



ธนาคารแห่งประเทศไทย  
BANK OF THAILAND

# Introducing central bank digital currency in Thailand

UN-Escap Economic and Social Survey of Asia and the Pacific 2022

“Building Forward Fairer – Economic Policies for an Inclusive Recovery and Development”

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Bank of Thailand



## Context: Three questions

- Where does Thailand stand on introducing a central bank digital currency (CBDC)?
- What opportunities lie ahead?
- Despite its potential benefits, what should developing countries be mindful of when introducing central bank digital currencies?



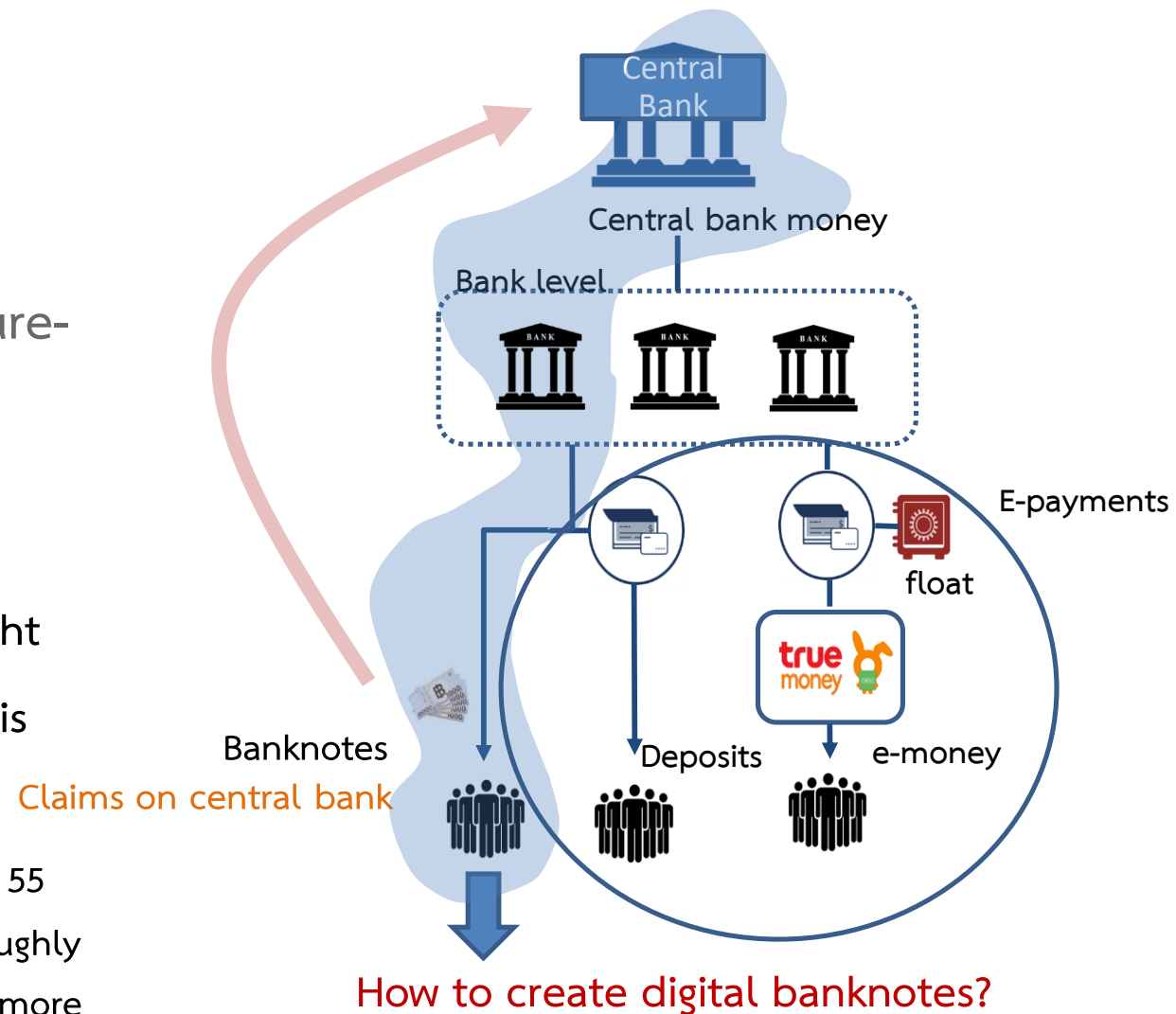
# Where does Thailand stand on introducing CBDC?

- Our journey started in 2017
  - **Initial goals:** To understand how distributed ledger technology (DLT) might be used to issue CBDC, and how this might affect the financial system
- Since 2018, four proofs-of-concept on wholesale CBDC has been conducted
  - **Domestic wholesale CBDC: Inthanon Phase I and Phase II II** (With eight Thai commercial banks)
  - **Cross-border wholesale CBDC: Inthanon-Lion Rock** with Hong Kong Monetary Authority and commercial banks
  - **Wholesale CBDC for corporates** (supply chain financing) with Digital Venture
  - Different vendors have been used
- Since 2020, a two-prong approach
  - **Retail CBDC** proof-of-concept in 2021, with a pilot planned for 2022
  - **mCBDC (multi-currency CBDC)** with People's Bank of China, Hong Kong Monetary Authority, Central Bank of United Arab Emirates



# What is the rationale for retail CBDC pilot in Thailand?

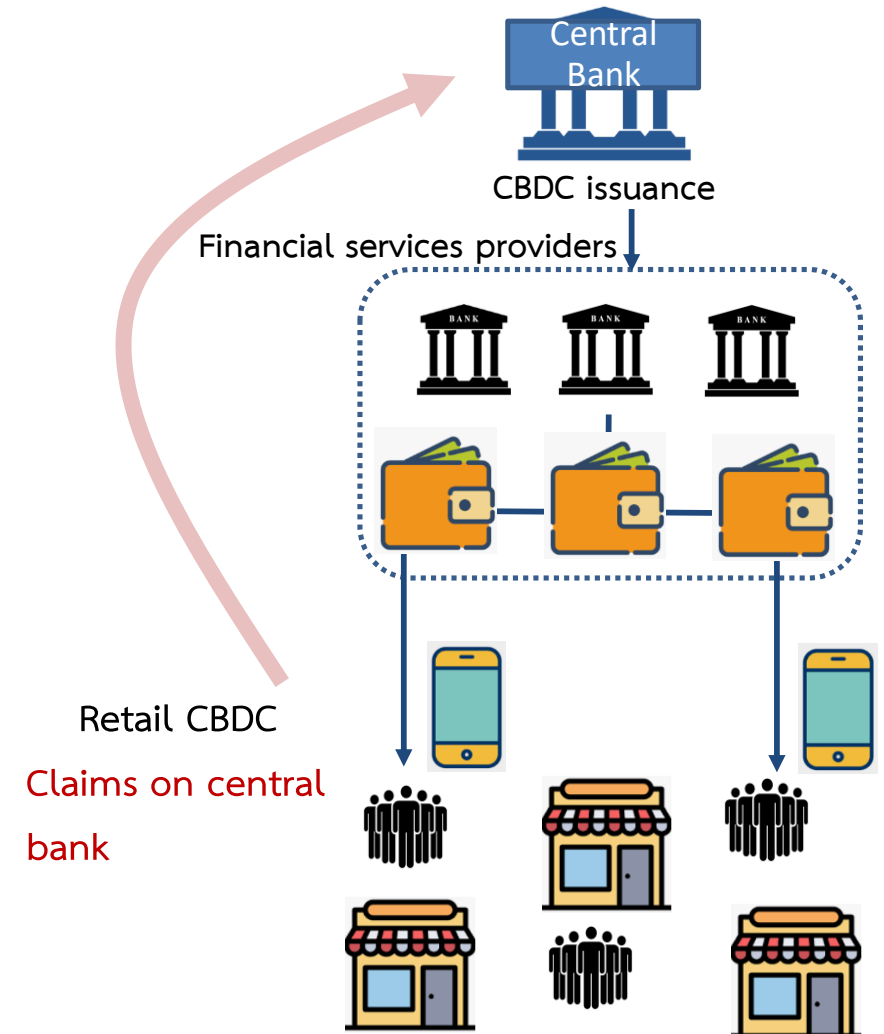
- Investigate how retail CBDC might be a **new, complementary infrastructure** that help future-proof the financial system
  - Allow for more innovations (programmability)
  - Allow for more inclusion (players and users)
  - Cashless society could come faster than thought
    - China, Sweden: Suddenly restaurants, taxis do not accept cash
    - In Thailand, PromptPay already has more than 55 million registered accounts, e-payments usage roughly doubled during the pandemic and likely to grow more





## Our retail CBDC pilot design

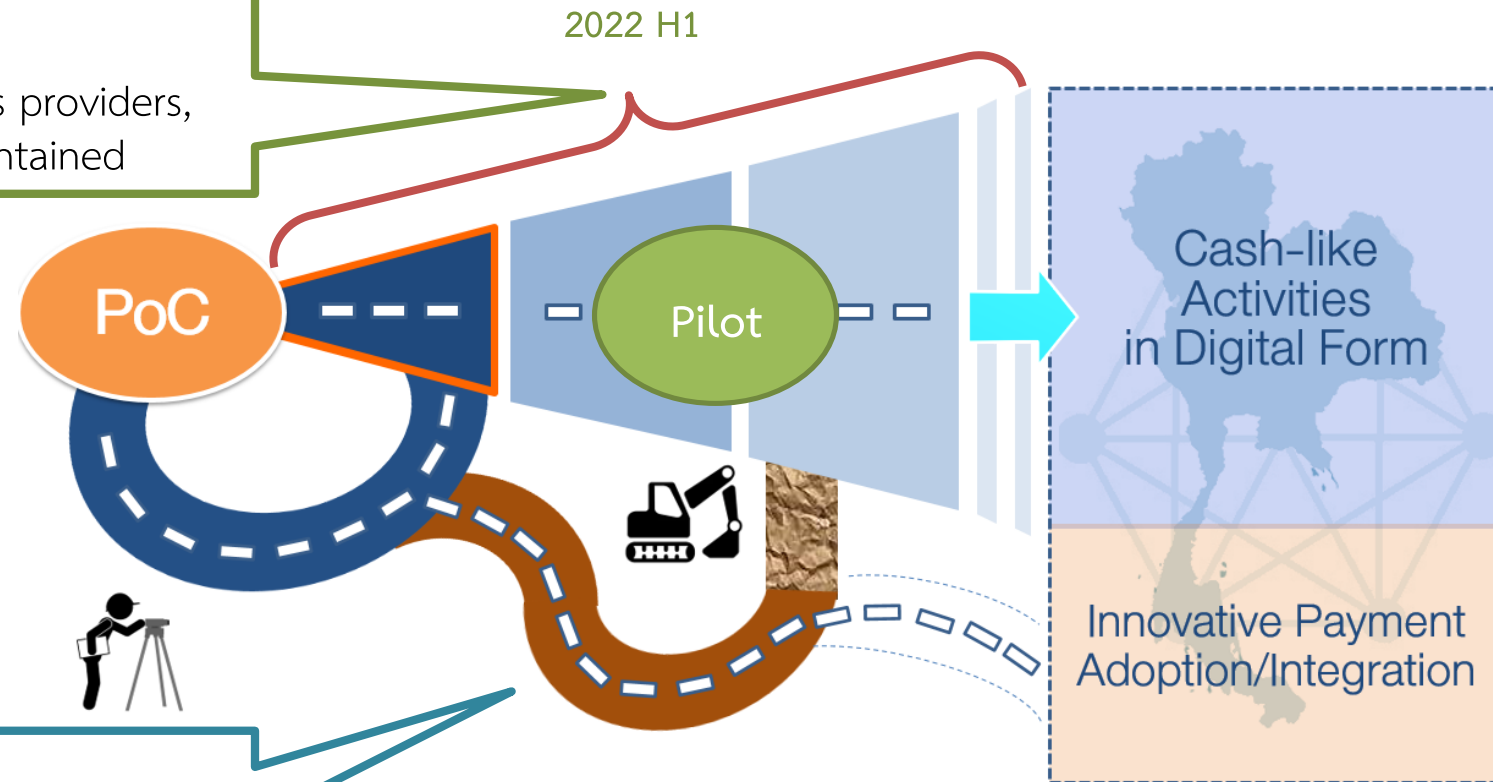
- Retail CBDC as “digital banknotes”, individuals do not hold accounts at BOT
- Two-tier architecture, with banks *and non-banks* as CBDC custodians and/or distributors
- CBDC does not pay interests, not competing with bank or e-money accounts
- Limit wallet size according user characteristics (individuals v. merchants, KYC level, etc.)
- Open to innovations by banks and non-banks who can develop applications on top of CBDC infrastructure
- Keep to a well-defined but inclusive groups of users, to contain risks





## Foundation track

- Basic payment functionality
- Limited number of participating financial services providers, merchants, and users to ensure that risks are contained



## Innovation track

Open for innovations by financial services providers



## Things to be mindful of when introducing CBDC in a developing country

- Technology
  - IT/Cyber security is paramount
  - Capacity building is essential for all the stakeholders
  - Digital financial literacy would be very important for users
- Policy
  - Potential effects on the financial system: Financial stability, monetary transmission, cross-border implications, AML/CFT
  - Personal data privacy to ensure trust in the system
- Business
  - Adoption depends on use cases that help solve pain points of financial services providers, customers, or merchants



## Conclusion

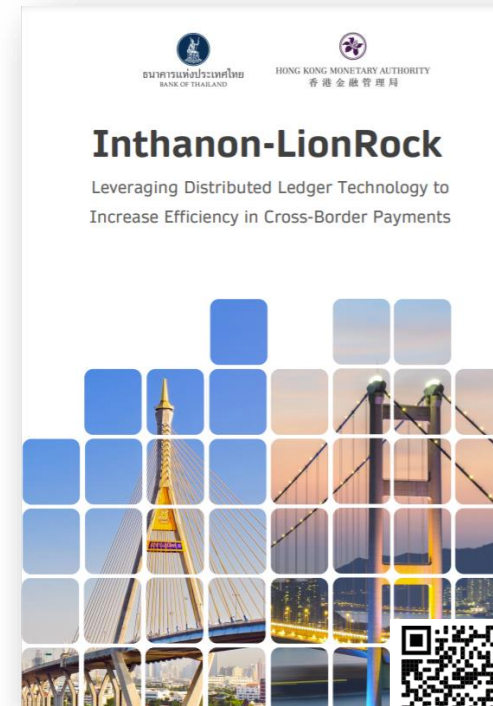
- Our CBDC journey is an iterative one: Exploring the potential and pitfalls, design and redesign
- Stakeholders engagement are critical: It takes an ecosystem to build CBDC
- This is just the beginning of a long journey:
  - Technology, policy, legal, and business issues remain, and are evolving
  - Integrating wholesale, retail, and cross-border CBDC will require further explorations





## Wholesale CBDC

## CBDC for corporates





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If you want to know more (2)

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