



Changing the game with digital money

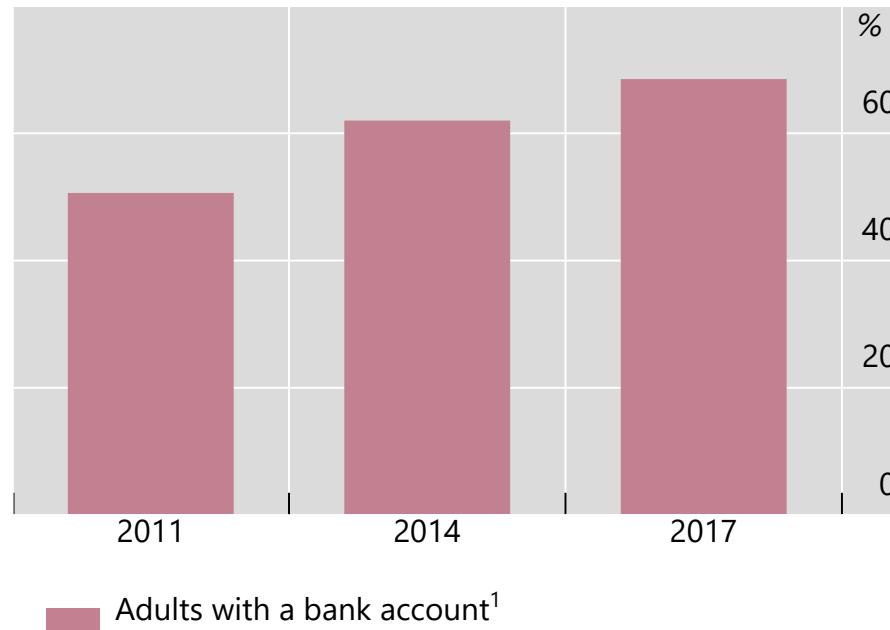
Morten Bech, Head of CPMI Secretariat
19 November 2019

Game plan

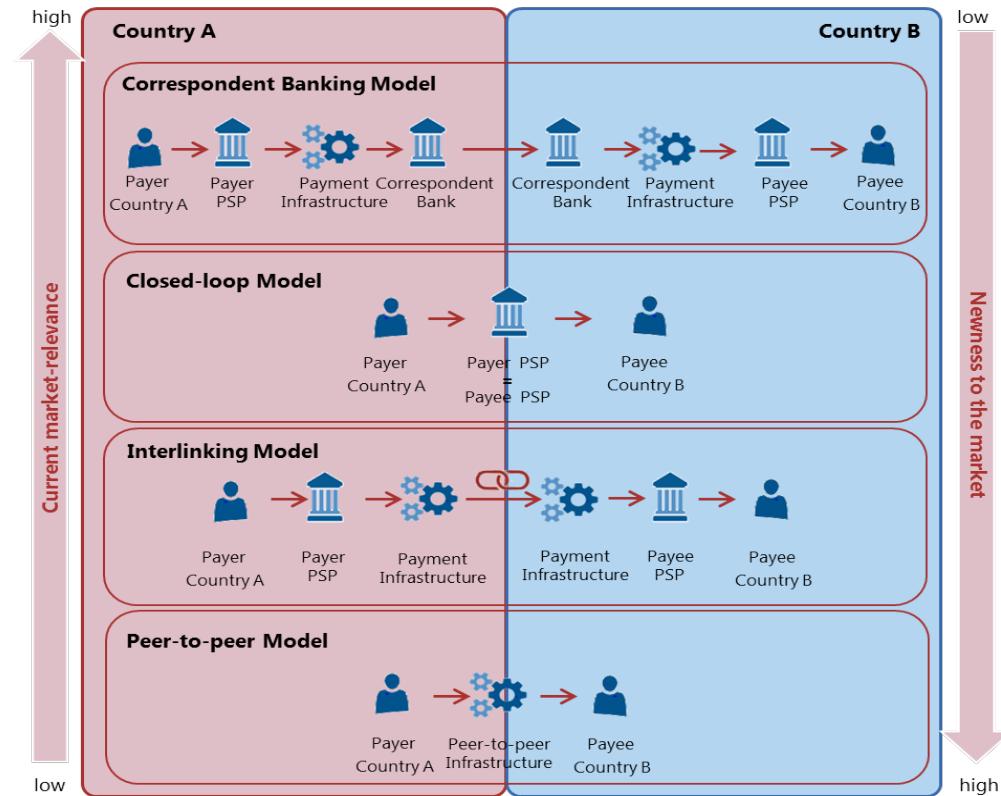
- Inefficiencies in money and payments: an emerging market perspective
- Central bank digital currencies as a solution
- The opportunistic bigtechs
- Concluding remarks

Known inefficiencies in FMI: inclusion and cross-border payments

Global access (financial inclusion)



Cross-border retail payment arrangements

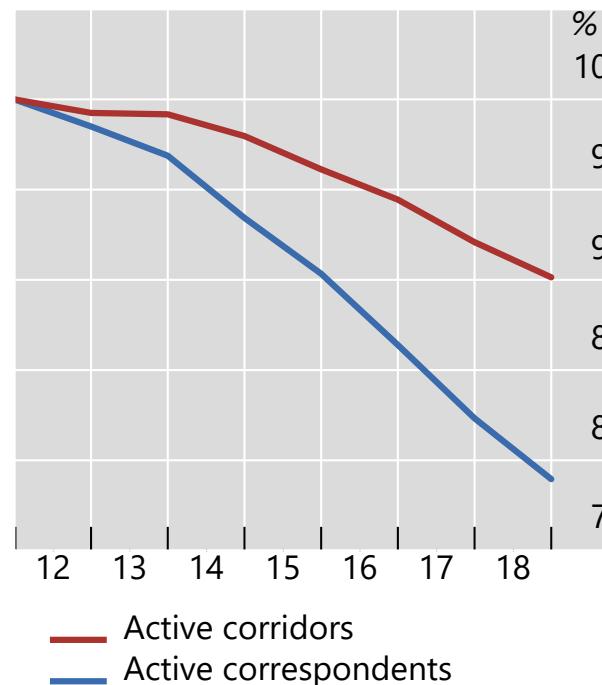


¹ Respondents aged 15+ who report having an account (by themselves or together with someone else) at a bank or another type of financial institution or report personally using a mobile money service in the past 12 months. Sources: World Bank Global Findex Surveys 2011, 2014, and 2017;

Remittance volumes and costs are rising

Placing a higher burden on emerging market economies that rely on remittances

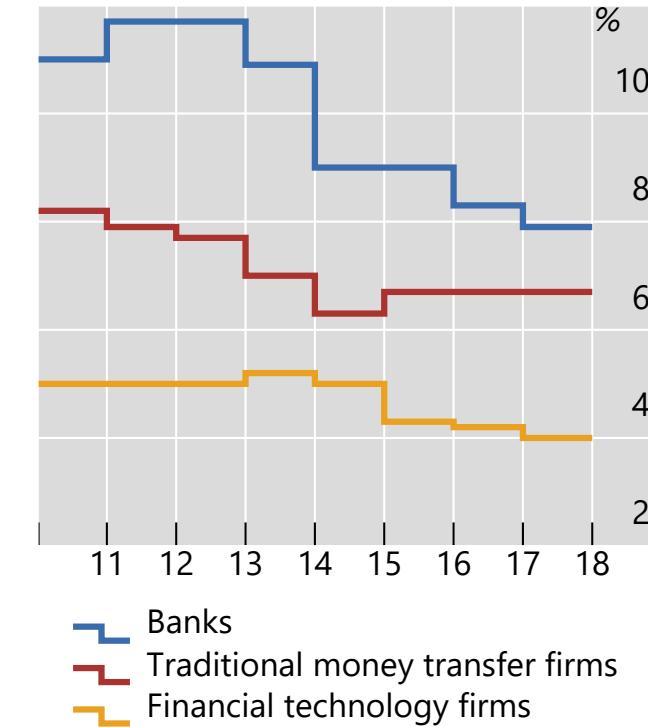
Decline in correspondent banking



Remittances volumes are rising



...at still high average costs¹

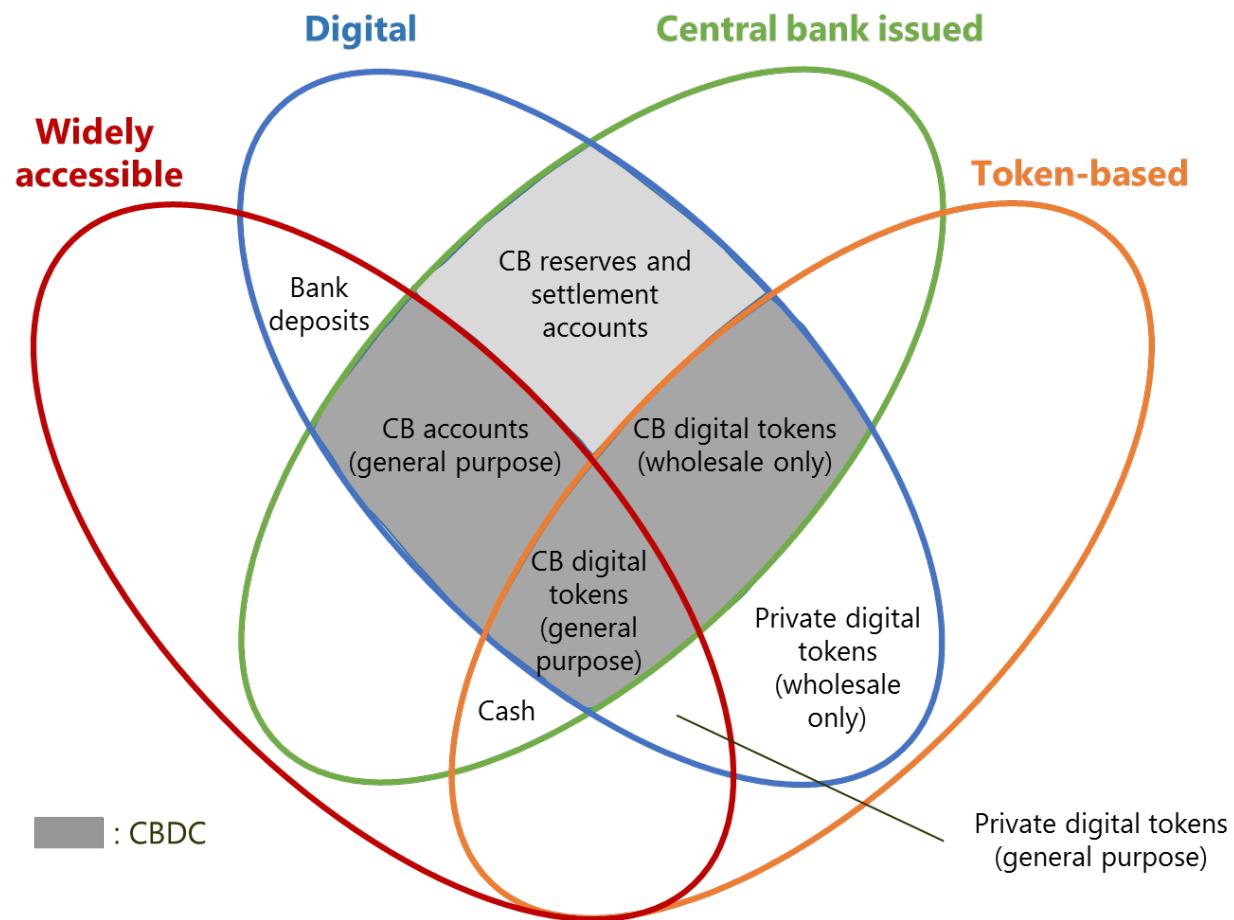


¹ Average total cost for sending \$200; figure adapted from *The Economist* (2019).

Sources: National Bank of Belgium; SWIFT BI Watch; *The Economist* (2019); World Bank, *Remittance Prices Worldwide*; World Bank; BIS calculations.

Game changer
Are Central Bank Digital Currencies the solution?

Central bank digital currencies



Source: Bech and Garratt, BIS Quarterly Review, September 2017, adapted by CPMI-MC report (2018).

Design choices

	Existing central bank money		Central bank digital currencies		
	Cash	Reserves and settlement balances	General purpose		Wholesale only token
			token	accounts	
24/7 availability	✓	✗	✓	(✓)	(✓)
Anonymity vis-à-vis central bank	✓	✗	(✓)	✗	(✓)
Peer-to-peer transfer	✓	✗	(✓)	✗	(✓)
Interest-bearing	✗	(✓)	(✓)	(✓)	(✓)
Limits or caps	✗	✗	(✓)	(✓)	(✓)

✓ = existing or likely feature, (✓) = possible feature, ✗ = not typical or possible feature.

CBDC for all

The potential positives:

- Safer deposit account
- Lower barrier to entry/improving inclusion
- Easier negative rates
- Better competition for customer deposits
- Easier cross-border payments

The considerations:

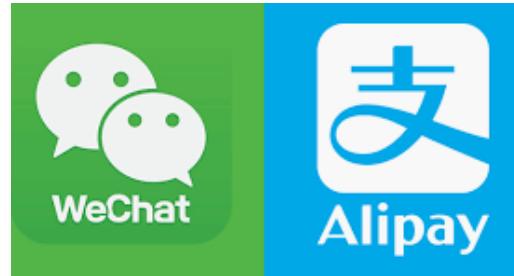
- Feasibility
 - Mandate/legal
 - Cyber risk
 - AML/CFT
 - Logistics
- Financial intermediation
 - bank deposits
 - Impact banks' business models and lending
- Financial stability
 - quicker bank runs vs safe deposits

Wholesale CBDC

- Experiments to date result in systems that look broadly similar to, and not clearly superior to, existing RTGS
- But there might be a role to play if RTGS are not yet developed
 - Higher risks – DLTs are largely untested
 - Higher reward?
- More work and experimentation needed

Financial pain could be bigtechs' gain

Big techs are increasingly moving into mobile payments



venmo



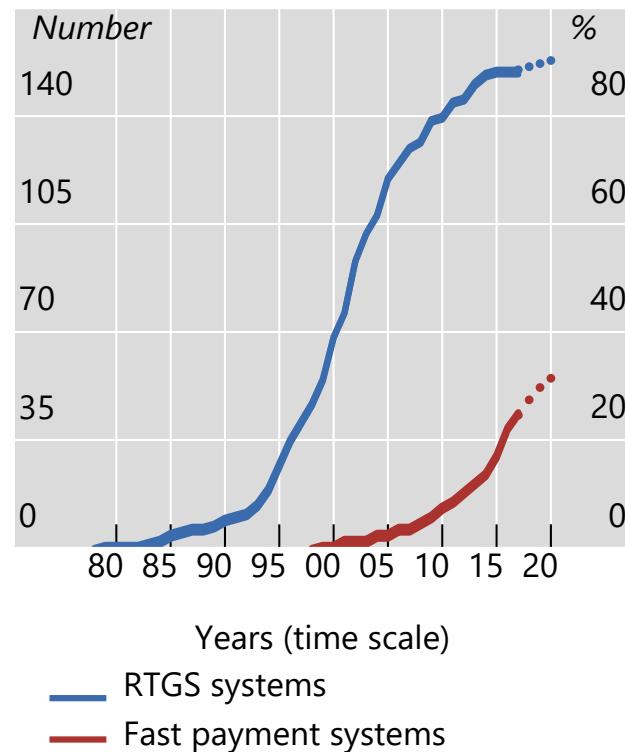
Apple Pay



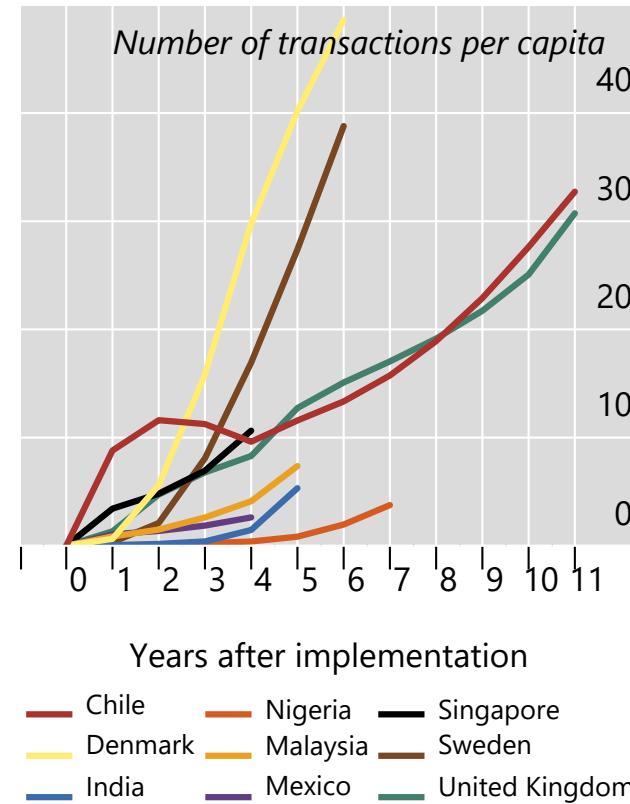
¹ Venmo is a mobile payments app owned by PayPal that integrates social media features. It is popular among college students in the US. ² Calibra is the mobile wallet that will run on top of the Libra network. ³ M-Pesa (M for mobile, pesa is Swahili for money) is a mobile phone-based money transfer, financing and microfinancing service, launched in 2007.

The need for speed - the back-ends are improving

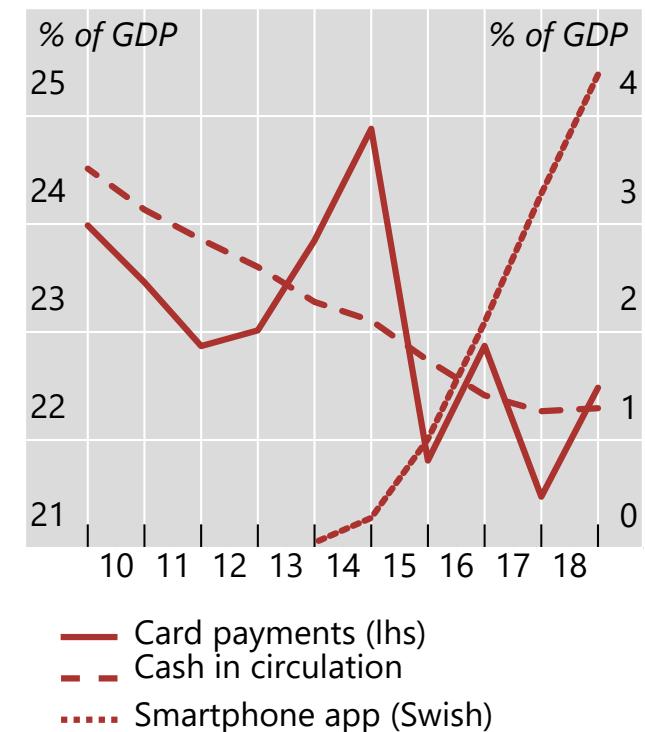
Diffusion of fast payments¹



Use of fast payments



Sweden mobile payments take-off



¹ The dashed part of the lines corresponds to projected implementation.

Sources: Bech and Hobijn (2007); Bech, Shimizu and Wong (2017); CPMI Red Book Statistics; FIS (2018); national central banks; World Bank Group; IMF.

New potential entry – global stablecoins

Front-end

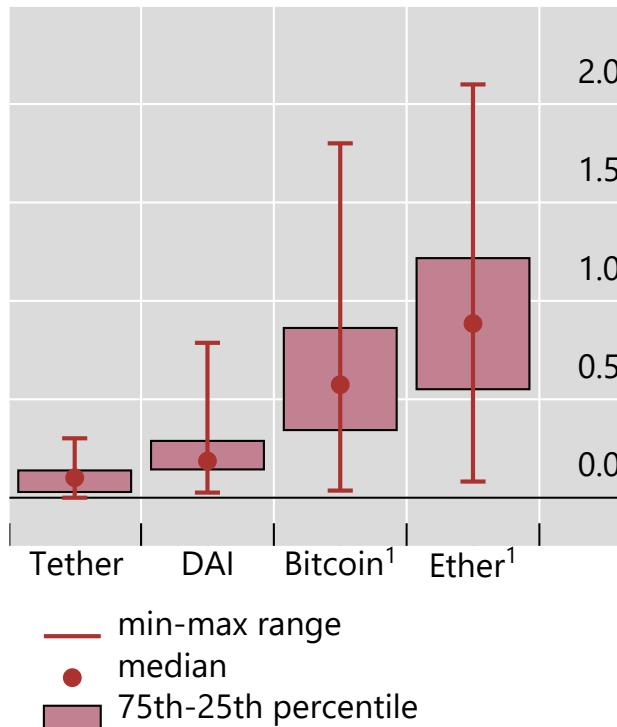


Back-end

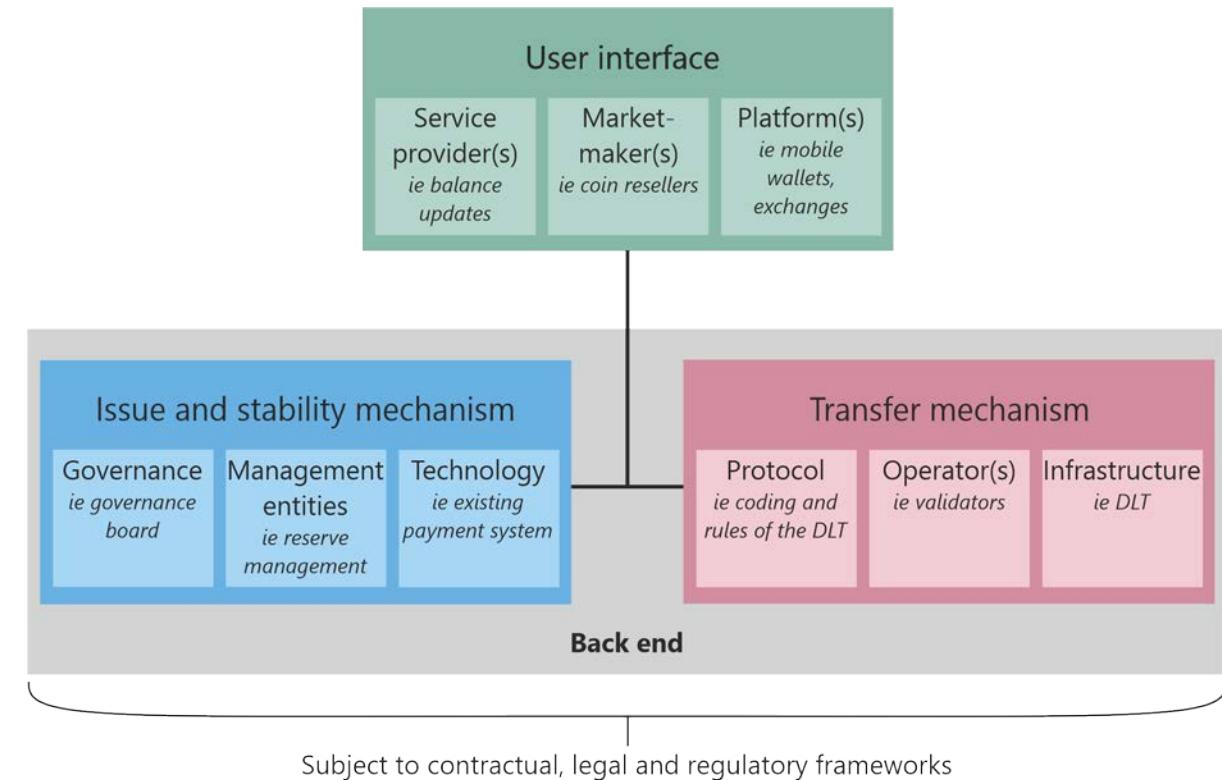


Stablecoins – bringing cryptos closer to money

Volatility



A functional view of the stablecoin ecosystem



¹ Bitcoin nor Ether are 'stablecoins'; they are included for reference.

Sources: G7 WG Investigating the impact of global stablecoins (2019); Bullmann, D, J Klemm and A Pinna (2019).

A simple framework ...

		Reach	
		Domestic	Global
Payments infrastructure	Overlay <i>(Uses other infrastructure to transact)</i>	 MobilePay	 venmo
	Stand alone <i>(Traditional infrastructure and DLT)</i>	 WeChat	 Alipay

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The map shows the geographical reach of various payment systems across Europe, with icons representing different countries.

Category	Example
Domestic Overlay	MobilePay, Venmo
Domestic Standalone	WeChat, Alipay
Global Overlay	Calibra, Apple Pay, Google Pay, PayPal
Global Standalone	Libra

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Hybrid - a 'synthetic' CBDC

- Central Banks offer 'eMoney' providers access to their reserve accounts under a strict condition of 100% backing - IMF
- 'Synthetic CBDC' = Narrow banking
- Benefits:
 - Remove credit risk
 - Retail services provided by private sector
- Costs:
 - Strict supervision required
 - Reputation risk for Central Bank

Concluding remarks

Walk the talk

- We need to **improve the efficiency and inclusiveness of payment and financial services**.
- Central banks assess the relevance of issuing **central bank digital currencies**.
- Public authorities consider **most appropriate regulatory treatment** of stablecoins and how existing regulatory frameworks can and should be applied.
- The FSB and international standard-setting bodies assess **how existing international principles and standards could be applied**.
- Maintain the high level of **international coordination**; ensure a level playing field.