TBTF Symposium: Taxing Leverage Comments on Cochrane

Thomas Philippon

NYU, NBER, CEPR, ACPR

May 15, 2016

Overview

- Narrow banking
 - Deposits 100% backed by Treasury
 - Credit 100% equity financed
- Tax on short term debt
 - Pigouvian taxes instead of capital requirements

Comments

- What I like
 - Stimulating discussion.
 - Healthy skepticism. Do we really "need" all this short term debt?
 - Interest on reserves
 - Broad-, function-based regulation
- Issues
 - Will narrow banking stop runs?
 - How do we tax leverage?
 - Need a model
- Measuring Systemic Risk

Narrow Banking Will Not Stop (All) Runs

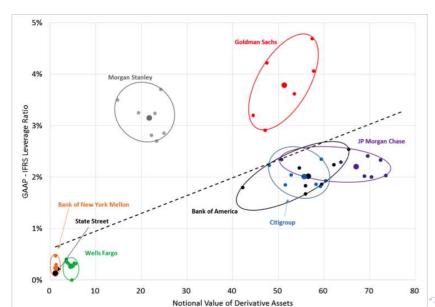
- NB = move all illiquid assets to bonds mutual funds
- But as long as <u>assets</u> are illiquid there is still a <u>first mover</u> advantage.
 - "Payoff complementarities and financial fragility: Evidence from mutual fund outflows," by Qi Chen, Itay Goldstein, and Wei Jiang
 - "Narrow Banks Won't Stop Bank Runs" by Schoenholtz & Cecchetti
 - Fewer runs, not run free. But quantitative differences are important
- Deposits 100% backed by sovereign debt
 - Outside the U.S.? Need to define which government debt is safe. Good luck with that.



Taxing Leverage

- Nice idea
 - focus on function, not SIC code
 - applies outside banking
- But exactly what are we supposed to tax?
- Banks can take risk w/o "leverage"
 - contingent assets
 - derivatives

Leverage and Derivatives



Taxing Leverage

- Safe Harbor vs Automatic Stay
- Ring fencing: local leverage or global leverage?
- Bottom line: easier said than done
 - For banking, not simpler than capital ratio
 - Advantage outside banking.. but simple only until you start to fill in the blanks
- Presentation of current framework too much of a straw man
 - 2 key elements: multiple metrics (E/A, RWA, Liq, ST) & systemic surcharge
 - by design, harder to game

Need a Model

- Explicit analysis of what needs to be solved: OK
- But need a model of why banks exist. Otherwise inconsistencies.
- One example: safe assets and narrow banks
 - "The current version of the [..] narrow banking proposal begins with an observation: The magnitude of safe short-term assets outside the banking system exceeds the magnitude of banks' demand deposit liabilities. Therefore, say the proponents of narrow banking, why not avoid the problems of an illiquid banking system by forcing a rearrangement of asset holdings in the economy"
 - xx? 19xx?

Need a Model

- "Narrow Banking Meets the Diamond-Dybvig Model", Neil Wallace, FRBM Quarterly Review, Winter 1996
- Wallace uses a standard DD to interpret the data:
 - interpreted allocation with assets outside banking system
 - consistent with observation that safe short term assets outside banking >> deposits
 - yet, (Prop 3): narrow banking is equivalent to autarky!
- So I would much rather see a model

Acharya, Philippon & Richardson (2015)

- Our initial approach (2010)
 - Tax/regulate contribution to aggregate capital shortfall

$$SES_i = \mathbb{E}\left[\kappa a_i - w_i \mid W < \kappa A\right]$$

- Model designed for banking
- What about Insurance companies?
 - "we are vital to the economy" (i.e., like the banks)
 - but "we are not systemic" (i.e., unlike the banks) because we do not experience runs
- Debate very confused
 - Can you really be "vital" without being "systemic"?
 - Is runnability a necessary condition for systemic risk?



Our Model

- Large number of financial firms
 - Asset allocation, leverage, maturity
- Markets
 - Failed assets, takeover
 - New investments
- Find two types of systemic externalities
 - Credit Crunch externality
 - Disruption/Liquidation externality

Planner

- Private welfare + credit crunch externality + liquidation externality
- Pigouvian Tax System

$$\tau_i = \tau_0 + \tau_i^R + \tau_i^L$$

- Runnable liabilities increase systemic risk
- But you can create systemic risk even if no run

Conclusion

- Leverage
 - Measurement
 - Safe harbor
- Equity
 - 100%? Cannot even get to 20%. Reminds me of inflation target.

END

Why Banks Want to Be Big?

 The inverse relationship between size and expenses is particularly negative for corporate overhead (such as accounting, printing, and postage), information technology and data processing

Efficiency Ratio and Bank Holding Company Size Flexible Functional Form

Normalized Efficiency Ratio

