





Change 2: Difference in Economic Performance

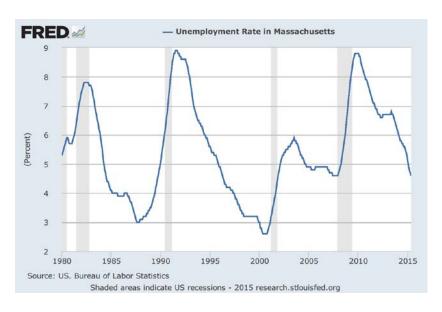


National recession





Change 2: Difference in Economic Performance





Early period: New England – real estate collapse; Texas – oil shock





Change 3: Regulatory Reforms in early 1990s

- Basel I Accord (1988)
 - implemented early 1990s
 - higher capital requirements
- FDICIA (1991)
 - FDIC must use least cost resolution
 - Prompt Corrective Action (PCA)
 - capital triggers that force supervisors to act
 - reduces forbearance
 - expected to reduce FDIC losses





Data

- Sample is comprised of established small/midsize commercial banks
 - Bank data Call Reports
 - FDIC Losses FDIC Historical Statistics on Banking
- Take characteristics of banks right before each of the 7 year periods
 - Balance sheet (loan concentrations, securities, deposits, capital)
 - Performance (size, non-performing loans, earnings)
 - Accounting (loan loss reserves, accrued interest receivable)
 - State-level economic conditions





Method

- Pool banks by period
 - Pre-FDICIA (1986-1992), Recent crisis (2007-2013)
 - Take bank characteristics in 1985Q4 and 2006Q4
- Heckman selection model
 - Predictors of failure and loss given failure evaluated in separate stages
- Use consistent variables across the two periods





Predictors of Failure

- Increases failure probability
 - Lending concentrations CLD, CRE, C&I
 - Performance Non-performing loans
 - Economic shocks HPI drop, unemployment increase
 - Accrued interest receivable
- Decreases failure probability
 - Capital, securities holdings, earnings, core deposits
 - Residential mortgage and size (earlier period)





Predictors of FDIC Losses

- Most variables do not explain the variation in losses
- Increases losses in both periods
 - Accrued interest receivable
- Decreases losses in both periods
 - Size





Comparison of the Crises

- For small and mid-size banks
 - Crises look very similar
 - Same variables predict failure
 - Main difference is size of effects

- Some caveats
 - Policy actions to reduce failure rates in later period, e.g.
 TARP, expanded deposit insurance





Counterfactuals: failures

- Actual failure rates
 - 1986-1992: 5.7%
 - 2007-2013: 4.7%
- Switch size of economic shocks (HPI, unemployment)
 - 1986-1992: 11.6%
 - 2007-2013: 1.4%
- Move 2006 banks to 1985
 - 1986-1992: 3.3%
 - drop driven by higher capital of 2006 banks
- Size of economic shocks more important than CRE concentrations
- Higher capital from financial reforms helped

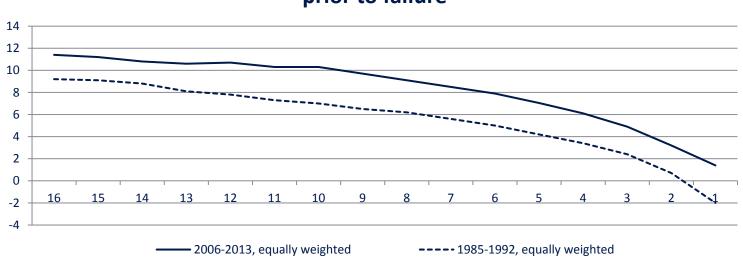




percent

Capital Ratio of Failed Commercial Banks

Average capital ratio of all failed banks in the 16 quarters prior to failure



In general, supervisors followed PCA.





Counterfactuals: losses

- Similar approach as with failures counterfactuals
- Economic shocks do not explain the size of losses
 - Unless constant term is picking that up
- If a bank gets to FDIC receivership, losses are going to be high
 - Suspect more valuable banks are bought before failure





Conclusions

- Two crises look very similar for small/mid-size banks
- Differences in failure rates
 - Biggest factor size of economic shocks
- Balance sheet changes
 - Increased CRE concentration was risky
 - But higher capital was a mitigant





Conclusions (cont.)

- Higher capital requirements as a tool to reduce losses given failure:
 - Helped to reduce failure probabilities
 - No evidence of direct effects on losses to FDIC
- If a bank fails, losses are usually large
 - Accounting numbers lagged economic value
 - Suggested by finding on accrued interest receivable





Thank you

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