"Bad Loans and Entry in local Credit Markets" (M. Bofoundi and G. Gobbi - Bank of Italy)

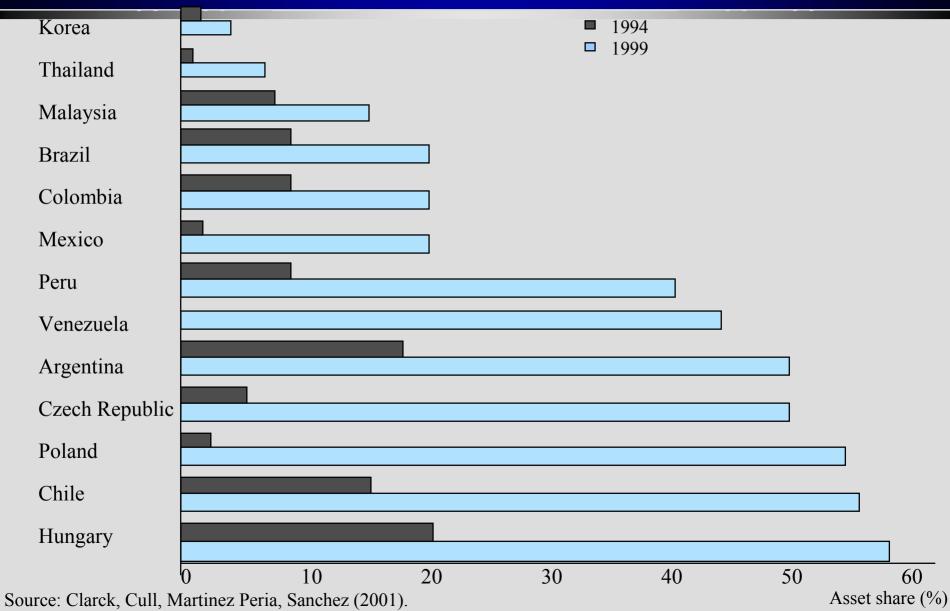
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- In recent years foreign bank participation in many countries has increased tremendously.
- The trend has been especially pronounced in developing countries although the pattern of entry has not been uniform.
- Latin America and the transition countries of central Europe have been quickest to permit foreign participation in banking.
- In Asia, Africa, the Middle East and the former Soviet Union progress has been much more modest.

Figure 1: Asset share of Foreign Banks 1994, 1999



The literature on foreign bank entry focuses on 4 main questions;

1. What draws foreign banks to a country?

- e.g. following clients opportunities in host country.
 - host country regulation/restrictions.
 - structure of the local banking system etc.

2. Which banks expand abroad?

- e.g. size (multinational banks enjoying economies of scale and scope?);
 - efficiency (X-Efficiency and Profit efficiency).

4 main questions (Cont.)

3. What do foreign banks do?

- compete with domestic banks (e.g. serve retail customers, wholesale customers), or focus on selective market niches e.g. trade in derivatives, specialize in non-interest income activity).
- type of lending: to small and medium size enterprises (SME's) or large or international companies ("cherry picking").

4 main questions (Cont.)

- 4. How does the mode of entry and Organizational form, affect foreign bank activity?
- By Mergers and Acquisitions with local banks?
- De Novo: new banks.
- Branches, subsidiaries or representative offices. (neither take deposits nor make loans only provide information).
- Cross border lending (in some developing countries even such lending exceeds credit provided by the foreign banks subsidiaries established in those countries).

The paper by Bofoundi and Gobbi tests the hypothesis that entrants into a credit market are forced to assume too much risk because their pool of borrowers is adversely selected (based on Shaffer 1998 – "the winner's curse in banking").

Namely, the pool of their applicants is likely to include those potential borrowers previously rejected by mature banks in the market. The information regarding those customers was obtained by incumbents (through long term bank-customer relationship) and was not available to new entrants.

The empirical results of this paper <u>are very</u> <u>important</u> particularly to the banking supervision department which has to decide whether to grant or reject a request by a foreign bank to obtain a license in the local banking market.

When we (at the banking supervision department) assess the likely effect (benefits vs. risks) that foreign banks entry has on the performance of the local banking system and the contribution of foreign banks to society's welfare, we normally apply 3 criteria:

Competition

Stability

Efficiency

Competition

Within the banking system

Increased competition improves the efficient allocation of resources in the economy, thus enhancing society's welfare (consumer's surplus increases by more than the reduction in producer's surplus).

Stability

of the banking system

A stable banking system reflects a low probability of bank failure, thus reducing the possible social and economic damage that bankruptcies might cause on the financial system and the entire economy.

Efficiency

of the banking system

The system's contribution to the efficient allocation of resources in the economy is reflected by managerial ability to control input costs (labor, physical capital, deposits) through utilization of returns to Scale, Scope and X-Efficiency.

We complement this analysis with **profit efficiency** since it also accounts for revenue and risk effect which the conventional efficiency indeces ignore.

Tradeoffs

There are tradeoffs between the three criteria:

- Increased competition through e.g. encouragement of foreign bank entry may lead to risk taking, which tends to reduce the stability of the banking system.
- Measures undertaken to increase stability and/or to improve operating efficiency through e.g. mergers, might lead to reduced competition.

Regulators should consider the possible tradeoffs between the three criteria and pursue their policies with caution.

To a certain extent the paper by M. Bofoundi and G. Gobbi touches upon each of the above 4 main questions which the literature focuses on and the 3 criteria that supervisors consider.

The results of the paper demonstrate the <u>complexity</u> of the <u>issue</u> regarding the relation between foreign bank entry and credit risk.

The hypothesis that new entrants in local markets are systematically subject to higher loan default rates can be accepted or rejected only after one accounts for:

• The different characteristics of the entrants (size, reputation, profit maximization, their degree of efficiency, attitude towards risk, do they offer new technologies and banking products or they offer the convectional deposits and loans products, etc.)

- The characteristics of the banking market which it enters (degree of competition - concentration, and number of banks, regulated market vs. liberal, extent of government involvement, banks rely on common filters (shared data base and uniform screening criteria like standard credit scoring models or internal models), developed vs. developing country etc.).
- The <u>mode of entrance</u> (branch, subsidiary, representative office, banking from distance, M&A).

In lines of the Core Principle of Effective Banking Supervision of the Basel Committee.

A <u>branch</u> is supervised by the authority in the home country (the home bank has complete responsibility).

A <u>subsidiary</u> is treated exactly like a local bank thus examined and supervised accordingly (its financial soundness, integrity, management ability, minimum capital etc.).

Because most of the literature on this topic relates to developed countries it is difficult to answer whether foreign banks are exposed to higher credit risk.

Most studies of <u>developed countries</u> have found that domestic banks are more efficient than foreign competitors.

Also foreign banks outperform domestic ones in developing countries.

There is evidence that foreign banks do more than merely follow their domestic clients abroad.

They may not enter all sectors forcefully (at least in the short run) but their entry is broad enough to exert some competitive pressure on domestic banks \Longrightarrow increase consumers benefits. This competition could cause some domestic banks to fail. Hence, foreign banks entry may turn to be destabilizing.

According to Crystal Dages and Goldberg (FRBNY 2002) which compared the performance of foreign banks to domestic banks in Latin America there is evidence that private foreign and private domestic banks did not systematically differ from each other in condition and performance. Their conclusion was based on Rating Based Analysis by Moody's and CAMELS used by local regulators.

I. Data on banks provisioning for bad loans shows that Foreign banks had <u>higher loan provisioning</u> expenses and comparable or higher reserve coverage of non-performing loans suggest Foreign banks had <u>tighter credit review standards</u> than domestic banks.

They also had higher average recoveries on charged-off loans more intensive or more effective workout procedures. Foreign banks were more aggressive in addressing asset quality deterioration.

- II. Foreign banks in Latin America maintain <u>higher</u> shares of liquid assets, a reflection perhaps:
 - (1) of their tighter credit review standards leading to "cherry picking" (Are they familiar with the "winners curse hypothesis"?).
 - (2) Greater reliance on potentially more volatile non-deposit borrowing compared to a broad deposit-based funding of domestic banks.

- III. Foreign banks maintain <u>higher risk based capital</u> ratios than domestic banks. Can reflected
 - a) Better attitude towards risk.
 - b) A larger investment in liquid and lower risk assets.

The authors conclude that Foreign banks in Latin America contribute to a sounder and more stable banking system.

<u>In Israel</u> since 2000 there are branches of two foreign banks: City Bank & HSBC. They are large international banks and hence, their managers follow instructions regarding strategy of loan review (high standards) from their home office.

About 60% of their assets are risk free: Deposits at the Bank of Israel; TBs and Government Bonds and only 40% are loans, mainly to Top grade customers. (cherry picking!?)

Willing to forgo high profit in the short run to obtain top grade customers in the long run (high risk adjusted return on capital – RAROC).

Specific comments:

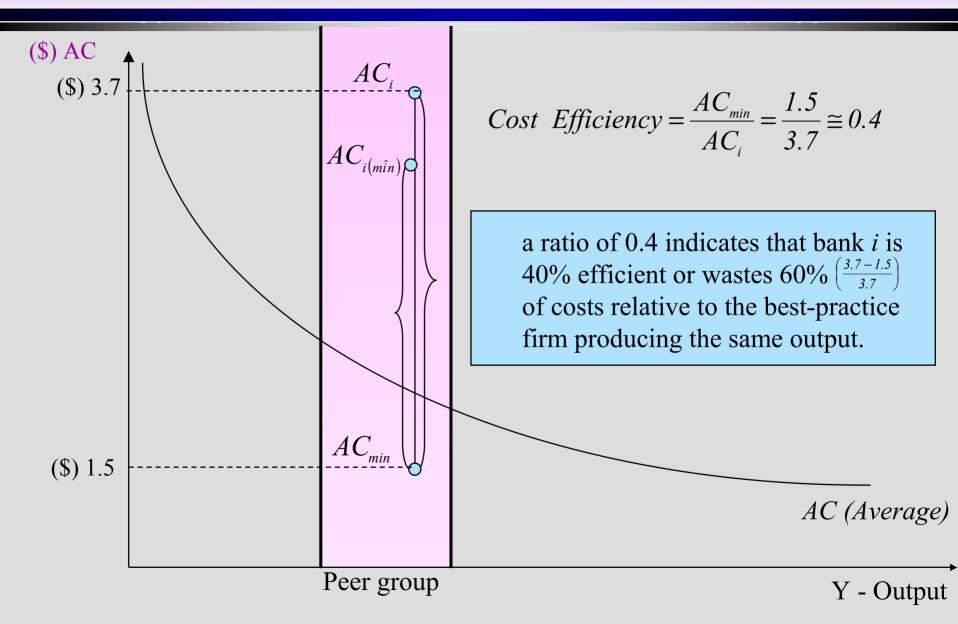
- The population of banks operating in different credit markets/provinces which the authors use to test the "winner's curse hypothesis" is in my opinion not adequate.
 - clearly, one can't infer from the results of branches crossing province lines to branches/banks crossing different countries or continents, such as multinational banks.
- Analysis by provinces does not allow one to distinguish between the impact of the Italian economy GDP growth on the banking system credit risk from the credit risk that new entrants with certain characteristics were exposed to.

- The authors did not include in their model the availability of credit substitutes in each market (capital market issues, loans from banks abroad etc.).
- Do not account for other important features of loan portfolios that may lead to higher default rates such as high concentration by sectors/industries.
- The significant effect of the interactions between the independent variables, demonstrate the complexity of the issue. For example, foreign bank's entry increases credit risk which is mitigated by well capitalized and highly efficient (operating and profit) banks.

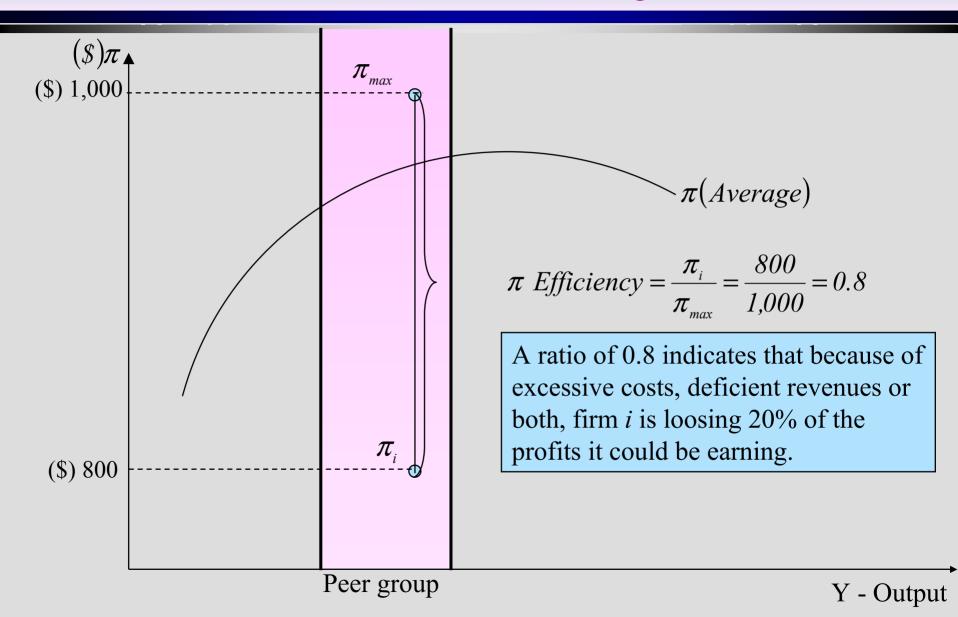
Namely, increased efficiency and reduced leverage (low capital adequacy ratio) significantly reduce credit risk.

- I suggest that a translogarithmic equation could be a more suitable specification to capture such interactions.
- Efficiency (operating and profits) and leverage have to be analyzed by peer groups!!

Operating Cost Efficiency (X-Efficiency)



Profit Efficiency



• The inclusion of Herfindhal (H) together with the number of banks is problematic (multicolliniarity) since; 1

since;
$$\frac{1}{n} \le H = \sum s_i^2 = \sum (s_i - \bar{s})^2 + \frac{1}{n} \le 1$$

• I suggest to use "market power" as a proxy for competition in the province:

$$M_{i} = \frac{P_{i} - MC_{i}}{P_{i}}$$

$$M = \sum_{i} M_{i} \left[\frac{y_{i}}{y} \right] = H \bullet \frac{1}{\eta_{d}} \bullet \frac{\partial y}{\partial y_{i}}$$

 M_i = degree of market power of Bank i. Indicates deviation from perfect competition equilibrium.

Where: P = Price; MC = Marginal Cost (Financial & Operating);

H = Herfindahl index of Concentration;

 η_d = Elasticity of the demand for loans;

 $\frac{\partial y}{\partial y_i} = \frac{\partial y}{\partial y_j} = \gamma$ Degree of Conjectured Variation; (assume homogeneous expectations)

Null Hypotheses: $\frac{\partial M}{\partial H} > 0$; $\frac{\partial M}{\partial \eta_d} < 0$; $\frac{\partial M}{\partial \gamma} > 0$