Testing the Strong-Form of Market Discipline: The Effects of Public Market Signals on Bank Risk

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Objectives

- Analyze whether the availability of market information has any effect on bank risk taking

- Test the **strong-form of market discipline**: "publicly traded banking organizations with constantly available market signals from their stock (and bond) prices would take less risk than otherwise similar non-publicly traded banks that do not have constant market signals"

Results

- “Day-to-day market influence remains, for the moment, more a matter of faith than of empirical evidence” Bliss and Flannery 2002.

Indeed:

- The regression analysis does not detect any significant difference in credit risk, earnings volatility, and capital between otherwise similar publicly and non-publicly traded BHCs

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- It seems that the empirical evidence confirms the opposite (perverse influence?)…..

Results

- Publicly traded BHCs tend to have worse supervisory ratings than non-publicly traded BHCs, which is inconsistent with the strong-form of market discipline (but consistent with the opposite!)
- the same BHC tends to have more asset risk while holding less capital when it was publicly traded than when it was privately owned, which is inconsistent with strong-form of market discipline at work (perverse influence? support Froot and Stein (1998)?)

Theory

1. With market signals regulators have more information at high frequency

- "….. we need to adopt policies that promote private counterparty supervision as the first line of defense for a safe and sound banking system. Uninsured counterparties must price higher or simply not deal with banking organizations that take on excessive risk." (Greenspan, 2001).

Theory

- What's the distinction between excessive risk and acceptable risk? Is the "excess risk" for market participant the same for regulators?
- Market discipline and regulatory objectives: is the optimal level of risk and capital for the market the optimal one for the regulator?

Theory

- stockholders may like bank risk-taking (Merton, 1974, 1977),
- bondholders may not care about the level of bank risk as long as they are properly compensated for bearing such risks
- Only the discipline from counterparties, borrowers, and **regulators** has the unambiguous constraining effect on bank risk-taking.

Theory missed

- Froot and Stein (1998): banks are capital constrained as a result of informational problems and consequently they will act to conserve capital so as to be able to profit from future opportunities
- => if non-publicly traded banks face difficulties to adjust capital (asymmetries of information?) they hold less asset risk and more capital.
- Merton (1978), Bhattacharya (1982), Marcus (1984), Furlog and Keeley (1989) and Keeley (1990): franchise value has a role on bank risk taking and capital structure

Methodology

- Regress many measures of bank risk taking:
  - Credit risk, Earnings volatility,
  - Capitalization (?), Failure risk
- against
  - Dummy for publicly traded banks
  - Vector of firm characteristic: firm size, portfolio composition and funding mix

Methodology

- There could be many reasons (and many explanations) for publicly traded banks to hold different portfolio (and different risk profile) with respect to non-publicly traded banks
- These reasons could influence banks risk taking behavior in opposite directions
- Market discipline is only one of these reasons and does not seem to be the most important

Questions

- One important control variable: the franchise value is missed.
- Why are you not controlling for capital? (see Keeley (1990), Saunders and Wilson (2001) and De Nicolo' (2001))
- Rough measures of risk: how do you capture bank risk management and derivative use?

Questions

- Fischer, Heinkel, and Zechner, (1989), Strebulaev (2004) dynamic capital structure and tests:
  - in the presence of infrequent adjustment, cross-sectional properties of economic variables in dynamics may be fundamentally different from those derived assuming that they are always at their target levels.

Issues

- Why is market discipline not effective?
- Market discipline needs that information are used to influence behaviour, that is it needs an action by:

1. Market: market participant “punish” banks for making bad decisions
2. Regulators: they should incorporate market information more centrally into their supervisory assessment and mechanism of control and reverse undesirable changes in firm conditions

Issues

- If market discipline is not working well for non financial firms, why should it be effective for financial firms?
- What's the relative efficacy of market in presence of supervisory discipline?
- Pillar III: market discipline is important but is not working because of opacity => disclosure: what are the potential effects?

Issues

- In order for the disclosure mechanism to function effectively, the user must be able to understand and act on the information provided. BUT:

1. dramatic increase, both in scope and complexity, of available information in the public domain
2. dynamic changes in bank portfolios

=> disclosures become outdated almost instantaneously, which renders it nearly impossible for a user to have up-to-date information with regard to a bank's risk profile