



The value added of Central Bank Digital Currencies

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Paper available at [here](#)

CBCDs are reality in 130 countries

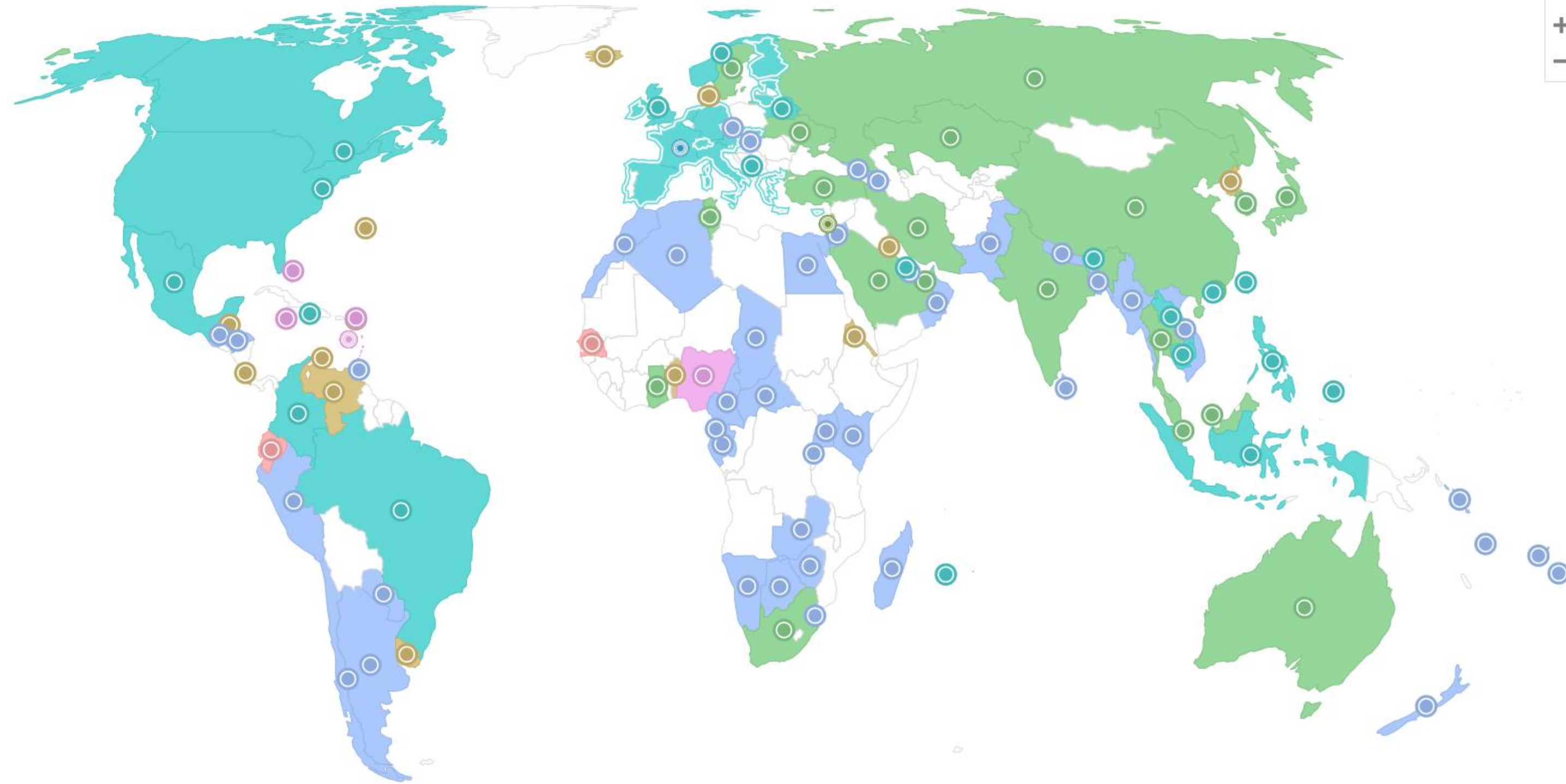


130 Countries / Currency Unions Tracked

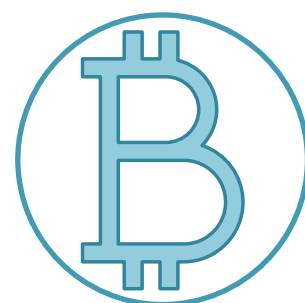
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Status

- 11 Launched
- 21 Pilot
- 32 Development
- 45 Research
- 16 Inactive
- 2 Canceled



Why did Central banks become interested in CBDCs ?



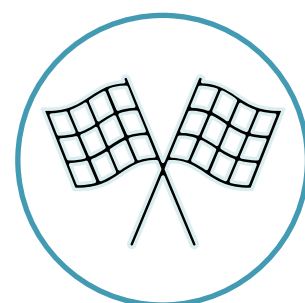
The emergence of cryptocurrencies



Increasing trend in digital payments



Improve the reach and efficiency of payment systems



Strategic autonomy

Two types of usage



For retail use

- For payments and small transactions
- End users: consumers and merchants

For wholesale use

- For settling transactions in wholesale financial market
- End users: financial institutions

A case for retail CBDC ?



Cryptocurrencies are not taking over payments

Value of all crypto assets < 1%
of total global financial assets

Payments using crypto:
Only 0.19% of global e-
commerce value

Mostly used for investment
purposes (77%) rather than
payments (18%)

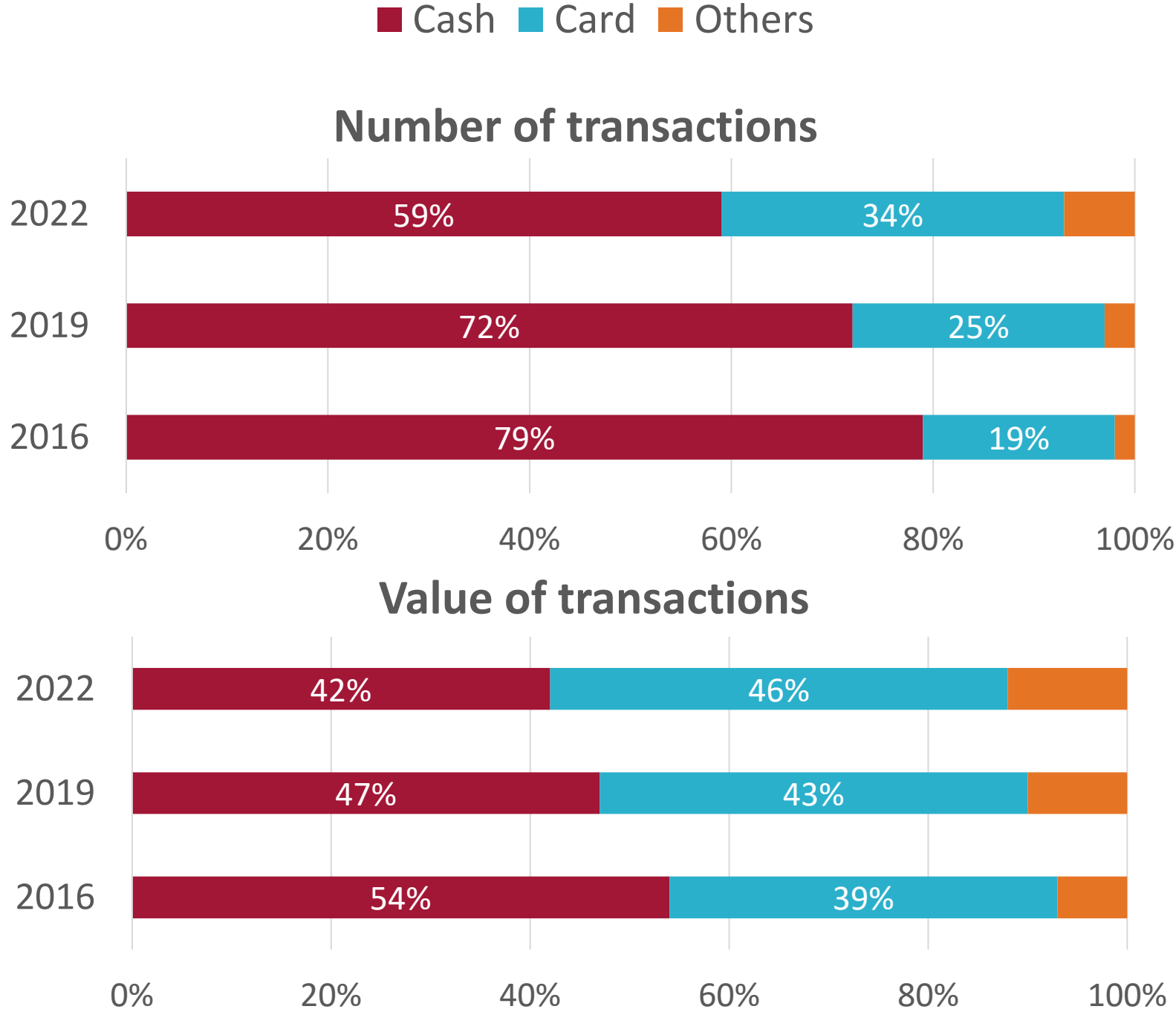
- BUT some countries see high adoption rate. E.g. In Nigeria 1 in 10 adults own cryptocurrencies

Fear of cryptocurrencies displacing sovereign money has not materialized, but this could change in the future and across geographies

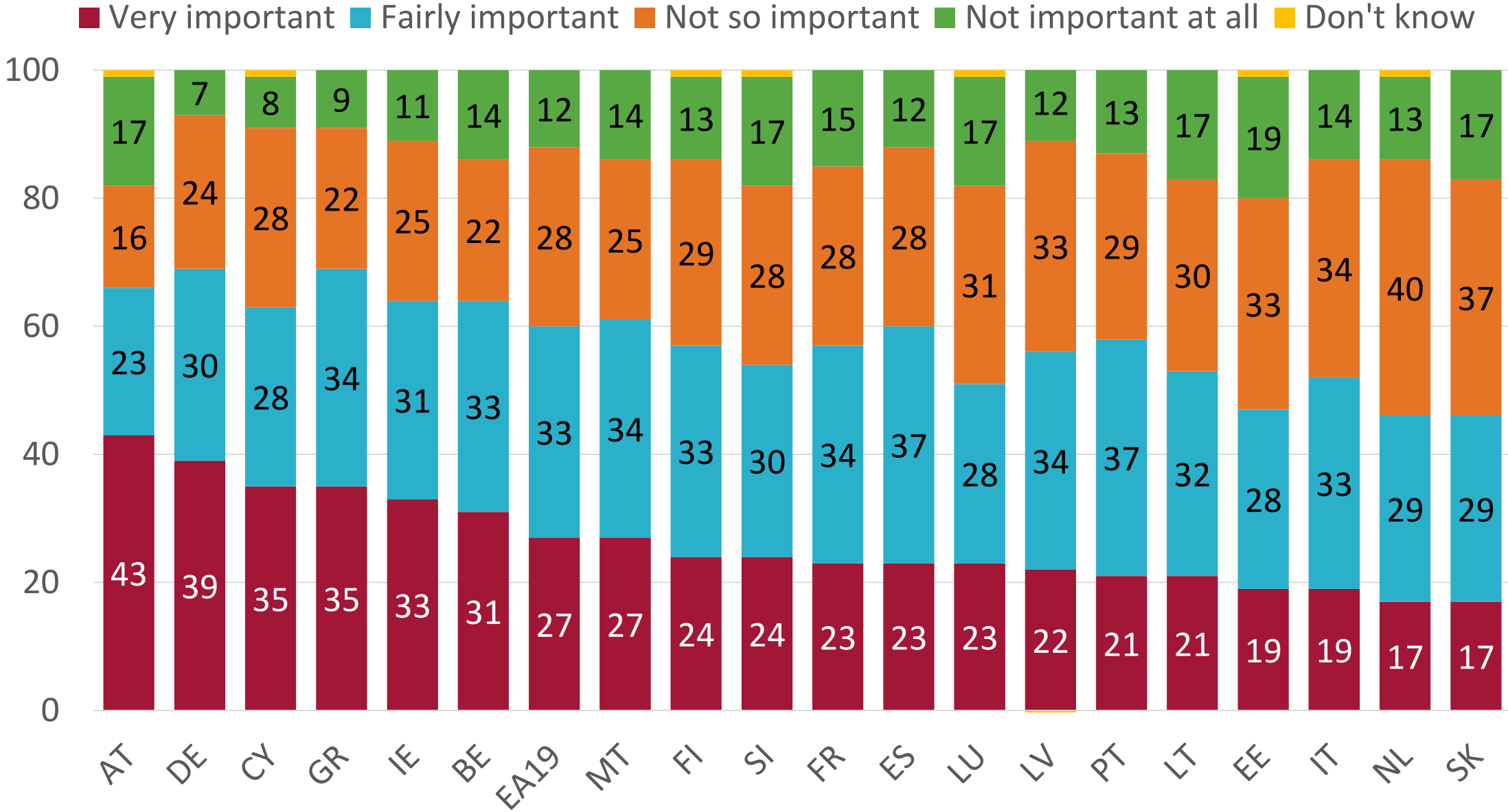
Payment preferences and anonymity



Payments at the Point of Sale in the Euro Area

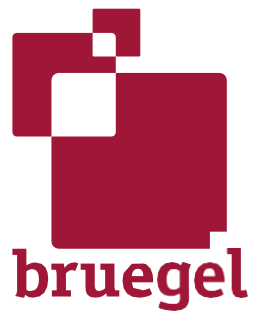


Importance of having the option to pay with cash (%)



Source: Bruegel based on the ECB's SPACE 2022 report.

What does the evidence show so far?



Uptake of CBDCs in selected countries

| December 2022 values | Nigerian e-Naira | Bahamian Sand Dollar | Chinese e-CNY |
|--|------------------|----------------------|--------------------|
| CBDC in circulation | 3 billion eNaira | 303,785 Sand dollars | 13.61 billion eCNY |
| % of total currency in circulation (M0) | 0.01% | 0.17% | 0.13% |

Why small uptake?

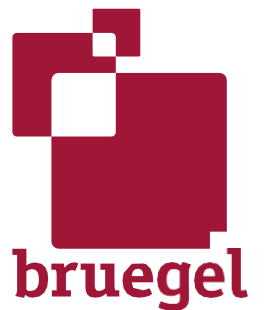
- The public confuses the CBDC with privately issued cryptocurrencies
- CBDC not readily accepted everywhere. Merchants need to have the right infrastructure
- Lack of trust in the underlying currency

A mixed case for establishing a retail CBDC



- **Digitalisation in payments not a clear case** for introducing CBDCs. Insufficient understanding among the public of the difference between CBDCs and cryptocurrencies
- **Most compelling reason** remains **increasing financial inclusion**. But CBDCs not necessarily the solution by themselves, **infrastructure needs to be available** and success depends on network effects
- **Welfare implications** remain very **understudied**: for competitiveness in payment systems and for retail banking business model (deposits guarantee)
- **Operational and governance risks**. E.g. limits, privacy and anonymity, cyber security. A digital representation of a currency cannot solve governance shortcomings.

What is novel about wholesale CBDCs?

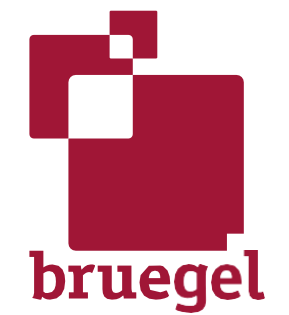


- Domestically, advanced systems for euro-denominated transactions (T2, TIPS), soon for USD-denominated (FedNow to be launched in July 2023)
- BUT **global cross-border payment** system lags behind as the global economy integrates: it is slow, costly, limited in access and not transparent

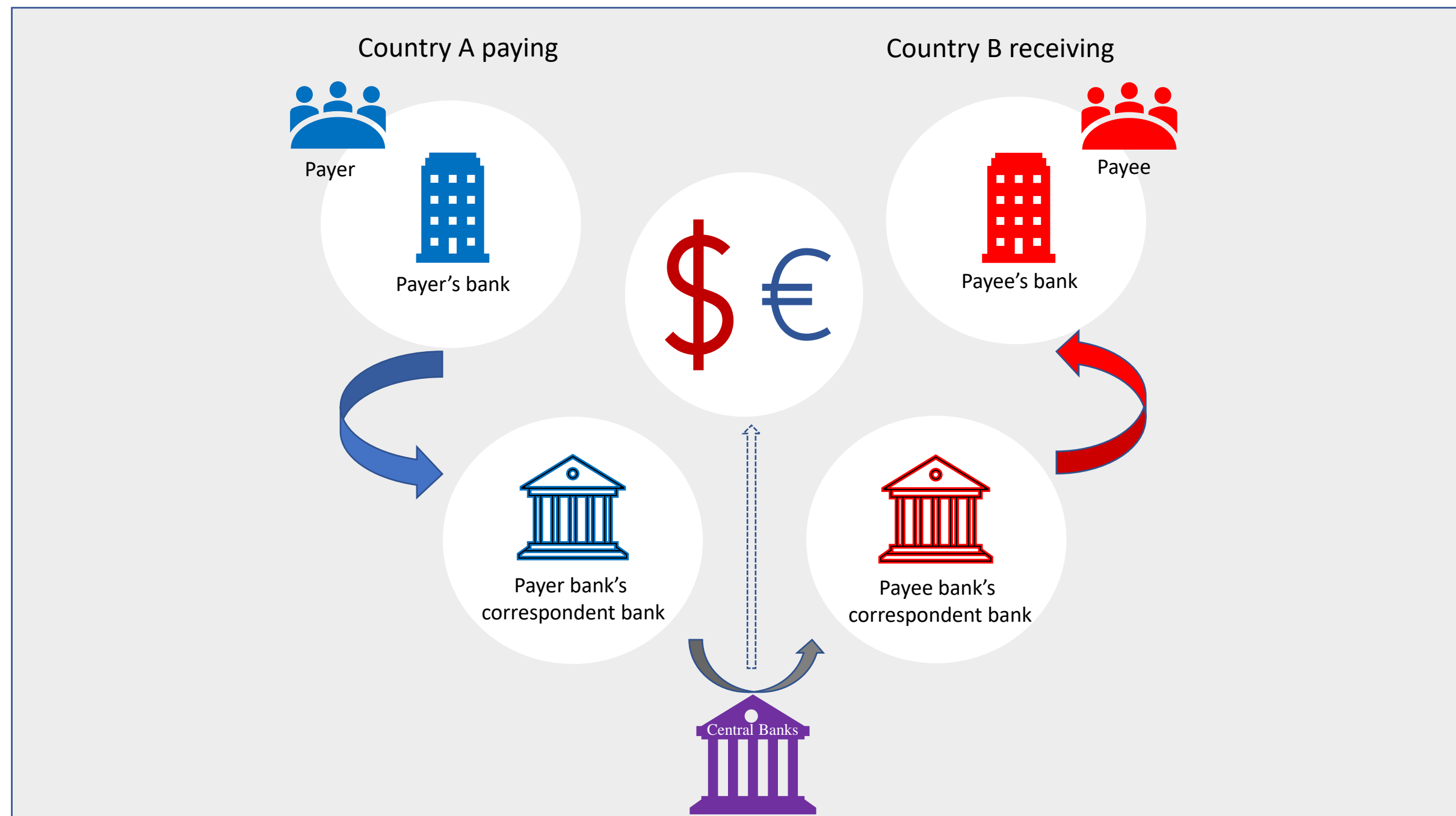
| | Current payment system | New technologies for payments |
|------------------|-------------------------|-------------------------------|
| Transaction time | 3 – 5 days | 2 – 10 seconds |
| Costs | <2% – >7% | As low as 1% |
| Accessibility | Via corresponding banks | Peer-to-peer |

- Many participants in less advanced economies left with no access to the global financial system
→ **G20 established as priority**: Need to improve cross-border payments

A new order in international payments



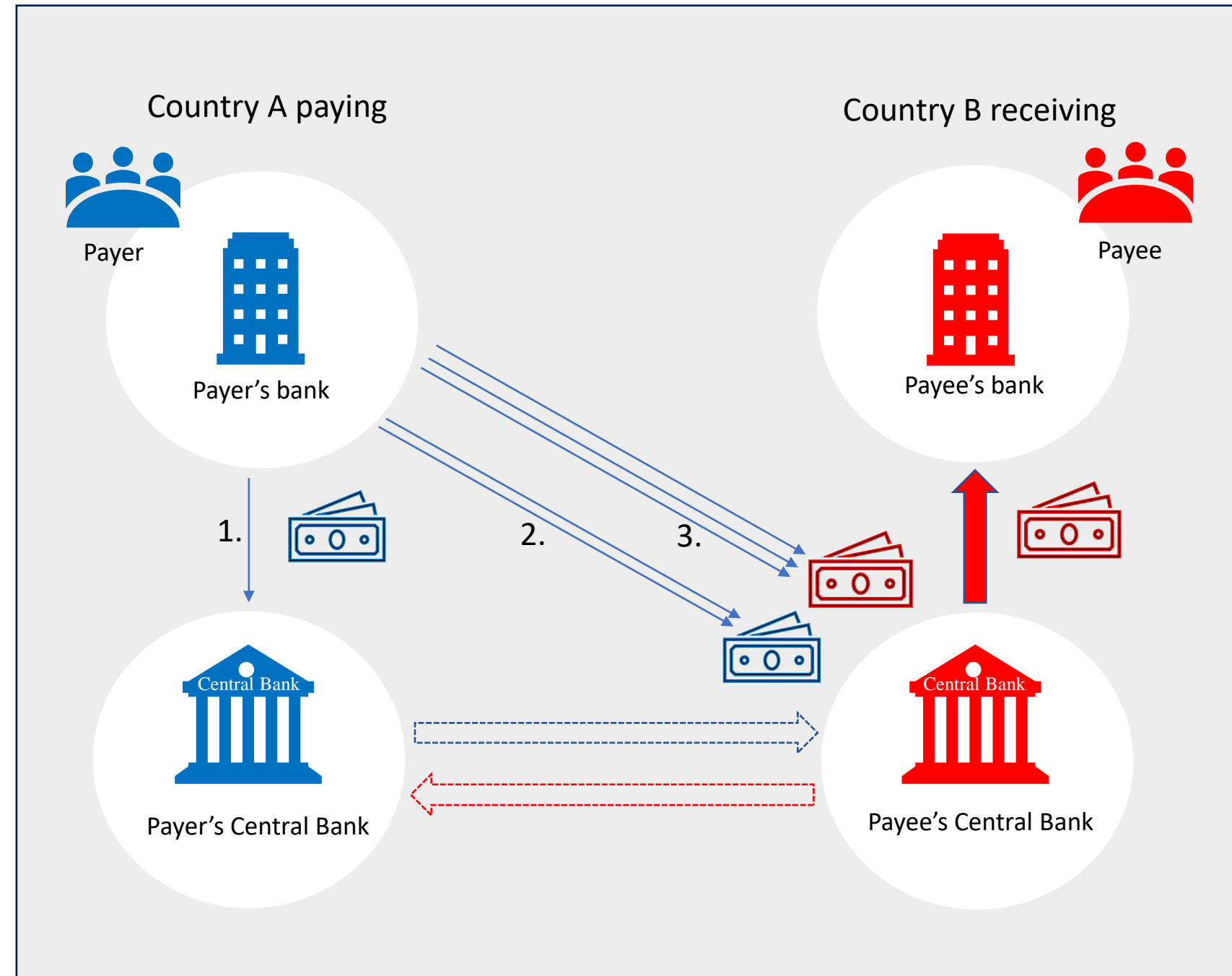
Moving from a dollar-euro-based international financial system...



Source: Bruegel adapted from BIS, Connecting economies through CBDC, October 2022.

A new order in international payments

...to bilateral and multilateral financial settlements...



CBDCs as a geopolitical tool

GT Global Times

SOURCE / ECONOMY

China and Russia to establish independent financial systems: Russian media

By Global Times

Published: Dec 17, 2021 12:47 AM



Photo: IC



Summing up



- **Retail CBDCs: not of immediate use**
 - CBDCs can help address financial exclusion but require infrastructure (who pays for it?)
 - Can distort existing payment systems. Is this justified?

BUT

 - Future-ready technology
 - Euro area is well placed

- **Wholesale CBDCs: potential efficiency gains**
 - An improvement in cross-border payments
 - Provides for bilateral settlement solutions (BUT bypasses financial sanctions)
 - Many questions to be solved (technical, legal, economic and governance)
 - Euro area is well placed to help set global standards

Thank you!

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