Discussion of "Intermediary Frictions and the Corporate Credit Cycle: Evidence From CLOs"

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Overview of the Paper

- This paper presents evidence of equity-debt conflict of collateralized loan obligations (CLOs), and show its importance in affecting CLO issuance and corporate credit cycle.

- Key empirical evidence:
  - Trading by CLOs on average is profitable, but destroys value when equity is low.
  - For low-equity CLOs, active trading increases equity payout.
  - More years left for active trading incurs higher CLO credit spread.

- A partial equilibrium model to quantify the CLO agency friction:
  - Overlapping-generation model of CLO manager decision.
  - More debt decreases the continuation equity value but does not affect "bad trading", thus more agency problem.
  - Key identification: years left for active trading as manager discretion.

Why is this paper important?

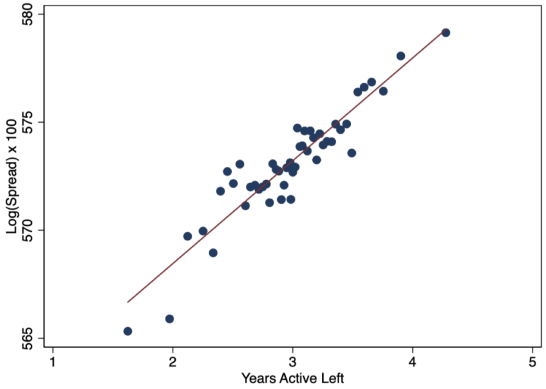
- Equity friction is the key intermediation friction in macro-finance and it drives financial crises cycles
  - He and Krishnamurthy (2013); Brunnermeier and Sannikov 2014; Krishnamurthy and Li (2024)
- Banks not raising enough equity is the crux of modern financial regulation.
  - Admati and Hellwig (2014); Cochrane and Seru (2024)
- CLO has a similar leverage ratio as banks (10% equity). Thus, severity of debt/equity conflict is informative about banking.
  - In general, quantifying debt/equity agency conflict is very challenging in finance.

Comment 1: Empirical Evidence and Classical Theory

- The idea of debt overhang problem (or the "agency problem" of debt) traces back to Jensen and Meckling (1976) and Myers (1977). Classical theory:
  - Risk shifting incentives: e.g., "gambling for resurrection".
  - Leverage ratchet: Admati et. al. (2018); DeMarzo and He (2021).
  - Underinvestment in positive NPV projects.
  - High equity issuance costs.
- The story of CLO seems different ...
  - CLO imposes over-collateralization (OC) test to limit risk-taking when equity is low.
  - To avoid failing the OC test, CLO managers/equity holders try to sell highly risky assets at a firesale cost.
- Is there a voluntary component of CLO sales? How to connect to classical theory?

Comment 2: Active Trading Horizon and Debt Cost

- In the data, CLO credit spread is positively correlated with years left active trading, controlling for remaining maturity and underlying collateral quality.



Comment 2: Active Trading Horizon and Debt Cost

- This is convincing evidence that "discretion" matters for CLO pricing.
- In the model, manager chooses good trading if

$$\bar{R}_t - \sigma_t \epsilon_{t+1} + \alpha(f_t) - D_t \geq f_t B_t$$

  - As discretion f_t increases, both good trading and bad trading become more appealing.
  - B_t reflects the extent of agency conflict and is critical for quantitative results.
  - How to discipline B_t?
- Can we have some micro foundations?
  - If the manager sells risky assets, σ_t is affected.
  - What happens after the bad trading?

Comment 3: What does the paper tell us about banking?

- Banks have risk-based regulations, similar to the over-collateralization test.
  - With a high leverage, banks always try to take on risks that are less regulated (e.g., SVB bank failure)
  - Is OC test more powerful than banking regulation?
  - Can banking reform borrow insights from CLOs? E.g., stopping dividend payment and enforcing more deposit insurance premium payment when equity is low.
- What is the implied equity issuance cost from the CLO model?
  - We know that bank shareholders hate equity issuance.
  - What is the implied shareholder cost for equity issuance? What about the social cost?

Summary

- A great paper that addresses a fundamental economic question!
- Potential implications on banking regulation and financial sector reform.
- Suggestions:
  - Tighter connection to classical theory.
  - Better micro foundations.
  - More implications on equity financing frictions.