Discussion of “Credit risk transfer in banking markets with hard and soft information” by Hakenes & Schnabel

Florian Heider
European Central Bank
Financial Research

Contribution of the paper

- Cost and benefit of buying insurance against loan default
  - allows to fund more profitable but risky projects
  - insurer cannot observe loan quality so it sets average price $\rightarrow$ bank has incentive to insure very low quality loans
- Bank use profits from high quality loans to subsidize lower quality loans
  - competition erodes profits from high quality loans

The mechanics of the model

- Bank assets (loan portfolio) are risky

$$p_M: \quad l_G(R_G)(R_G - r) + l_M(R_M)(R_M - r) - l_M X \pi_M$$

$$1 - p_M: \quad l_G(R_G)(R_G - r) + l_M(R_M)(X - r) \geq 0$$

- Competitive insurers position

$$p_M: \quad l_M X \pi_M$$

$$1 - p_M: \quad -l_M X$$

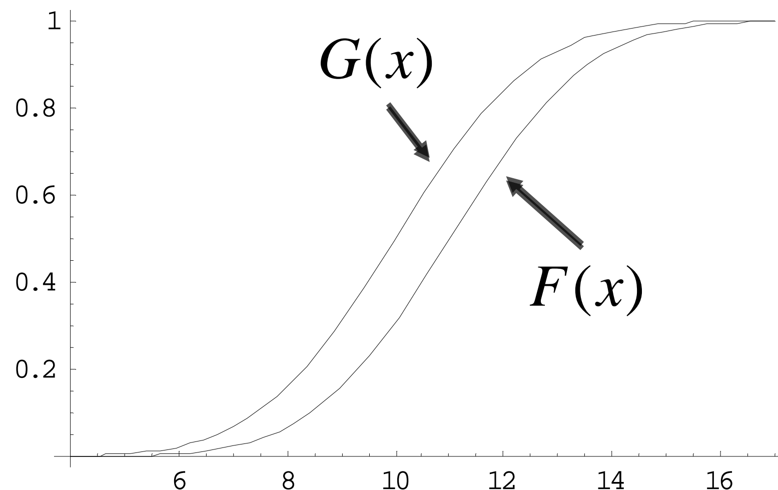
$$\pi_M = \frac{1 - p_M}{p_M} < \pi_B = \frac{1 - p_B}{p_B}$$

Some observations

- Two-point support: debt or equity?
- "Soft" vs "hard" information or "complete" vs "incomplete" information?
  - insurer knows/doesn't know the quality of the loan
- Can insurer screen loan quality?
  - asking for collateral, different probability of obtaining insurance, partial insurance
- Insurer is not constrained to not default
  - in practice risk was less distributed than it was assumed → who can bear long-term risk?
- More competition leads to more bad loans
  - but more competition reduces adverse selection insurance premium → market break down less likely

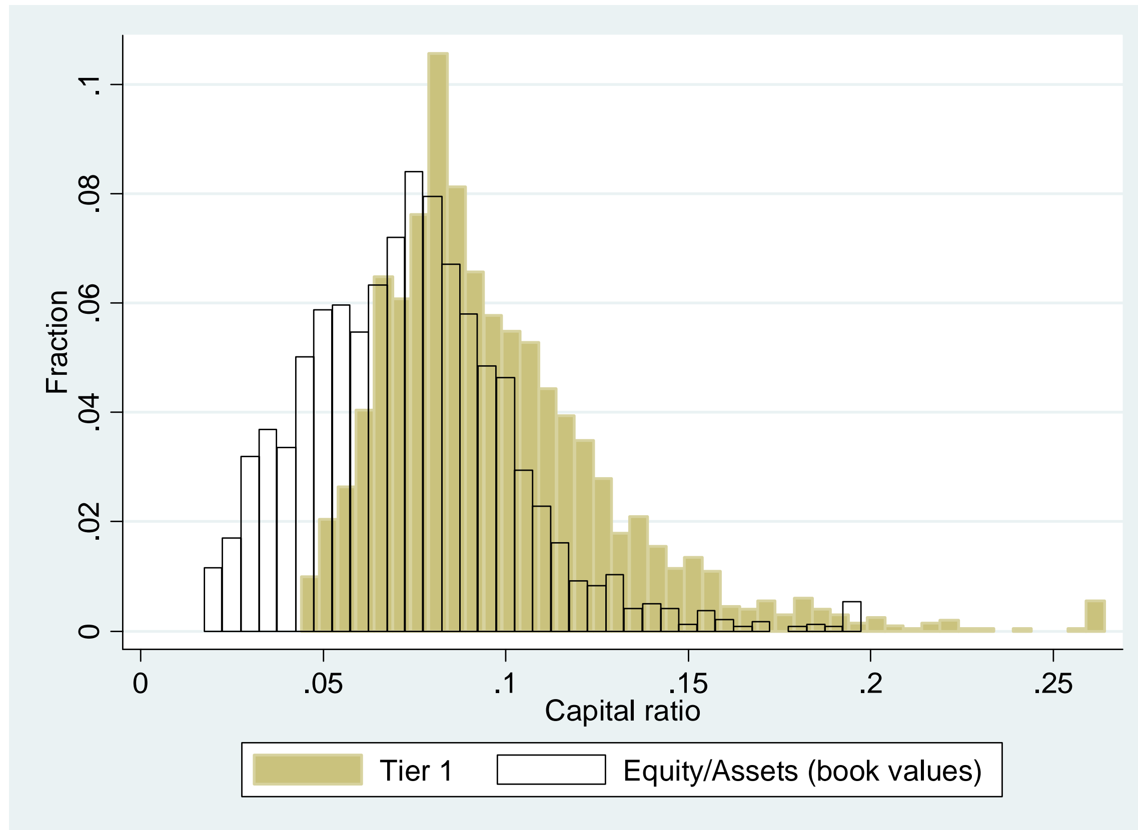
A comment on modeling asymmetric info about risk

- Project qualities are ordered by First-Order Stochastic Dominance
  - distribution *F* dominates *G* if *F(x)≤G(X)*



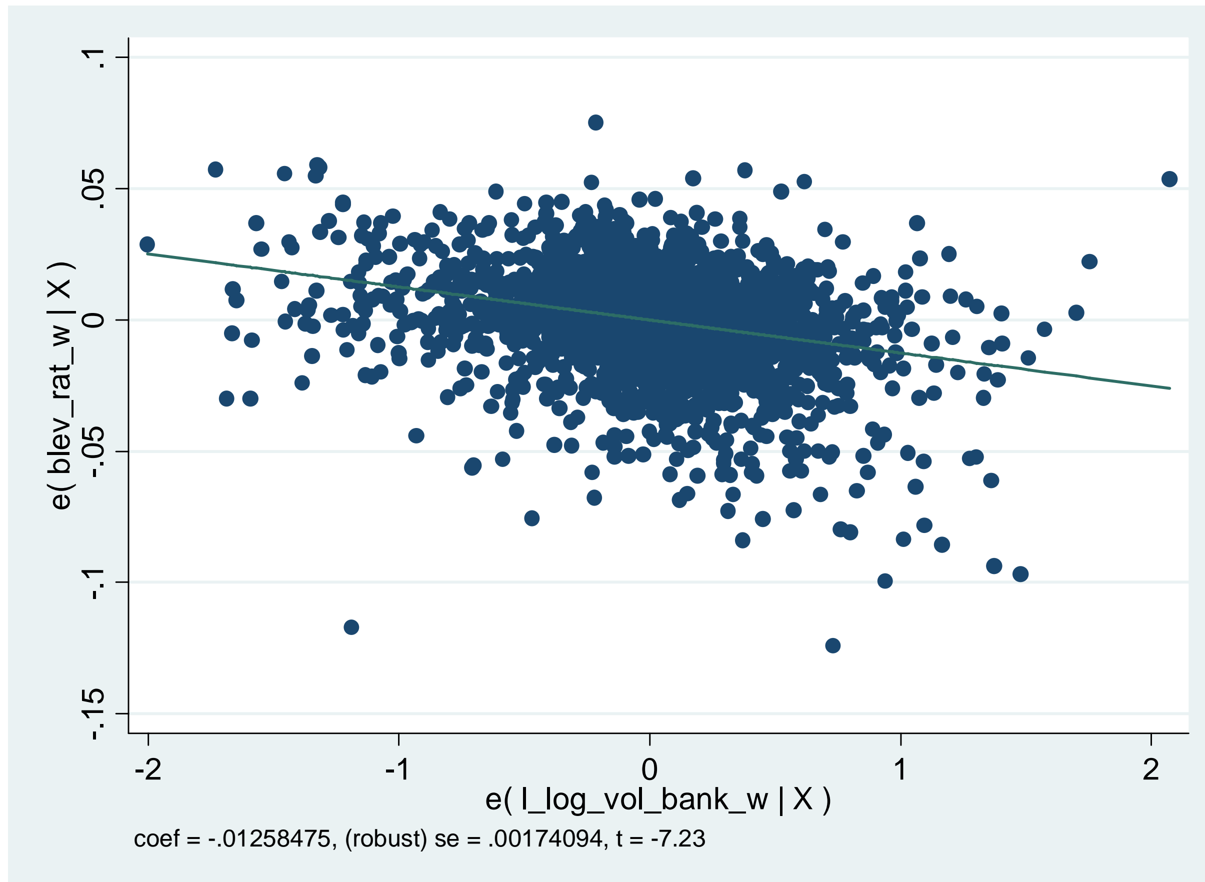
$\Rightarrow$ Any investor chooses *F* over *G independent of her attitude to risk*

How constrained are banks? They hold a lot of equity



Sample: top 100 US and top 100 EU publicly traded banks 1991-2004
(Gropp & Heider, 2007)

Riskier banks hold more equity (to expand capacity?)



Controls: size, profits, market to book, collateral, dividends, year & country FE