Central bank digital currencies (CBDCs) - Risks and Opportunities for Developing Countries

by

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CBDCs
Risks and Opportunities for Developing Countries
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Disclaimer: The views are my own and not necessarily reflect the views of the Bank for International Settlements (BIS)
growth in digital payments
The Digital Era for the Monetary System

Made or received digital payment, (% age 15+):  
- Female
- Male


%
And then, crypto came...
Crypto was introduced on 31 Oct 2008.
What are the risks?
What are the opportunities?
What do we want from a monetary system?
High Level Goals of the Monetary System

- Safety and stability: Money needs to perform fundamental functions as a store of value, unit of account, and medium of exchange.
- Accountability: Public mandates and regulation should ensure that key nodes in the system are accountable and transparent to users and society.
- Efficiency: The system should provide low-cost, fast payments and throughput.
- Inclusion: The system should ensure universal access to basic services at affordable prices.
- User control over data: Data governance arrangements should ensure users’ privacy and control over data.
- Integrity: The system should avoid illicit activity such as money laundering, financing of terrorism and fraud.
- Adaptability: The system should anticipate future developments and users’ needs and foster competition and innovation.
- Openness: The system should allow for seamless cross-border use.

Safety and stability
Accountability
Efficiency
Inclusion
User control over data
Integrity
Adaptability
Openness
High Level Goals of the Monetary System

Safety and stability
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User control over data
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Openness
Achieving the Goals

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Regulation
Intermediation
Technology
Regulation is Imperative!

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Risks in changing the 2-tier system are large

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Regulation
Intermediation
Technology
What do we want from Technology?

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What do we want from Technology?

- Safety and stability
- Accountability
- Efficiency
- Inclusion
- User control over data
- Integrity
- Adaptability
- Openness

Technology

Efficiency
Flexibility
Privacy with integrity
Technological Options

**Technology**

- Efficiency
- Flexibility
- Privacy *with integrity*

**Distributed Ledger Technologies**

11 projects on CBDC
Technology needs governance.
The Impacts of Pix

16th Nov 2020

Launch

> 64 million

80% of the adult population initiated or received

1st transfer

Source: Central Bank of Brazil
Pix Growth

83 million average # transactions (October 2022)

Source: Central Bank of Brazil
Pix and TED (Previous credit transfer instrument)

Source: Central Bank of Brazil
Pix and Other Instruments

Avg transaction amount
Oct 2022
Pix – BRL 467
TED – BRL 41,045

Source: Central Bank of Brazil
Number of transactions per capita

Source: Bech, Hancock e Zhang (2020) and Central Bank of Brazil for Pix
The Role of the Regulator

The twofold role of Regulator

Platform Operator
Technology Perspective

Rule Setter
Governance Perspective
The Role of the Regulator

Rule Setter

Governance Perspective

- **Competition**
- **Participation** of large payment service providers
- **Financial Inclusion**
- **Low cost** policy
- Standardised **user experience**
- **Efficiency and Interoperability**
- **Co-creation** approach to address market failures
  ... among others

What do we want from a CBDC?

- Competition
- Financial Inclusion
- Efficiency and Interoperability

... among others

**Technology Perspective**
- DLT
- Tokenisation

**Regulation Perspective**
- Trust
- Centralisation
Thank you