

Central banking & digital currencies

Lecture I

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Agenda

1. Introduction to central banking & money issuance
2. Digital currencies: overview
3. Central Bank Digital Currencies
4. Tokenised deposits
5. Stablecoins



We are a global SecurityTech company and innovation leader in three segments



DIGITAL SECURITY

Trusted protection of confidential systems, networks, data and identities

FINANCIAL PLATFORMS

Holistic offering for contemporary payment and banking experiences

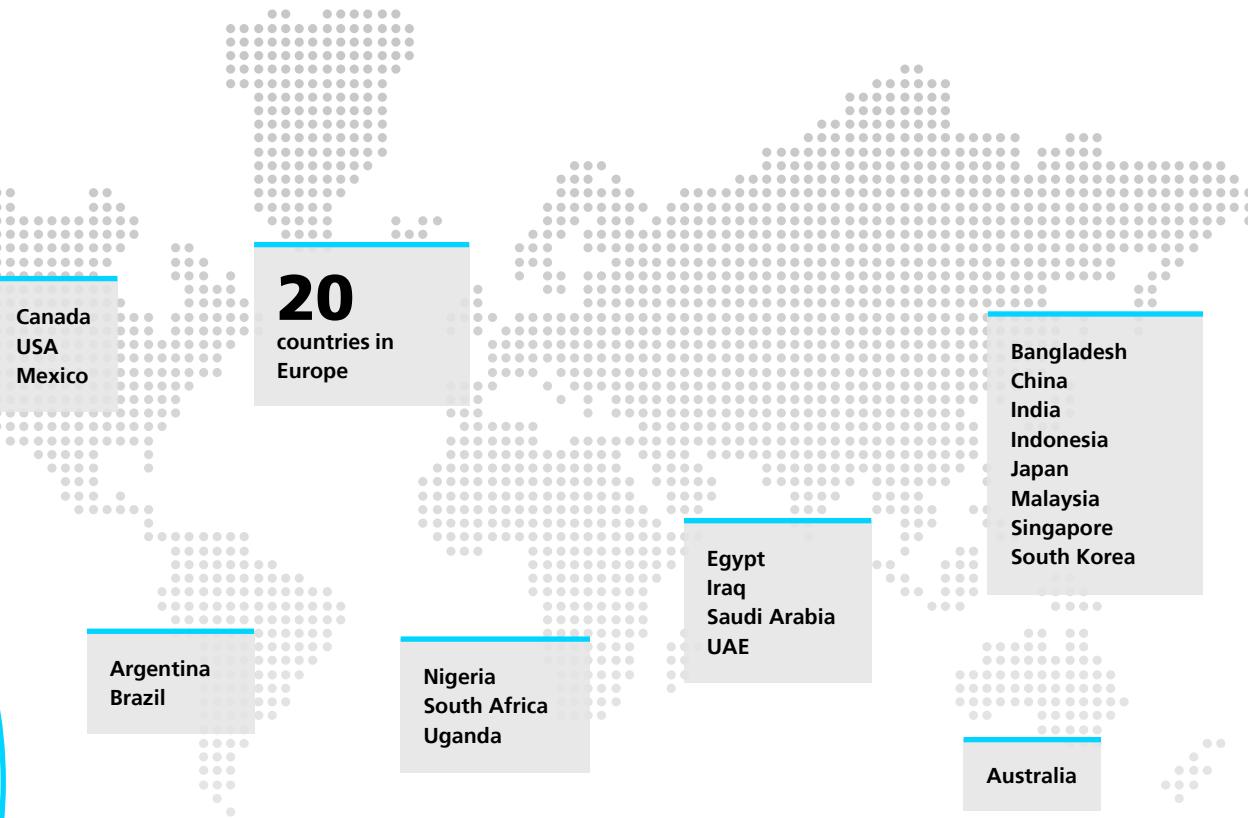
CURRENCY TECHNOLOGY

Secure public currency solutions in physical and digital ecosystems

G+D is present in
41 countries
worldwide



14,000 employees worldwide



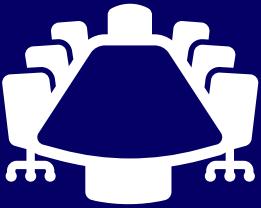


1. Introduction to central banking & money issuance





Who creates money?



Government
Fiscal Policy

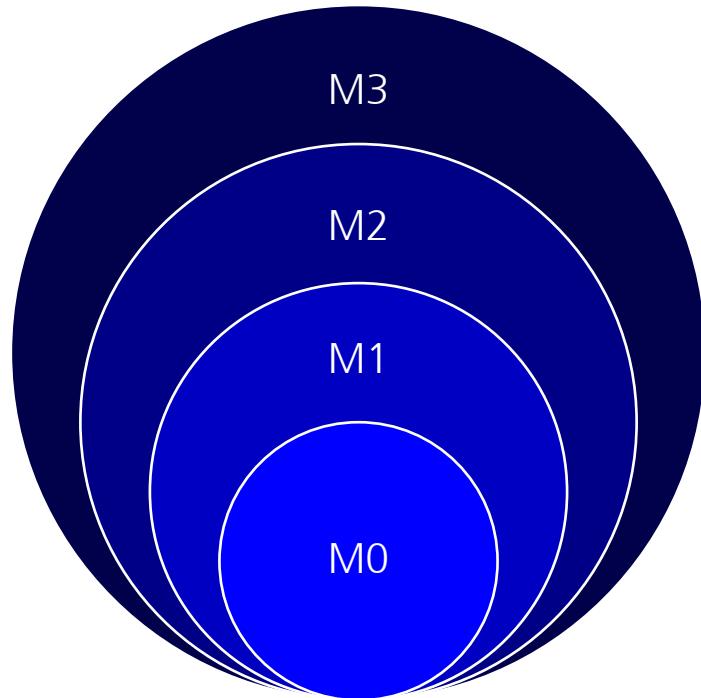


Central Bank
Monetary Policy



Commercial Banks
Intermediation

Money supply





Bank customer



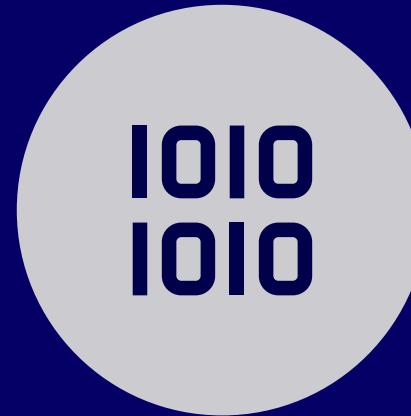
Assets		Liabilities	
Reserves	€ 400	Deposits	€ 100
Loans	€ 100	...	

Assets		Liabilities	
Deposits	€ 100	Loan	€ 20
Cash	€ 50		

Types of “classical” money



BASE MONEY



BROAD MONEY

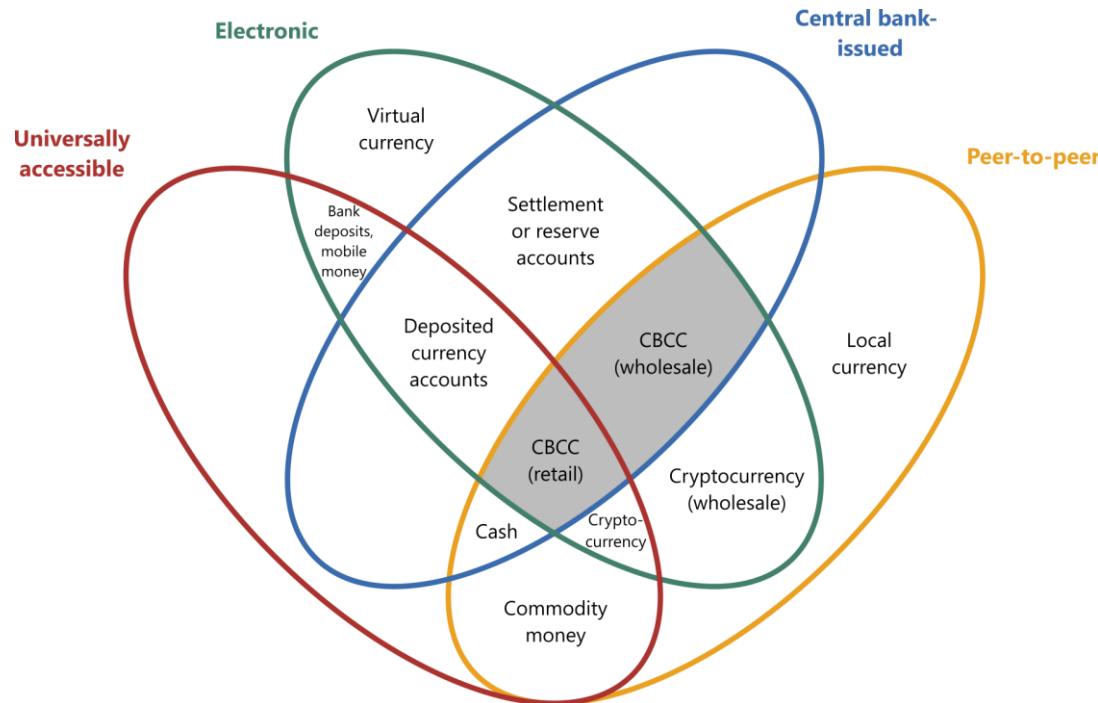


2. Digital currencies: overview

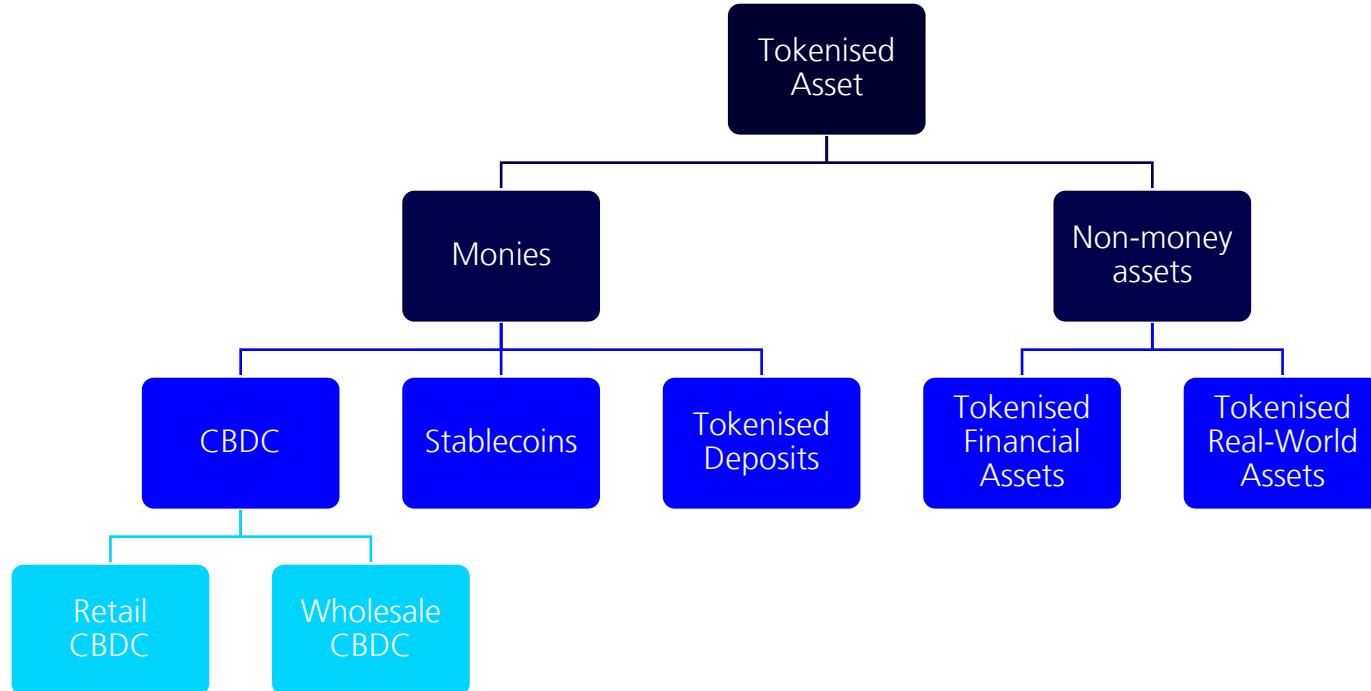


A word cloud visualization of a speech by Agustín Carstens, showing the frequency and context of various financial terms. The words are colored in shades of blue and black, with some smaller words appearing in white. The most prominent words are 'tokenised' (large, light blue), 'financial' (large, black), 'system' (large, light blue), 'deposits' (large, blue), 'money' (large, light blue), 'central' (large, light blue), 'bank' (large, blue), 'monetary' (large, dark blue), and 'wholesale' (large, dark blue). Other visible words include 'commercial', 'payment', 'technology', 'banks', 'tokenisation', 'project', 'form', 'systems', 'right', 'vision', 'unified', 'transactions', 'cbdc', 'digital', 'key', 'future', 'transaction', 'assets', 'ledger', and 'legal'. The size of each word indicates its relative importance or frequency in the speech.

The “money flower”



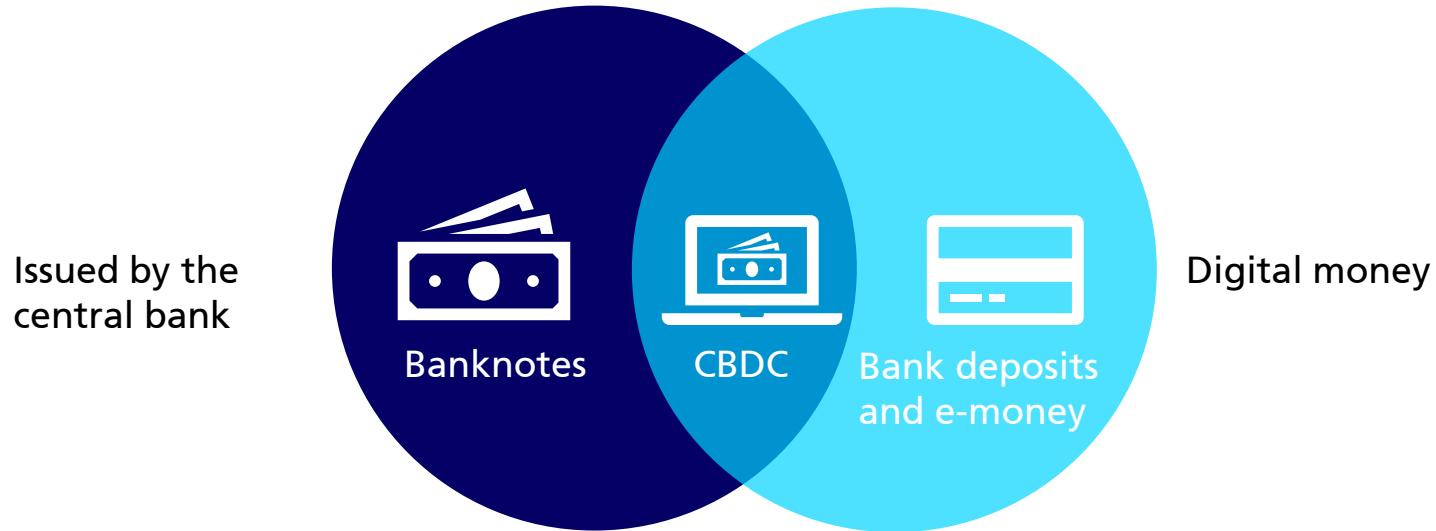
A simple classification





3. Central bank digital currency

Central Bank Digital Currency



The move towards CBDC is gaining momentum

91%

of central banks worldwide are actively engaged in CBDC work

67%

are experimenting and/or running pilots

89%

of adv. economies work on both retail & wholesale

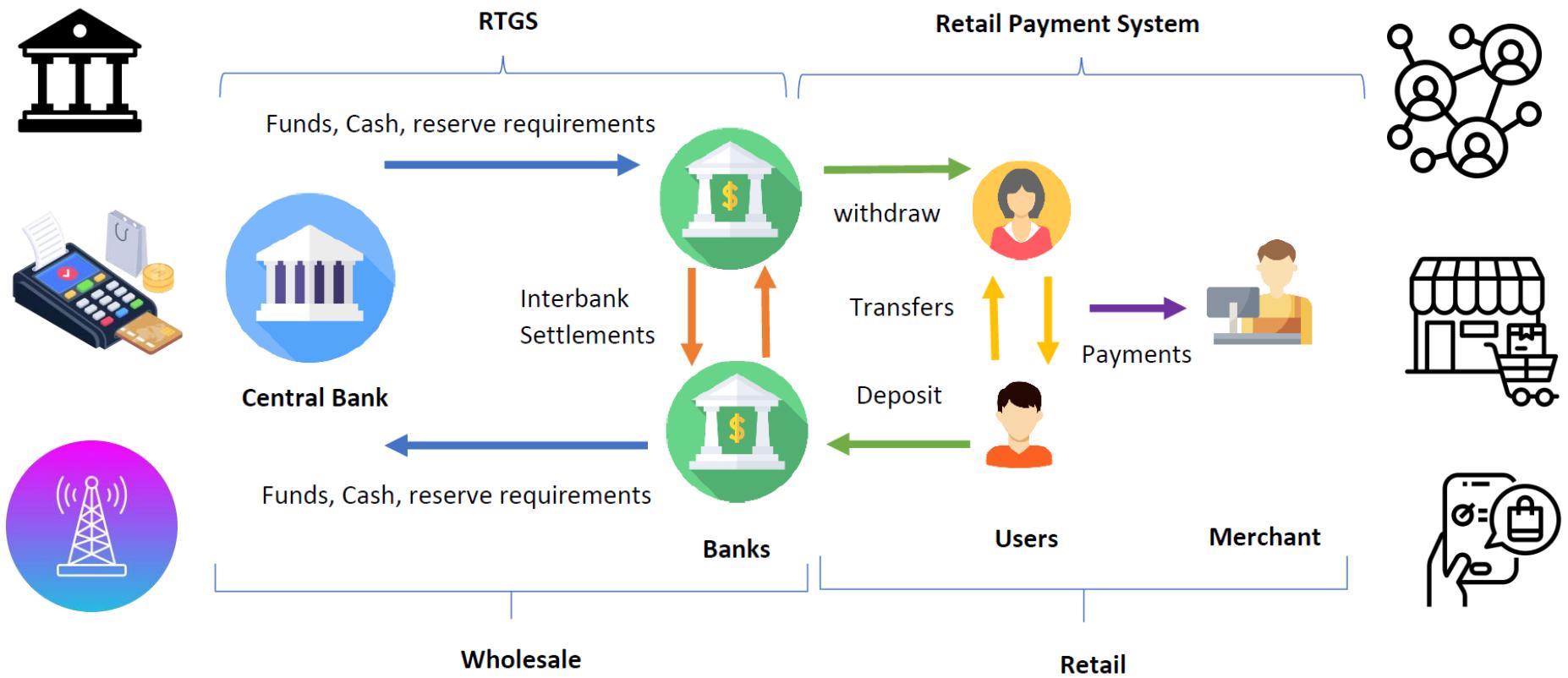
CBDCs progressed in tandem with regulations for stablecoins and other cryptoassets

Central Bank Digital Currency

Distributed Ledger Technology

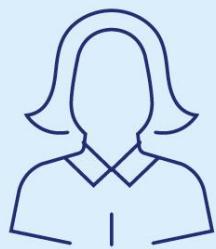
Will CBDC run on DLT?

Does it matter?



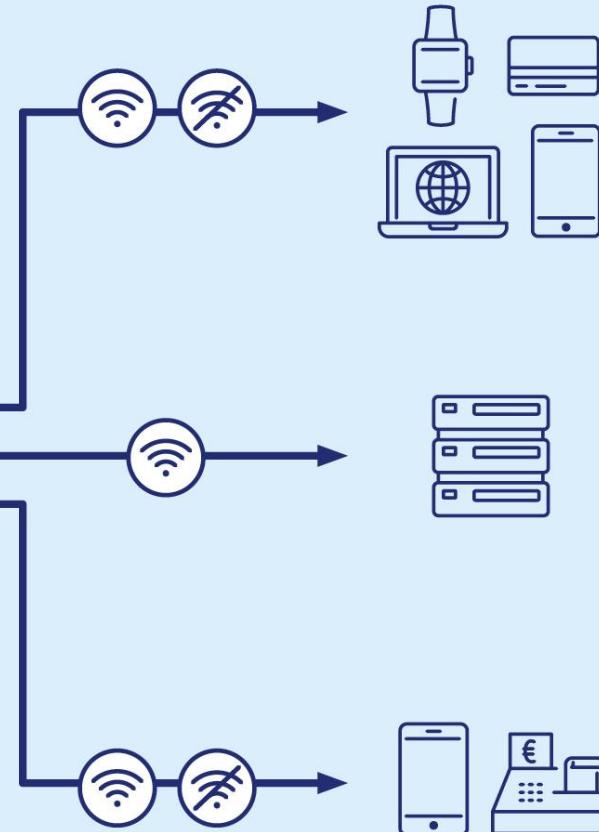


3.1. Retail CBDC



01110 0110
111101000110010
01110
01110110 0110111
1001110 0110111
1010001100

50€

A central graphic showing a stack of binary digits (0s and 1s) with a large '50€' symbol overlaid. The binary digits are arranged in several lines, with the '50€' symbol positioned in the center.

Person to Person

A blue line-art icon of a person wearing glasses, a shirt, and a tie, facing right.

Online Shop

A blue line-art icon of a globe with latitude and longitude lines.

Merchant

A blue line-art icon of a small storefront with a canopy and windows.



Seamless integration of on- and offline payments



Re-spendable offline transactions



Highest security and resilience



Balancing privacy versus transparency

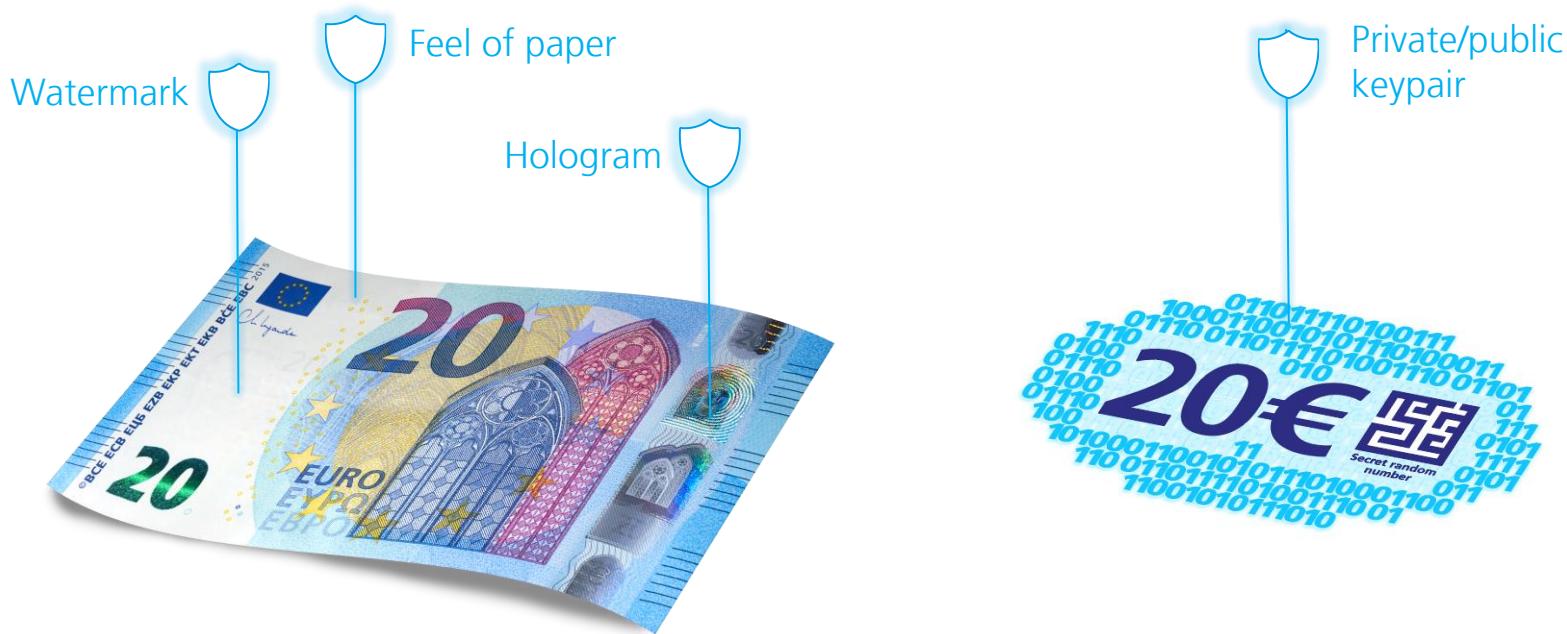


Foundation for innovative solutions

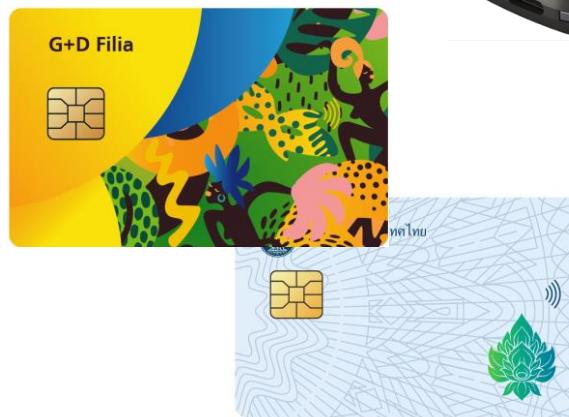


Production level performance

Modelling digital cash after physical cash



Wallet form factors





3.2. Wholesale CBDC

Potential use cases



Interbank settlements

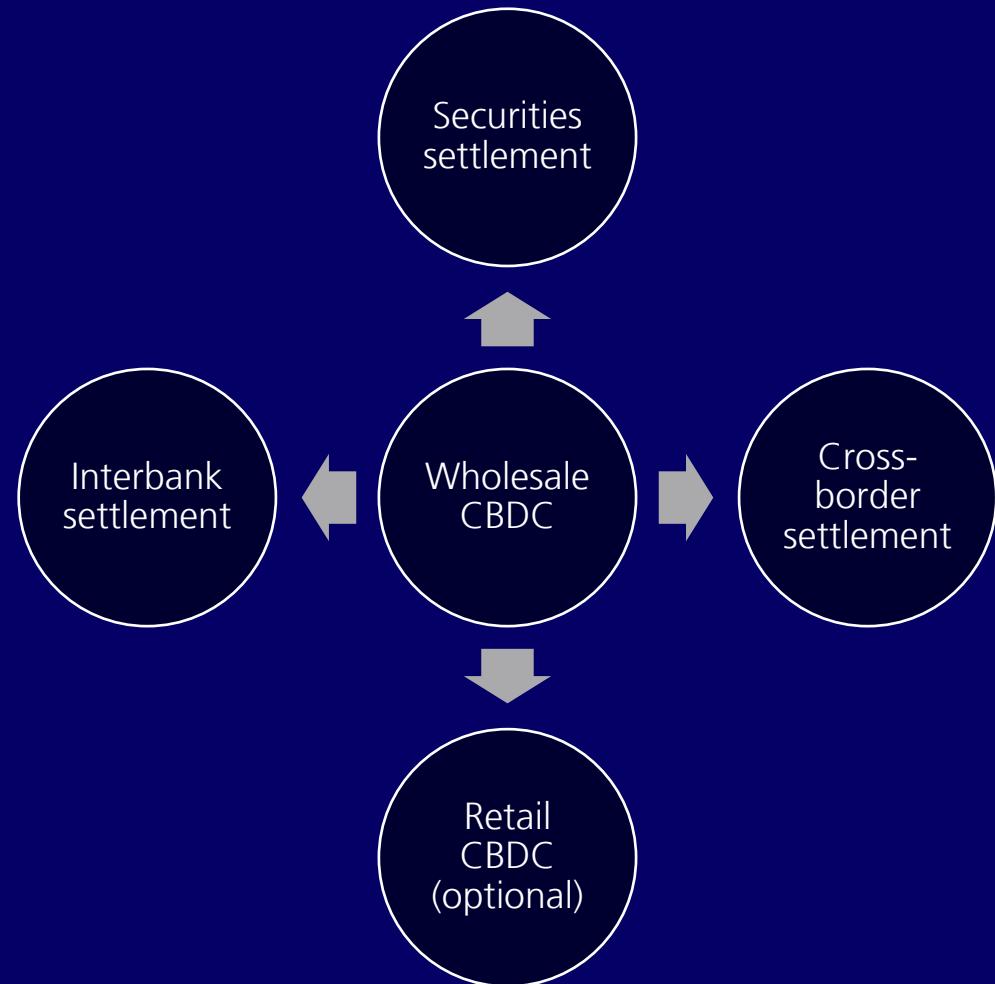


Securities settlements (DvP)



Cross-border settlements (PvP)

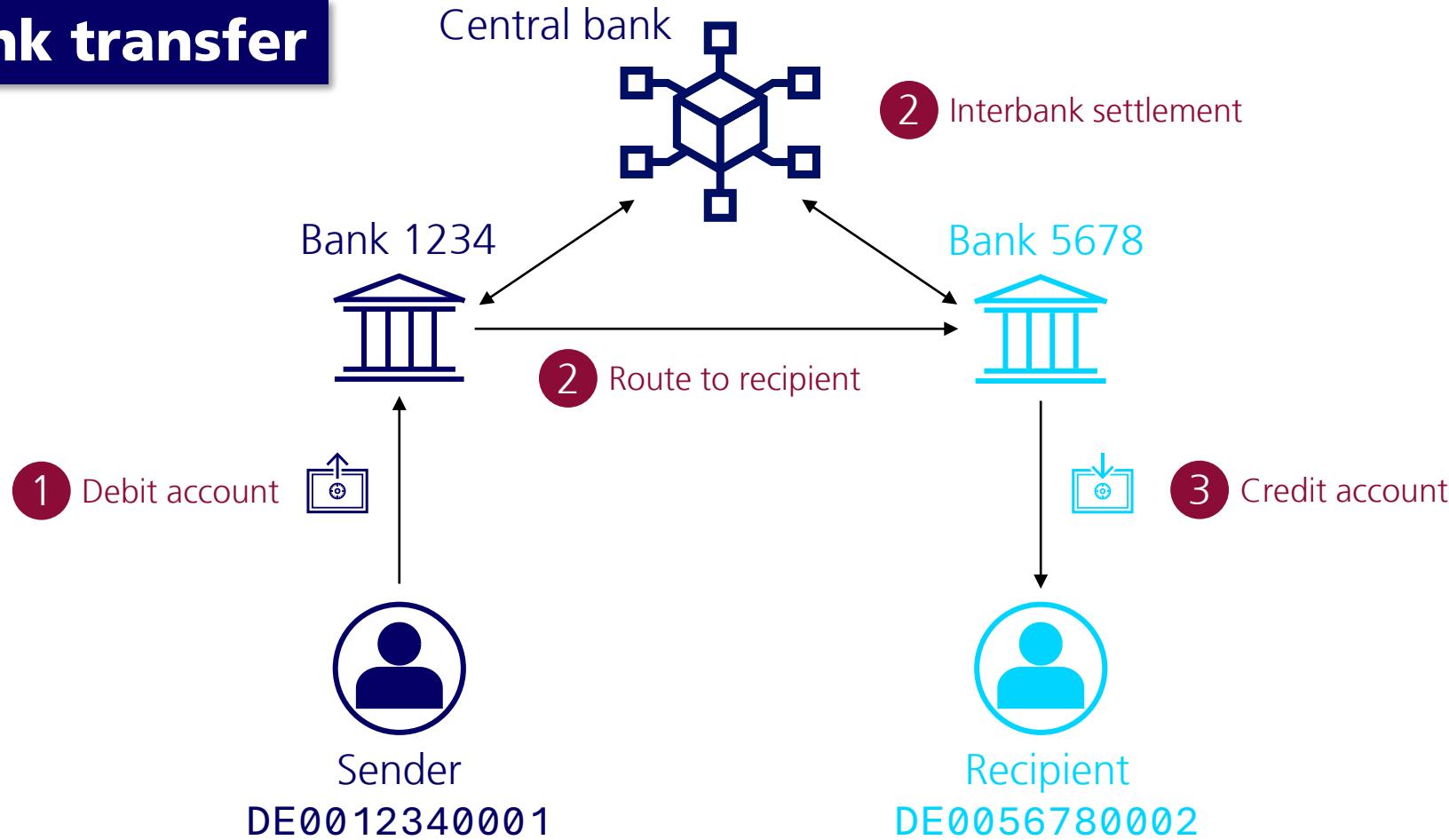
Wholesale CBDC as the center of a tokenized financial ecosystem





4. Tokenised deposits

Bank transfer





5. Stablecoins

Questions? Answers!

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