Tradeoffs in Disclosure of Supervisory Information

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Itay Goldstein
Wharton School, University of Pennsylvania

Sources

This presentation is based on some of my research on the effects of disclosure as summarized in the review papers:

- **Should Banks' Stress Test Results Be Disclosed? An Analysis of the Costs and Benefits** (Goldstein and Sapra, *Foundations and Trends in Finance*, 2014)
- **Information Disclosure in Financial Markets** (Goldstein and Yang, *Annual Review of Financial Economics*, 2017)

Supervisory Information Disclosure: Policy Debate

- Financial reforms often focus on improving the public disclosure of information.
- A key example is the stress tests enacted following the crisis of 2008 where large financial institutions are examined on their ability to maintain capital under stress scenarios. The wide disclosure of stress tests results has been unprecedented in the context of bank supervision.
- This disclosure has been controversial from the start:
    - Wall Street Journal, March 5, 2012: **Fed Governor, Daniel Tarullo**: "*The disclosure of stress-test results allows investors and other counterparties to better understand the profiles of each institution*." **The Clearing House Association**: Making the additional information public "*could have unanticipated and potentially unwarranted and negative consequences to covered companies and U.S. financial markets*."

The Benefit of Disclosure

- There is not much controversy about the benefits of disclosure:
  - Market participants can make more efficient decisions with more information.
- For example, in the context of banks' stress test results:
  - The greater disclosure of banks' risks enables investors and other counterparties to make more efficient decisions concerning their transactions with the bank.
    - Market Discipline: Riskier banks will get fewer resources.
    - Lack of disclosure has been mentioned as a factor in the S&L crisis of the 1980s and the Japanese crisis of the 1990s, for example.

- Additional Benefits:
  - Effect on banks' actions: Market discipline incentivizes banks to take less risk ex ante.
  - Supervisors' accountability: Supervisors can be held accountable if the results are disclosed and their supervisory approach can be subject to greater scrutiny and discussion.
- Overall, "Common wisdom" among many academics and policymakers is that disclosure is a panacea…
- However, economic theory suggests that there are costs of disclosure in the presence of frictions.
  - It is important to understand them when designing disclosure policy.

Cost of Disclosure I: Risk Sharing

- According to Hirshleifer (1971), disclosure destroys risk sharing opportunities:
    - If types are already known, then insurance arrangements cannot form.
    - Disclosure destroys ex-ante welfare.
- This is potentially important for banks, as they are known to engage in a lot of risk sharing arrangements in the interbank market or via derivative contracts, e.g., Allen and Gale (2000).
    - Danger is that disclosure will harm these arrangements.
- While in Hirshleifer (1971), there is no tradeoff, Goldstein and Leitner (2017) develop a model where risk sharing motives create a tradeoff:

  - In bad times, risk sharing markets fail because average fundamentals are bad.
  - Hence, in bad times, some disclosure is necessary to isolate some bad banks, and allow risk sharing to emerge among the rest.
  - In good times, however, if risk sharing markets work, no disclosure is needed.
  - Conclusion related to Bouvard, Chaigneau, and De Motta (2015) in a different setting.
- Optimal disclosure in bad times:
  - If banks don't know information that is discovered by regulators, optimal disclosure can be implemented as pass/fail scores.
  - If banks know information that is discovered by regulators, more disclosure is needed to separate different types of banks.

Cost of Disclosure II: Ex-Post Externalities

- In the presence of externalities among investors, the use of the disclosed information might not be (ex-post) efficient.
- In the presence of strategic complementarities among investors, they put excessive weight on public signal relative to private signal (see e.g., Morris and Shin (2002)).
    - Public signal provides indication, not only about the fundamental, but also about what other investors know.
    - Increasing public disclosure might exacerbate this externality.
    - This is very relevant for investors in financial institutions; 'run' problems.
    - See empirical evidence by Hertzberg, Paravisini, and Liberti (2011).

- Hence, regulators should be cautious when disclosing information in cases when coordination problems are prevalent.
- This is the case when (see, Chen, Goldstein, and Jiang (2010)):
  - Banks hold illiquid assets.
  - Banks’ investors base is disperse.
  - Banks have a severe maturity mismatch between assets and liabilities.
- Negative results should be followed by a corrective action to avoid negative consequences.
- Regulators should be cautious when disclosing information that is not very precise, because this information will be weighed excessively. Aggregating information can help in increasing precision.

Cost of Disclosure III: Ex-Ante Incentives

- Basic economic tension: ex-post efficiency might imply ex-ante inefficiency.
    - Good corporate governance might lead to ex-ante inefficient behavior.
- Similarly, if results are disclosed frequently, and manager cares about interim prices, he might choose to promote an inefficient short-term strategy: Gigler, Kanodia, Sapra, Venugopalan (2011).
- In the context of stress tests, one might worry about 'gaming'. It is important to look into banks' investment strategies and the potential for choosing portfolios to ensure good results at the expense of long-term efficiency.
    - It is important not to fully inform the bank of the model or the scenarios ahead of time so that 'gaming' possibilities are limited.

Cost of Disclosure IV: Learning from Markets

- Many policy proposals call for learning from the market in government policy.
  - Learning from the market is also prevalent among other market participants, e.g., creditors.
  - The market aggregates information and opinions from many different participants in the financial system, Hayek (1945).
- It is important to consider what is the effect of disclosure on the information available in the market
  - Bond and Goldstein (2015): Disclosing information to the market might reduce the amount of information produced and processed in the market.

    - On the one hand, the decrease in uncertainty encourages trading activity, but on the other hand the decrease in traders' informational advantage discourages it.
  - Goldstein and Yang (2018): Disclosing information publicly discourages traders from trading on this type of information and encourages them to shift to trading on other types of information.
- Hence, disclosing information about parameters that the decision makers want to learn more about might reduce the ability to learn them from the market. But, disclosing information about parameters on which decision makers are already well informed can increase the ability to learn from the market:
  - More disclosure about bank-specific loans and less about market externalities.

Aggregate vs. Bank-Specific Information

- Overall, disclosure serves a useful macroprudential goal of financial stability.
- It seems that limiting disclosure of bank-specific results and enhancing disclosure of aggregate results will minimize the costs of disclosure, while still achieving the macro-prudential goal.
    - Banks will not have an incentive to change investment strategies.
    - Increased precision means that excessive reliance on public information is less damaging.
    - Supervisors are less likely to learn from market about aggregate macro conditions.

Guidelines for Disclosure of Bank Specific Information

- Regulators should be cautious when disclosing information in cases when coordination problems are prevalent.
- Negative results should be followed by a corrective action.
- If the market has an informational advantage on a certain dimension, it might be better not to disclose information on this dimension.
- Disclosure in bad times is less harmful than in good times.
- Costs of disclosure become less significant when the information disclosed is more precise.
- Look more deeply into banks' investment strategies and the potential for choosing suboptimal/myopic portfolios. Avoid information that allows banks to manipulate.