

Spillover Effect of Private Firm Disclosure on Public Firms' Loan Pricing

Chen, Ng, Saffar, Yang; Arthur Morris (HKUST) discussant.

Outline:

1. Hypotheses and results.
2. Efficiency in debt contracting.
3. Alternative mechanism.
4. Empirical notes.

Main association:

- ▶ Private Firm Disclosure and Public Firms' Loan Pricing

Central Hypotheses:

- ▶ **positive information externalities view:** *“To the extent that increased private firm disclosure generates positive information externalities that reduces the adverse selection that banks face when contracting with public firms, that public firms are expected to pay a lower price for their loans.”*
- ▶ **negative crowding out effect view:** More disclosure from private firms makes it easier to lend to private firms. *“Facing greater competition for bank loans, public borrowers may be forced to pay more to obtain loans.”*

Main result:

- ▶ *“A one standard deviation increase in private peer disclosure transparency is associated with a seven-basis-point decrease in loan spreads, or a decrease of US\$1.23 million in total interest.”*

This association is robust, and they do a lot of good work to suggest that there is a causal relation between private firm disclosure and public firm commercial loan spreads.

Economic significance:

Footnote 3 is a masterpiece:

- ▶ *“For comparison, Bharath et al. (2008) and Hasan et al. (2014, 2017) find that a one-standard-deviation increase in accounting quality, decrease in the effective tax rate, and increase in social capital reduces bank loan costs by 6.65, 4.87, and 4.33 basis points, respectively. A typical loan in our sample has an issuance amount of US\$432 million and maturity of 4.08 years (49 months). The total interest expense for a typical loan is $0.0007 \times 432 \times 4.08 = \text{US\$}1.23$ million.”*

Efficiency in debt contracting:

Whenever I read things like:

- ▶ *“... we find that private firm disclosure significantly lowers public firms’ loan spreads ... Overall, our findings identify positive externalities of private firm disclosure in the public firm loan market, namely, reducing information frictions and improving contracting efficiency.”*

I think of:

- ▶ *“Our notion of efficiency is endogenously derived from the joint optimality of the debt covenant and the corresponding interest rate on debt, but differs from the usual efficiency notion assumed in empirical studies.”*

Gigler, Frank, Chandra Kanodia, Haresh Sapat, and Raghu Venugopalan. “Accounting conservatism and the efficiency of debt contracts.” *Journal of Accounting Research* 47, no. 3 (2009): 767-797.

Secondary Results: Covenants

- ▶ *“Consistent with predictions that private peer accounting information reduces the tightness of public firms’ non-pricing loan terms, we find that private firm disclosure is positively associated with loan maturity; negatively associated with the probability of collateral requirements and covenants; and negatively associated with the number of covenants in loan contracts. These findings add to the evidence that private firm disclosure reduces information frictions and contractual costs in transactions between banks and public borrowers.”*

If the efficiency claim is central, then covenants will have to share the limelight with spreads.

Questions about Central Hypotheses:

- ▶ **positive information externalities view:** *“To the extent that increased private firm disclosure generates positive information externalities that reduces the adverse selection that banks face when contracting with public firms, that public firms are expected to pay a lower price for their loans.”*
 - ▶ Banks have a lot of information about the borrower itself. Industry information of this sort seems less critical for banks than for equity investors. However, the increase in information about *private firms themselves* is monumental.
- ▶ **negative crowding out effect view:** More disclosure from private firms makes it easier to lend to private firms. *“Facing greater competition for bank loans, public borrowers may be forced to pay more to obtain loans.”*
 - ▶ This is not the only way this could play out, they may raise higher-cost capital from other sources.

Alternative Mechanism: Portfolio Change

- ▶ **Alternative crowding out view:** Private disclosure allows banks to better screen private borrowers. Low credit risk private borrowers replace high risk public borrowers. So the composition of bank portfolios change leading to lower spreads and lower covenant use.

This is more direct. The increase in information impacts the private firms themselves.

An overly simple illustration:

1. Bank has enough capital to lend to 10 firms.
 2. There are 20 firms, 10 public, 10 private.
 3. Five high type each, five low type each.
 4. Bank lends to the 10 public matching rates to type.
 - ▶ Does not have enough information to lend to the private firms.
 - ▶ Moderate spreads.
 5. Private information becomes available.
 6. Bank now lends to 10 high type firms, 5 public and 5 private.
 - ▶ Low spreads (all borrowers are high type).
- ▶ In this case rates go down because lower risk borrowers obtain credit.
 - ▶ The bank uses the borrowers' disclosures to screen the borrower itself.

Empirical Design:

- ▶ Lots of FE + High R^2 :
 - ▶ Breuer, Matthias and deHaan, Ed, Using and Interpreting Fixed Effects Models (August 13, 2023). Available at SSRN: <https://ssrn.com/abstract=4539828> or <http://dx.doi.org/10.2139/ssrn.4539828>
 - ▶ “Measurement Error, Fixed Effects, and False Positives in Accounting Research”, Review of Accounting Studies, with Jung Kim, Joshua Lee, Daniel Taylor, 2023
- ▶ Staggered DiD:
 - ▶ Consider discussing the proportion of never-treated units, and testing the extent of the Goodman-Bacon comparison problem, before correcting for it.
 - ▶ Roth, Jonathan, Pedro HC Sant’Anna, Alyssa Bilinski, and John Poe. “What’s trending in difference-in-differences? A synthesis of the recent econometrics literature.” Journal of Econometrics (2023).

Misc. Notes:

- ▶ Screening gets less discussion than I expected.
- ▶ Copy editing: “banks *reply* on”.
- ▶ I don't think that I could construct the variable of interest from the Variable Definitions Appendix.
 - ▶ *Transp_Private*
 - ▶ *Transp_Public*
- ▶ Dealscan as a measure of the extensive margin of covenant use will likely need validation/get pushback.