Introducing central bank digital currency in Thailand

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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** (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
Retail CBDC: Pilot roadmap

**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

- **PoC**
- **Pilot**
- **Cash-like Activities in Digital Form**
- **Innovative Payment Adoption/Integration**

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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
If you want to know more (1)

Wholesale CBDC

CBDC for corporates
If you want to know more (2)

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