CBDC and International Use of Currencies

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The views expressed in this presentation are mine and do not necessarily reflect those of the IMF.

Question:

- Would CBDC drive international use of currencies in ways that are distinct from traditional dynamics?

Currency Use for International Transactions

	Roles		
	Medium of exchange	Store of value	Unit of account
Private sector	Vehicle currency Liquid & safe asset markets	Nominal securities issuance Banking, cash hoarding	Denomination of securities Trade invoicing Pricing of goods and services
Official sector	Intervention currency Lender of last resort	Reserves	Exchange rate pegs Anchor currency

Note: Adapted from Kenen (1983).

Drivers of international use of currencies

Traditional drivers	▪ Issuer characteristics like: ▸ Economic weight and interconnectedness ▸ Financial market breadth and depth ▸ Geopolitics ▪ Economic forces: ▸ Network effects reinforced by synergies across functions of money
Drivers specific to digital money	▸ Low transaction costs (within and across borders) ▸ Ease of access ▸ Reduced switching costs ▸ New rails for FX trading and liquidity provision

Network effects and synergies across monetary functions

- Network effects occur when the private value of using a service or product increases with the number of other users.
  - Once a currency is established internationally, the fact that it is used by many increases the likelihood that others will adopt it.

- The different functions of money (medium of exchange, unit of account, and store of value) are likely to reinforce each other.
  - The status of the U.S. dollar as the dominant international currency for trade invoicing and payments has probably boosted the role of the dollar in international finance and vice versa.
  - But causality is not clear.

CBDC: Potential advantages for cross border payments

Clean slate and common standards;

Shorter transaction chains;

Less complex than bilateral correspondent banking relationships;

Larger networks, greater competition, and better FX liquidity;

Safety and integrity;

24 x 7 hours

Cheaper, faster, more transparent & accessible

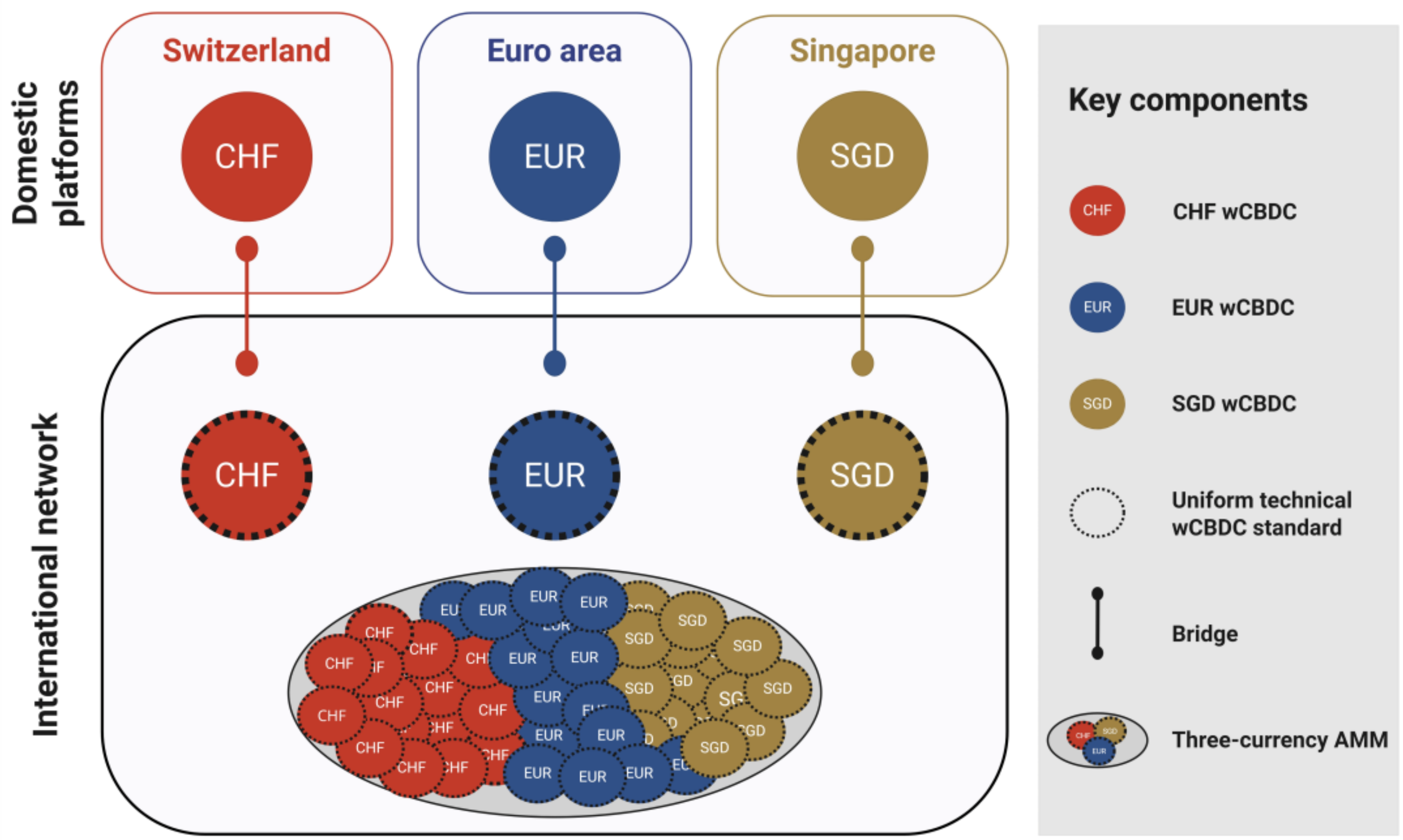
The “industrial organization” of international liquidity provision

- Dollar dominance reflects dominance of U.S. banks as liquidity providers

- Large sunk-costs in establishing the network of bilateral correspondent banking relationships
  - Dominance by large banks
  - Market concentration

- CBDC rails, e.g., multilateral platforms, provide a new opportunity to organize international liquidity provision
  - Shifting trust from “claim” to “object” (Kahn and Roberds, 2009), underpinned by technology
  - Shifting trust from bilateral relationships to multilateral networks governed by common rules (Adrian, Garratt, He, Mancini-Griffoli, 2023)

Example: Project Mariana--Automated Market Maker through Liquidity Pool



Source: “Project Mariana: Cross-border exchange of wholesale CBDCs using automated market-makers”, Interim report, June 2023, BIS Innovation Hub.

Conclusions

- Yes, CBDC has the potential to drive international use of currencies in a way distinct from traditional dynamics…
- …though it's difficult to quantify the impact.
- Unless the impact is sufficiently large, inertia will likely continue to dominate.