Banking Regulation and Supervision: Paper Discussion by Stijn Van Nieuwerburgh

Regulatory Changes and the Cost of Capital for Banks[1]
The Value of Regulators as Monitors: Evidence from Banking[2]

[1]Anna Kovner and Peter Van Tassel

[2]Emilio Bisetti

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Kovner and Van Tassel

- Computes cost of equity capital for banks
- High in crisis, much lower after Dodd-Frank Act, especially for largest banks
- Intuition: Dodd-Frank Act lowered bank risk-taking, making bank equity safer
- However, they also find a higher WACC for banks after Dodd-Frank Act passage, including for the largest banks
- Consistent with implications of model with tighter regulatory capital constraints post Dodd-Frank Act (Elenev, Landvoigt, Van Nieuwerburgh)
  $WACC = \mathbb{E}(Return^{Equity}) \times \frac{E}{A} + \mathbb{E}(Return^{Debt}) \times \frac{D}{A}$
- But, lower cost of equity capital doesn't always mean higher welfare! Tighter capital requirements also imply:
  - Lower output and capital investment
  - Higher macro-economic volatility due to lower risk absorption capacity of financial sector

Kovner and Van Tassel

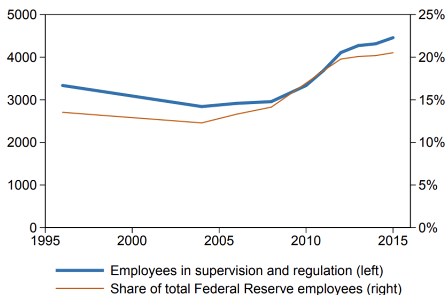
- There are well known difficulties with computing expected equity returns
- Particularly pronounced over short windows (eg: Financial crisis or SCAP period)
- Robustness to other factor models is a good start
- Also explore factor models where factors are based on bank stock returns only
- More promising: use options data to compute both equity risk premium and individual betas (Martin 2007, Martin and Wagner 2017, Buss and Vilkov 2012)

Bisetti

- Banks between $150-500 million in assets are exempted from onerous financial filings requirement
- Assumption: Fed is devoting fewer resources to supervise them. Would be nice to provide direct evidence on this
- Finds that market-to-book ratio of assets decreases 1% and market-to-book ratio of equity falls 7% relative to those (just) above threshold
- Intuition: Shareholders now need to spend more resources on auditing/consulting to prevent rent extraction by management, especially in riskier banks
- Like the experiment and the supporting direct evidence

Bisetti

- Fed is spending large amount of resources on supervision



Source: Eisenbach, Lucca, and Townsend 2017

- It thereby provides a valuable public good
- Do bank shareholders pay high enough fees for supervisory services they "consume"? Only BHCs with $50 billion in assets are charged a supervisory fee by the Fed

Suggestions for both papers

- Post hoc ergo propter hoc
  - This is a period with major changes in regulatory capital rules (Basel III) that interact with changes in supervision. Is Bistetti paper just picking up supervisory changes?
  - The period also had major cyclical fluctuations (eg: housing boom and bust). This makes it difficult to cleanly estimate cost of capital and isolate effect of capital regulation (Kovner and Van Tassel)
- Use later changes to regulatory and supervisory framework as out-of-sample tests
  - 2018 Economic Growth, Regulatory Relief, and Consumer Protection Act
  - FR Y-9C threshold changed from $500 million to $1 billion, and from $1 billion to $3 billion effective March 2015 and September 2018, respectively
- Papers show that tighter capital regulation and stricter supervision are good for banks' shareholders, especially for large banks
  - Could these results reflect comparative advantage in regulatory compliance (economies of scale) for large banks?

Conclusion

- Macro-economic burden of regulation not captured
- Coffey, McLaughlin, and Peretto 2016 estimate the cumulative cost of federal regulation has dampened economic growth by approximately 0.8 percent per year since 1980
- Suggests we need a macro-economic framework/general equilibrium analysis to study all parties affected by regulation and supervision including
  - Financial Intermediaries
  - Their borrowers (Firms and households)
  - Their lenders (Depositors and debt holders)
  - Government(Explicit and implicit bailout guarantees)