Discussion of:
CBDC and Banks: Disintermediating fast and slow

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WBS Gillmore Conference on DeFi & Digital Currencies
28th September 2024

[1] The views expressed in this paper are those of the author and do not necessarily reflect the position of the Bank of England or its committees.

Summary

- **Great paper!**
- **Research Question**
  - What are the financial stability implications of a CBDC?
- **Methodology**
  - DSGE model with CBDC and endogenous bank runs
  - Calibrated to Euro area data + Bundesbank survey data
- **Contribution**
  - One of the only CBDC surveys!
  - Distinguishes between fast (runs) and slow (steady-state) bank disintermediation
  - Welfare analysis of CBDC with different designs
  - Calibrating optimal holding limits

Modelling Bank Runs

- Bank runs in the model are **systemic** $\Rightarrow$ only case where CBDC seems important
- Runs occur if households don't roll over deposits $\Rightarrow$ all incumbent banks close
- Runs are costly because more costly for HHs to hold assets than banks
- Also (possibly?) HHs lose bank equity
- HHs don't lose deposits $\Rightarrow$ but run to CB money, assets and (possibly?) new banks
- **Clarifying Questions:**
  1. Who owns banks and what happens to bank equity if there were no runs?
  2. What determines the number/size of entrant banks? Is it different in a run/non-run?

How does CBDC change things?

1) New form of money:

- CBDC is an additional variety of money
- Lowers consumption transaction costs

2) Slow Disintermediation:

- HHs substitute away from deposits and cash towards CBDC
- Cost of funds for banking sector increases
- Banking sector shrinks $\Rightarrow$ lower run risk

3) Fast Disintermediation:

- Cash subject to quadratic holding costs $\Rightarrow$ CBDC is not
- CBDC lowers costs of HHs running during Bank runs
- Increase probability of bank runs

Comment 1: Slow vs fast disintermediation

- Paper emphasises trade-off between Slow and Fast disintermediation effect
- Clear what is happening with run-risk but what about welfare?
- Hard to disentangle welfare benefits of CBDC from its costs
- Holding limits seems like a (necessarily?) crude way of dampening effects
- Could clearer understanding of the channels help design better policy?
- **Suggested experiments:**
  1. Can turn off fast disintermediation by setting CBDC storage cost same as cash
  2. Can turn off slow disintermediation through appropriate CB interventions

Comment 2: What is the optimal size of the banking sector?

- Introduction of CBDC raises costs of funds for Banks $\Rightarrow$ Banking sector shrinks
- Smaller Banking sector reduces run risk BUT also lower investment and so lower capital
- If households hold more assets in steady state this could increase inefficiencies
- Key parameter is $\gamma^F = 0.33$: fraction of assets held by non-banks without incurring costs
- Steady state Bank holdings is around 40% so this cost is incurred outside of runs?
- **Questions:**
  1. What would $\gamma^F = 0$ and/or $\gamma^F = 1$ change?
  2. Is there an optimal liquidity premium on deposits given γ^F?

Comment 3: Costly cash - bug or feature?

- Cash has costly storage costs that help deter bank runs
- Is this a bug or a feature of cash?
- Doesn't seem comforting to policy makers that runs are prevented by cash storage costs
- Cash usage is declining, how would this affect the trade-off in the future?
- Might go either way. Storage costs increase? Or coefficient in CES decreases?
- **Question:**
  1. What happens to the frequency of runs if cash usage declines?

Comment 4: Does CBDC help in runs?

- In a systemic run, CBDC may play a role in mitigating some of the effects (cf uniformity of money).
- There is already some of this in the model:
  - Running to cash in a run is costly
  - and lower cash holdings increases transaction costs
  - With CBDC HHs are able to hold more money...
  - ...and lower transaction costs in the run state
- Why not make this explicit and show welfare conditional on run/not run?
- **(Possible) Policy Implication:**
  In a (future?) world where there is higher systemic risk, benefits of CBDC during a bank run could outweigh cost of slightly more bank runs occurring

Concluding Remarks

- **Great paper:** if you haven't read it - do
- **Important Contributions:** calibrated holding limits, ran one of only a handful of surveys on CBDC preferences, model trade-off of fast/slow disintermediation...
- **Main suggestion:**
  - I would like to understand the mechanisms and trade-offs more clearly...
  - ...hoping this could lead to interesting policy proposals
  - How might the welfare trade-off change in the future given current trends?