Performance of Community Banks in Good Times and Bad Times: Does Management Matter?

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Past research

- Considerable research has examined differences between large and small banks and found that small banks:
 - Rely more on core deposits
 - Have fewer credit card and securitized loans
 - Have more small business and ag loans
 - Rely more on net interest margin
 - Lend more to credit-constrained firms

Past research

- Research on differences among small banks has been less common, but some findings are:
 - The smallest banks underperform other community banks
 - Geographic concentration of loans doesn't seem to adversely affect performance
 - Charge-off rates increase with bank size
 - Small banks are more profitable when more of their competitors are large banks

Motivation for our paper

- Community bank performance clearly is affected by both external and internal factors
 - There have been failure waves due to real estate, ag and oil crises
 - Ineptitude and malfeasance also lead to poor performance, in some cases
- Our question: To what extent do market factors, as opposed to factors under management control, affect community bank performance?

Empirical model

- We estimate a model relating community bank profitability to various bank and market characteristics
 - Some explanatory variables are clearly endogenous, so we can't infer causation from our results
- We use data from 1993-2011 in roughly 5-year intervals
 - We also examine years 2007-2011 individually
- We estimate separate models for urban and rural markets

Empirical model

- Our sample covers 4 distinct time periods
 - 1993-96: a period of stability
 - 1997-2001: a period of moderate decline
 - 2002-06: a return to stability
 - 2007-11: a period of dramatic decline and recovery
- Measure bank performance with ROE, but results from ROA are very similar

Explanatory variables

- Market population
- Per capita income
- Unemployment rate
- Market concentration
- Market share of other community banks
- Years since branching deregulation
- Age of bank

- Asset size
- CAMELS "M" rating
- S-Corp status
- Loan ratios:
 - Real estate
 - Construction
 - Commercial & industrial
 - Consumer
- Brokered deposit ratio
- "Big shift" indicator

Sample and data

- Community bank = a bank or thrift that:
 - belongs to a HC with < \$1 billion in total banking assets (in 2005\$), and
 - has at least 70% of its deposits in one local banking market
 - Markets are defined as rural counties or MSAs
- All data are publicly available other than the management rating

Univariate comparisons of urban & rural community banks

- Rural banks have higher ROA than their urban counterparts, but not higher ROE
- Urban banks suffered more over 2007-11
- Rural banks are older, on average
- Community banks cumulatively hold a greater % of deposits in rural markets
- Rural banks are more concentrated in real estate and construction loans
- Urban banks are more concentrated in consumer loans
- Urban banks are more reliant on brokered deposits

Regressions results

- Per capita income and the unemployment rate are negatively correlated with profitability
- More concentrated markets have higher ROA but not higher ROE
- Profitability declines the longer the period since branching deregulation, but this effect is greater in the 1990s than in recent years
- Older banks are less profitable in rural markets

More regression results

- Larger community banks are more profitable
- The management rating has a very strong relationship with profits
- S Corporations have higher profits, as expected
- None of the 4 variables measuring the loan portfolio is consistently positively or negatively related to profitability
 - Construction lending has a positive effect until 2007
- Results for brokered deposits are mixed

Yet more regression results

- Large shifts in portfolios are consistently negatively related to profitability
 - This result holds when our single shift variable is replaced by 8 variables for large increases or decreases in each of our 4 portfolio measures
 - This result also holds for the 4 most common combinations of portfolio changes
 - This result is stronger for banks with poor management quality, but holds for all banks

Lessons from the recession

- PCI loses its negative correlation with profitability: a retreat to safety by the rich?
- Management quality matters more
- Construction loans hurt profits
- Brokered deposits are more negatively related to profitability

Conclusions

- Factors outside bank management control have important effects on community bank profitability
 - PCI and the unemployment rate
- However, management quality and large changes in portfolios also greatly affect profits
- Community banks are better off sticking to what they know