



Central bank digital currency & financial inclusion?

SEPTEMBER 2021

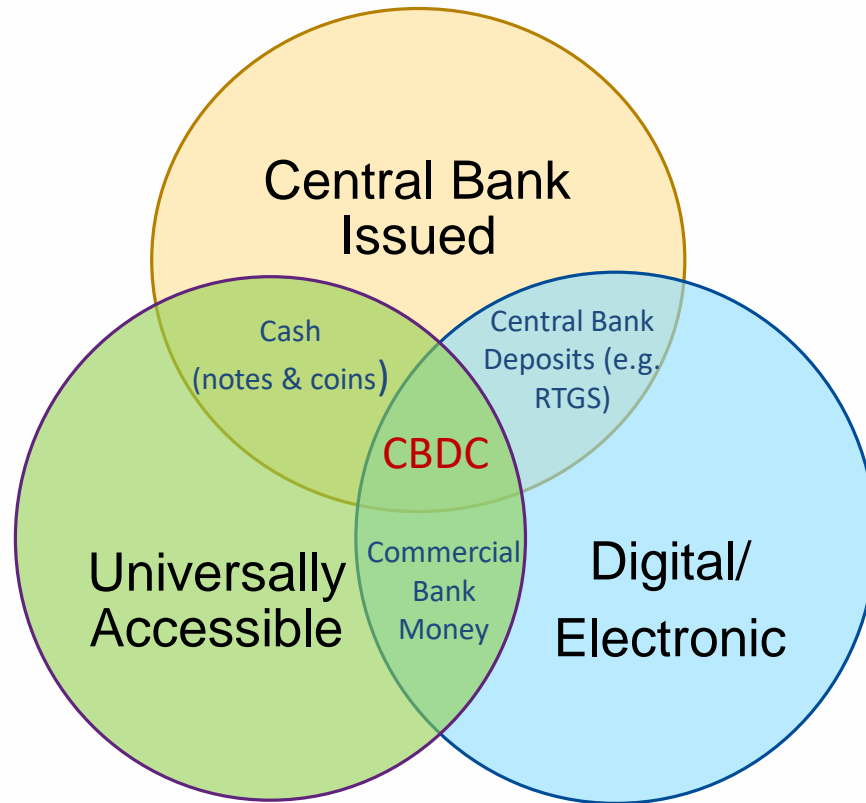
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Views expressed are presenter's perspective

Discussion

- 1. CBDC – what is it?**
- 2. Designing CBDC for financial inclusion**
- 3. Comparing CBDC to other forms of digital money (from an inclusion perspective)?**

CBDC is official, fiat money – just digital...



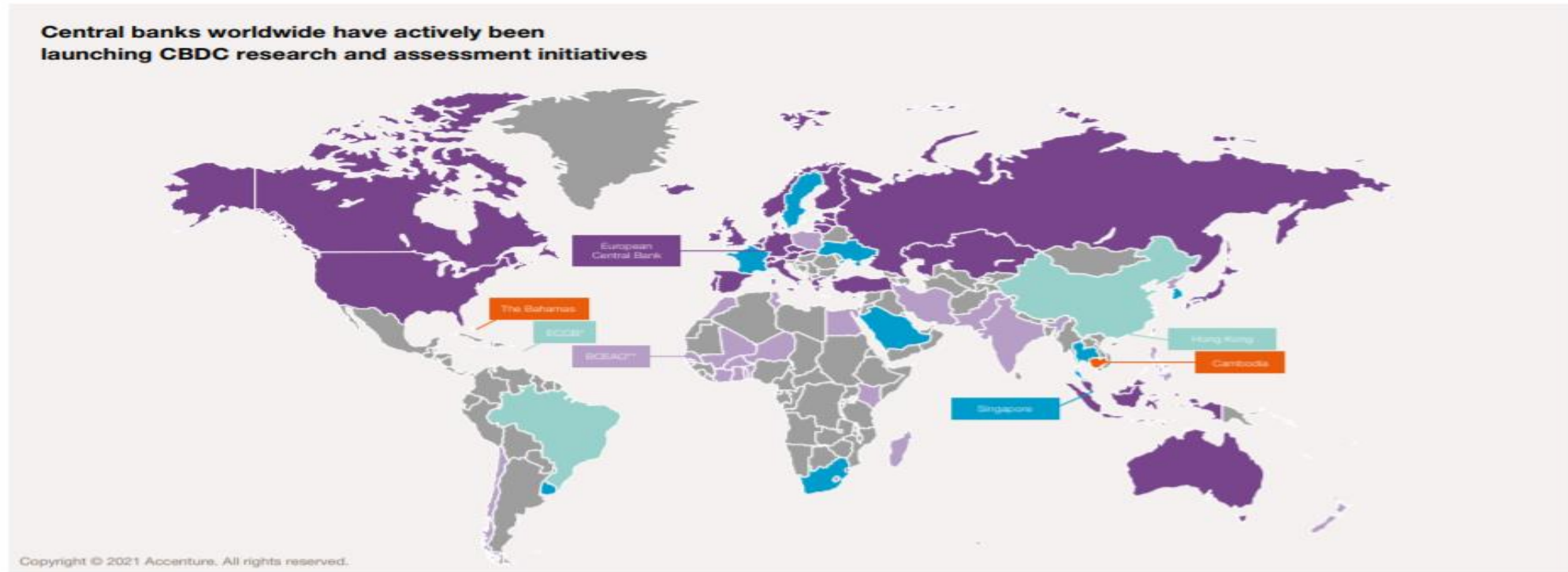
Retail CBDC* is central bank issued money, as a digital bearer instrument, & is accessible to all – is therefore conceptualized as “**digital cash**”

The BIS define a CBDC as “a digital payment instrument, denominated in the national unit of account, that is issued by a monetary authority and remains a direct liability of the central bank.”

Source: Bjerg, 2017

* Sometimes referred to as general purpose CBDC

Interest in CBDCs is gathering pace with many central banks researching or conducting pilot experiments



32	Interest	Countries declaring interest and doing initial internal research to explore CBDC feasibility.
35	Research	Countries that published CBDC research reports and/or conducted early PoCs.
19	Experimentation	Countries that started experimenting and piloting CBDC with limited number of parties.
2	Implementation	Countries preparing their CBDC for a full-scale launch.
2	Launched	Countries that officially launched a CBDC.

*Eastern Caribbean Central Bank

**Banque Centrale des Etats de l'Afrique de l'Ouest

How may we design CBDC with FI in mind...



CBDC may be designed with FI in mind....*how?*

May be designed to be legal tender – like notes & coins, for wide usage & acceptance

- ✓ Must be accepted by all merchants and persons
- ✓ Motivation for broad acceptance, may include reduced cost & safety issues with physical cash

Design may target “frictions”, especially costs

- ✓ Design may include “0 fee” to holder, granting maximum value of instrument – like cash
- ✓ May target new economic model: e.g. lower “interchange fees” and lower “merchant fees”
- ✓ Could consider domestic transactions only to maintain low costs



Source: cointelegraph.com



CBDC may be designed with FI in mind....*how?*

Design may target greater accessibility, speed & ease-of-use

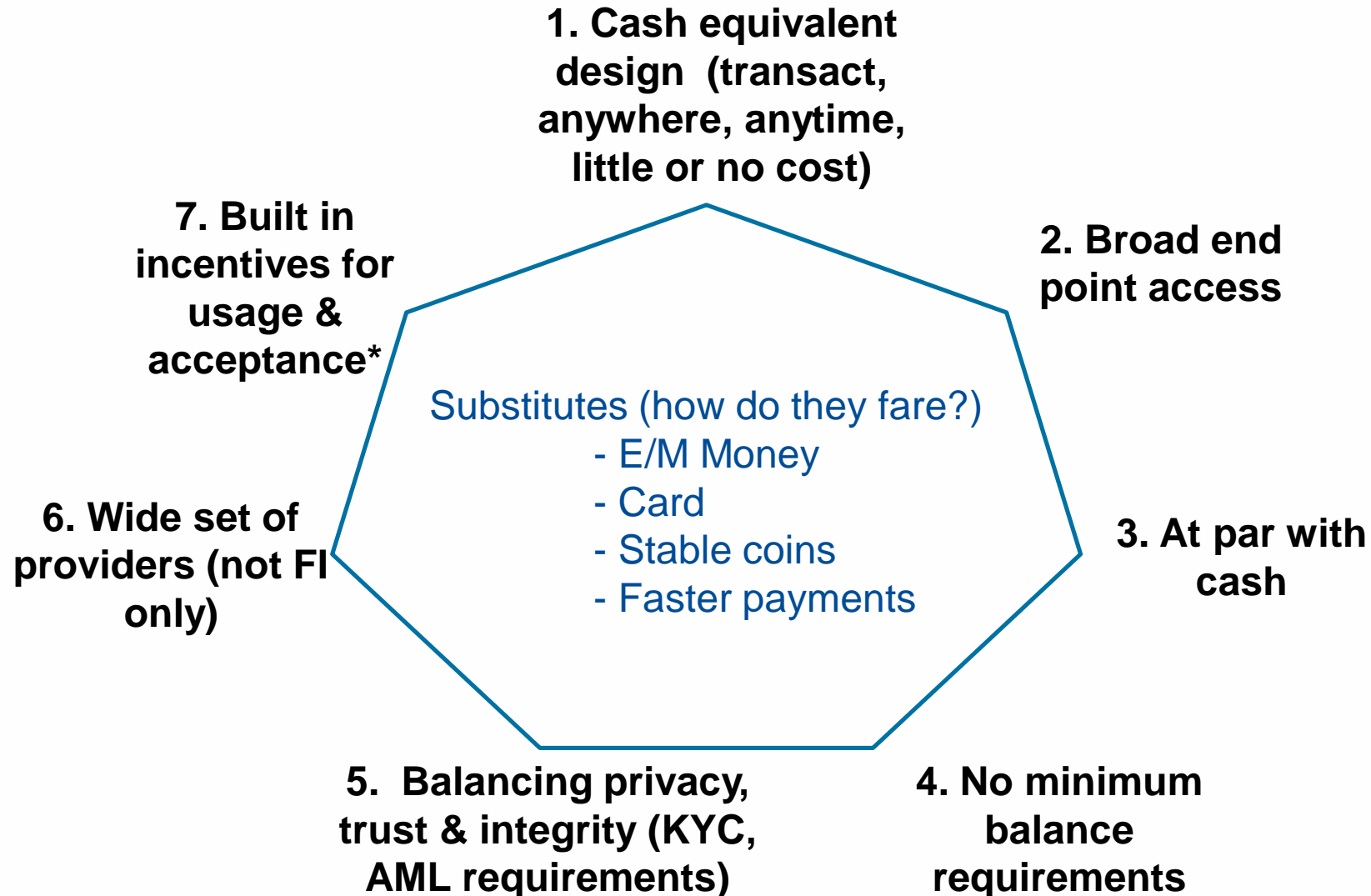
- ✓ Easy “cash in” services at appropriate locations (e.g. retailers)
- ✓ No account requirements (with typical overheads)
- ✓ Simplified onboarding: digital registration & identification process
- ✓ Acceptance at “non-urban” locations - address “last mile issues” through new providers e.g. MNOs & fintech acquirers (mPOS providers)
- ✓ 24 x7, real time & “proxy” service (pay by mobile #)
- ✓ Offline transactions (with limits)
- ✓ Include USSD (non-internet-based services)
- ✓ Automated tax submissions for merchants & lowered tax incentives for payers

Interoperable & integration with existing networks & schemes

- ✓ Issued by central bank but integrated & operated by established networks

Main challenge: how to integrate above requirements & still achieve sustainable economic & business model

Summary: 7 design elements critical for FI...



Source: Maniff, J, L. 2020. "Inclusion by Design: Crafting a Central Bank Digital Currency". Federal Reserve Bank of Kansas City, Payment system research briefing.

* 7th element added to the framework

Comparative view of the potential difficulties...

Designing for FI...		E Money May enjoy strong economies of scale, but when large, difficult to regulate (competition, stability & resolution related issues)	Card Mature products, strong network effects but may struggle with “last mile issues”, may be perceived as costly	Faster Payment Immediate easy-to-make payments, targeted at existing users, may not address “last mile” issues	Stable Coins New, emerging, desire to address FI, but may lack ease of use, may be perceived as costly. When large, may be difficult to regulate	CBDC Strong desire to reduce cost of cash & address FI, but new. Likely competes with existing instruments, needs to develop sustainable business model
1.	Broad acceptance, anywhere, at end points useful for lower LSMs	Usually, depends on scheme	End point access main issue			Desired, TBD
2.	Designed & potentially perceived as low cost by user	Likely	Perceived as costly		Desired, TBD	Desired, TBD
3.	Available 24x7, fast/immediate payment (real time/near real time settlement”	May have sync & reconciliation processes				Desired, TBD
4.	Usually, no account or minimum balance needed				Likely not	Desired, TBD
5.	“Safe”, trusted central bank money (like cash)					
6.	No deposit insurance needed to protect funds					
7.	Easy registration & onboarding				Desired, TBD	Desired, TBD
8.	Well established, scheme, brand, marketing & operations	Depends on scheme		Depends on scheme		
9.	Supports multiple use cases/needs (e.g. “superapp” features)				TBD	Desired, TBD
10.	Supports proxy payments or offline transactions				Likely not	Desired TBD

Conclusion

Designing a CBDC with financial inclusion in mind may be **relevant & desirable** for numerous jurisdictions.

However,...the **sustainability** of a CBDC model (with FI as goal) may largely depend on **nuances of each jurisdiction** (e.g. the *availability, depth & spread* of competing offerings, *available infrastructure, market structure & the CBDC design choices* selected)