



Monetary sovereignty and the path towards digitalisation of money

BSP-RBWC International Research Conference 2021

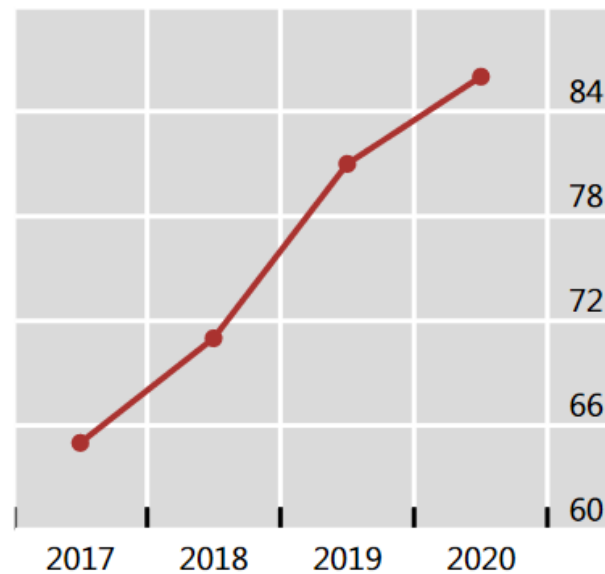
Benoît Coëuré, 28 September 2021

*The views are those of the author and not necessarily the Bank for International Settlements

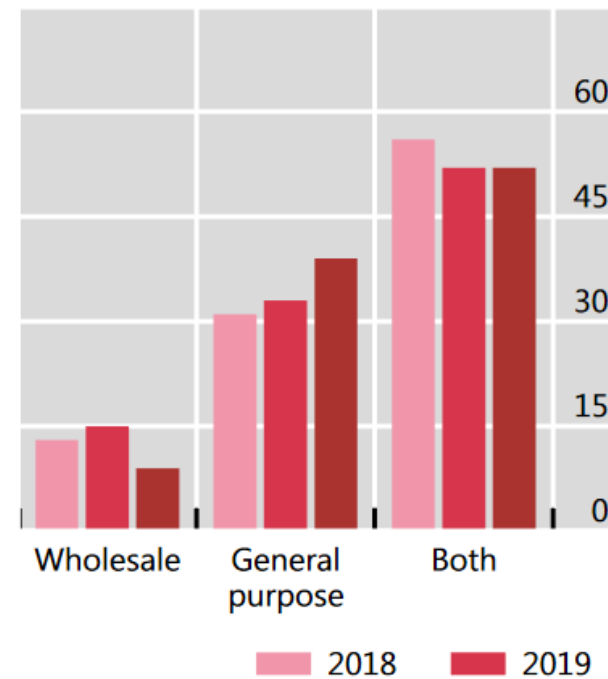
Central banks' work on CBDC

Share of respondents

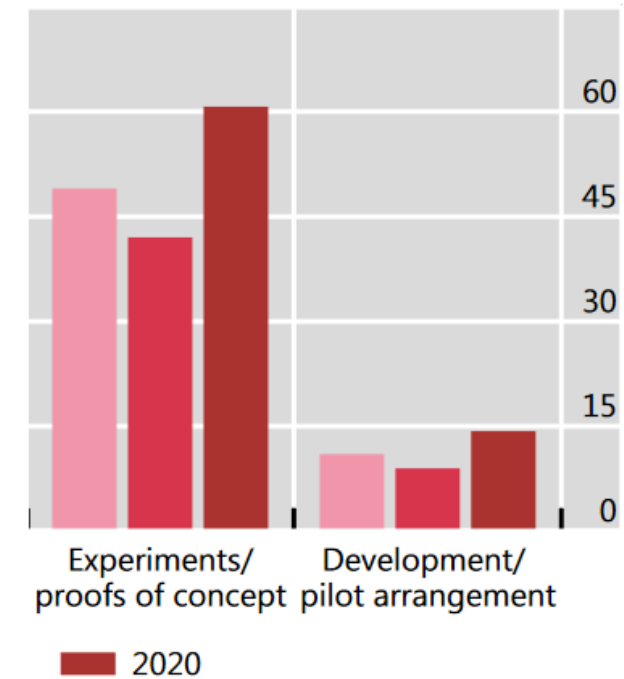
Engagement in CBDC work



Focus of work¹



Type of work in addition to research¹



¹ Share of respondents conducting work on CBDC.

Source: BIS central bank survey on CBDCs.

The market for payments: walled garden or public square?

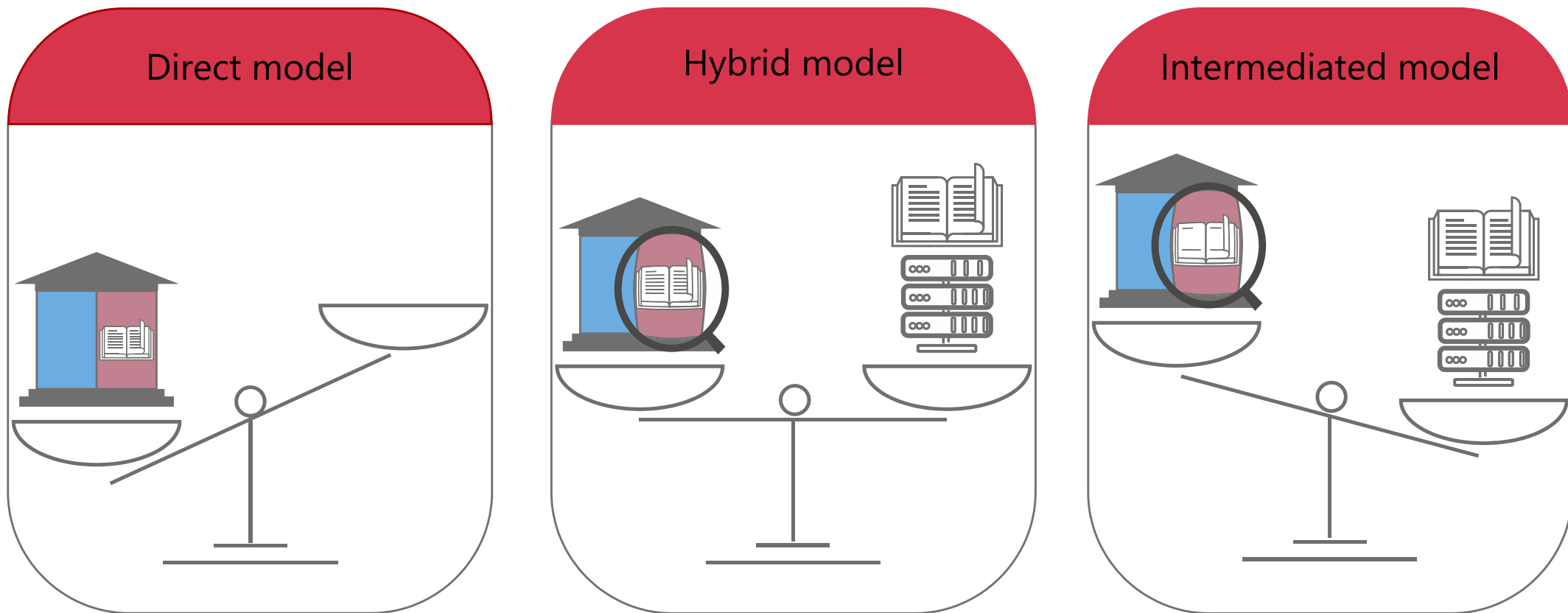


Source: Shin (2021).

Why?

- Fast-changing payments and money
 - Latest developments: User-friendly payment interfaces; crypto; bigtech-operated “walled gardens”
- CBDC as a public good supporting wider public policy objectives
 - Financial inclusion and access
 - Safety and integrity in digital payments
 - Innovation and open architectures
- Central bank money is:
 - A super-safe settlement asset allowing finality of payments
 - An enabler of outside liquidity provision (lender of last resort function)
 - Commercially neutral

A fundamental choice: which architecture to use?

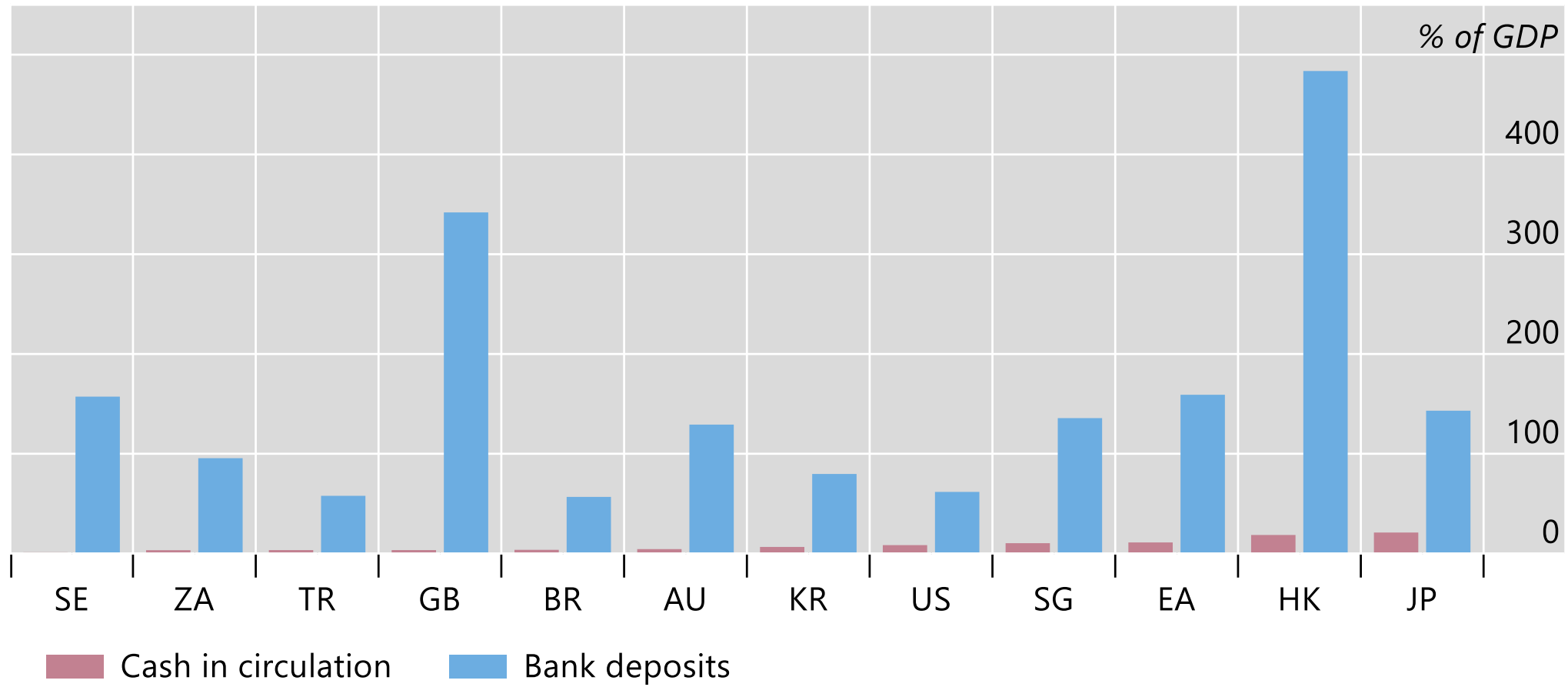


Source: Adapted from R Auer and R Böhme, "Central bank digital currency: the quest for minimally invasive technology", *BIS Working Papers*, no 948, June 2021.

How?

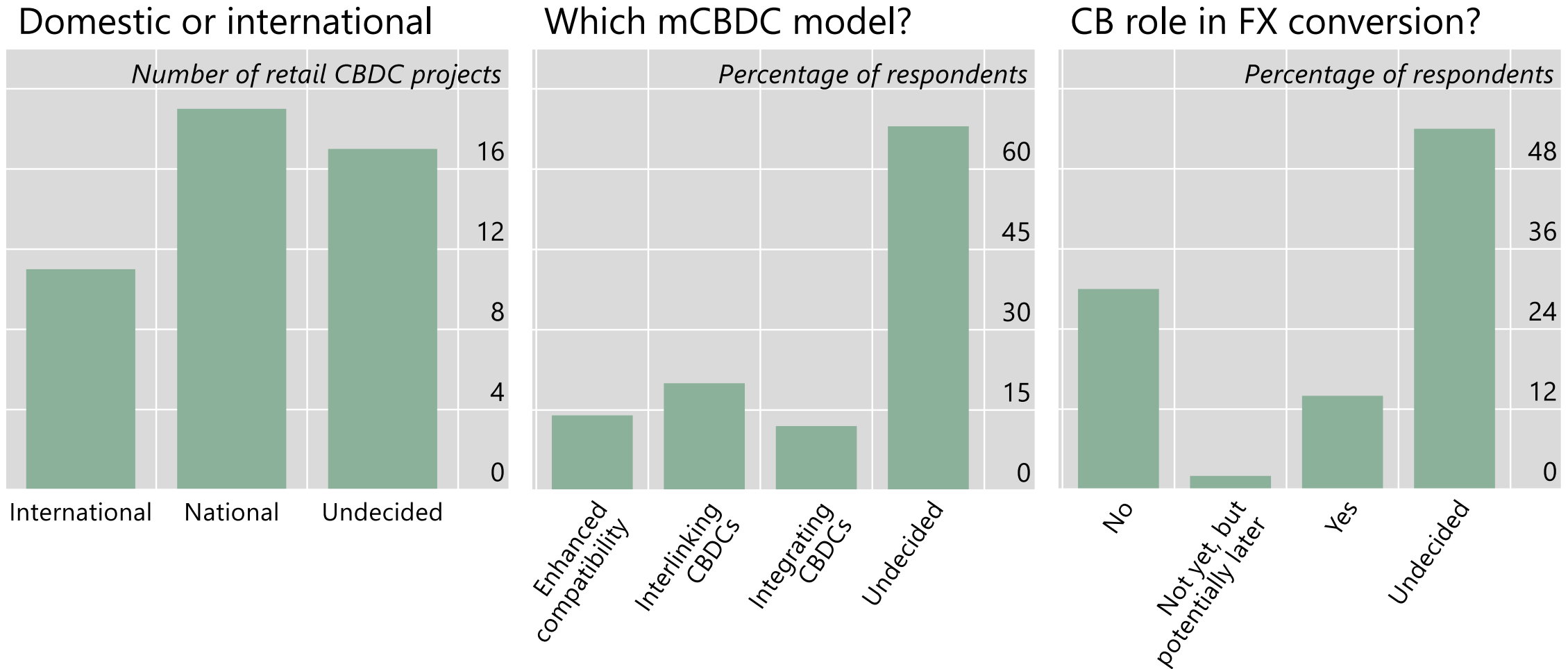
Fact	Question
CBDC is a means to an end	Which policy objectives? Are we prepared to let CBDC reshape financial intermediation, and if not, what are the safeguards?
Diversity brings resilience	Where to draw the line between public and private elements of a CBDC system? Which CBDC design is the most supportive of open finance?
Consumers value privacy, authorities value compliance	Who will hold and access payment data? How can central banks and other public authorities work together to make consistent policy choices?
Technology is not perfect	How to balance scale, speed and open access with security? How to balance offline functionality with complexity and security?
The world is open	Should offshore use of CBDC be discouraged? Are small, open economies at risk? How can multiple CBDCs be interlinked?
The future is uncertain	What is the risk tolerance for a CBDC to go live? Will policy tools (eg. caps, multiple rates) work as intended? Will global stablecoins lock-in market power before CBDC is launched?

CBDCs can be designed to have a limited footprint – like cash today



Source: R Auer and R Böhme, "Central bank digital currency: the quest for minimally invasive technology", BIS Working Papers, no 948, June 2021.

CBDC design increasingly has an international dimension



Source: R Auer, C Boar, G Cornelli, J Frost, H Holden, and A Wehrli, "CBDCs beyond borders: results from a survey of central banks", BIS Papers, no 116, June 2021.

BIS Innovation Hub's CBDC projects

Retail



Retail CBDC (Aurum) explores a two-tiered distribution model for retail CBDC. It aims to create a prototype with two separate platforms: an inner, DLT-based platform where central banks can issue CBDC with access to banks only and an outer platform with access to the general public and to banks.

Wholesale



Project Helvetia, done jointly with the Swiss National Bank and the financial infrastructure operator SIX has resulted in two PoCs to settle tokenised assets in central bank money. These have shown that central banks have options in how they can provide central bank money to DLT-based security platforms.

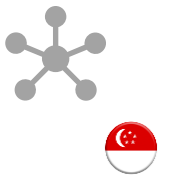


Project Arena is a shared blockchain environment for all centres in the BISIH's cloud environment and aims to build a core platform and modules for wholesale CBDC settlement and a liquidly saving mechanism. The liquidity saving mechanism will use data streaming technology to pool payments and machine learning to optimise settlement, which takes place in the integrated blockchain CBDC platform.

Cross-border



Multiple CBDC bridge builds on the experience of Inthanon-Lionrock and is joined by the Hong Kong Monetary Authority, the Bank of Thailand, People's Bank of China and the Central Bank of the United Arab Emirates. It aims to develop a working prototype to support instant cross-border payment versus payment (PvP) in multiple currencies among multiple jurisdictions.



Project Dunbar (Platform for settling cross-border payments using multiple wholesale CBDCs) builds on the work by Monetary Authority of Singapore and the financial industry on Project Ubin. It aims to develop working prototypes of shared settlement platforms for transactions with multiple CBDCs, and connectivity mechanisms to link up multiple shared platforms.



Project Jura, explores the use of a wholesale CBDC for cross-border settlement jointly with the Banque de France, the Swiss National Bank and a private-sector consortium. It involves a wholesale digital euro, a wholesale digital Swiss Franc, and a tokenised financial instrument.