FINANCIAL INNOVATION AND TOKENIZATION

NY FED FINANCIAL ADVISORY ROUNDTABLE

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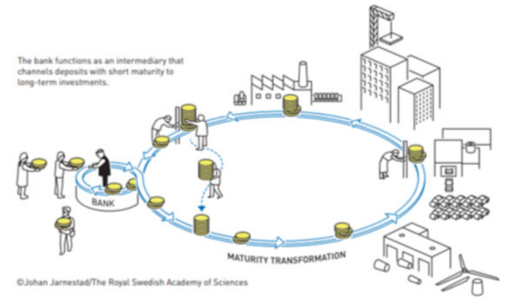
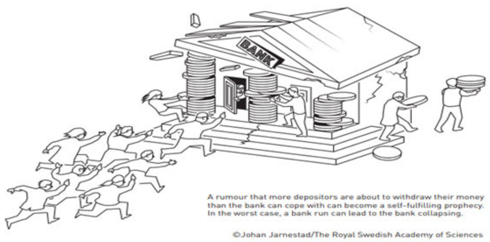
THE ROLES OF TRADITIONAL BANKS

- Traditional banks perform key roles in the economy, including
  - Credit provision
  - Liquidity transformation
  - Money creation
- Liquidity mismatch renders banks fragile as they are vulnerable to panic-based runs
  - Depositors rush to withdraw deposits expecting that others will do so





THE RISE OF FINTECH

- The phenomenon of Fintech has risen in the last 10-15 years with three inter-related features:
  - The pace at which new technologies are tested and introduced into finance is faster than ever before
  - Much of the change is happening from outside the financial industry, as young start-up firms and big established technology firms are attempting to disrupt the incumbents
  - Push towards decentralization aims to give rise to a process that will not rely on these big players

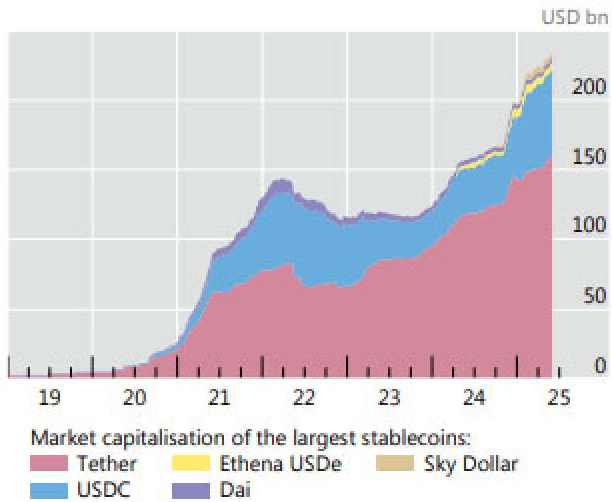
Source: Goldstein, Jiang, and Karolyi (2019)

DECENTRALIZATION AND THE OBSTACLES IT FACES

- The push to decentralization has generated products such as
  - Peer-to-peer lending
  - DeFi and smart contracts
  - Cryptocurrencies
- Despite much technological progress, there are clear obstacles pushing back to centralization and intermediation
  - Traditional benefits of intermediaries and central financial players (monitoring, screening, risk sharing) are still present
  - Challenges in achieving the combination of consensus, scalability, and decentralization
  - Regulatory uncertainty and issues with lack of trust and fraud
  - Operational challenges such as energy costs
  - High volatility in cryptocurrencies' values

STABLECOINS AS A LEADING APPLICATION

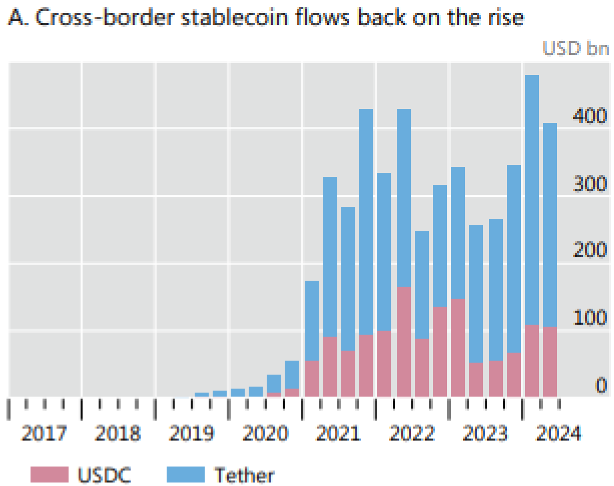
- The leading application in the world of digital currencies these days appears to be stablecoins
- Stablecoins are cryptocurrencies designed to maintain a peg to fiat-currencies
- Given that cryptocurrencies are very volatile and hence difficult to use for transactions and store of value, there is demand for a stable currency in the digital world
- The leading stablecoins – Tether and USDC – are backed by traditional liquid and safe assets
- Given the history of Fintech – pushing against traditional arrangements and centralization – it is interesting that stablecoins emerged as the leading application thus far



Source: BIS, Annual Report (2025)

STABLECOINS' POTENTIAL BENEFITS

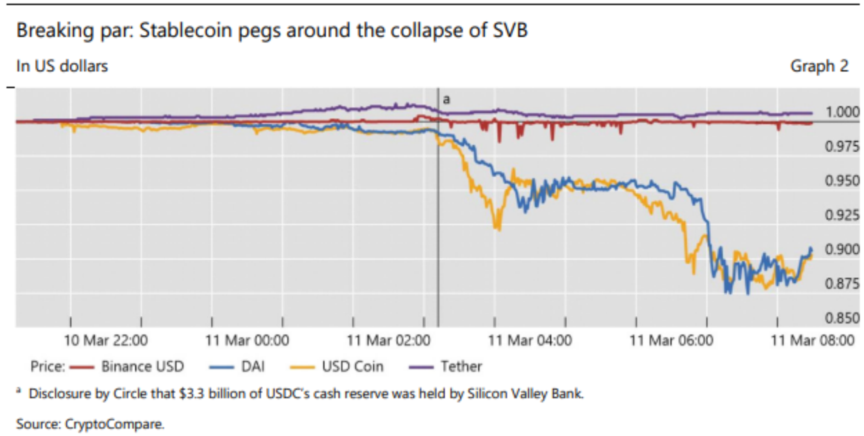
- There is a growing push to use stablecoins as replacement for traditional money
- There are potential benefits by overcoming frictions in the current payment system
  - These frictions are known to lead to delays and fees
  - They are clearly prevalent in some settings, such as cross-border transactions
  - There is more debate about the extent to which these are first-order concerns more generally



Source: BIS, Annual Report (2025)

STABLECOINS' RISKS

- A big concern about the growth of stablecoins and the possibility that they crowd out the banking system is with the singleness of money
- There are also concerns about runs, which are a known by-product of trying to hold a fixed promised payment
  - This concern is not easily avoided even when stablecoins are backed by traditional liquid assets
  - As the figure on the right shows, concerns have emerged around the collapse of SVB, especially because Circle (who is behind USD Coin) was so exposed
- A natural conjecture is that the threat to the singleness of money might amplify run concerns
- There are also additional concerns to the widespread use of stablecoins such as with the enforcement of laws against the use of money for crime

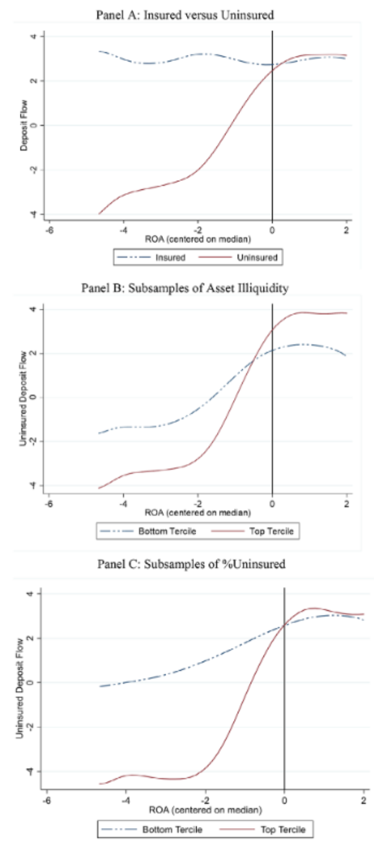


TOKENIZED DEPOSITS

- Tokenized deposits can bring some of the technological advantages of stablecoins as mentioned above to the traditional banking system
- This will be an advantage given the concerns related to the singleness of money and law enforcement that stablecoins might pose
- In general, there is still a lot of uncertainty about the viability of tokenized deposits as banks are starting to explore the concept and experiment with implementation
  - The extent of interoperability, for example, is unknown, but this is critical for the success of tokenized deposits
- It should be noted that when discussing the development of tokenized deposits we need to also consider Central Bank Digital Currency (CBDC) with all the challenges it entails

POTENTIAL RISKS OF TOKENIZED DEPOSITS

- As the concept and implementation of tokenized deposits are explored, it is important to keep risks in mind
- We discussed run risk before; the figure to the right shows evidence that these risks continue to exist in the modern banking system
  - Uninsured deposits are flighty
  - They are more likely to be withdrawn in the presence of higher degree of liquidity transformation
- We have seen in the SVB crisis how digital banking might amplify this phenomenon
- A natural conjecture is that tokenization of deposits could strengthen this phenomenon even further



Source: Chen, Goldstein, Huang, and Vashishtha (2024)

CONCLUSIONS

- Stablecoins emerge as a leading application of Fintech with potential to be used as money crowding out the banking system
- They present technological benefits that can help overcome frictions in the payment system
- Risks and disadvantages include threats to the singleness of money, concerns about runs and financial fragility, and challenges with law enforcement
- Developing tokenized deposits, alongside CBDC, can address some of these issues, although the implications for runs and fragility should be considered