Stablecoins: Adoption and Fragility

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Discussion by

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[1] Disclaimer: The views expressed are those of the authors and do not necessarily represent those of the Federal Reserve Board of Governors or anyone in the Federal Reserve System.

Stablecoin basics

- Stablecoins (SC) are digital assets that promise to maintain a constant price of $1 and to be redeemable at par on demand
- Mostly collateralized by other assets, *partly illiquid* (Tether/USDC or Dai)
- Similar to banks and MMF, this exposes SC to run risk
- But, without direct compensation $\rightarrow$ SC *pay no interest*

Questions that arise:

- Where does the demand for stablecoins come from?
- (*Relatedly, but distinct*) How SC have mostly managed to maintain their peg in secondary trading?

This paper

- Bertsch (2023) tackles the first question focusing on the role of SC to facilitate payments
- Intuitively, if SC can be used more efficiently for *some* types of payments than other private money, then there is demand for them
  - Idea is: ”I am only willing to exchange my dollars for a currency with risk of devaluation if I need it to buy a coffee from a local store accepting only local currency”
- *Complementary channel:* Gorton et al. (2022), ”Leverage and Stablecoin Pegs”, show that demand for stablecoins comes from their role to take leveraged, *speculative* positions in crypto

Sketch of Model *(very high level)*

- Three periods ($t = 0, 1, 2$); a stablecoin issuer; and heterogeneous agents w.r.t. payment preferences choosing between insured deposits and stablecoins
- At $t = 0$, issuer *caters* demand for stablecoins and invests proceeds in *single* risky and illiquid project (relaxed in an extension)
- At $t = 1$, some agents become *active* and some *passive*
  - Active agents decide whether to redeem stablecoin in a global game
  - **Comment:** Trick from some MF papers, but hard to reconcile with SC traded 24/7 in decentralized blockchains, smartphone apps tracking prices, and social media presence
- At $t = 2$, if SC solvent, agents can use tokens for certain payments **with some probability**; if SC insolvent, they get the proceeds from SC resolution

Payment type probabilities

- Key aspect is that agents have heterogeneous preferences such that with some probability they prefer goods that require payment either in SC or deposits
  - Common component: increasing in # of SC in circulation at $t = 0 \rightarrow$ network effects
  - Idiosyncratic component ranks types from high to low probabilities and is exogenous

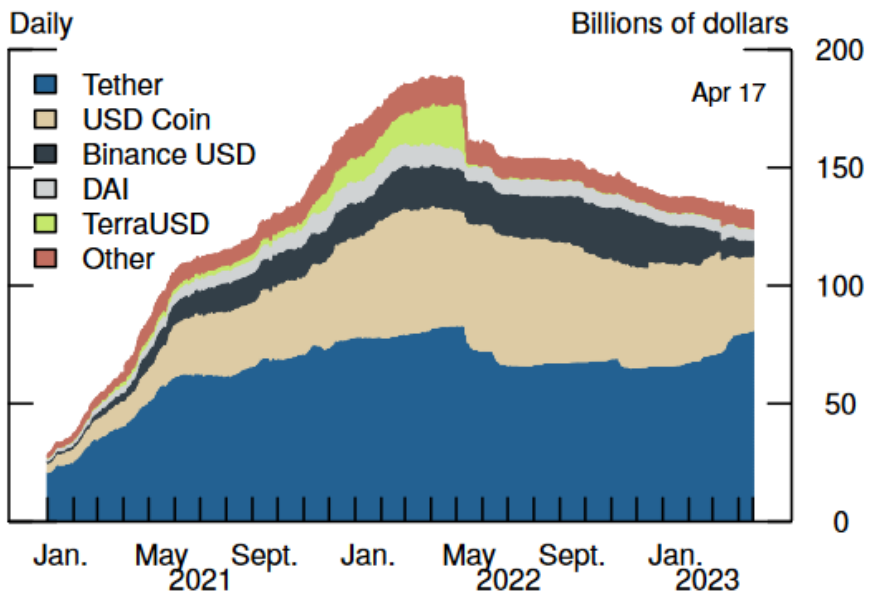
- **Comment A:** Modeling of common component is inconsistent with # of coins in circulation in all out-of-equilibrium paths in global game

- **Comment B:** Common component is a bit ad hoc; preferable to microfound it with random or directed search
  - From a normative perspective, microfoundations are important to identify which way matching inefficiencies and contagion externalities go
  - Networks effects could be captured by an increasing returns to scale matching function (check also Coppola et al. 2023)

- Networks effects do not seem to matter for key insights, so an alternative would be to drop it and simplify the paper

Quantification

- The theoretical point of the paper is straightforward
- Could benefit from some quantification to evaluate its economic significance
- How big is the convenience yield for payments using SC?
  - Van den Heuvel (2022): convenience yield on deposits about 80bps in recent years
- Are 80bps enough to justify growth in SC given their high run risk?



Overall

- One of early paper on global-game approach to stablecoins
- Focus is on role of stablecoins for payments
- Very nice contribution