

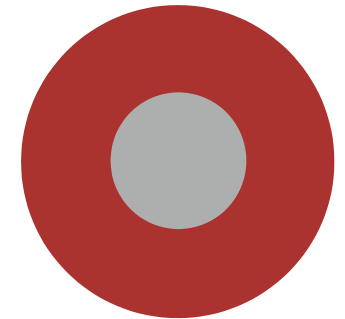
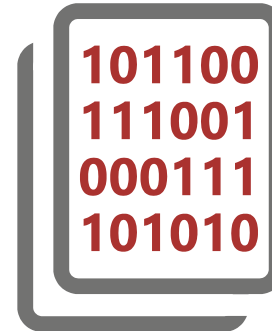
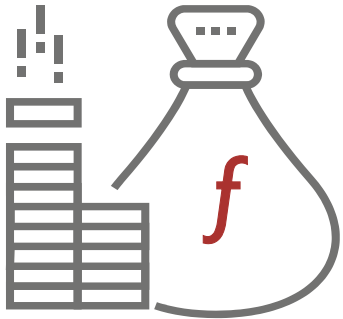


Tokenisation and the financial system

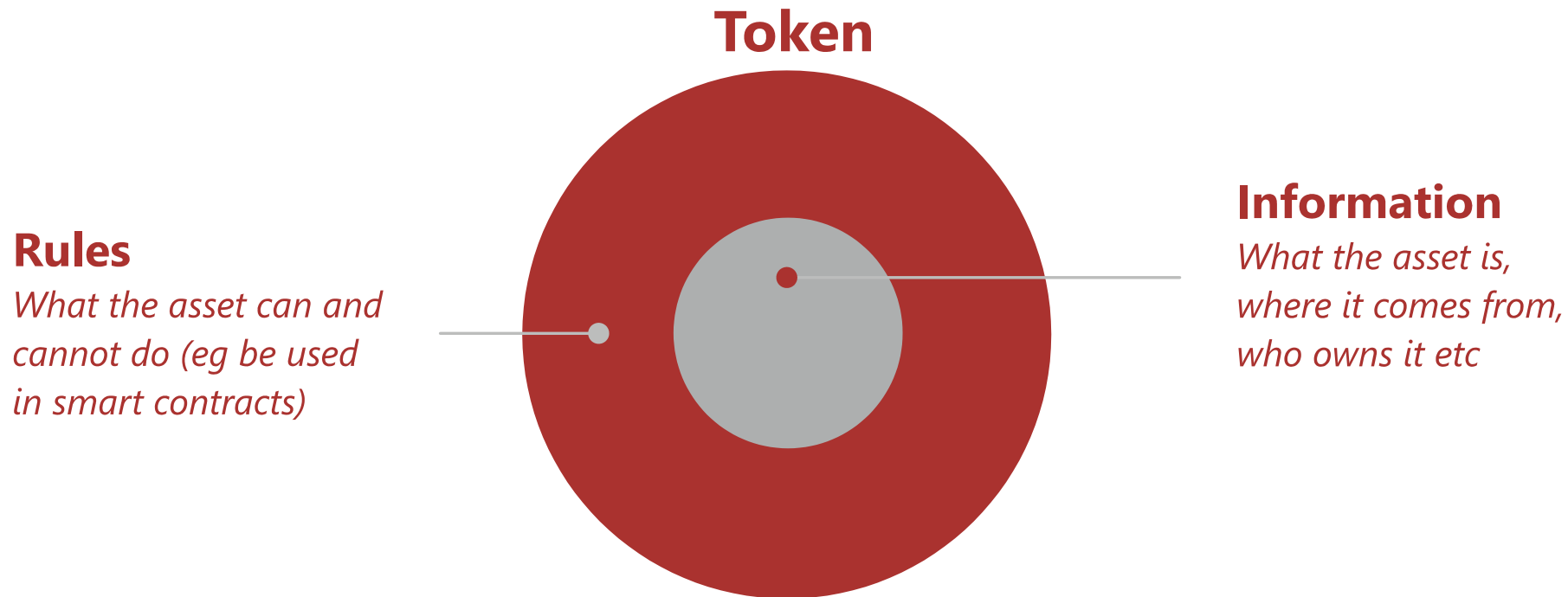
Hyun Song Shin*, Economic Adviser and Head of the Monetary and Economic Department
Chapultepec conference, Mexico City, 6 February 2025

*The views expressed here are mine and not necessarily those of the Bank for International Settlements

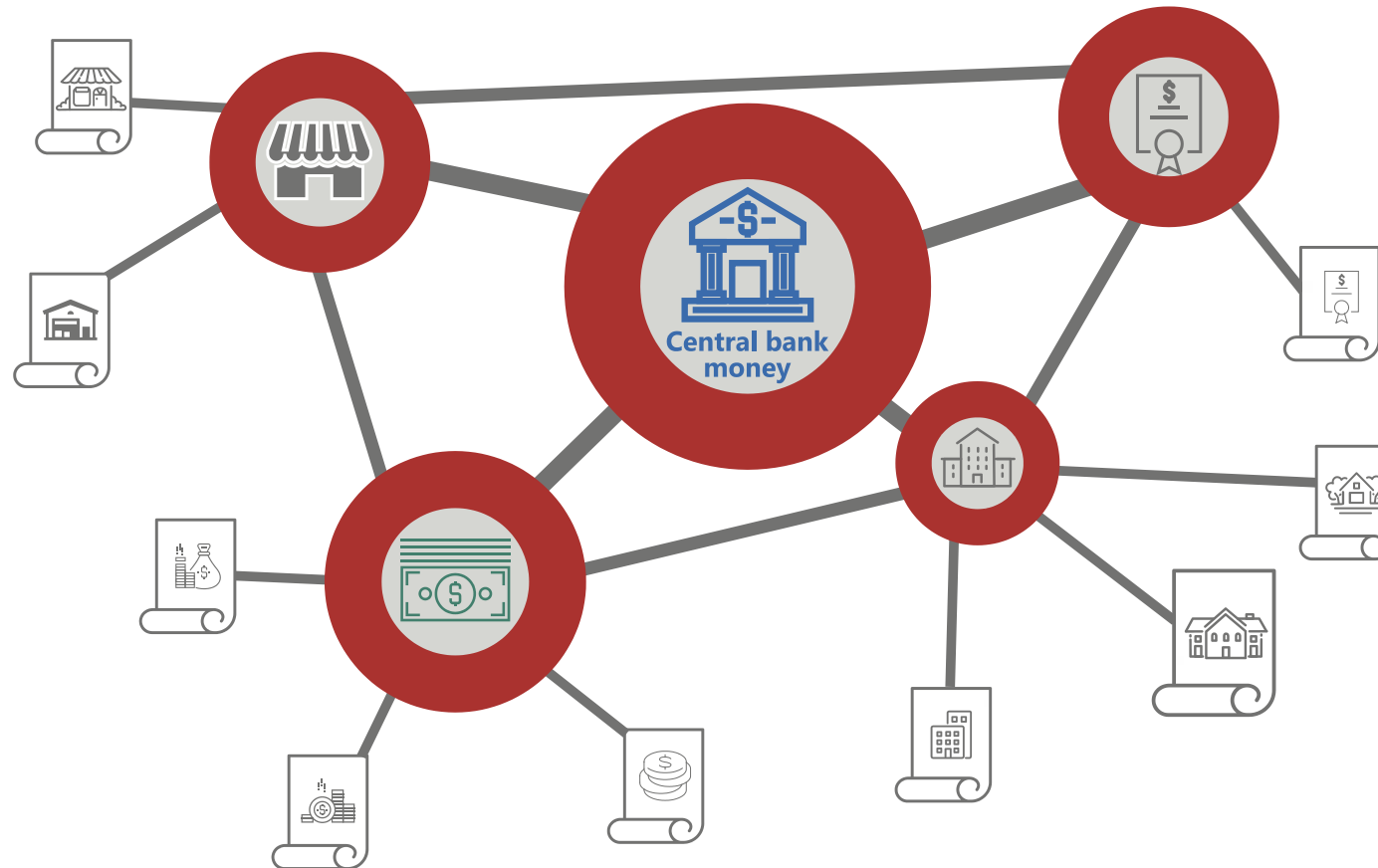
Innovations in the monetary system have evolved in step with developments in economic activity; after digitalisation, tokenisation could be the next step



Tokenisation integrates records in a traditional database with the rules and logic governing transfers; it enables the *contingent performance of actions* and programming capabilities of digital platforms



Use case 1: capital markets development through a unified ledger

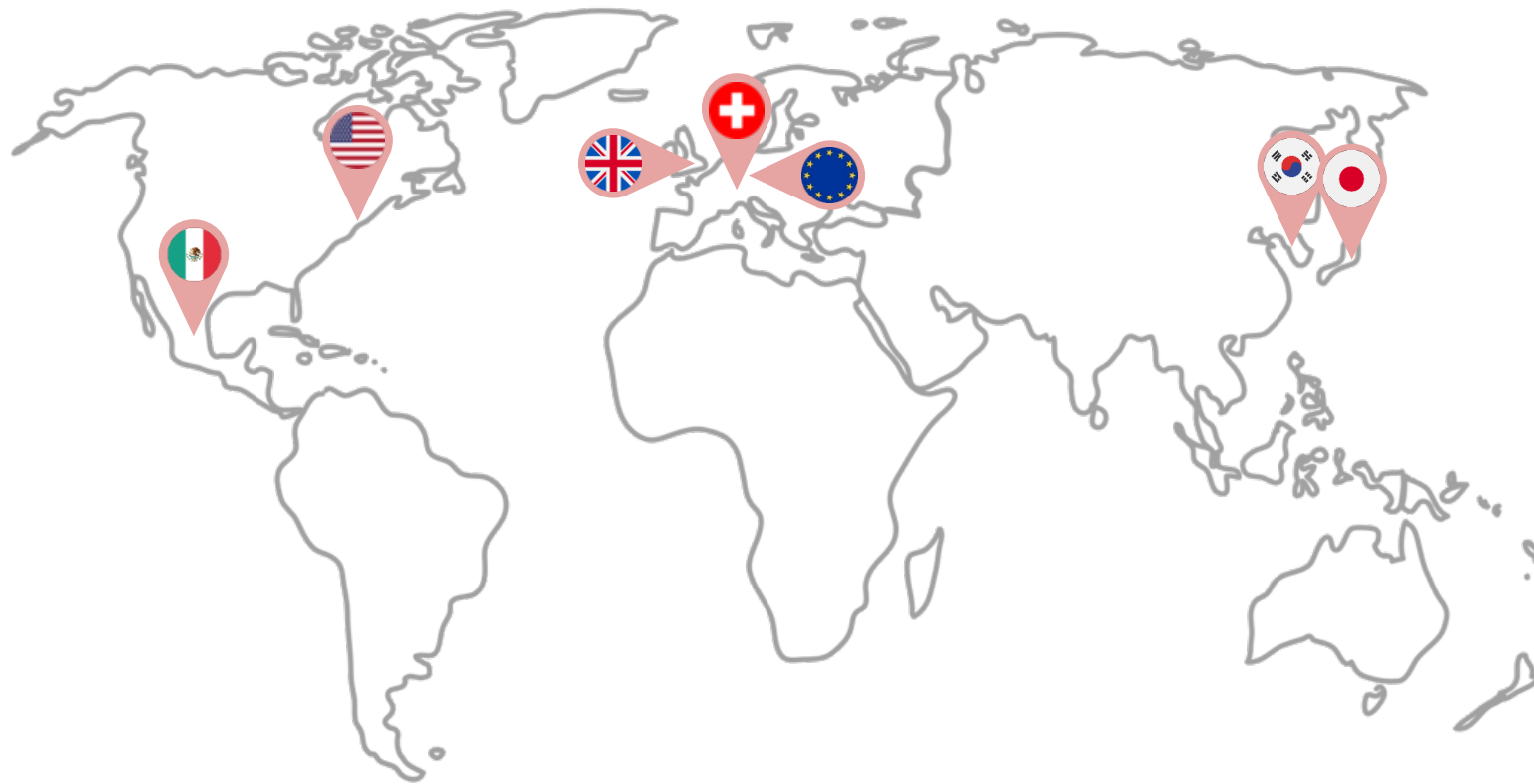


Providing wholesale central bank money in tokenised form *in the same venue* as other claims ensures that digital platforms build on public money and reaps attendant benefits such as interoperability (BIS Annual Economic Report, 2023)

A historical painting of a busy city square, likely from the 17th or 18th century. The background features a large, grand classical building with a prominent pediment and many windows. The foreground is filled with a dense crowd of people, many on horseback, and several horse-drawn carriages. The scene is set in a wide, open square with a paved ground.

Use case 2: next generation correspondent banking

BIS's Agora project has 7 participating central banks



 **BIS** public sector convener

Central banks



BANK OF JAPAN

Bank of Japan



Bank of Korea



Banque de France (*)



Swiss National Bank



Bank of England

Bank of England



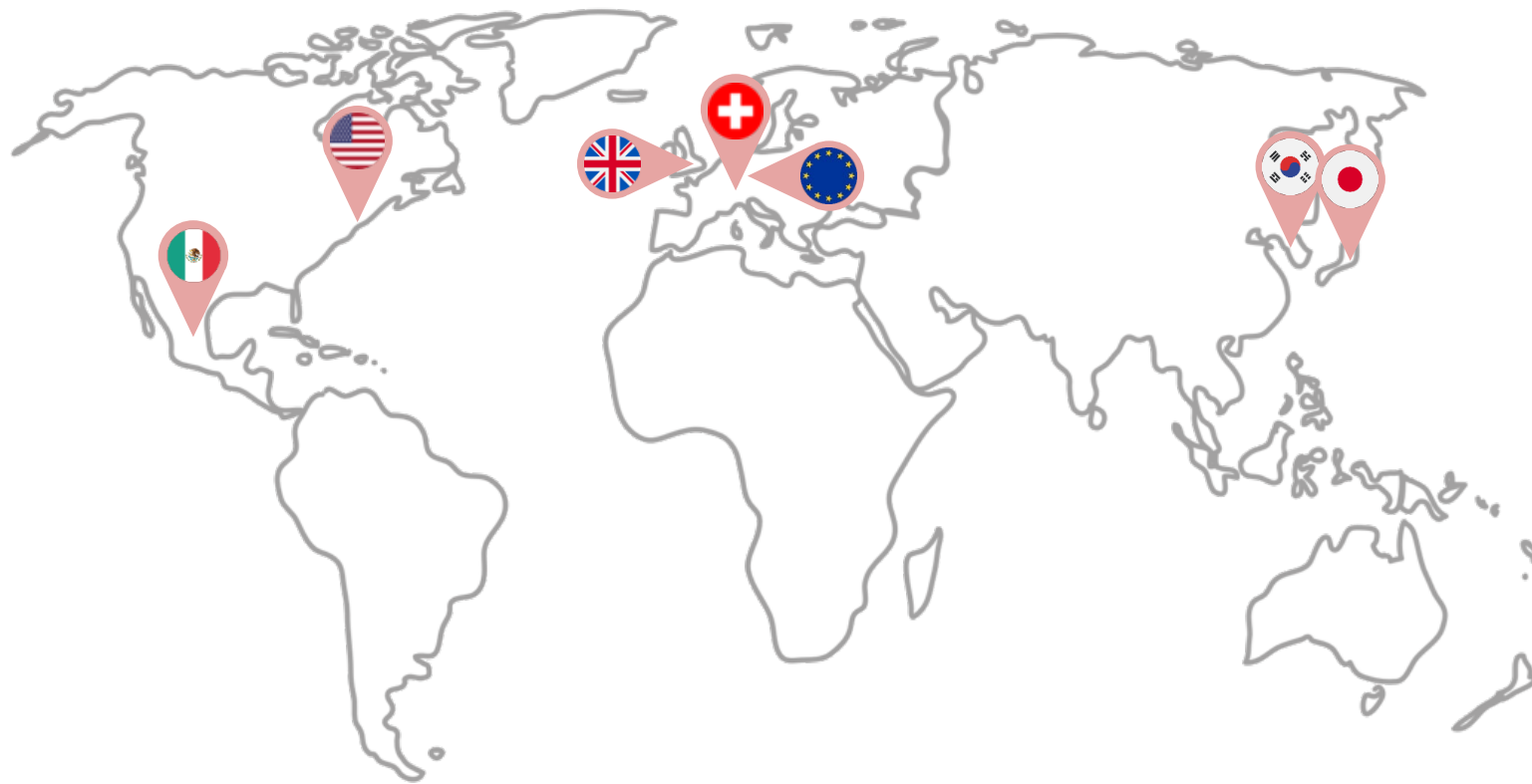
Federal Reserve Bank NY



Bank of Mexico

* representing the Eurosystem

Agora has more than 40 participating private financial institutions

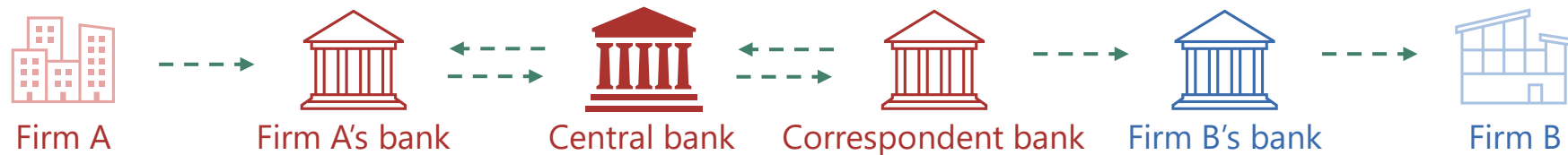


private sector convener

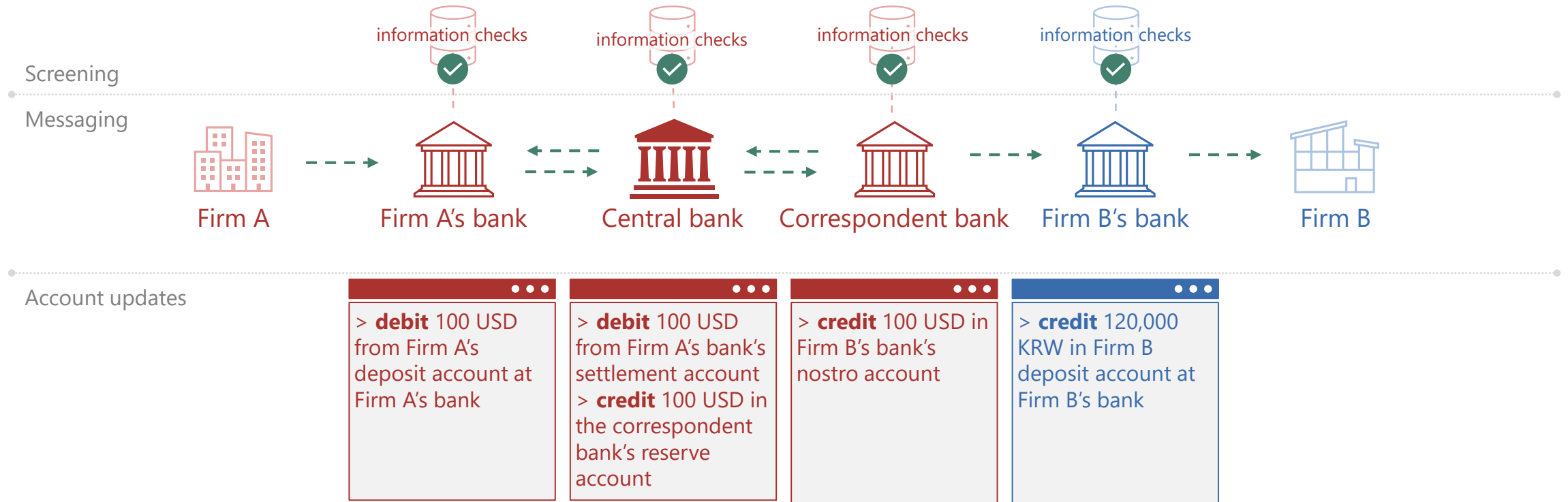
Private institutions

Amina Bank	HSBC	Banking Corporation
Banco Santander	IBK	Swift
Banorte	Intercam Banco	Sygnum Bank
Banque Cantonale Vaudoise	JPMorgan Chase	TD Bank N.A.
Basler Kantonalbank	KB Kookmin Bank	UBS
BBVA	Lloyds Banking Group	Visa
BNP Paribas	Mastercard	Woori Bank
BNY	Mizuho Bank	
CaixaBank	Monex	
Citi	MUFG Bank Ltd.	
Crédit Agricole	NatWest Group	
CIB	NongHyup Bank	
Deutsche Bank AG	PostFinance Ltd.	
Eurex Clearing AG	SBI Shinsei Bank Ltd.	
Euroclear	Shinhan Bank	
S.A./N.V.	SIX Digital Exchange	
FNBO	Standard Chartered	
Groupe BPCE	Sumitomo Mitsui	
Hana Bank		

Backbone of the current global monetary system is correspondent banking, which relies on a sequence of bank balance sheet updates

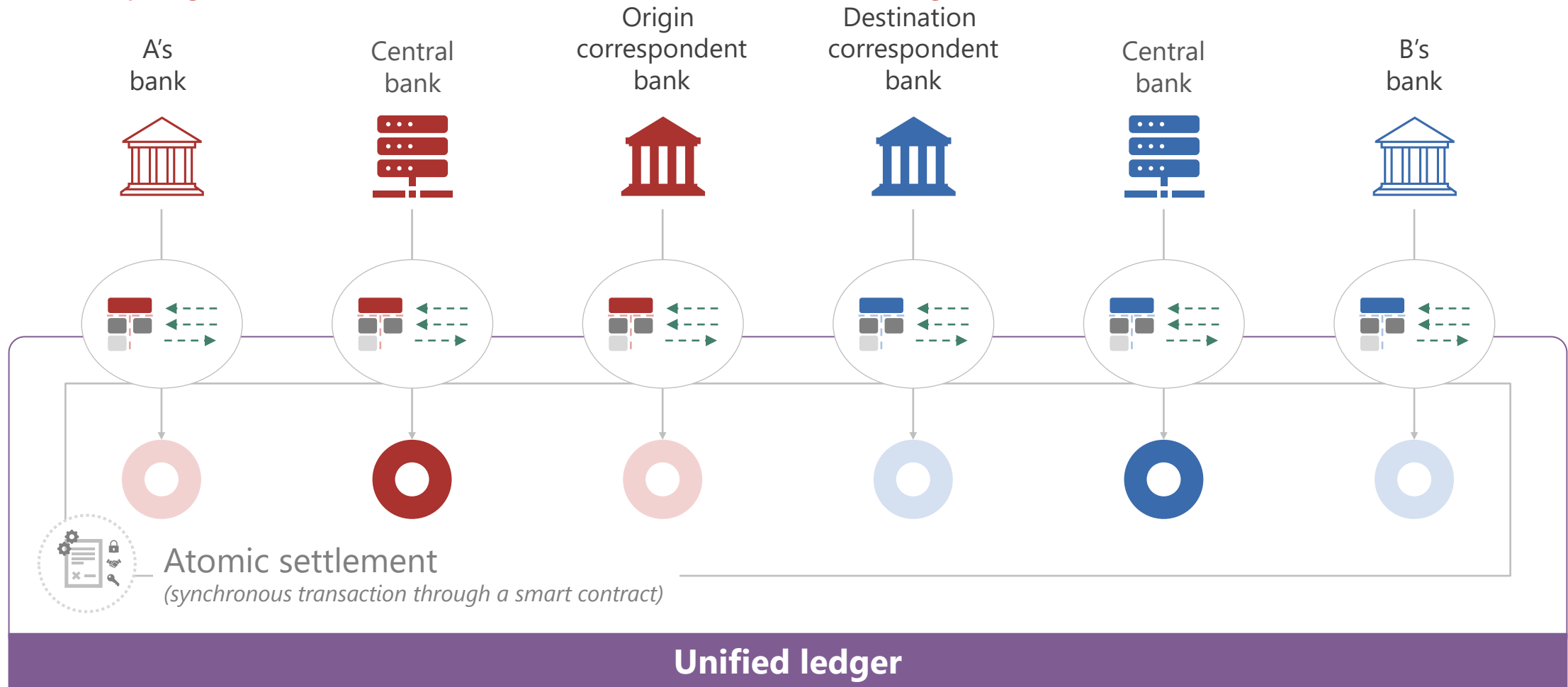


Compliance checks (sanctions lists, AML checks) are conducted sequentially entailing duplication and delay



---> payment messages in a successful transaction

Tokenisation enables a *single update* to all balance sheets; KYC/AML compliance checks can harness programmable features such as machine learning and AI



Some considerations in practical tokenisation for the regulated financial system

- Tokenisation applications that potentially deliver largest economic benefits are the ones that are most difficult to pull off
 - Supply chains
 - Real estate applications
- Applications that harness coordinated updating of account ledgers are most promising
 - Centralised securities depositories (CSDs) are also account ledgers; unified ledger enables the **trilogy** of tokenised central bank money, tokenised deposits and tokenised government bonds
 - Next generation correspondent banking