Intermediary Market Power and Capital Constraints

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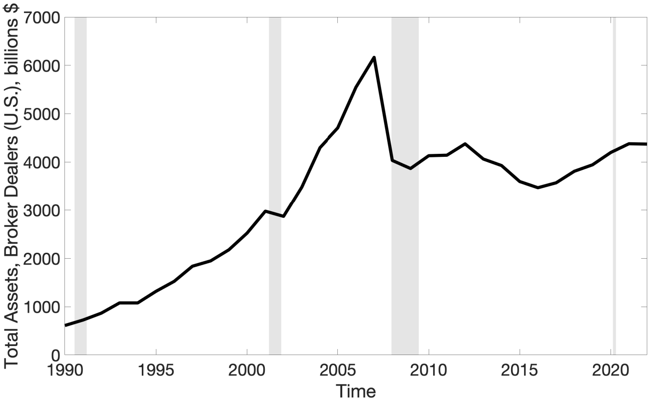
SUMMARY

- Intermediary asset pricing.
  Brunnermeier and Sannikov (2014), He and Krishnamurthy (2013)
- Intermediary market power.
  Corbae and D'Erasmo (2021), Wang, Whited, Wu, and Xiao (2022)
- A theory of the trade-off between capital regulation and market power in auctions.
- Paper tests and validates this prediction with Canadian Treasury auctions data.

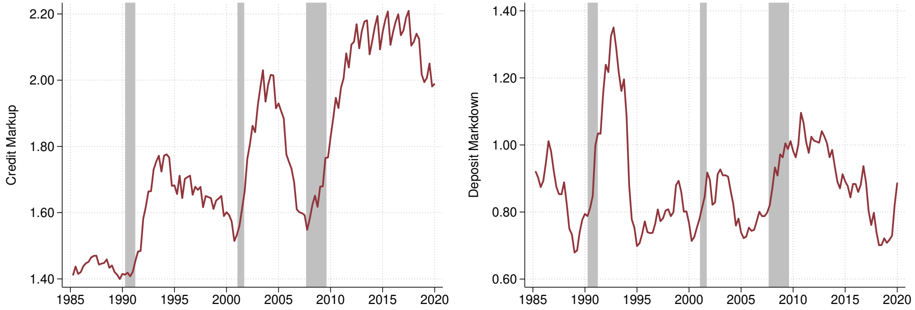
Big Picture 1: Intermediary Asset Pricing



Notes: Source: Financial Accounts of the U.S.

- Broker-dealer as marginal investor. Procyclical leverage. Financial (in)stability.
  Adrian and Shin (2010)

Big Picture 2: Intermediary Market Power



(A) Credit Markups (B) Deposit Markdowns

Notes: Credit markups and deposit markdowns. Sample: U.S. commercial banks. Source: Jamilov and Monacelli (2023).

- Counter-cyclical, heterogeneous, rising U.S. bank market power.

Competition-Stability Trade-Off

- Financial stability and competition: generally a trade-off.
  Keeley (1990), Hellman et al. (2000), Repullo (2004), Beck et al. (2006)

- Standard models: high-markup environments are stable. Lowering competition increases instability. Thus the trade-off.

- This paper: relaxing capital constraints increases dealer markups. Then, raising the constraint lowers markups *and* increases stability (presumably).

- Where is the trade-off? Closer to the no-tradeoff view (Martinez-Miera and Repullo (2010)).

- "Higher market power leads to lower liquidity, pushes down the market price below the perfect. competitive benchmark." Minor confusion: *markups* or *markdowns*?

General Effects of Capital Regulation

- Decreasing capital costs not only increases prices but also affects efficiency and risk.
- If the balance sheet does not exhibit decreasing returns to scale, ...
  Malherbe (2020)
- ... a loosening of capital requirements yields efficient expansions.
- Furthermore, capital regulation + market power affect the market value of equity capital E_i in GE. Pecuniary externality absent.
  Lorenzoni (2008), Bianchi (2011)
- GE and normative effects, and thus implications for policy, are not obvious.

The Intermediary Size Channel

- Weaker capital constraints encourage net worth growth. Larger intermediaries choose higher absolute markups.
- Both channels work through intermediary *size*, which is the absorbing (endogenous) characteristic.
  Bellifemine, Jamilov and Monacelli (2022)
- With CARA, not sure if wealth/size differences matter. But motivation mentions big banks: Bank of America etc.
- In the application, all 8 dealers are probably very large. So, this intensive margin maybe is irrelevant.
- But in theory, not obvious in general.

Stochastic Risk Aversion

- Separately identify risk aversion from shadow costs of capital regulation:

$$\beta_{it} = \frac{\rho_m}{1 + \lambda \kappa_{it}}$$

- Policy change: exemption of domestic govt. bonds from Basel III during COVID.
- View 1: ρ is inherent ("ex-ante heterogeneity" approach).
- View 2: ρ is stochastic.
  Santos and Veronesi (2022)
- Identification goes through iff View 1 is true. Exemption period was too long.

What Risk Aversion is Estimated?

- Absolute or relative?
- Separately identifying *relative* risk aversion from the elasticity of intertemporal substitution is hard.
  Chetty (2006)
  - Important for asset pricing. Especially if believing that RA of *dealers* is low but could be high on average.
    Gârleanu and Panageas (2015)
  - Not important when no background risk. But supply is uncertain. Not clear whether the estimated RA is low or EIS is high.
- Is generalization to Epstein-Zin feasible? Non-parametric identification?

Conclusion

- Dealer asset pricing meats dealer market power.
- Important theoretical and empirical contribution.
- Clarifying the precise trade-off + GE and normative discussions would be helpful.
- Identification is not 100% clear, but it's not easy.