EUROPEAN CENTRAL BANK

EUROSYSTEM

Central banks on-chain

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Member of the Executive Board of the ECB

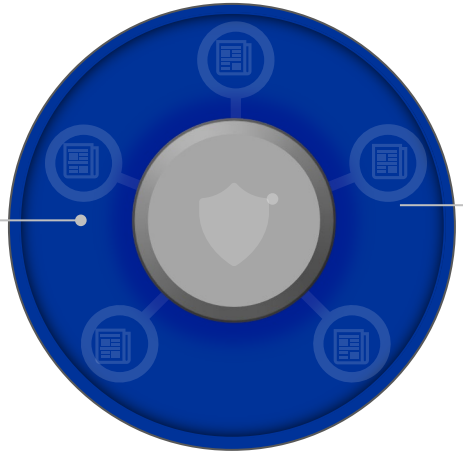
Jackson Hole Economic Policy Symposium
28 August 2026

Tokenisation allows for faster, safer and smarter settlement

Tokenisation

Atomicity

Legs of a transaction
settle together
or not at all

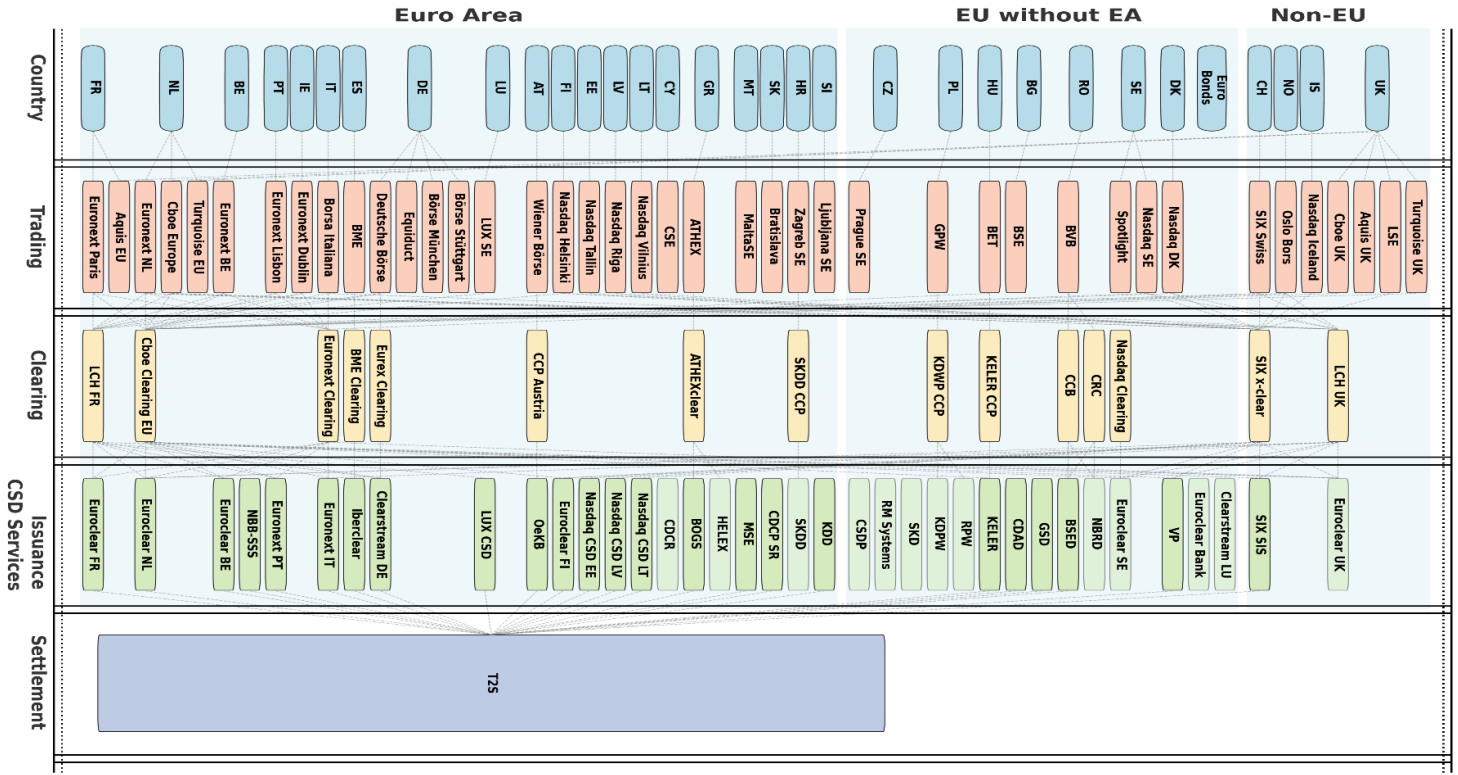


Programmability

Settlement can be made conditional
on set of rules
executed automatically

Tokenisation could foster integration of financial infrastructures in Europe

Overview of the European Securities Infrastructure



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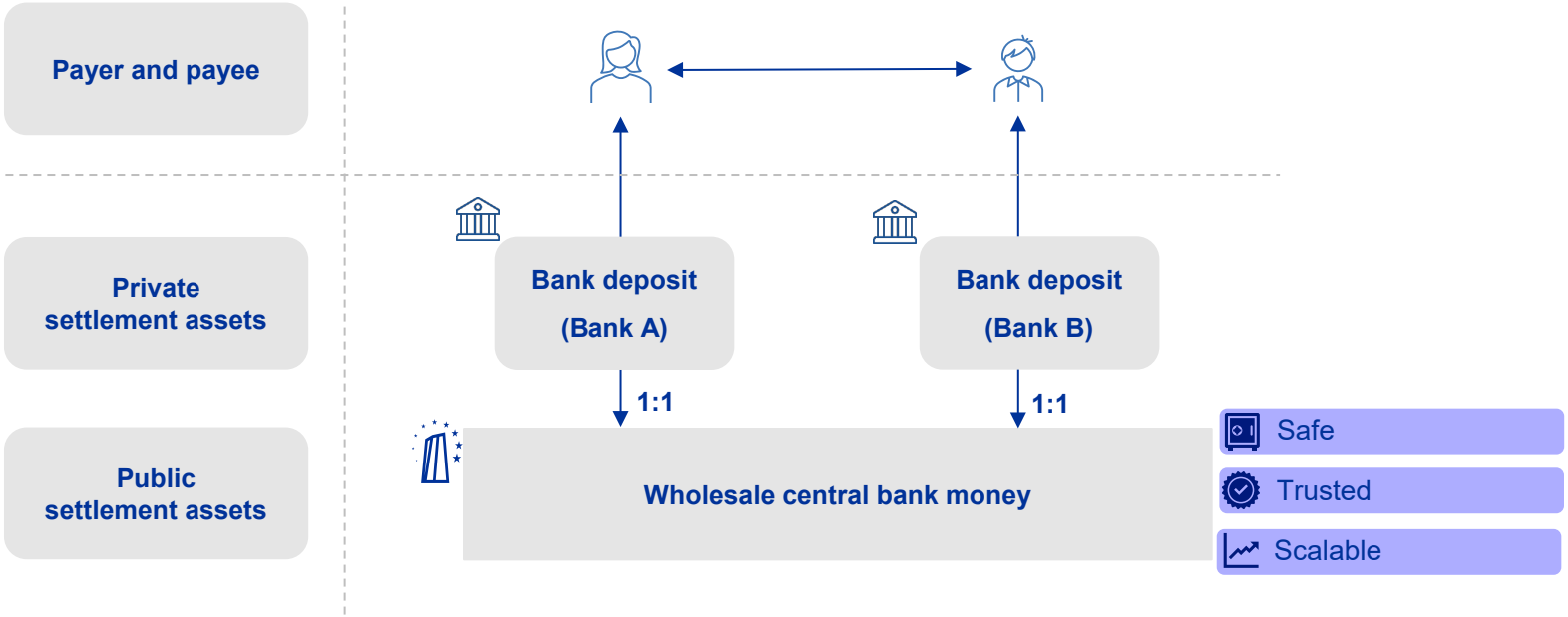
Modern fiat monetary systems are built on a two-tier structure



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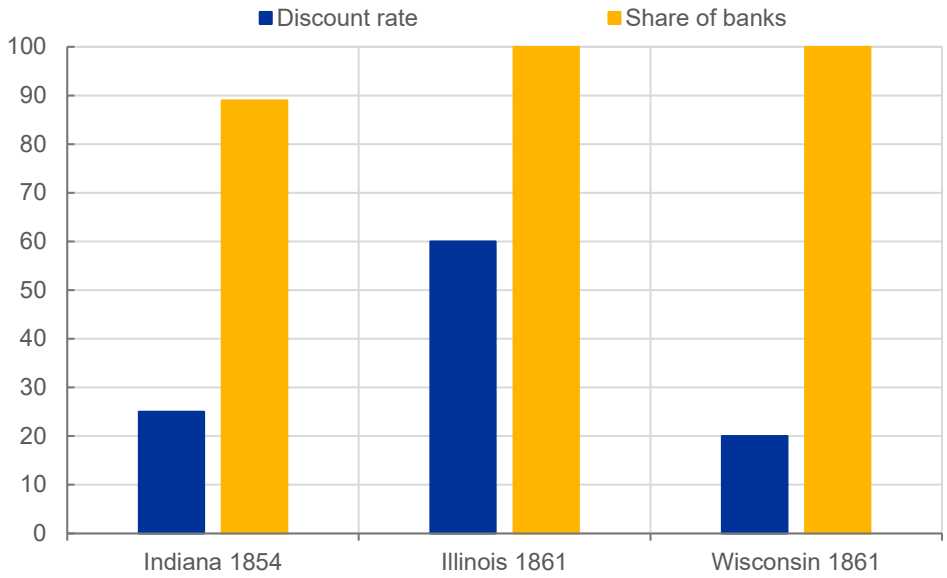
Erosion of trust put singleness of money into question during free banking era

Discount rates on notes

(%)



Sources: Dwyer, G. P. (1996), "Wildcat Banking, Banking Panics, and Free Banking in the United States", Federal Reserve Bank of Atlanta, Economic Review, December.
Notes: Share of banks refers to percent of banks with this discount rate and higher.

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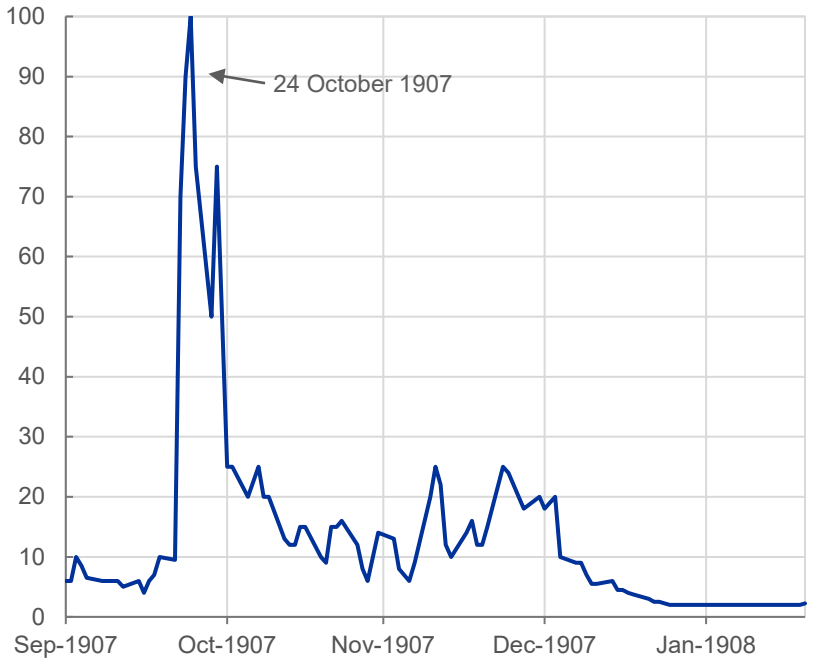
Modern central banks can expand liquidity elastically to counter financial stress

Panic of 1907: call money interest rate

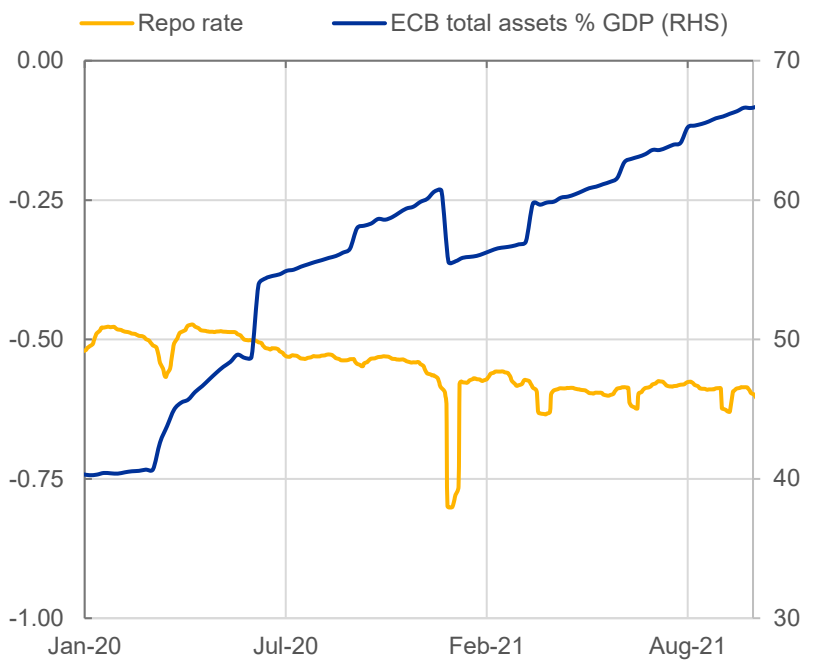
(% per annum)



Sources: Federal Reserve, New York Times, Commercial and Financial Chronicle (various issues).
Notes: The call money interest rate is the rate of interest on stock collateral offered at the New York Stock Exchange.

COVID-19 pandemic: repo rate and ECB total assets

(LHS: % per annum; RHS: % of GDP)



Sources: Bloomberg, ECB data portal, ECB calculations.
Notes: ECB total assets are calculated as a percentage of euro area GDP and the repo rate is shown as a 7-day moving average.

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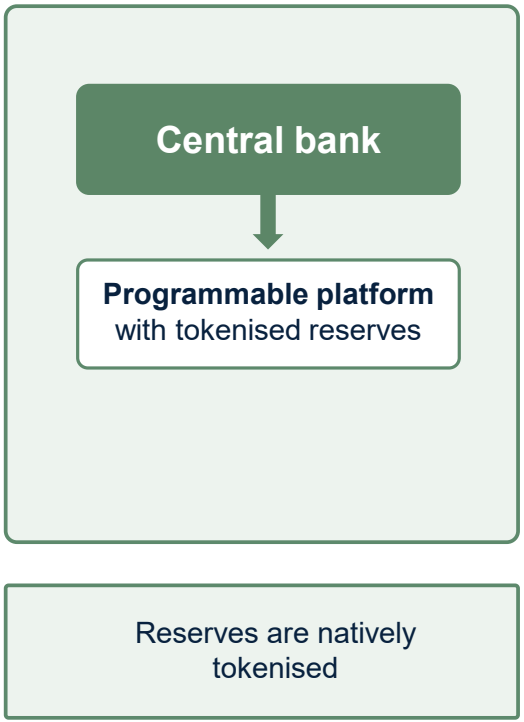
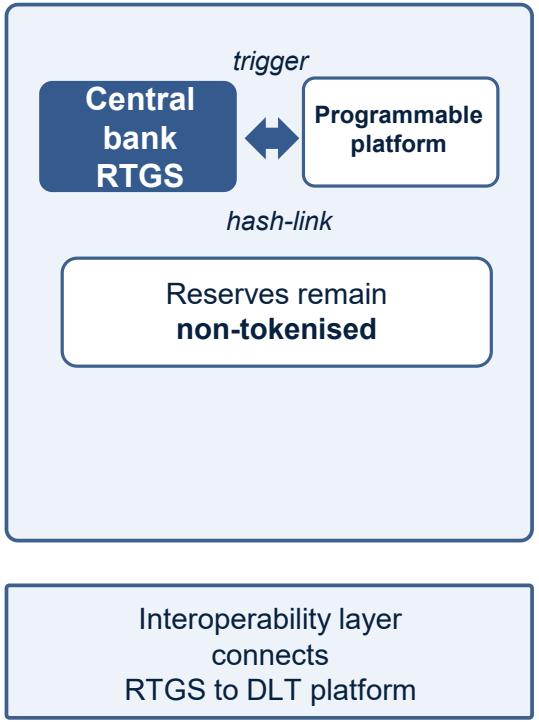
Central banks could modernise monetary policy implementation by going on-chain

1. Direct issuance



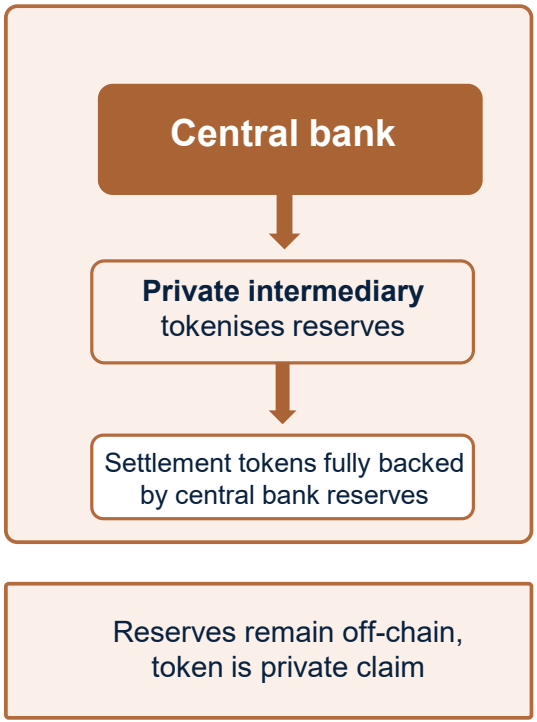
Reserves are natively tokenised

2. Bridging / synchronisation



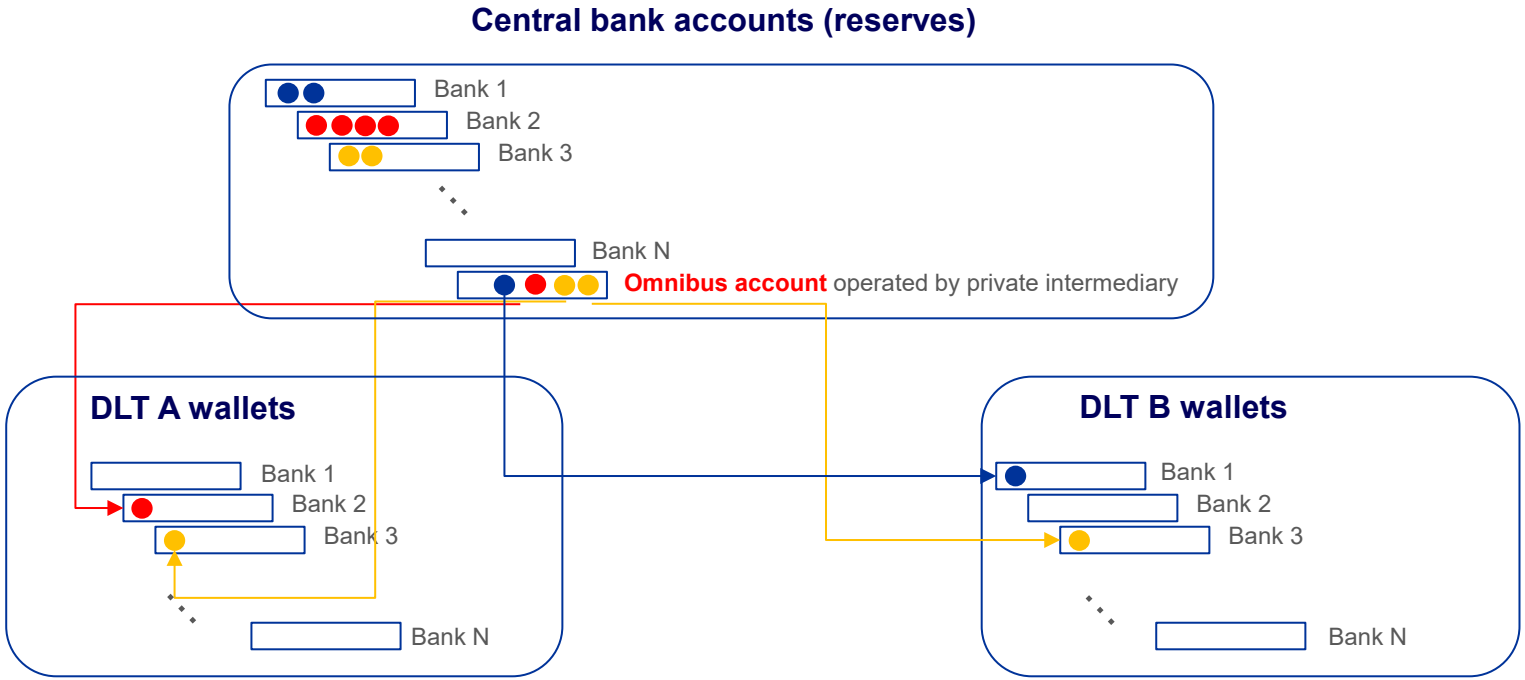
Interoperability layer connects RTGS to DLT platform

3. Private intermediary



Reserves remain off-chain, token is private claim

Omnibus solution: Private intermediaries provide tokens fully backed by CB reserves



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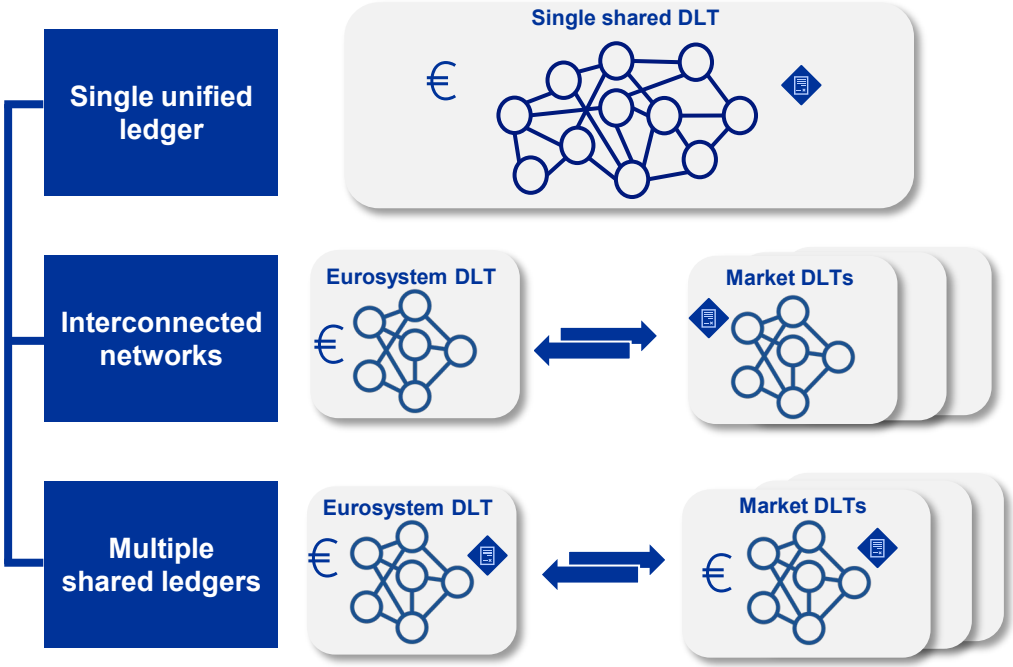
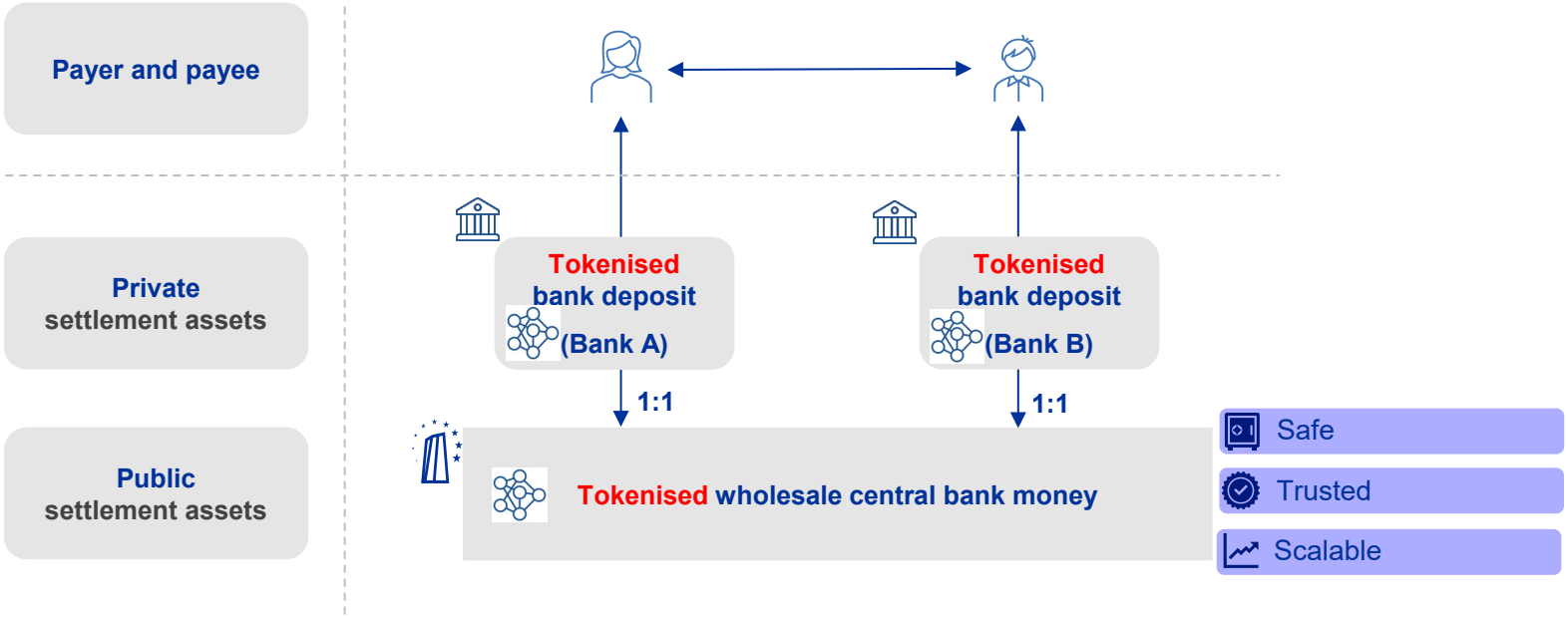
Eurosystem's project Appia explores a range of tokenised architectures



€ Wholesale central bank money

Financial assets (securities, deposits, stablecoins etc.)

Tokenised system can replicate two-tier structure if CB money is provided on-chain



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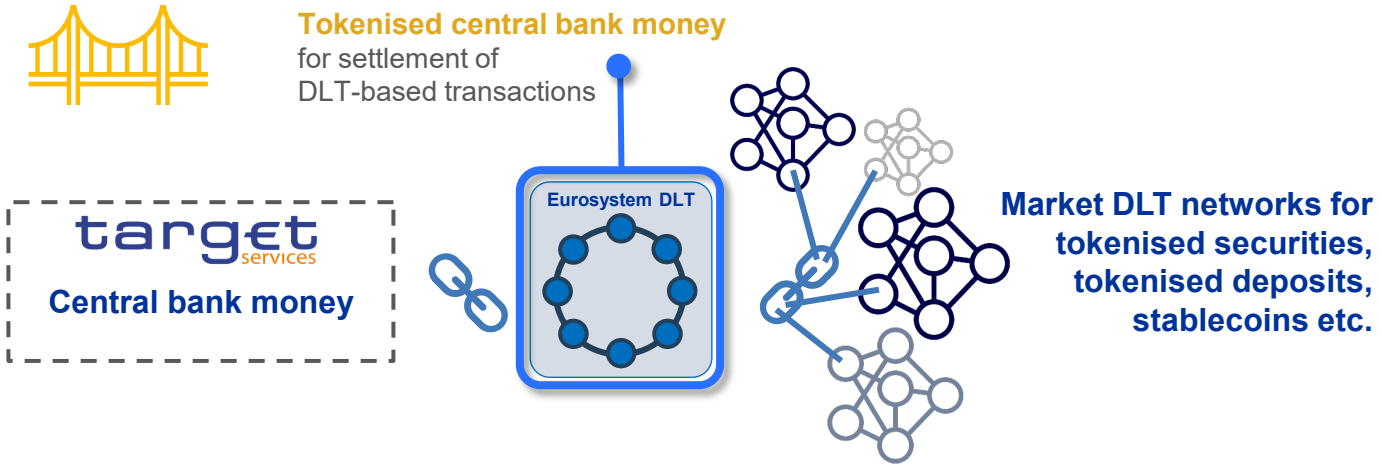
Pontes combines bridge solution with Eurosystem DLT to offer tokenised CB money

Launch: Q3 2026, offering dual settlement model via TARGET2 or DLT



Planned enhancements: 24/7 availability and decentralised programmability

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Thank you very much for your attention!

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