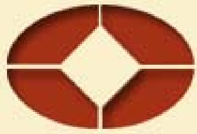


BANK FOR INTERNATIONAL SETTLEMENTS

Market discipline disclosure and moral hazard in banking

by Erlend Nier and Ursel Baumann

Discussion by

Kostas Tsatsaronis

Bank for International Settlements

Rome, 21 March 2003

Important questions

Main question: How does Market Discipline (MD) affect risk choices of banks?

- Two dimensions of risk: Asset risk and choice of capital
- Three dimensions of MD: Deposit insurance, inter-bank deposits, disclosure

Relevance: Inform the policy discussion on the desirable mix of supervisory and market mechanisms for financial stability

Methodology and validation

Panel of individual bank data: 729 banks, across 32 countries and 7 years.

Two main regressions:

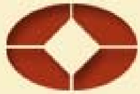
$$capital_t = f(\ risk_t \ ,\ MD_t \ ,\ controls\ )$$

$$risk_t = f(\ capital_t \ ,\ MD_{t-1} \ ,\ controls\ )$$

- Extensive use of proxies for key variables puts the focus on the sign and significance of coefficients
- Validation: do the results conform with reasonable priors and are they reasonably robust to specification changes?

Main results

- Presence of moral hazard: tougher MD is associated with more careful banks
- The effectiveness of MD is enhanced/hampered by the generosity of the safety net
- Non-linearities: MD is less effective for institutions that are closer to insolvency.



General comments

② Impressive coverage and meticulous data work: many variables and some new to the literature

② Attention paid to some data limitations

② Recognition of the endogeneity problems of the exercise and attempts to address them…

④ …not fully adequately: lack of tight theoretical framework

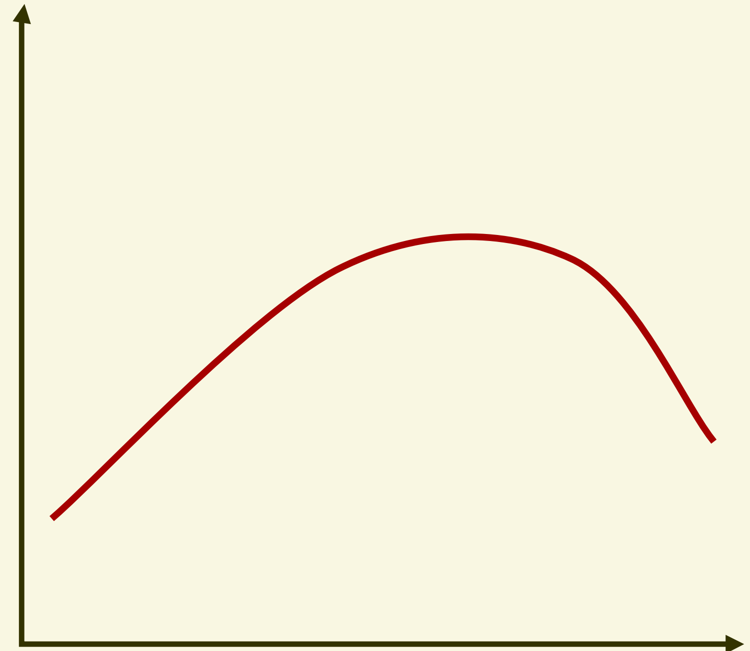
④ Some methodological questions remain

Theory: what is the benchmark?

Key background assumption: What is the “neutral”relationship between risk and capital?

- ⑧ Higher asset risk should be associated with higher capital
- – Incentive problems might lead banks to decrease capital ratios when they take more risk.

Theory: what is the benchmark?



Theory: what is the benchmark?

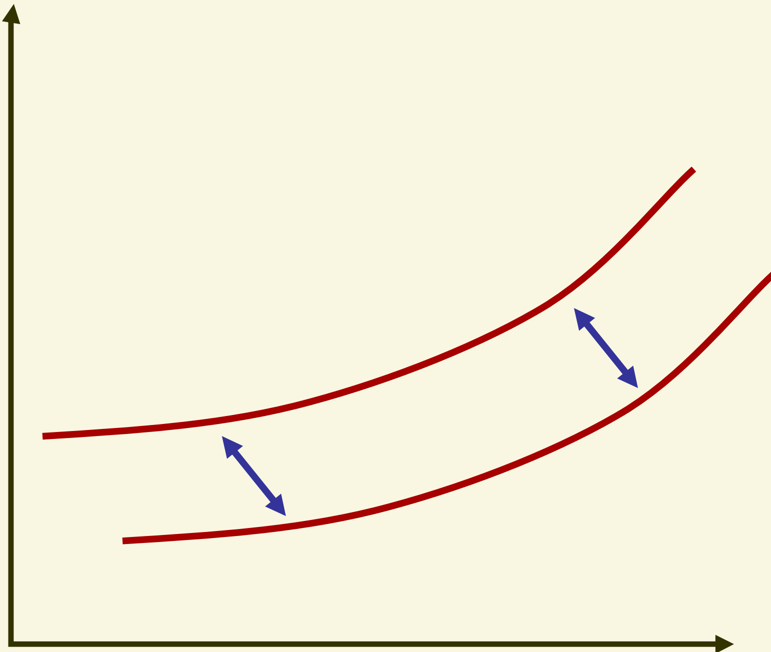
Key background assumption: What is the "neutral" relationship between risk and capital?

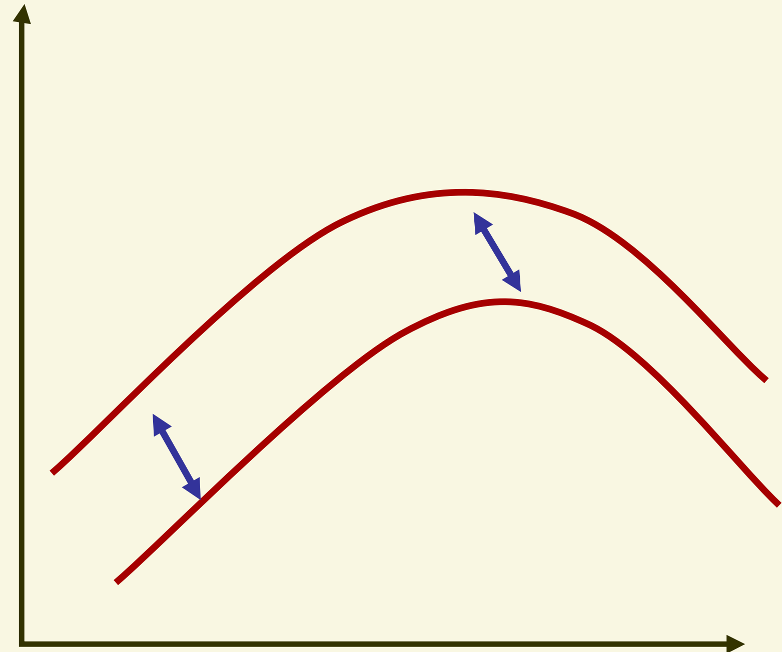
- Higher asset risk should be associated with higher capital
- Incentive problems might lead banks to decrease capital ratios when they take more risk.

➢ A question of balancing private risk and reward

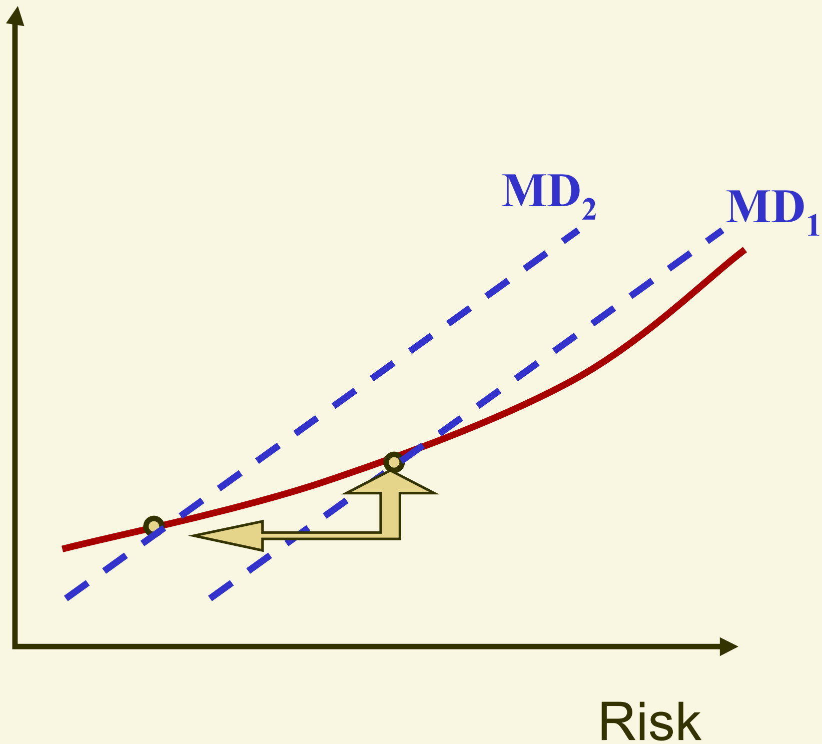
➢ A function of the regulatory framework

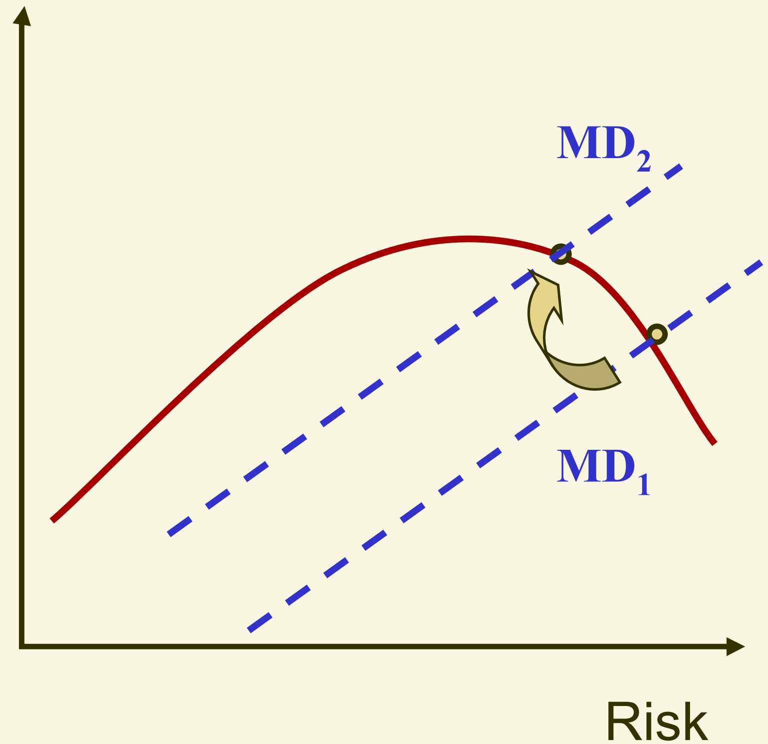
Theory: what is the benchmark?





Theory: what is the benchmark?





Why care about “serious theory”?

- Serious endogeneity makes fully specified theoretical framework key for interpretation.
- Example: signs of estimated relationship between risk and capital change across models/regressions!
  - Corr(capital, risk) > 0 in Capital regressions
  - Corr(capital, risk) < 0 in Risk regressions
- Should this be expected or is it a symptom of mis-specification?
- Are the variables good proxies?

Specification of regressions

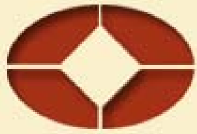
- Country-specific effects are not explicitly incorporated
  - Implicit in definition of deposit insurance and disclosure
- Interaction terms between risk,capital and MD are not present
  - In “risky bank” regressions the classification variables are also included in the regression

Are the variables used good proxies?

- Risk: imperfect measures but paper does obvious thing
  - PC "composite" measure should be explored further
  - Use KMV-style information as risk measure
  - Unclear as to how β and idiosyncratic variance should be interpreted
- Capital: use of risk-weighted measure of assets or deviation between actual and required
- MD: good idea to look into different dimensions
  - Adding up dummies implies equality of importance

Bottom line

- Overall an impressive effort to tackle a tough problem
- The robustness of the sign of the MD effect cannot be easily discarded as a “fluke” of the data
- Interpretation of results, however, demands a more structured economic framework
- The question addressed and the data chosen require further experimentation with the estimation.



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