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): $\beta_t =$“liquidity coverage ratio”

• Higher $\beta_t$:
  • 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): $\beta_t$ = “liquidity coverage ratio”
  • Or, ex-ante have the CB raise rates, and drop at $t + 1$

• Higher $\beta_t$:
  • 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 $\beta_t$
  • 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 $\beta_t$
  • 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 $\beta_t$
  • 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 $\beta_t$
  • 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 $\beta_t$
  • 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 $\beta_t$ 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?