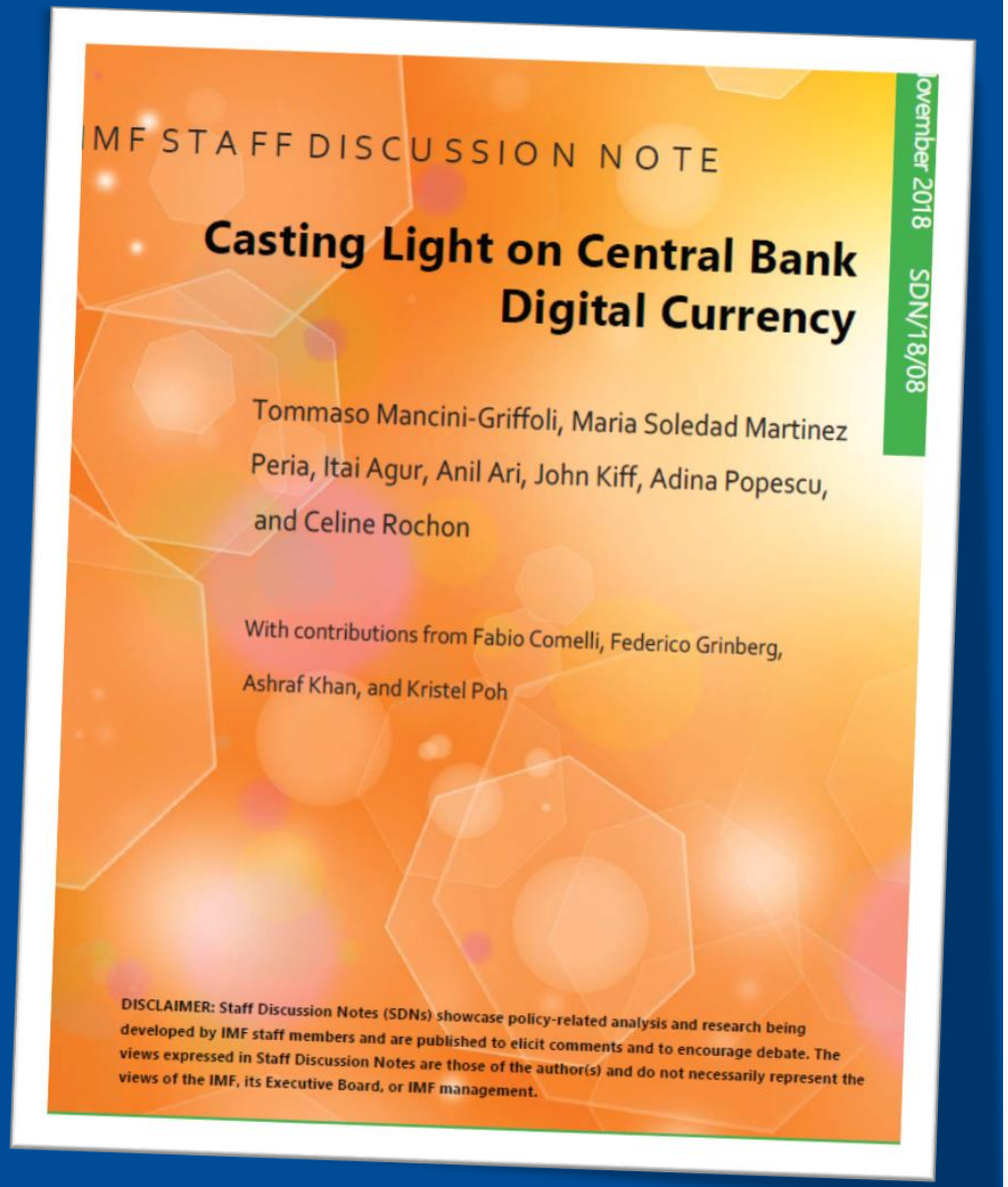


Retail Central Bank Digital Currency

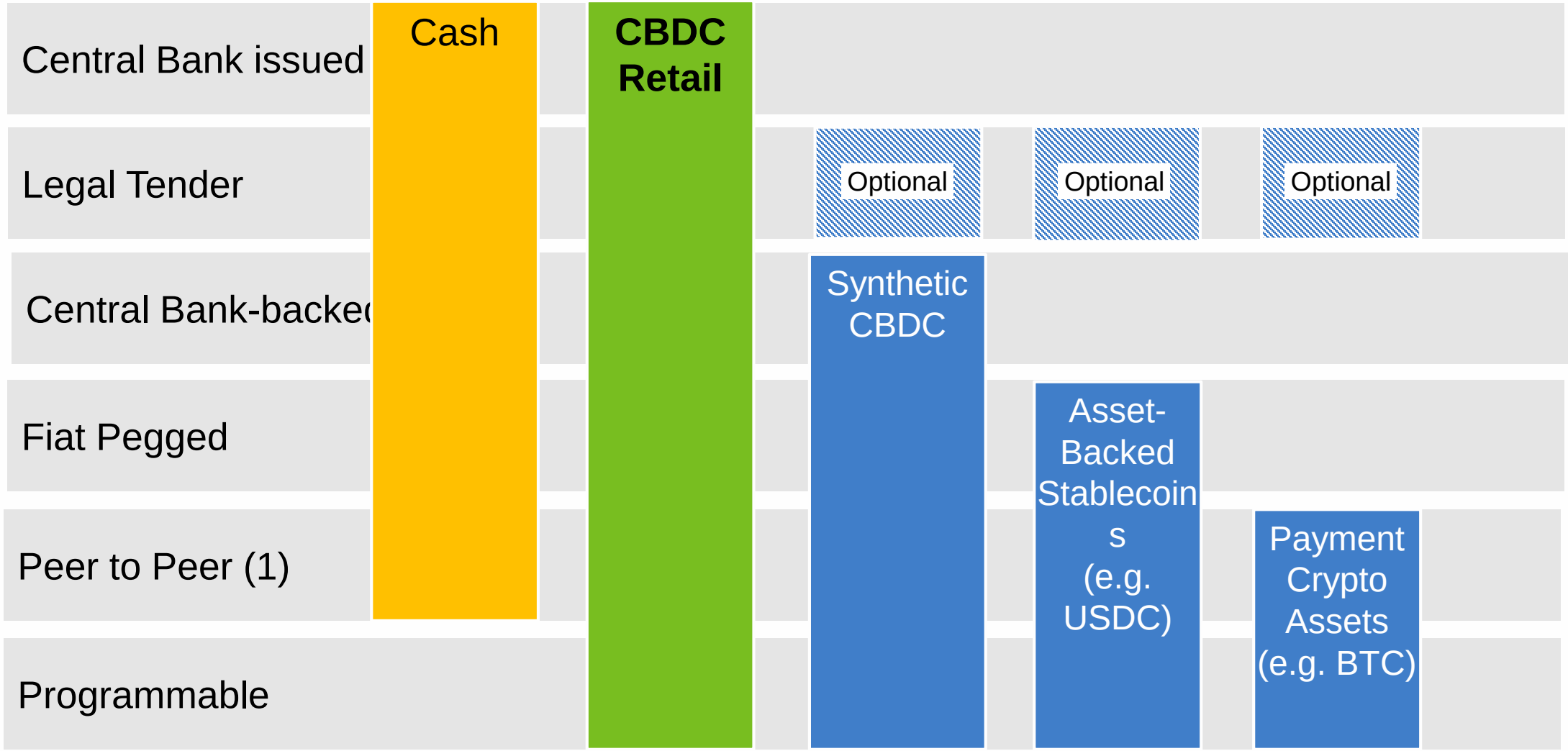
Associated Risks

NOVEMBER 15, 2019

John Kiff, Monetary & Capital Markets

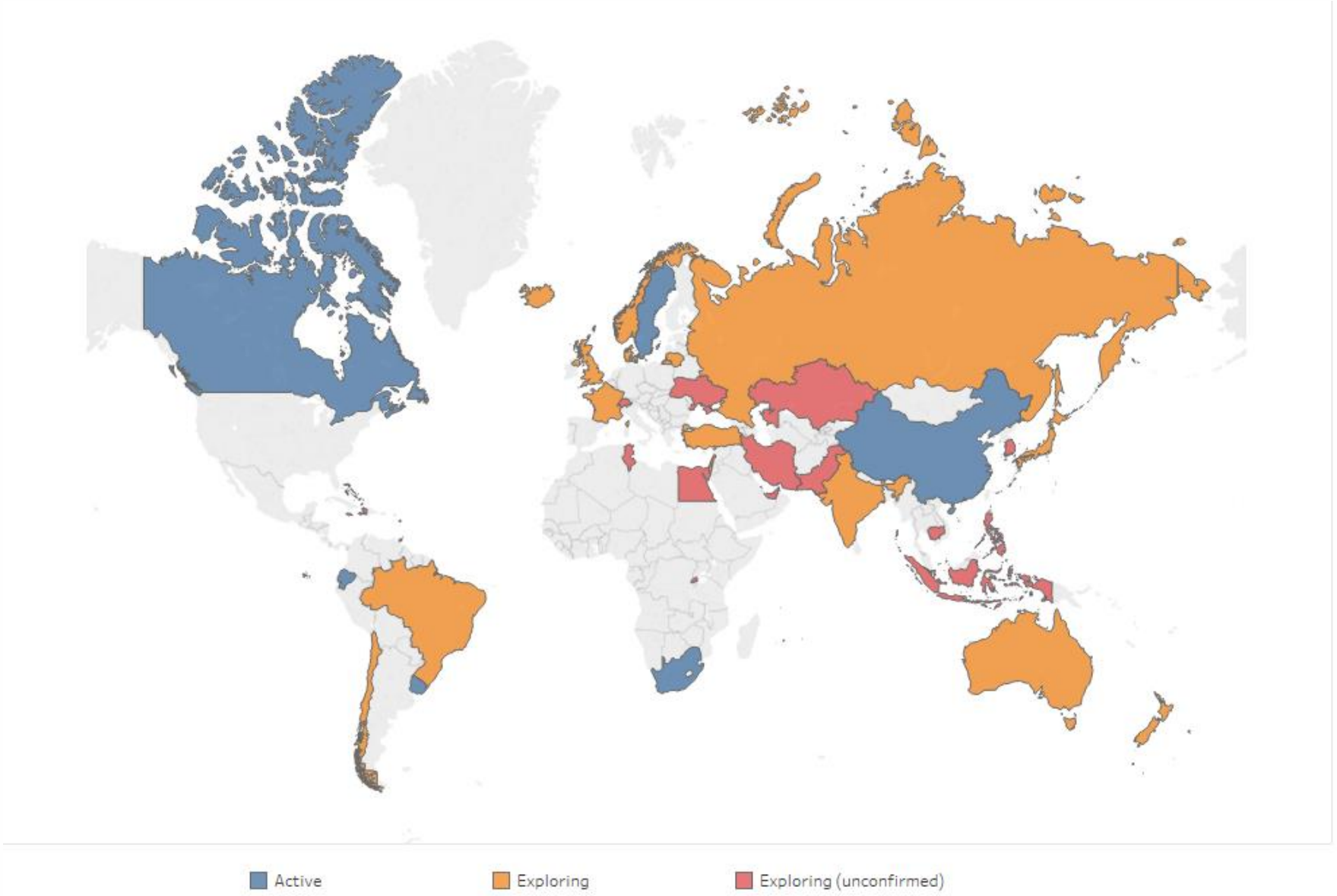
The views expressed herein are those of the author and should not be attributed to the IMF, its Executive Board, or its management

A Money Matrix (An Alternative to the BIS "Flower")



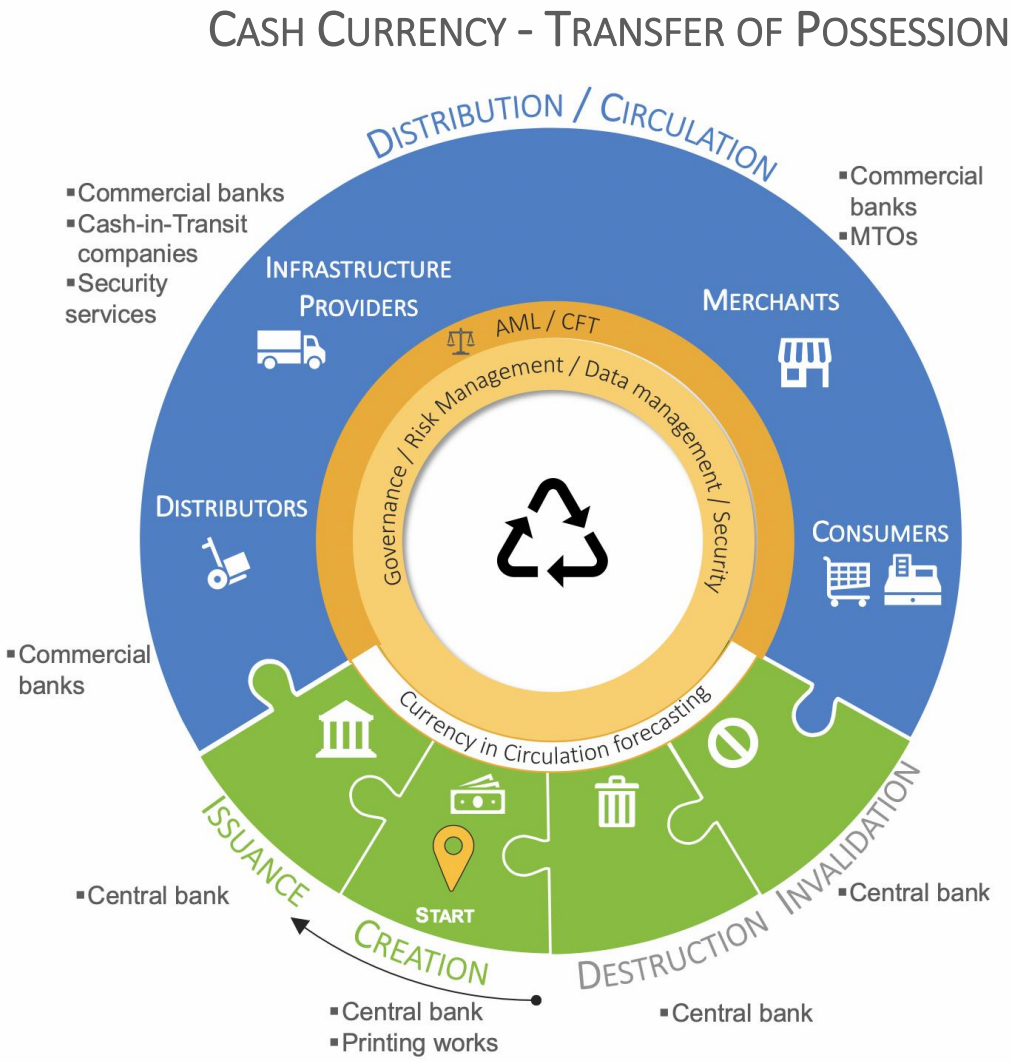
(1) Person to person, bank to bank, merchant to merchant, etc.
(2) Adrian (2019)

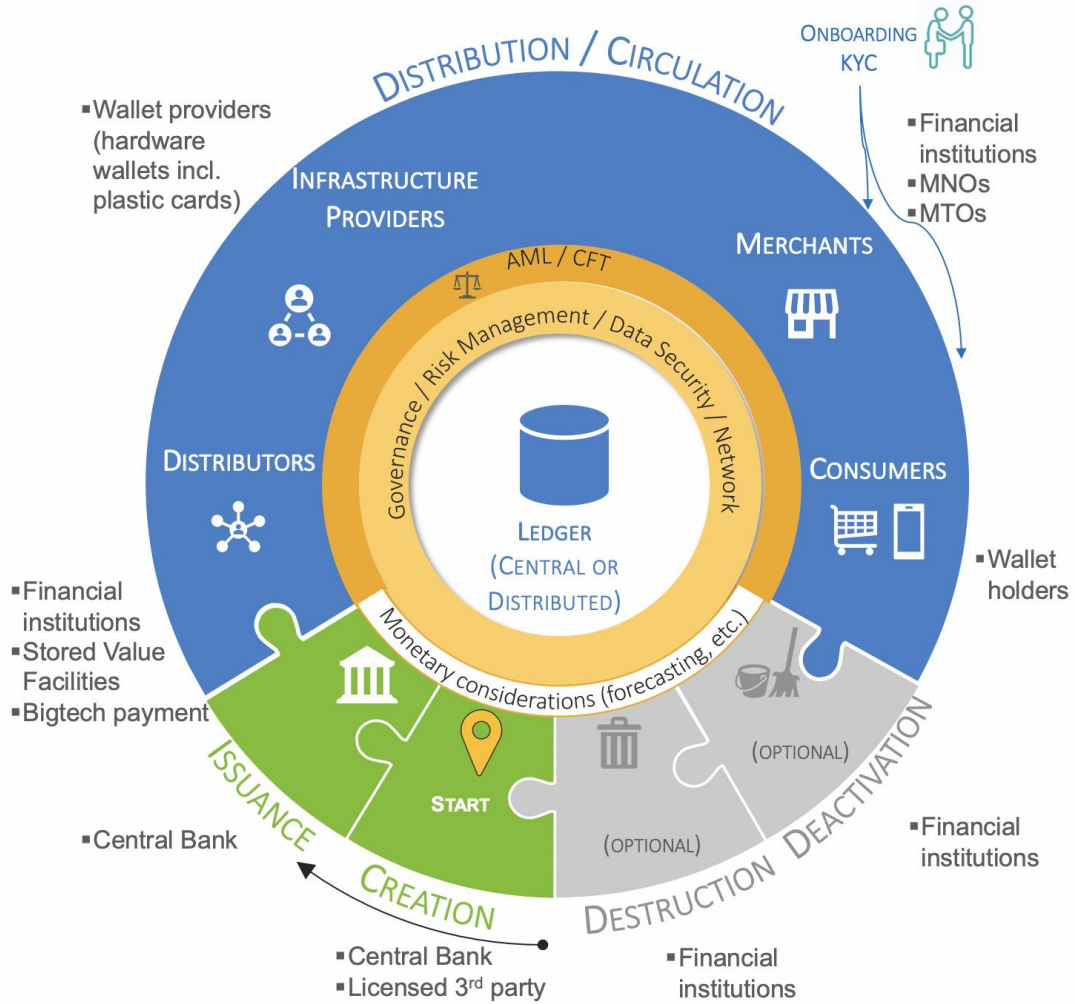
Current CBDC Projects (as of Nov 2019)



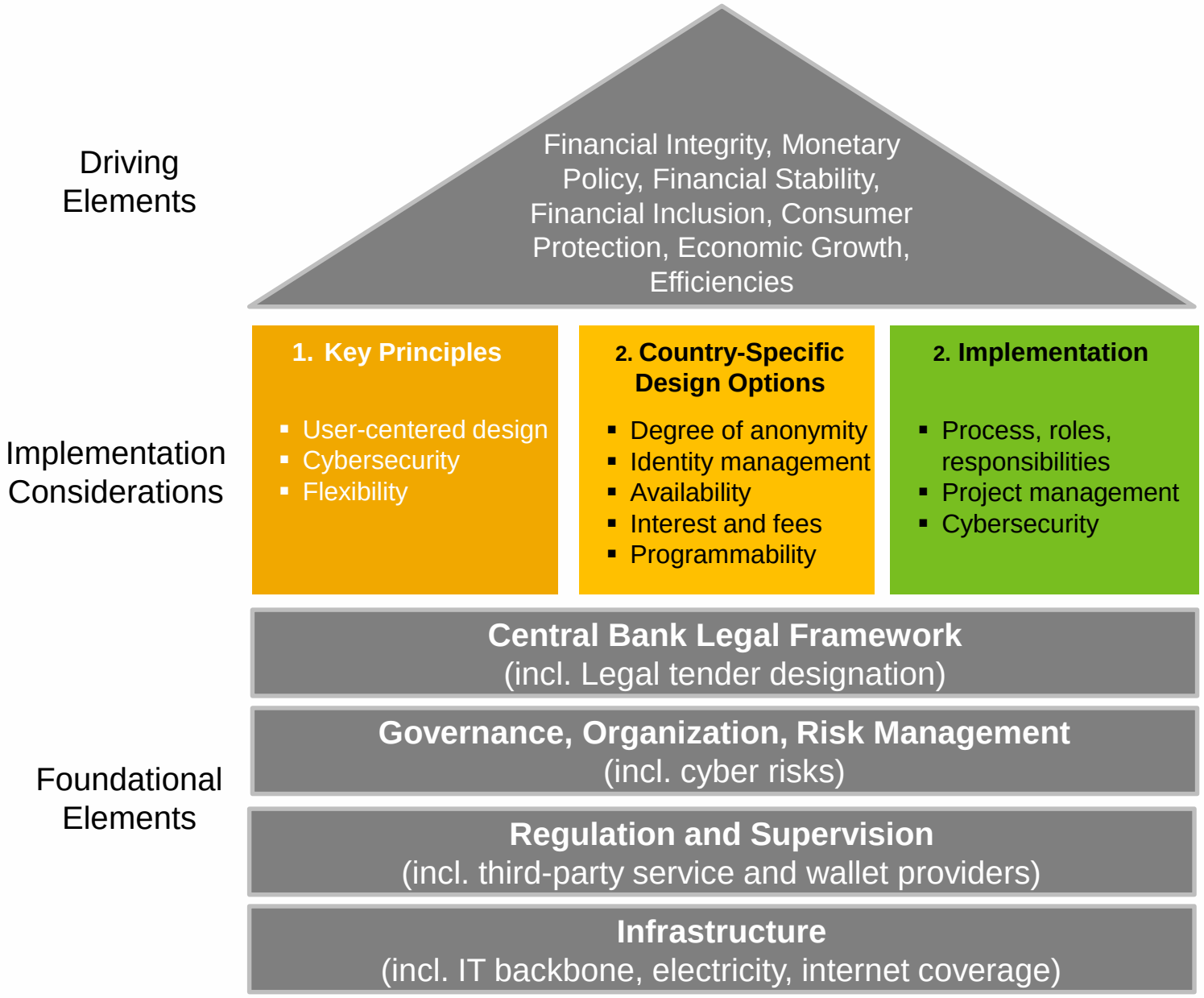
CBDC Operating Models - 1

From a high level, the actual work of issuing CBDC is quite like that involved in the management of physical cash

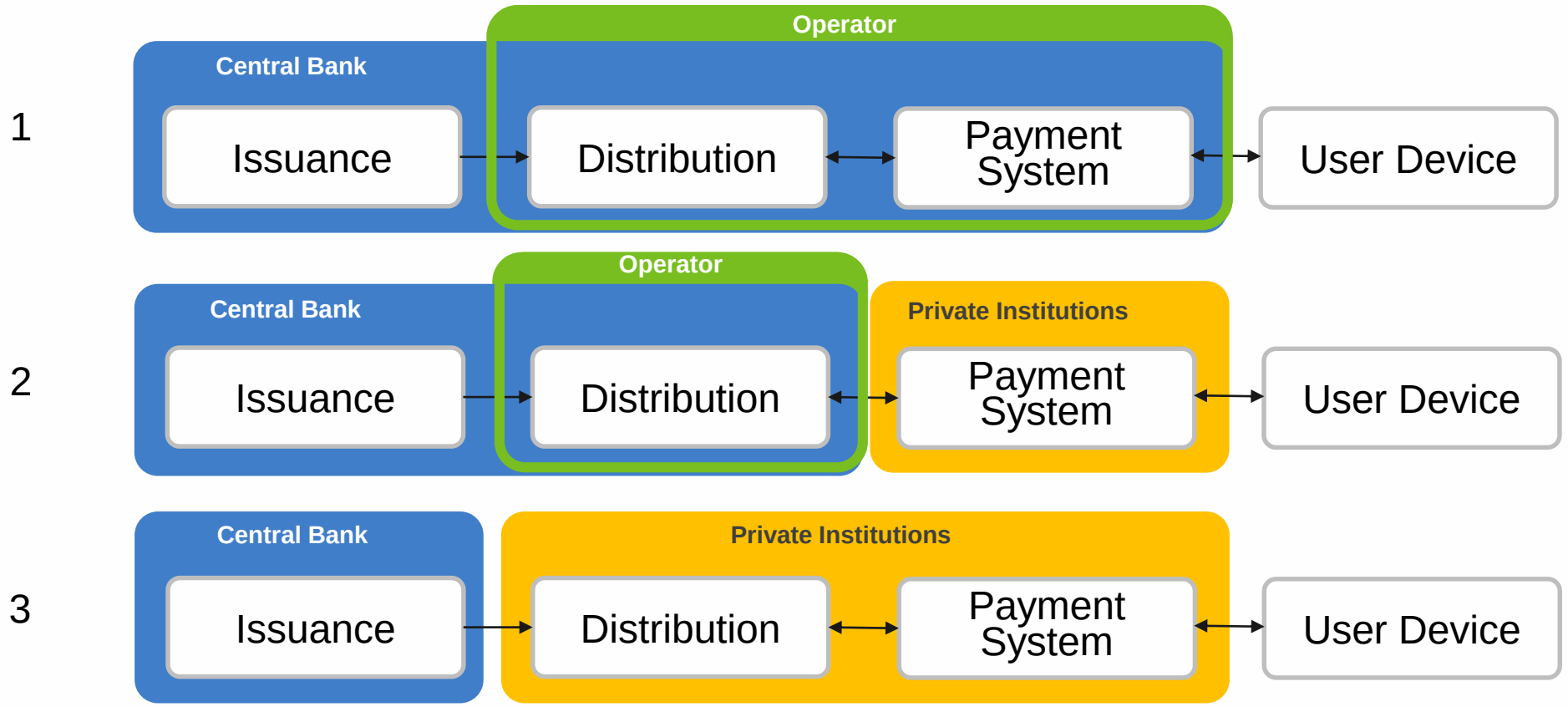




Implementation Considerations



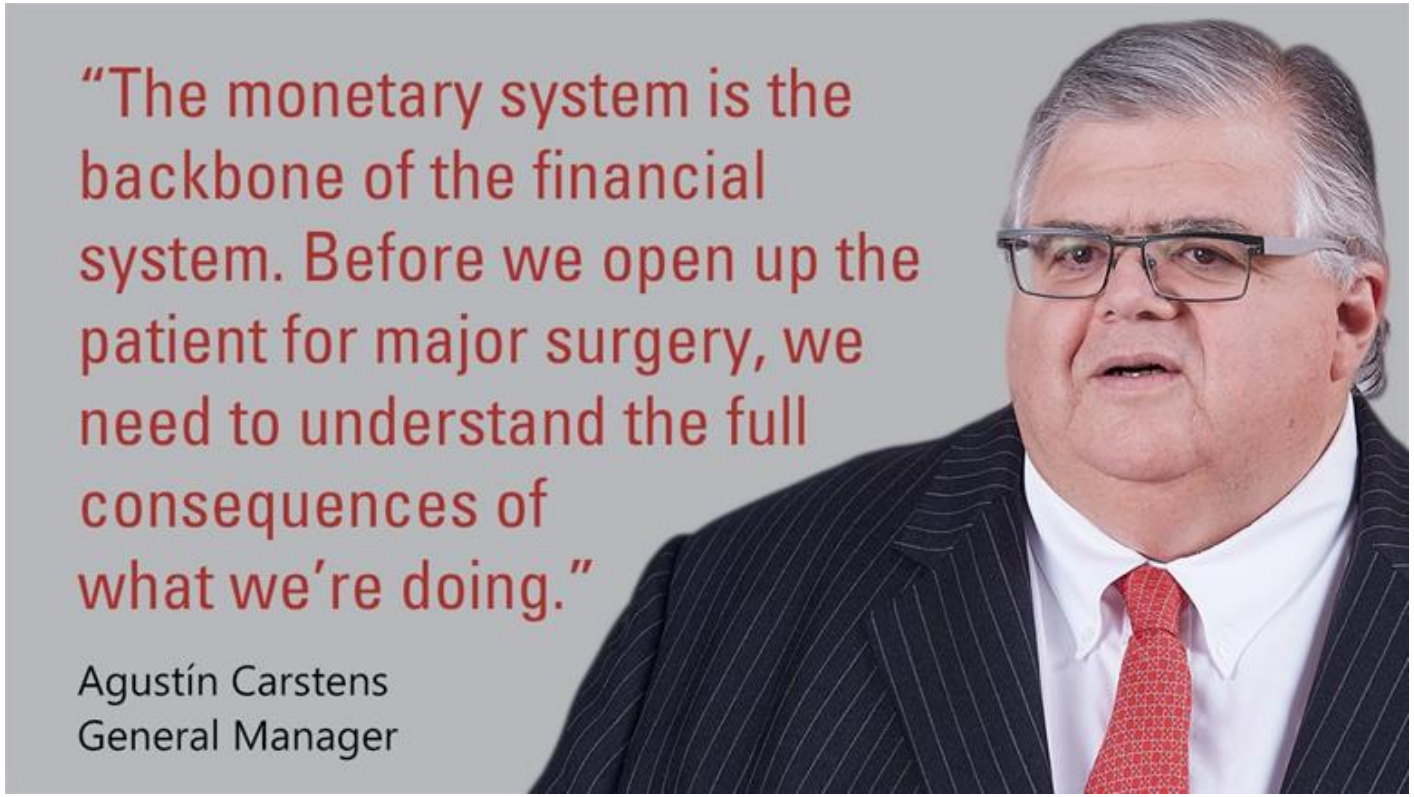
CBDC Operating Models - 2



SOURCE: GIORI DIGITAL

CBDC Could Impact Monetary Policy Transmission and Interfere with Commercial Bank Intermediation

The BIS warns that CBDC could impact monetary policy implementation by changing the demand for base money and its composition in unpredictable ways, and possibly modifying the sensitivity of the demand for money to changes in interest rates. Also, CBDC could lead to a larger central bank balance sheet, which may require it to purchase additional assets, which could interfere with key markets functioning or dry up liquidity.



Design and Policies Can Mitigate Monetary Policy Risks

- Monetary policy transmission is unlikely to be significantly affected and…
- It could actually strengthen if CBDC increases financial inclusion, exposing more households and firms to interest-sensitive instruments.

- Interest-bearing CBDC could enhance monetary policy implementation by allowing for deeply negative policy rates, if cash were prohibited or costly.

- CBDC could also be used to implement aggressive “helicopter drop” monetary stimulus by directly crediting CBDC accounts/wallets.

- Central banks could tap more granular and real-time payment data to enhance policy formulation and macrofinancial projections.

Design and Policies Can Mitigate Disintermediation Risks

- CBDC could increase funding costs for deposit-taking institutions but design choices can help ease such concerns. For example,
  - Carefully calibrated interest rates (if CBDC is interest bearing).
  - Limits to individual CBDC holdings or disincentives (such as fees) to convertibility from bank deposits to CBDC.

- Deposit insurance may mitigate run risk, in cases of individual bank insolvency fears, running from one bank to another is already easy.

- In the case of a currency or sovereign crisis, depositors typically run from local assets so having a CBDC will not change things.

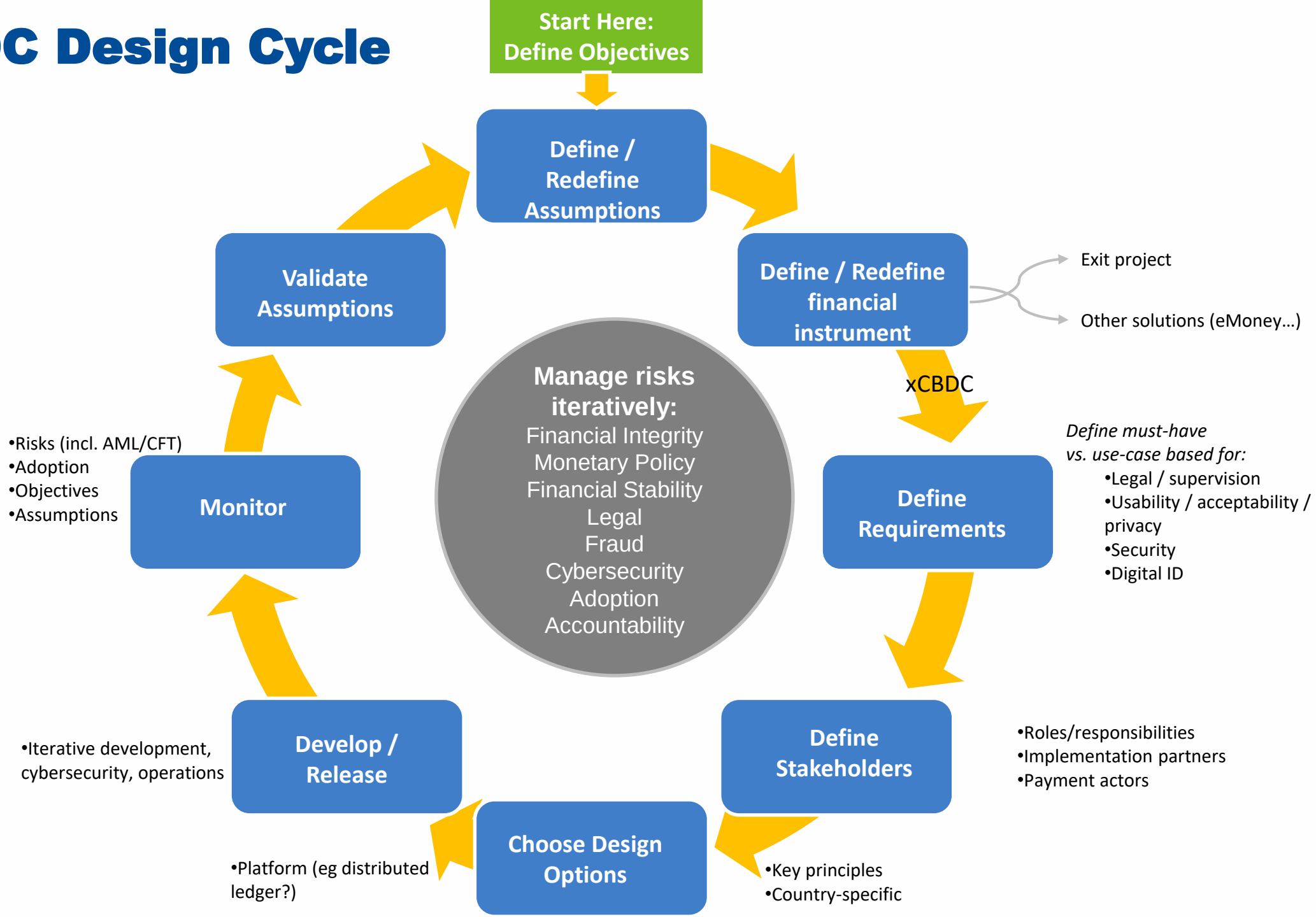
High-Level Design Principles

- User-centricity to maximize satisfaction, ease of use and adoption
- Design flexibility to account for changes or evolution in technology, use cases or policy objectives, regulation, and interoperability
- Right balance between compliance with AML/CFT standards and anonymity.
- Could be designed to pay interest to incentive its adoption.
- Could have offline capabilities to provide 24/7 availability and resilience.
- These design principles are independent of a specific technology choice.

CBDC Project Management

- Before committing to a specific technological solution central banks can test it out in a proof of concept (POC).
- Via a request for proposal central banks can engage interested technology service providers in an open bidding process.
- Consulting the end-user fosters usability and user-friendliness, which will help promote user adoption.
- Gradual CBDC development through pilots or regulatory sandboxes, will help flesh out benefits and risks and help to train central bank staff.

CBDC Design Cycle



Thank you for your attention