



Central Bank Digital Currency Development Entering the New Phase

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Global CBDC Exploration: Diverse International Landscape

- **Interest remains strong** in both retail and wholesale CBDC
- Three jurisdictions have officially **launched** retail CBDC: The Bahamas, Jamaica and Nigeria – and several pilots are ongoing world-wide
- Some jurisdictions are devoting **large resources**: Brazil, China, Euro Area, India, and the United Kingdom
- Interest in wholesale CBDC increased for **cross-border payments** and **settlement of tokenized assets**
- International organizations are also **taking part**
- IMF's **analytical work** reflects evolving experiences, findings, and policy views on CBDC exploration

Completed CBDC Virtual Handbook Chapters

Objectives

Readiness

Design

Process

Macro-financial

Completed CBDC Virtual Handbook Chapters

Objectives	Readiness	Design	Process	Macro-financial
<ul style="list-style-type: none"> • Digital money: positioning CBDC • Identifying pain points and objectives • Elements of thinking through CBDC 	<ul style="list-style-type: none"> • Legal considerations • Operational and cyber resilience • Required capacity within central banks • Regulation and supervision 	<ul style="list-style-type: none"> • Design choices • Business models and adoption • Financial integrity considerations • Data use and privacy protection • Capital flow management measures 	<ul style="list-style-type: none"> • Product development (5 Ps) • Technology landscape and innovation 	<ul style="list-style-type: none"> • Promoting financial inclusion • Impact on monetary policy transmission • Impact on monetary operations • Impact on financial stability • Cross-border payments • Financial-sector market structure and contestability

Note: Those in green are the first wave chapters published in 2023. Those in red are the second wave chapters to be published in November 2024.

Positioning CBDC in the Payments Landscape

- How do **retail CBDC**, **Fast Payment Systems** and **e-money** compare, and which to prioritize?
 - All three systems can deliver efficiency gains and support financial inclusion
 - Approaches can be complementary
 - CBDC is **issued by the central bank**, and can offer:
 - **Trust** and **interoperability**
 - **Market discipline** and **uniformity of money**
 - **Infrastructure** can be shared
 - eMoney can resemble CBDC
- The future is likely to see **co-existing systems**:
 - Depending on **pain points** and **constraints** in capacity, resource, and governance
 - **No “one-size-fits-all” strategy.**

Cyber Resilience of the CBDC Ecosystem

Trust is pivotal for money.

Trust also builds on cyber security.

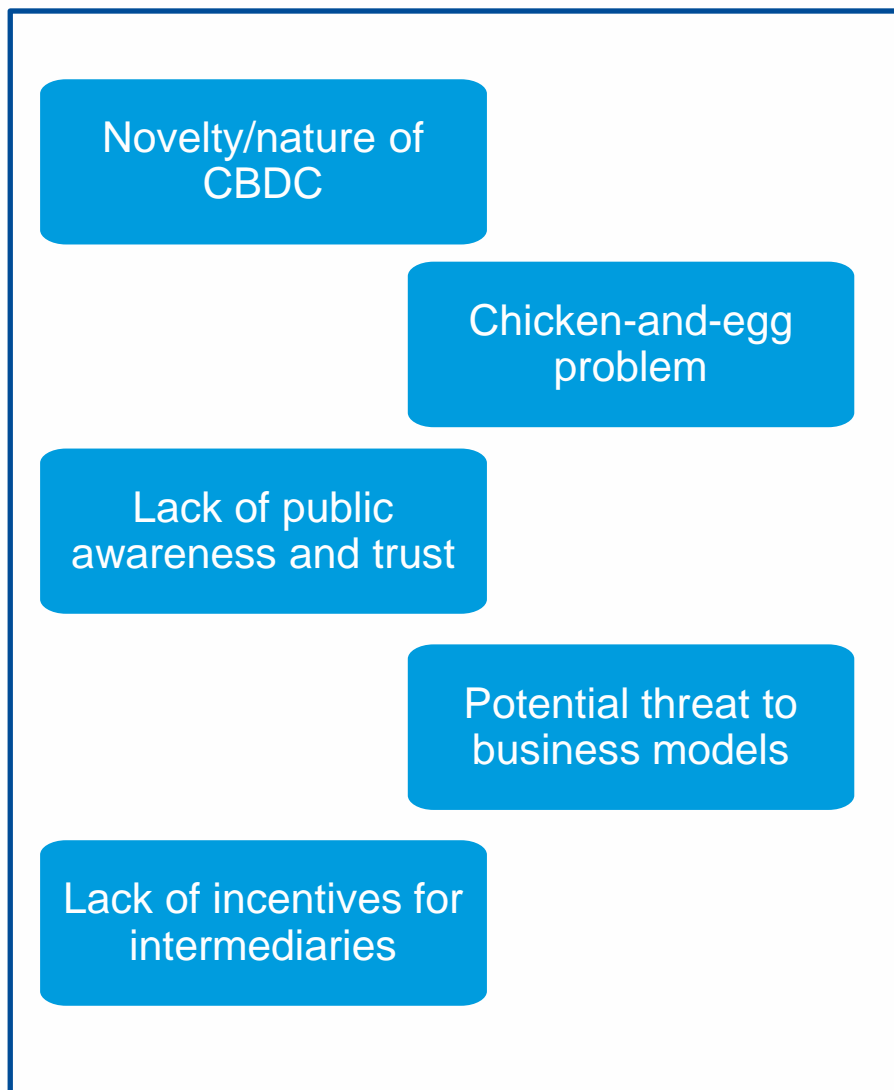
CBDC

Complex and vast ecosystem.
An attractive target for cyber attackers.
With financial stability implications

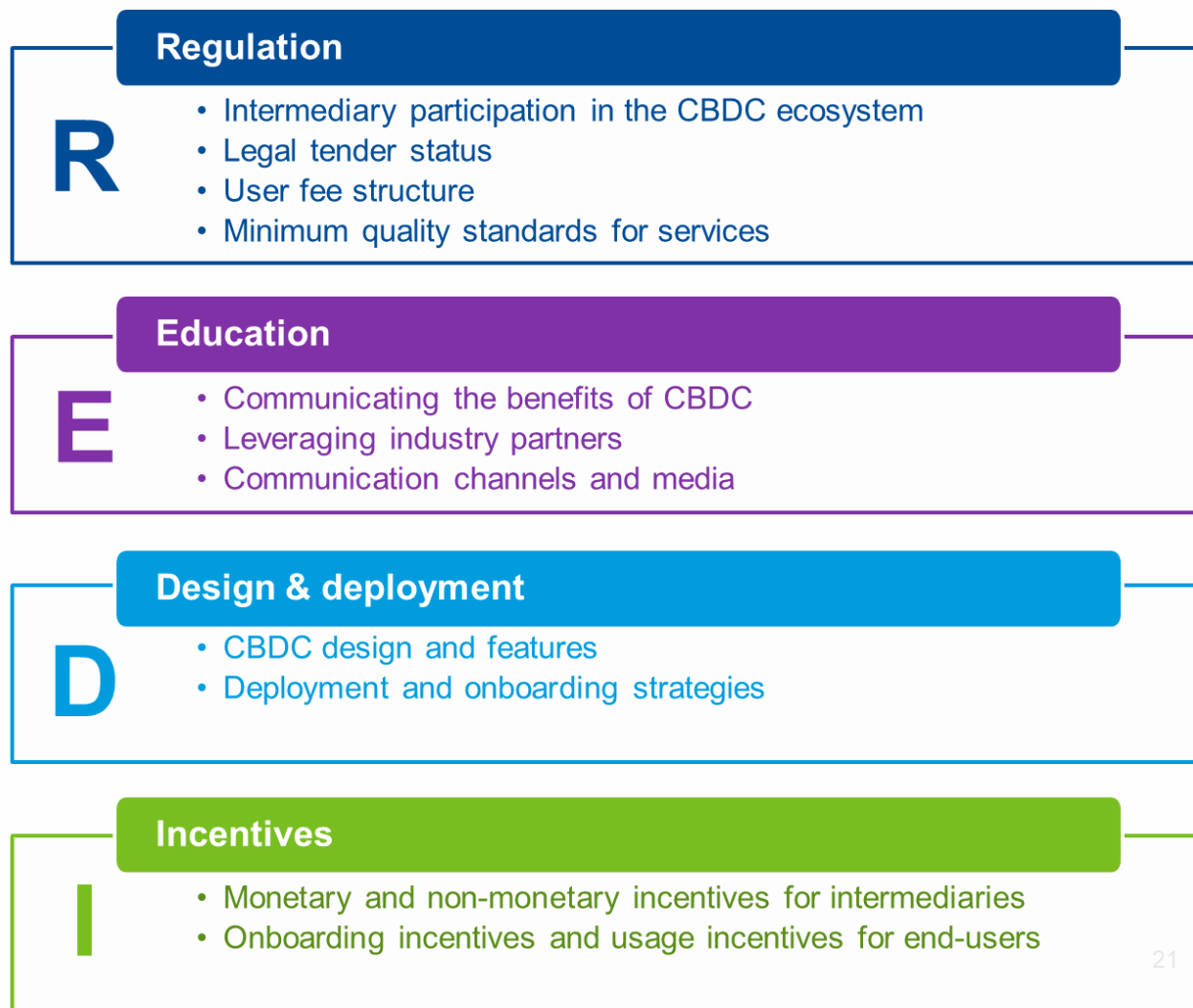


CBDC Adoption and Strategies

Challenges with CBDC adoption



The REDI Framework to manage adoption



CBDC Data Use and Privacy Protection

- CBDC creates a “**digital trail**” – data to be collected and stored
- An appropriate **balance between CBDC data use and privacy** will depend on norms and cultural preferences
 - Some will opt for a **high degree of privacy** in the design of CBDC
 - Others will leverage data **for policy**, such as financial inclusion and policymaking
- CBDC offers an opportunity to **improve the trade-off** between data use and privacy protection
 - Using institutional arrangements, CBDC design, and technological solutions

Monetary Operations

- CBDC may affect how central banks **conduct monetary policy operations** by
 - substituting for other **forms of money** and changing **reserve balances** in the banking system, which in turn may influence **short-term interest rates**
 - affecting central banks' ability to forecast **liquidity**, drawing **market rates** away from the policy target, and complicating banks' **liquidity management**
- However, effects can be **attenuated** by adapting monetary operations or CBDC design
 - improving **liquidity forecast** model, engaging in **fine-tuning operations**, and **providing additional liquidity** to the market
 - adjusting **CBDC design**, such as remuneration, access, or quantity limits

Cross-Border Payments with Retail CBDC

- Retail CBDC can facilitate faster and cheaper cross-border payments
- Design should be **factored in from the start...**
- **Regarding five interrelated elements:** access, communication, currency conversion, compliance, and settlement
- **International collaboration** and information sharing are critical to maximize benefits

Conclusion

- If appropriately designed, CBDC **has the potential** to improve payment systems and support a role for central bank money even as other solutions proliferate.
- But the appropriateness of CBDC will vary with **country circumstances**. If poorly designed, CBDC could pose risks.
- Given the **complexities and the novelty** involved, policymakers should explore CBDC carefully and systematically.
- The virtual CBDC Handbook offers **initial guidance to policymakers** on how to explore CBDC and investigate its macro-financial implications.
- **Analytical and practical progress** on different aspects of CBDC is being made... and captured in the Handbook.
- Requests for CD going forward are expected to be more **specific in nature** as jurisdictions seek to build capacity in specific areas they deem important.
- **The IMF will continue analytical work** to offer jurisdictions knowledge, lessons, experience, and findings.