Discussion of "The Fiscal Footprint of Liquidity Regulation"

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Questions, answered and not answered (yet?)

☑ • What is the fiscal footprint of liquidity regulation?
  - Channels
  - Conditional channels: in which states and regimes, are channels more operational?

☑ • Macro-pru authority vs. fiscal authority
  - What are conflicts? When do we lead to suboptimal outcomes?
  - Fiscal dominance of macro-pru

☑ • How does this knowledge inform our answer to the delegation question?
  - Should the fiscal authority, the monetary authority, or a third authority do liquidity regulation?
  - How does the answer depend on the institutions and rules of a given country?

Paper's analysis of channels

- Banks may need resources to cover stochastic liquidity shock required for capital investment of k_{t+1} (variant of Holmstrom-Tirole, 1998)
  1. Hold ex-ante in the form of government bonds
  2. Or, wait and get a bailout from the fiscal authority (T_{t+1})

  - Macro-pru regulation forces option (1): β_t ="liquidity coverage ratio"
- Higher β_t:
  - Lower government bond interest rates
  - Less k_t , because date-t budget constraint tightens => Less tax revenue
  - But higher k_{t+1} and lower bailout T_{t+1}

- The paper also asks how (larger expected liquidity shocks, government near fiscal capacity) exacerbates these effects

Missing channels

- Banks may need resources to cover stochastic liquidity shock required for capital investment of k_{t+1} (variant of Holmstrom-Tirole, 1998)
  1. Hold ex-ante in the form of government bonds
  2. Or, wait and get a bailout from the fiscal authority (T_{t+1})
  3. Or, receive discount window loan (illiquid but solvent…)

  - Macro-pru regulation forces option (1): β_t ="liquidity coverage ratio"
  - Or, ex-ante have the CB raise rates, and drop at $t+1$

- Higher β_t:
  - Lower government bond interest rates
  - Less k_t , because date-t budget constraint tightens => Less tax revenue
  - But higher k_{t+1} and lower bailout T_{t+1}
  - Distributional consequences

Liquidity regulation: effects on objectives

- For fiscal authority: Higher β_t
  - Lower government bond interest rates
  - Less k_t , because date-t budget constraint tightens => Less tax revenue
  - But higher k_{t+1} and lower bailout cost T_{t+1}

- For central bank: Higher β_t
  - ~~Lower government bond interest rates~~
  - Less k_t , because date-t budget constraint tightens
  - But higher k_{t+1} ~~and lower bailout T_{t+1}~~

Macro-pru vs. fiscal authority game

- Fiscal authority may commit to not providing bailout resources
  - Forces macro-pru to increase β_t
  - Pushing down government bond rates

- CB in charge of macro-pru ignores bailout taxpayer money, allows firms to operate at higher scale

- *Are these biases easily avoidable? "Constrained efficient"?*

Comparison to Seignorage

- Welfare optimizing planner will use seignorage as instrument in part to offset fiscal shocks

- But that requires commitment; without commitment it may overprint money

- When commitment problem is severe:
  - Delegate the decision right over seignorage to (unelected) monetary authority, incentivized to hit an inflation-target

- Cost of delegation: we forgo the fiscal benefits of seignorage tool

How about capital regulation?

- For fiscal authority: Higher capital ratios
  - ~~Lower government bond interest rates~~
  - Less k_t , because date-t budget constraint tightens => Less tax revenue
  - But higher k_{t+1} and lower bailout T_{t+1}

- For macro-pru authority: Higher capital ratios
  - ~~Lower government bond interest rates~~
  - Less k_t , because date-t budget constraint tightens
  - But higher k_{t+1} ~~and lower bailout T_{t+1}~~

Why do CBs do capital regulation?

- Org design principle of bundling complementary tasks
  - First line in a crisis is CB liquidity
  - Seignorage/liquidity provision already delegated to CB for commitment reasons
  - So it follows that the CB should also do capital regulation

- Commitment problem has two costs:
  - CB may ignore the bailout and fiscal stabilizer is lost

Liquidity regulation

- For fiscal authority: Higher β_t
  - Lower government bond interest rates
  - Less k_t , because date-t budget constraint tightens => Less tax revenue
  - But higher k_{t+1} and lower bailout T_{t+1}

- For macro-pru authority: Higher β_t
  - ~~Lower government bond interest rates~~
  - Less k_t , because date-t budget constraint tightens
  - But higher k_{t+1} and lower bailout T_{t+1}

- Complementarity principle, means put CB in charge
- But at a cost that the CB cares less about the use of fiscal resources

Quantitative easing

- Kind of like β_t policy
  - Force banks to hold more reserves (higher liquidity) while increasing demand for bonds and reducing long-term government bond rates
- Effects on objectives
  - Fiscal authority likes QE; without commitment it overdoes QE
  - QE delegated to monetary authority, incentivized to think about output gap and inflation target
- But another cost of delegation here:
  - Treasury "undoing": Issues more long-term bonds when CB buys bonds
  - Bundling: CB should be also in charge of debt management

Conclusion

- Important issue that needs to be thought through systematically
- Paper (slides that I have) map out the channels of footprint and help us understand conflicts that may arise in current institutional setting
- Theoretical complement to Liang and Edge from yesterday

- Institutional design need not be taken as given
  - Liquidity regulation, Capital regulation, QE, Debt management, Interest rate policy, …
  - Who should be in charge of which bundle of tasks and how should they be measured and incentivized?