

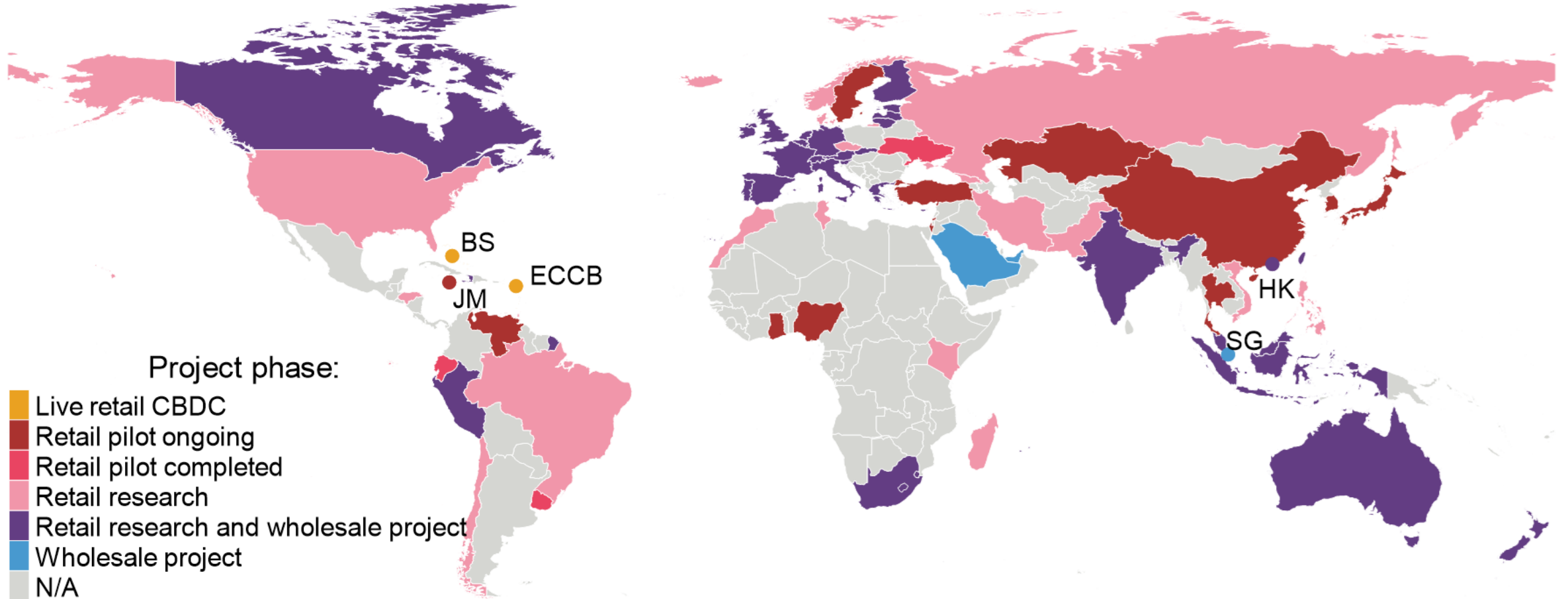
Central Bank Digital Currencies

- Promises and Challenges

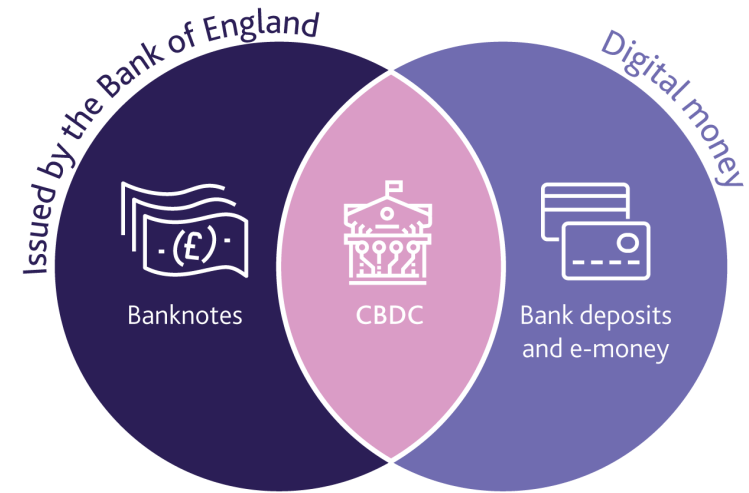
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Central Bank Digital Currencies (CBDC)



What is a „CBDC“?



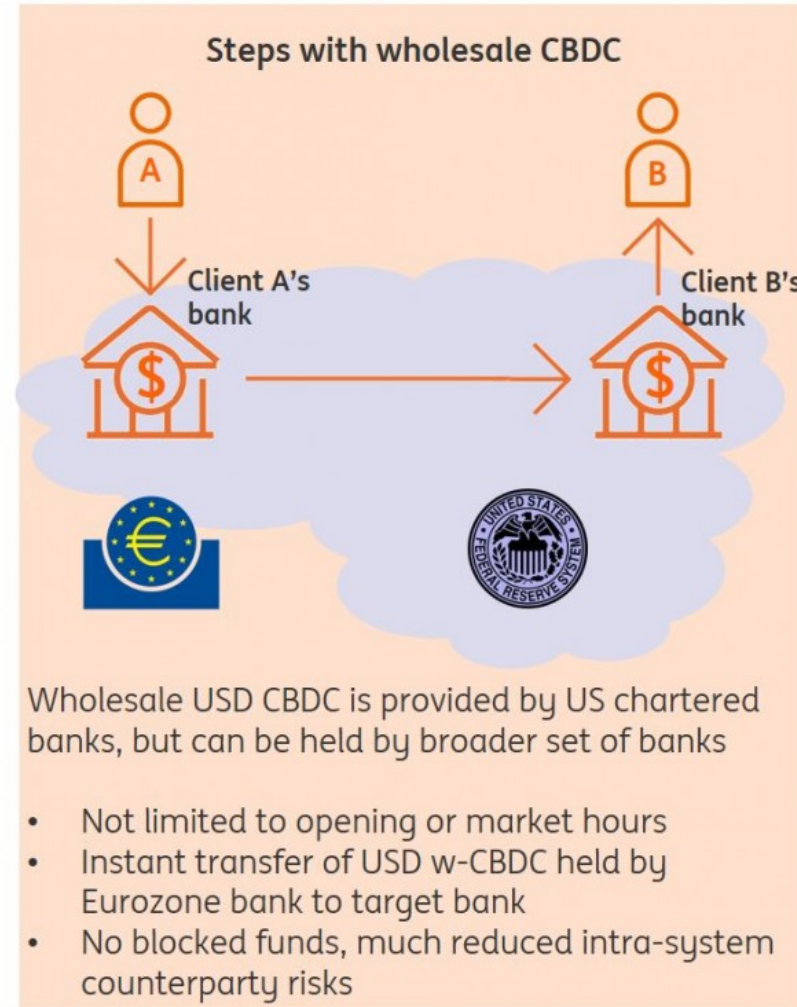
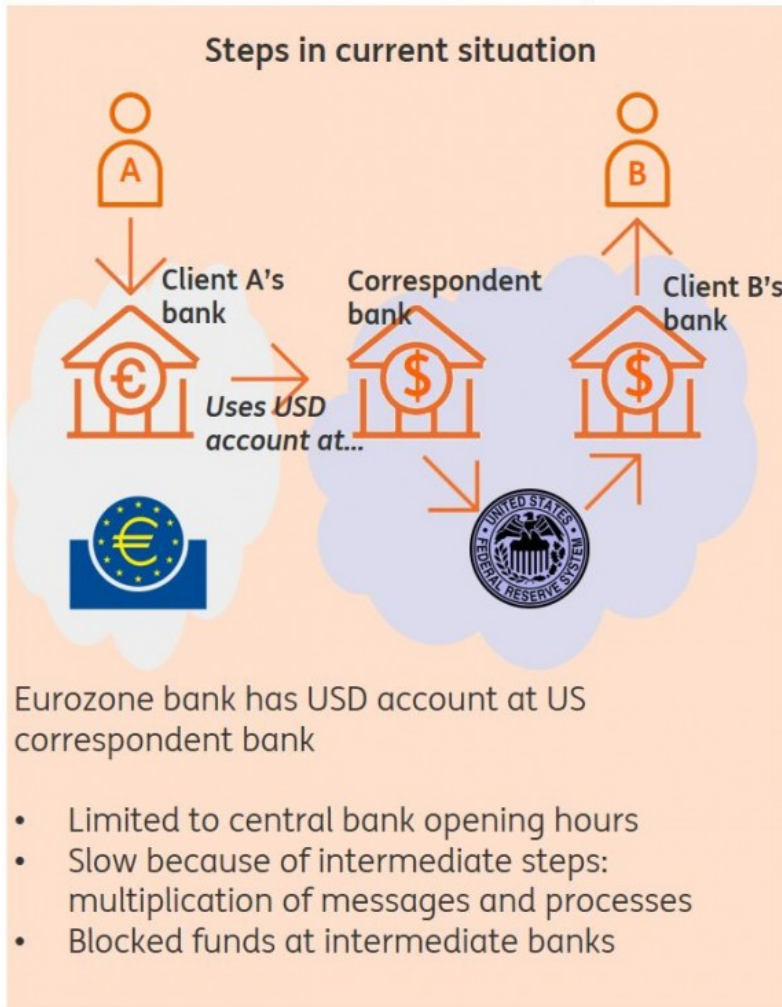
Source:
<https://www.bankofengland.co.uk/paper/2020/central-bank-digital-currency-opportunities-challenges-and-design-discussion-paper>.

- Technological definition: A digital payment instrument
- Legal definition: A liability of the **Central Bank**, denominated in the national unit of account
- Retail feeling: A cash equivalent

Distinguish: **Private** stablecoin pegged to an underlying

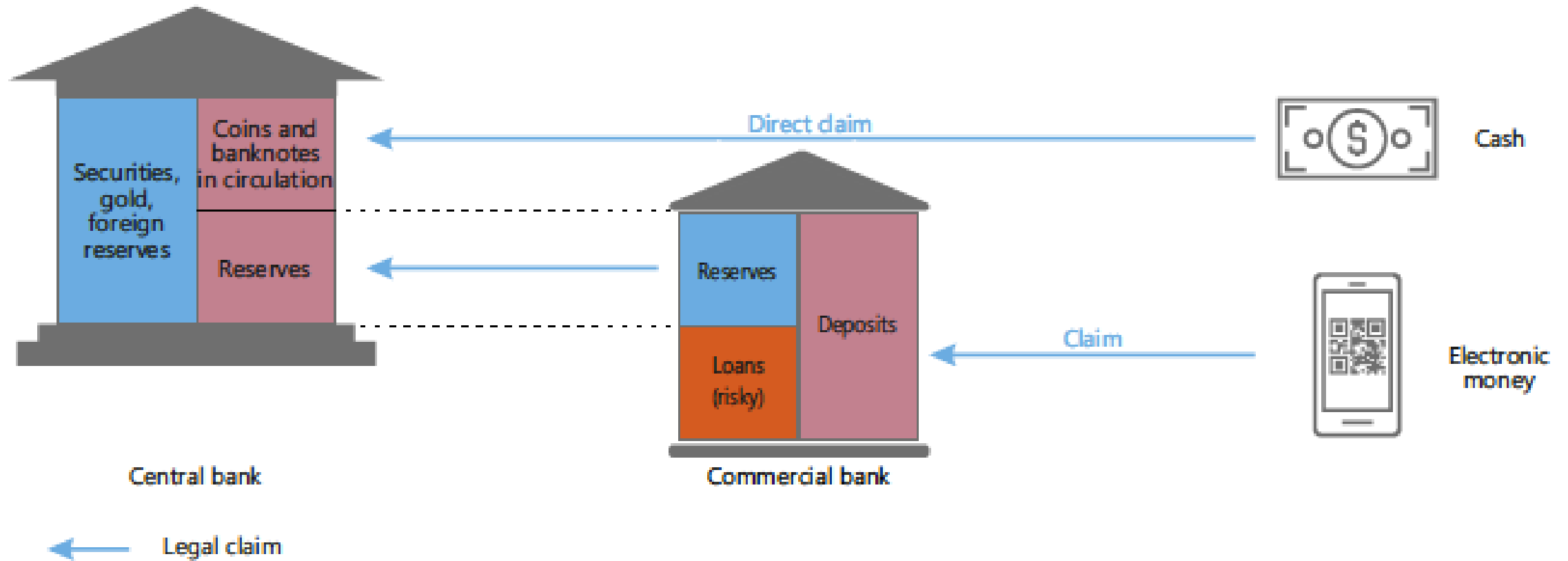
What is a „CBDC“ – Part 2: wholesale...

Example use case for w-CBDC: dollar payment from Eurozone resident to US resident

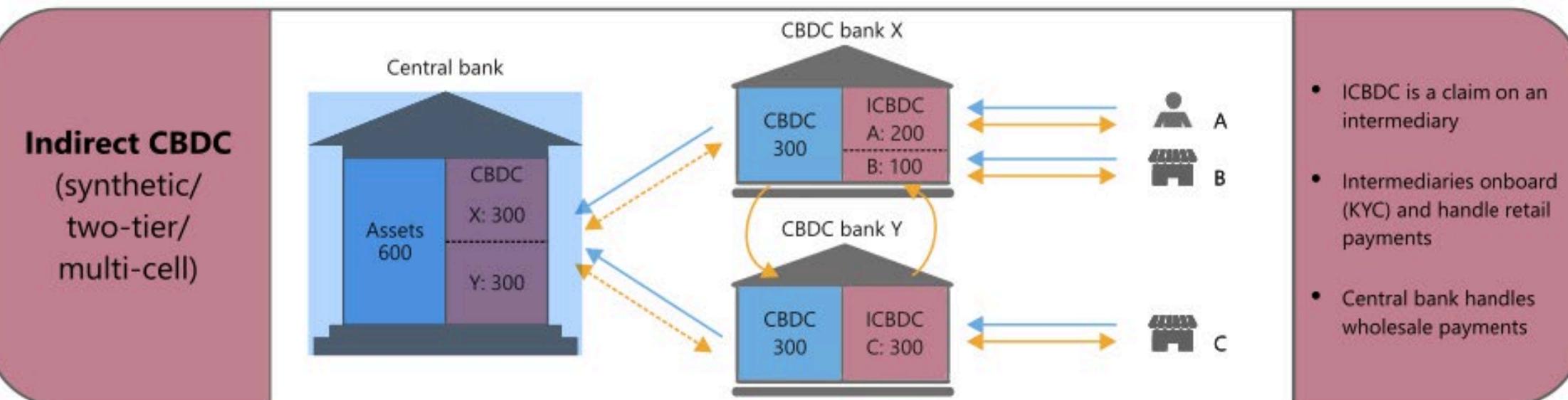
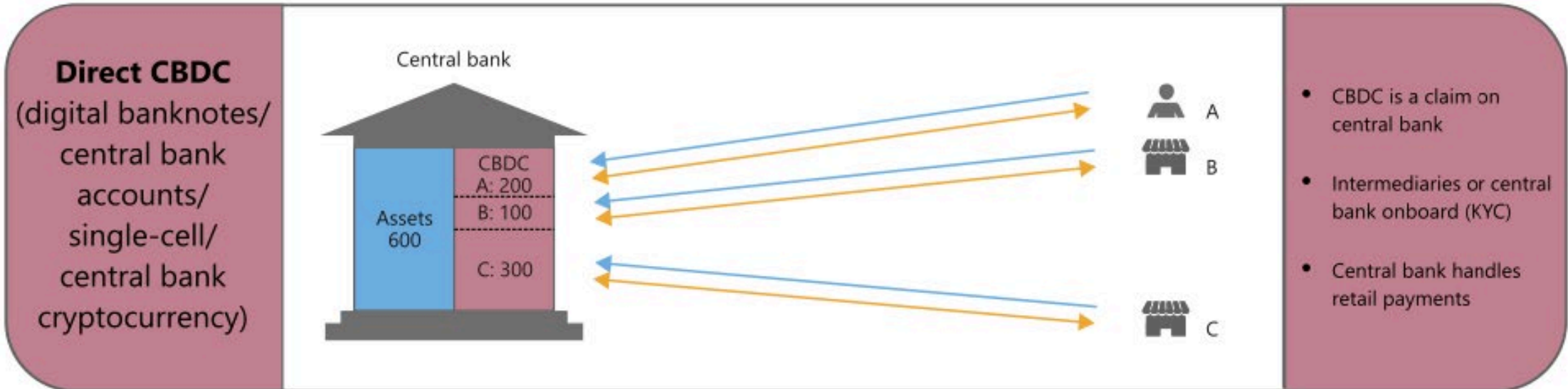


Source:
<https://think.ing.com/articles/new-money-v-central-bank-digital-currencies-may-come-soon-to-wholesale-market>.

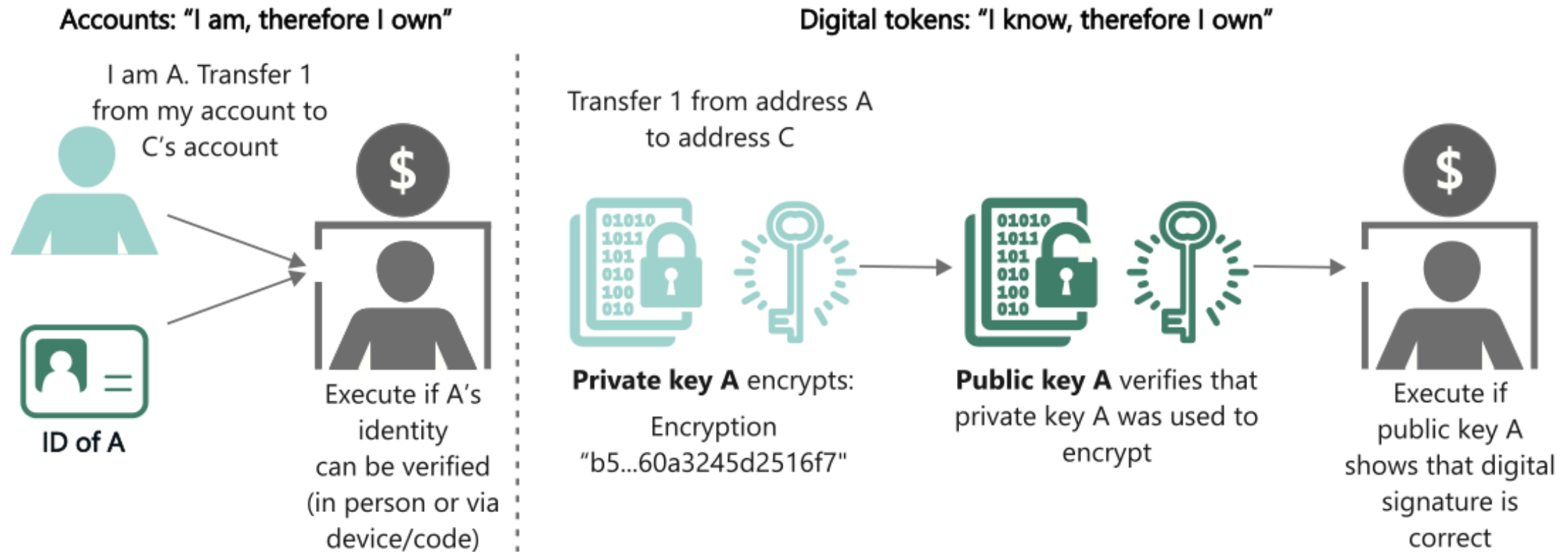
What is a „CBDC“ – Part 2: ... v retail



What is a „CBDC“ – Part 3: direct v indirect



What is a „CBDC“ – Part 4: token v account-based



In an account-based CBDC (left-hand side), ownership is tied to an identity, and transactions are authorised via identification. In a CBDC based on digital tokens (right-hand side), claims are honoured based solely on demonstrated knowledge, such as a digital signature.

Promises of CBDC – better than card payments, better than cash?

- Consumer:
 - Quick, easy and costless access across borders
 - Efficient payment systems, smart contracts
 - Trust in the state v trust in private actors
 - Merchant: Same, plus: no fees
- It has to be legal tender!



Challenges of CBDC

- Consumer: Privacy in lawful exchanges
- Regulator: Anti-Money-Laundering, Counter-Terrorist Financing, but also tax evasion and more: can be at odds with privacy
- Central Banks: International competition