EFFECTS OF BANK MERGERS AND ACQUISITIONS ON SMALL BUSINESS LENDING

Allen N. Berger
Board of Governors of the Federal Reserve System
Wharton Financial Institutions Center

RIETI Policy Symposium
Japan's Financial System: Revisiting the Relationship between Corporations and Financial Institutions

Tokyo, February 2006

The opinions expressed do not necessarily reflect those of the Federal Reserve Board or its staff.

A SIMPLE QUESTION

- **Are bank mergers and acquisitions (M&As) good or bad for lending to small and medium enterprises (SMEs)?**
  - **Do they increase or decrease credit availability?**
- **Seems like a simple question, but it is not.**
  - **Generated 100s of research studies, more in process.**
- **Answer differs by types of banks, SMEs, countries, etc.**
  - **In some cases, have fairly solid research results.**
  - **In other cases, have to extrapolate somewhat.**
- **Key tool in analyzing the findings is a conceptual framework that is supported by the research.**
  - **Framework helps draw conclusions with different degrees of certainty in different circumstances.**

OUTLINE OF DISCUSSION

- Research evidence on mergers and acquisitions (M&As) on lending to small and medium enterprises (SMEs).
  - Whether they increase or decrease credit availability for these firms.
- Focus on key results in the literature.
  - Not enough time to review individual studies or all the findings.
- Give references for some papers on which the presentation is based for more details.

OUTLINE (2)

- Discuss the conceptual framework used in reviewing the research.
  - Framework is itself a product of the research.
    - Based on theoretical and empirical evidence on what banks and firms do in different economic environments.

- Framework also helpful for formulating questions that are likely to give the most informative answers about the effects of M&As on SMEs.

- In addition to whether M&As increase or decrease credit availability for SMEs, we ask:
  - Which types of banks are involved in M&A?
  - Which nation?
  - Which types of SMEs?
  - Responses of other banks?

OUTLINE (3)

- **Brief "view from afar" of some important Asian nations.**
  - **China, India, Japan.**
- **Less is known than about U.S. & Europe, but extrapolate using the conceptual framework.**
- **Two important cautions!**
  - **1. I am not an expert on Asia.**
  - **2. Reminder: Opinions are not those of Federal Reserve!**

CONCEPTUAL FRAMEWORK

- Ownership type and size of bank in the M&A matters.
  - Foreign, private domestic, or state-owned.
  - Large versus small bank.
- Nation's lending infrastructure matters.
  - Accounting standards, creditor protection, regulation.
- Type of SME matters.
  - Firms with strong or weak financial statements.
  - Firms with or without access to good collateral.
- Other banks in the market matter.
  - May respond to M&A by supplying more or less SME credit.
  - May respond with more or less de novo entry.

DETAILS OF FRAMEWORK

- **Lending technologies for SMEs differ primarily by the information used in the bank's loan decisions.**
  - **Hard, quantitative data versus soft, qualitative and judgmental information.**
- ***Financial statement lending*** **based on strong financial statements (hard).**
- ***Fixed-asset lending*** **based on equipment, motor vehicles, or real estate taken as collateral (hard).**
- ***Relationship lending*** **based on qualitative information (e.g., owner's character and reliability) gathered over course of bank-borrower relationship.**
  - **Other hard and soft technologies not shown here.**

DETAILS OF FRAMEWORK (2)

- **Different types of banks have comparative advantages in different lending technologies.**
  - ***Large*** **versus** ***small*** **banks,**
  - ***Foreign*** **versus** ***domestic*** **banks,**
  - ***State-owned*** **versus** ***private*** **banks.**

DETAILS OF FRAMEWORK (3)

- **Large banks have comparative advantage in hard-information lending technologies.**
  - **Economies of scale in processing hard information like financial statement data, values of fixed-asset collateral.**
- **Small banks have advantage in soft-information lending technologies.**
  - **Diseconomies of scale in processing soft information.**
  - **Easier for small banks to "know" SMEs, their owners, and local communities.**
  - **Difficult to transmit soft information like the quality of the SME owner through the communication channels of large organizations.**

DETAILS OF FRAMEWORK (4)

- Foreign banks have comparative advantage in hard-information lending technologies in developing nations.
  - Better access to and experience in hard-information lending technologies than domestic banks.
    - Citicorp technology, experience versus local bank in developing nation.

- Advantage is reversed in developed nations.
  - Little difference in technologies and experience than large, domestic banks.
  - Added problems of distance, multiple economic, cultural, language, and regulatory environments.
    - Citicorp versus large, domestic banks in Paris, Berlin, or Tokyo.

DETAILS OF FRAMEWORK (5)

- **State-owned banks appear to be generally poor at providing credit to SMEs.**
  - **Lack of market discipline due to access to government subsidies.**
  - **Political pressures to misallocate credit.**
  - **State-owned banks only extensively studied in developing nations.**
    - **Poor performance also likely holds in developed nations, given findings for state-owned enterprises in other industries, such as telecommunications.**

DETAILS OF FRAMEWORK (6)

- Comparative advantages are important for analyzing M&As because M&As often transform bank type:
  - Small banks into large banks,
  - Domestic into foreign banks,
  - State-owned into private banks.
- Individual SMEs may be efficiently served using only a subset of the lending technologies.
  - May not have strong financial statements;
  - May not have fixed assets to pledge as collateral.
  - May gain or lose credit availability from M&A, depending on whether the advantages in the firm's efficient technologies are enhanced or destroyed.

DETAILS OF FRAMEWORK (7)

- **Nation's *lending infrastructure* also important:**
  - **Rules/conditions affecting bank lending, competition.**
    - **Accounting/information environment,**
    - **Legal, judicial, and bankruptcy environments,**
    - **Social environment,**
    - **Regulatory environment.**

- **Infrastructure affects feasibility/profitability of using technologies.**
  - **Financial statement lending requires accurate financial statements.**
  - **Fixed-asset lending requires strictly enforced creditor rights to seize collateral.**
  - **Relationship lending requires social norm of honesty.**

DETAILS OF FRAMEWORK (8)

- Lending infrastructure also affects market shares of banking industry.

- Restrictions on foreign bank entry.
  - Reduces market shares of foreign banks.
    - May reduce SME credit availability for firms most efficiently served by foreign banks.
  - May also reduce competitive threat for domestic banks.

- Government ownership of banks.
  - Increases market shares for state-owned banks.
    - May reduce SME credit availability generally, given the poor performance of this bank type.

RESEARCH RESULTS

- *Conventional M&As*: M&As of private domestic banks.
  - Transforms small banks into large banks.
  - No change in ownership type.
- Net gain for SMEs efficiently served by hard-information lending technologies (e.g., financial statement lending, fixed-asset lending).
  - Large banks better able to serve them because of scale economies in processing hard information.
- Net loss for SMEs that must rely on soft-information lending technologies (e.g., relationship lending).
  - Large banks suffer scale diseconomies in processing soft information, may discontinue relationships.

RESEARCH RESULTS (2)

- **For all M&As, the response of other banks matters, but often not included in the research.**
- **In the U.S., this has been studied for conventional M&As.**
- **The overall net effect of conventional U.S. M&As on SME credit availability is approximately *zero*!**
  - **Total SME credit by the merging banks declines.**
  - **Approximately equal increase in supply by other banks.**
    - **Incumbent banks in the market increase their SME lending.**
    - **De novo entry of new small banks that tend to make many SME loans.**
  - **These types of responses likely also occur in other nations, but they are probably much smaller because lending infrastructures are less competitive.**

RESEARCH RESULTS (3)

- Foreign takeovers: Purchase of a domestic bank by a multinational banking organization, usually a large domestic bank.
  - Transforms domestic banks into foreign banks.
  - Size of bank in the nation unchanged, but increases total size of the organization.

- Results differ for developing and developed nations.

RESEARCH RESULTS (4)

- Foreign takeovers in developing nations:
  - Net gain for SMEs efficiently served by hard-information lending technologies.
    - Foreign banks have better access to and experience in these technologies.
  - Unclear for SMEs that rely on soft-information lending technologies.
    - May have loss because foreign banks are poor at these technologies.
    - May have gain if foreign banks import hard-information technologies that may be efficiently applied for these firms (e.g., credit scoring).
  - Overall empirical results for developing nations show net gain in credit availability when foreign market share is higher.
  - Even stronger positive effect for removal of restrictions on foreign entry, suggesting positive effects of competition on domestic banks.

RESEARCH RESULTS (5)

- **Foreign takeovers in developed nations:**
  - **Possible slight negative effect on SMEs.**
    - **Likely little change in SME operations of large banks they acquire.**
    - **Foreign banks at a disadvantage in both hard- and soft-information lending technologies for these firms.**
    - **Distance, regulatory differences, strong competition from domestic large banks.**

RESEARCH RESULTS (6)

- Privatizations: Sales of state-owned banks to domestic private or foreign banking organizations.
  - Transforms state-owned banks into private domestic or foreign banks.
  - Size of bank unchanged.
  - Increases total size of the organization if foreign sale.
- Developing nations:
  - Many types of SMEs likely gain in the long run, given poor record of state-owned banks.
  - Short run empirical results show small amount of progress.
- Developed nations:
  - Not much evidence on banks, but likely positive effects based on other industries.

VIEW FROM AFAR OF ASIA

- Less is known than about U.S. & Europe, but we extrapolate using the conceptual framework.
- I am not an expert – I am on my first working papers on China, India, and Japan.
- Reminder: Opinions are not those of Federal Reserve!

CHINA

- Chinese banking dominated by “Big Four” state-owned banks, many others are partially or fully state-owned.
- Started to partially privatize many of the banks, including the Big Four, and sell minority shares to major foreign banking organizations.
- Preliminary research suggests that the efficiency benefits of partial privatizations are high.
- No current evidence on their SME credit availability.
  - However, the efficiency evidence, plus extrapolation from the conceptual framework and experience of other developing nations, suggest positive long-run effects of the partial privatizations.

INDIA

- India similarly has very large state-owned banks with large market shares.
- Has a small foreign shares and explicit barriers to expansion of foreign banks.
- Some evidence that state-owned banks are poor at SME lending relative to private domestic banks.
- Extrapolation from the conceptual framework and experience of other developing nations suggests would have positive long-run effects of privatizing the state-owned banks and removing explicit barriers to foreign banks.

JAPAN

- Japan also has a small foreign bank presence.
  - Probably makes little difference to SME credit availability because Japan is a developed nation.
    - Framework suggests foreign banks at a disadvantage in all technologies for SMEs in developed nations.
- No state-owned commercial banks, but Japan Post controls large share of deposits.
  - Press accounts of the battle over privatization last year suggests that funds mostly are invested in government bonds to finance public projects, rather SME loans.
  - Extrapolation from conceptual framework would also suggest long-run increase in SME credit availability from privatization.
  - However, I would certainly not make policy suggestions when I am the least informed person in the room!

PAPERS ON WHICH PRESENTATION IS BASED

Conceptual framework.

- Berger, A.N., G.F. Udell, forthcoming, A more complete conceptual framework for SME finance, Journal of Banking and Finance.
- Berger, A.N., forthcoming, Why Are Foreign Banks Often So Unsuccessful in Developed Nations? Proceedings of a Conference on Cross-Border Banking: Regulatory Challenges, (Federal Reserve Bank of Chicago and the World Bank, Chicago, Illinois).
- Berger, A.N., A. Demirguc-Kunt, R. Levine, J.G. Haubrich, 2004, Bank Concentration and Competition: An Evolution in the Making, Journal of Money, Credit, and Banking 36: 433-451.
- Berger, A.N., G.F. Udell, 2002, Small business credit availability and relationship lending: The importance of bank organisational structure, Economic Journal 112: F32-F53.

PAPERS (2)

U.S. applications.

- Berger, A.N., Rosen, R.J., Udell, G.F., forthcoming. Does market size structure affect competition? The case of small business lending. Journal of Banking and Finance.
- Berger, A.N., Miller, N.H., Petersen, M.A., Rajan, R.G., Stein, J.C., 2005. Does function follow organizational form? Evidence from the lending practices of large and small banks, Journal of Financial Economics 76, 237-269.
- Berger, A.N., Frame, W.S., Miller, N.H., 2005. Credit scoring and the availability, price, and risk of small business credit. Journal of Money, Credit, and Banking 37: 191-222.
- Berger, A.N., Bonime, S.D., Goldberg, L.G., White, L.J., 2004. The dynamics of market entry: The Effects of Mergers and Acquisitions on Entry in the Banking Industry. Journal of Business 77: 797-834.
- Berger, A.N., Saunders, A., Scalise, J.M., Udell, G.F., 1998. The effects of bank mergers and acquisitions on small business lending. Journal of Financial Economics 50: 187-229.

PAPERS (3)

European applications.

- Berger, A.N., C.M. Buch, G. DeLong, R. DeYoung, 2004, Exporting Financial Institutions Management via Foreign Direct Investment Mergers and Acquisitions, Journal of International Money and Finance 23, 333-366.
- Berger, A.N., Hasan, I., Klapper, L.F., 2004. Further evidence on the link between finance and growth: An international analysis of community banking and economic performance, Journal of Financial Services Research 25: 169-202.
- Berger, A.N., Q. Dai, S. Ongena, D.C. Smith, 2003. To What Extent Will the Banking Industry be Globalized? A Study of Bank Nationality and Reach in 20 European Nations, Journal of Banking and Finance 27: 383-415.
- Berger, A.N., DeYoung, R., Genay, H., Udell, G.F., 2000. The globalization of financial institutions: Evidence from cross-border banking performance. Brookings-Wharton Papers on Financial Services 3: 23-158.

PAPERS (4)

Latin American applications.

- Berger, A.N., Clarke, G.R.G., Cull, R., Klapper, L., Udell, G.F., 2005. Corporate governance and bank performance: A joint analysis of the static, selection, and dynamic effects of domestic, foreign, and state ownership. Journal of Banking and Finance 29: 2179-2221.
- Berger, A.N., Klapper, L.F., Udell, G.F., 2001. The ability of banks to lend to informationally opaque small businesses. Journal of Banking and Finance 25: 2127-2167.

PAPERS (5)

Asian applications.

- Berger, A.N., L.F. Klapper, M.S. Martinez Peria, R. Zaidi, Bank Ownership Type and Banking Relationships, working paper.
- Berger, A.N., I. Hasan, M. Zhou. Bank Ownership and Efficiency in China: What Will Happen in the World's Largest Nation?, working paper.
- Berger, A.N., C.H.S. Bouwman, H. Uchida, Bank liquidity creation in the U.S. and Japan: Different countries, different policies, different outcomes, working paper in progress.

THANK YOU!

- **Thank you to the conference organizers for inviting me and thank you to the audience for listening.**

- **I hope that this has been informative.**