The Changing Role of Small Banks in Small Business Lending

Lamont Black (DePaul)
Michal Kowalik (Boston Fed)
Bank Competition

• Community banks face increasing competition from large banks

• This competitive pressure has grown due to advancements in information sharing and lending technologies

• How does large bank competition affect community banks’ C&I lending?
Hypothesis

• Exposed to competition from large banks, small banks concentrate on borrowers of intermediate size
  – The smallest and largest borrowers choose large banks

• Premise related to DeYoung, Hunter, and Udell (2004) and Berger and Black (2011)

• Theoretical model adapted from Kowalik (2014)
Theory

• Small and large banks differ in their lending technologies
  – Small banks observe risks taken by their borrowers
  – Large banks do not observe risks, but they have a lower marginal cost

• Borrower sorting
  – Borrowers of intermediate size benefit the most from the monitoring of small banks
  – The smallest and largest borrowers benefit the most from the lower marginal cost of large banks
Data

- Collect data from bank Call Reports and FDIC Summary of Deposits

- Create sample of banks with total assets below $1 billion, operating in one urban market (MSA)

- Use deposit data to identify entry of a large bank ($>$10B) into the small bank’s market

- Large bank entry =1 if a new large bank establishes (organically) a branch in the market in a given year (as of June 30)
Data (2)

• C&I lending in the June Call Reports
  – Three categories: 0-100K, 100-250K, 250K-1M
  – Average allocation of 30%, 20%, 34%, 16% respectively
  – We construct >1M as remaining amount

• Data reported annually on June 30 between 1993 to the present (quarterly from 2010)

• Time span of sample: 1994 to 2007 (pre-crisis)

• We use shares of each category relative to bank’s total C&I
Testing the Hypothesis

\[ C&I \text{ share} = a \times \text{Large bank entry} + b \times \text{Bank controls} + c \times \text{Market controls} \]

Dependent variable: Small bank C&I loan shares

Hypothesis:
- Shares of smallest and largest shares decline
- Shares of intermediate loan sizes increase

With competition, small banks specialize in intermediate loan sizes.
Testing the Hypothesis (2)

• Bank controls
  – Log of assets
  – Loans-to-assets ratio
  – Deposits-to-assets ratio
  – Leverage ratio

• Market controls
  – Log of population
  – Unemployment rate
  – Market rents

• Bank fixed effects
• Year fixed effects
• Clustered errors
Baseline Results

• Small banks’ share of C&I loans with sizes between $250K and $1M increases following large bank entry

• Share of largest loans (>1M) declines

• These are about 10-15% changes relative to average shares.
Additional Results

• Effect is magnified by proximity of large bank entry to small bank’s branches

• In general, proximity of large banks reduces small banks’ share of C&I in smallest loans

• Endogeneity? Interstate deregulation predicts large bank entry. In general, results are robust.
Ongoing Research

• Teaser – Also see an effect of competition on CRE lending, but appears to move small banks into smallest loan category

• What is the future of small bank lending?
• How will the “high-touch” community banking model be affected by technology and growing competition from large banks (and non-banks)?