

A quick digital payments tour

Tony Richards September 2023



Introduction

- The evolution in forms of money
- Brief tour around the globe
 - Stablecoins
 - Retail CBDC
 - Wholesale CBDC

DFCRC/RBA study

- Scope, platform and rules
- Use cases

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- Findings: benefits, attributes of CBDC
- Questions for the future



Different Forms of Money





- Almost entirely a USD phenomenon to date
- Limited use outside of crypto environment so far??
- Central banks: if stablecoins are going be widely used as a form of money, then they will be regulated to be extremely safe (so you can forget algorithmically backed coins)
- Singapore and others leading the way on regulation: Like storedvalue facilities but with new technology?



Retail CBDC: Where are we now?

- Bahamas, Jamaica, Nigeria, Eastern Caribbean. China still pilot, not full issuance. India now piloting.
- Rationales: Mostly financial inclusion and payments system efficiency
- Some are using DLT, some not

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- Limited work to build ecosystem and two-sided market. Extremely slow take-up by population.
- No advanced economy issuance. But ECB heading towards decision? Working hard on all aspects of ecosystem. Bringing European Commission along the journey.
- Many others happy to watch ECB progress. E.g. Sweden slowing down?
- Advanced economy rationales: Preserving access to central bank money; resilience; 'strategic autonomy'; etc



- No decisions to issue yet
- But some advanced economy jurisdictions see stronger case than for retail CBDC; eg Australia, Singapore; as settlement asset for tokenised markets, atomic settlement, smart contracts etc.
- Possibly only a modest evolution relative to provision of existing CB settlement accounts
- BIS Innovation Hub: lots of cross-border experiments using wCBDC



DFCRC/RBA Australian research project

- What are the business models and use cases that a CBDC could support and which are not effectively supported by existing payments and settlement infrastructures? We need to go beyond technology pilots or desktop research.
- Our project was real money, real customers and real regulatory review
- Minimal guidance on types of use cases for CBDC (could be 'retail' or 'wholesale', i.e. consumer or business or financial market use cases)
- Private, permissioned DLT platform based on Ethereum (Quorum)
- 170 submissions and 16 use cases selected: from large financial institutions to small fintechs
- RBA issued CBDC directly to existing counterparties in exchange for ESA/reserve balances and to others via a bank/agent



Trading of nature-based tokenised assets (x2)

Corporate bond settlement

Tokenised HQLA securities trading

Tokenised FX transactions

Settlement of AUD leg of FX transactions

Proof-of-reserve for stablecoin issuance

Retirement savings contribution payments

Automation of VAT payments

Milestone-based construction payments
Multi-party payments with tokenised bills
Settlement of livestock auctions
Web 3 commerce
Offline payments
P2P payments with different custodial models
Two-tier distribution of CBDC.



Findings: Potential benefits to businesses and households from CBDC

- Enabling smarter payments: eg multi-party or multi-stage payments using smart contracts
- Supporting innovation in financial and other asset markets; eg tokenisation of assets, DLT platforms, atomic settlement
- Promoting private digital money innovation: eg promoting interoperability and uniformity of tokenised bank deposits or stablecoins
- Enhancing resilience and inclusion in the digital economy; eg offline payments, payments that do not require a bank account



Findings: Key CBDC attributes valued in use cases

- Claim on the central bank (guaranteed value, no counterparty risk)
- Direct control (holder did not have to rely on an intermediary)
- Programmability (smart contracts to improve efficiency or reduce risk in complex business processes)
- Atomic settlement (reducing settlement risk and improving efficiency)
- Transparency (valued by some but not other use cases, eg CBDC as backing for stablecoin)



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- See RBA and DFCRC websites
- Valuable learnings on:
 - How CBDC could be used to enhance the functioning of the payments system –
 CBDC as a possible infrastructure layer for private-sector innovation
 - Highlighting legal, regulatory, technical and operational issues that need to be understood/addressed
 - Providing a forum for interacting with industry and improving policymakers' knowledge
 - Identifying areas for future research



- Can there be a Goldilocks demand for retail CBDC?
- Can modernising RTGS be a substitute for tokenised wCBDC?
- Does Regulated Liabilities Network or BIS 'unified ledger' have legs?
- How could CBDC interact with stablecoins, tokenised deposits etc?
 Facilitating? Or Competing/replacing?
- Who should have electronic access to central bank balance sheet?
- Large network companies haven't been successful with stored-value products; will it be different with stablecoins?

