EFFECTS OF BANK MERGERS AND ACQUISITIONS ON SMALL BUSINESS LENDING

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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

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Latin American applications.

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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.**