

CBDC in the light of CB history

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Usual disclaimer

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Short chronology

- ▶ 2009: BTC launched
- ▶ 2011: BTC reaches \$0.05
- ▶ 2013: BTC reaches \$250, gets noticed
- ▶ 2014–16: all about crypto-currencies
- ▶ 2017–19: all about DLTs
- ▶ 2019: Facebook announces Libra (now Diem)
- ▶ 2017–19: all about CBDCs
- ▶ 2021: sand-dollar, e-yuan...



- ▶ it took a while for CBs to get involved in DC, and they seem reluctant, if not dragged into it
- ▶ the case is something like:
 - ▶ things are changing, we need to respond
 - ▶ CBDC could be good!
 - ▶ CBDC could be bad!
 - ▶ we need to think about this
- ▶ not always clear to what problem CBDC is the solution



The long arc of CB history

- ▶ medium of exchange
 - ▶ outside money used to be coin, produced more or less mechanically
 - ▶ usually, government is a monopolist
 - ▶ monetary policy: occasionally fiddling with the machine's levers
- ▶ medium (media) of exchange became natural unit(s) of account (or the reverse? lb → £)
 - ▶ governments got involved into finality of payments: what is legal tender
- ▶ CBs came in for various reasons, usually to fill a gap
 - ▶ to provide stable unit/medium of exchange
 - ▶ to provide a payment system when private sector failed
 - ▶ to finance government (short-term)
- ▶ originally, CBs were LVP only (notes > £5) but came to (effectively) absorb mints
 - ▶ notes pegged to coins (gold standard)
 - ▶ coins pegged to notes (fiat money)
- ▶ even now, aside from currency, CBs are typically not retail-oriented



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- ▶ the SVP technology hasn't changed



technological change



from 4th c. AD to 21st c. AD technology



from 7th c. BC to 21st c. AD technology?

New or better?

- ▶ new technologies can either help do things better, or do new things
- ▶ will CBDC be Cash 2.0 or something new?
 - ▶ bitcoin was something new, but won't go anywhere
 - ▶ DLTs \neq CBDC, because $D \neq C$
 - ▶ cryptocurrencies (BTC, ETH) are no one's liability, CBDC is liability of CB
- ▶ Cash 2.0 can incorporate features revealed by, but no tied to, cryptocurrencies
 - ▶ identity through cryptographic means (digitizing hand-to-hand)
 - ▶ micro-payments
 - ▶ smart contracts
 - ▶ it still remains a (big, complex) spreadsheet
- ▶ the core function remains: providing a stable unit of account (legal tender)
- ▶ the question seems to be: how would Cash 2.0 alter the equilibrium?



Inside and outside money

- ▶ banks have been around longer than CBs (possibly longer than MOE)
- ▶ CBs introduced for various purposes, their presence alters the boundary
- ▶ relation between CBs (privileged) and (unprivileged) private banks has been contentious at times, smoother at others
- ▶ CB often acquired (relied on?) a monopoly on *some form* of payment
 - ▶ for efficiency reasons, as source of income
- ▶ became tied in with regalian power on currency
 - ▶ State establishes standard of value by choosing an economic object as numeraire
 - ▶ can be a physical good (coin) or a security
 - ▶ State has to get involved in either producing or monitoring the production
 - ▶ no coincidence that the Libra project set off a scramble
- ▶ outside money doesn't always wipe out inside money, much less the whole banking sector
 - ▶ would CBDC completely overtake inside money?
 - ▶ depends on its properties, substitutability
 - ▶ would it be "run-accelerant"? Would that be bad?
- ▶ competition between inside and outside money keeps both on their toes
- ▶ final thought: big changes in money were often accidents or products of strong trends rather than conscious design by CBs



The tango continues. . .

