How to regulate stablecoins?

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Stablecoin risks and regulations

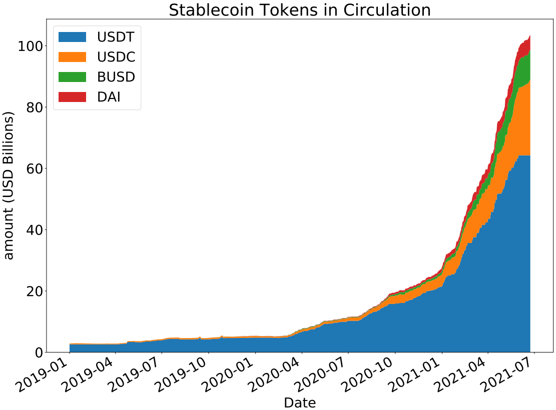
- What are the stablecoin balance sheet risks?
- How can we improve current accounting standards of stablecoins?
- Can a central bank digital currency be used to support stablecoins?

Stablecoin systems and properties

- Stablecoins operate on the blockchain and are pegged at parity to the US dollar.
- Two systems of collateral: **National-Currency backed** or **Cryptocurrency backed**, with the former predominating.
- **Vehicle currency**: They serve as vehicle currencies for trading crypto assets generally due to a reduction in intermediation costs by operating on the blockchain
- **Use in DeFi applications**: Stablecoins used as vehicle on Uniswap (DEX) and DeFI lending protocols to earn high savings rates (eg. Compound)
- **Alternative payments**: Remittance and cross-border payments. Residents in developing countries may use stablecoins to evade capital controls/high inflation.

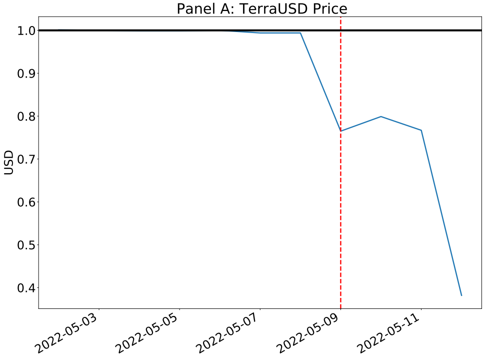
Stablecoin Ecosystem

Most common type are centralised stablecoins lead by Tether. Typically backed by dollar reserves, although not all dollar reserves are cash or cash-equivalent.



Case Study: Algorithmic Stablecoin TerraUSD collapse

- Algorithmic stablecoins typically have little or no collateral.
- Vulnerable to speculative attacks and can trade at large discounts.
- This case study sheds light on the importance of having liquid reserves to meet redemptions.

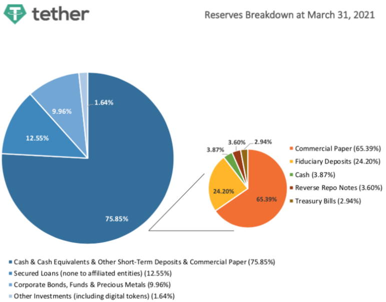


Stablecoin Risks

- **Custodial Risk**: Centralised issuer absconding with funds.
- **Run-risk**: Redemptions exceed liquid cash reserves.
- **Systemic risk** Stablecoins used in crypto derivatives increase risk exposures of financial intermediaries.
- **Payments risk**: Stablecoin devaluations can trigger insolvency of firms and consumers with savings/payments.

Tether balance sheet risks

- Tether, the dominant stablecoin by market cap, have quarterly attestations by accounting firm BDO.
- A limitation of current Tether reporting is it does not tell us if the Tether balance sheet is fully collateralised at all times.
- 2021 Q1 Quarterly statement released by Tether Ltd on breakdown of reserves. Only 75 % backed by cash or cash equivalents. Since then have scaled down their commercial paper to nearly 0!



Solution #1: Chainlink Proof of Reserve

- A potential solution to minimising run-risk is real-time audits through a proof-of-reserve system using blockchain technology.
- Third party verification of the stablecoin-issuer assets at a block-time frequency can mitigate run-risks and custodial risk of an issuer absconding with funds off-chain.
- By publishing real-time audit reports, Chainlink can prevent systemic failures in DeFi applications and protecting users from unexpected fractional reserve activity.
- Currently TrueUSD is the only stablecoin that uses proof of reserve.

Solution #2: CBDC-backed stablecoin

- In their digital pound consultation paper, the Bank of England argue that stablecoins can be backed by digital pounds held entirely with the central bank.
- **auditing**: In this model, the central bank could regularly audit stablecoin providers' reserves and impose capital requirements.
- **risk management**: If issuers were holding a certain percentage of liquid digital currency reserves at the central bank, this would ensure they had funds to process redemptions. The central bank can also provide insurance for customers.
- **profitability**: Extreme capital requirements could affect the profitability of stablecoins.

Conclusions

- **Stablecoin risk**: Inadequate liquid reserves to meet redemptions leading to a devaluation of the coin.
- **Improving auditing standards**: Private sector solution to increase transparency: proof of reserves through a third party verification such as Chainlink.
- **Stablecoins and CBDCs can coexist**: A stablecoin backed by the digital pound can address systemic risk of cryptoassets, and allowing legislators to mandate capital requirements.

Thank You!