RESERVE BANK OF AUSTRALIA

CBDC research at the RBA

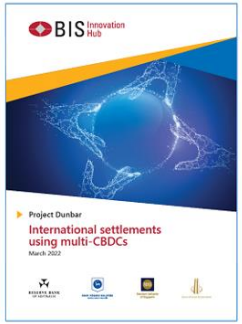
Chris Thompson – Deputy Head, Payments Policy Department

22 March 2023

RBA's CBDC research

Governor's speech:
"An eAUD?"
2017

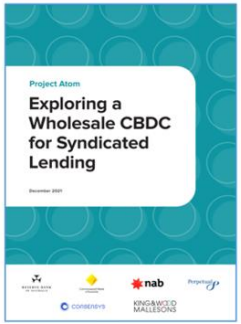
Bulletin article: "Retail CBDC: Design Considerations, Rationales and Implications"
2020



Project Dunbar
(Shared multi-CBDC platform for cross-border settlements)
2021–2022

2018–2019
"Settlement Token" project
(DLT-based POC of CBDC for inter-bank settlement)

2020–2021
Project Atom
(DLT-based POC of wholesale CBDC & tokenised syndicated loans)



2022+
Project with DFCRC
(Limited CBDC pilot to explore use cases)

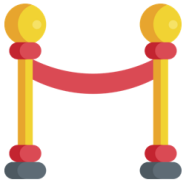
Pilot CBDC project – overview

Project is a collaboration between the Reserve Bank of Australia (RBA) and the Digital Finance Cooperative Research Centre (DFCRC)

Objectives

- Explore use cases and business models that could be supported by the issuance of a CBDC and potential economic benefits of introducing a CBDC
- Explore legal, regulatory and operational issues associated with a CBDC

Approach



- Develop and launch a pilot CBDC that will operate in a ring-fenced environment for a period of time
- Invite industry participants to develop specific use cases that demonstrate how a CBDC could be used to provide value-added payment and settlement services to households and businesses
- Select a number of industry participants to test their proposed use cases in the live pilot CBDC environment

Pilot CBDC

- Pilot CBDC will be a real digital claim on the RBA
- Issued in a limited amount
- Pilot CBDC platform is based on distributed ledger technology, but technology is not a major focus of the project

See: https://dfcrc.com.au/cbdc/

Images: Flaticon.com

Pilot CBDC project – timeline

Planning	*Phase 1*	*Phase 2*		
Q2/Q3 2022	Q3/Q4 2022	Q1 2023	Q2 2023	Mid-2023
1	2	3	4	5
Project planning	Design, build and test platform	Build use cases	Pilots operating	Project close
	Media releases and public whitepaper	Announce selected use cases	*We are here*	Publish report

Images: Flaticon.com

Overview of pilot CBDC use cases

Settlement of transactions in tokenised/digital asset markets

Using the atomic settlement capability and risk-free nature of CBDC to improve efficiency and reduce financial and operational risks associated with settlement

- Unizon: Tokenised invoices (supply chain finance)
- ANZ / Commonwealth Bank: Tokenised carbon credits/bio-diversity credits
- ASX Australian Bond Exchange: Corporate bonds
- Mastercard: Non-fungible tokens
- Imperium Markets: Tokenised HQLA securities
- Canvas: Tokenised FX trades

Smart payments and digital escrow

Using the programmable capabilities of CBDC to automate and speed up payments

- FAME Capital: Livestock auctions
- NotCentralised: Construction supply chain payments
- ANZ: Superannuation fund contributions
- Commonwealth Bank: Automated tax (GST) payments
- ASX Australian Bond Exchange: Corporate bond lifecycle payments
- monova (make money move): FX trades

Backing asset for privately issued stablecoins

Using CBDC as a backing asset for privately issued stablecoins for use as a safe settlement asset on public blockchains

- Mastercard: 'Wrapped' CBDC for use on public blockchains
- ANZ: Backing for commercial bank AUD-denominated stablecoin

Peer-to-peer payments

Using CBDC to provide cash-like digital payment services for P2P payments

- ANZ: Offline payments (smart cards)
- digi.cash (real crypto, real currency): Different CBDC custodial models for a cash-like digital payment system