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

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Federal Reserve Board
October 2013
Disclaimer

• The views expressed are those of the authors and do not necessarily represent the views of the Board of Governors of the Federal Reserve System or its staff
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