

Geopolitical tensions and international financial fragmentation

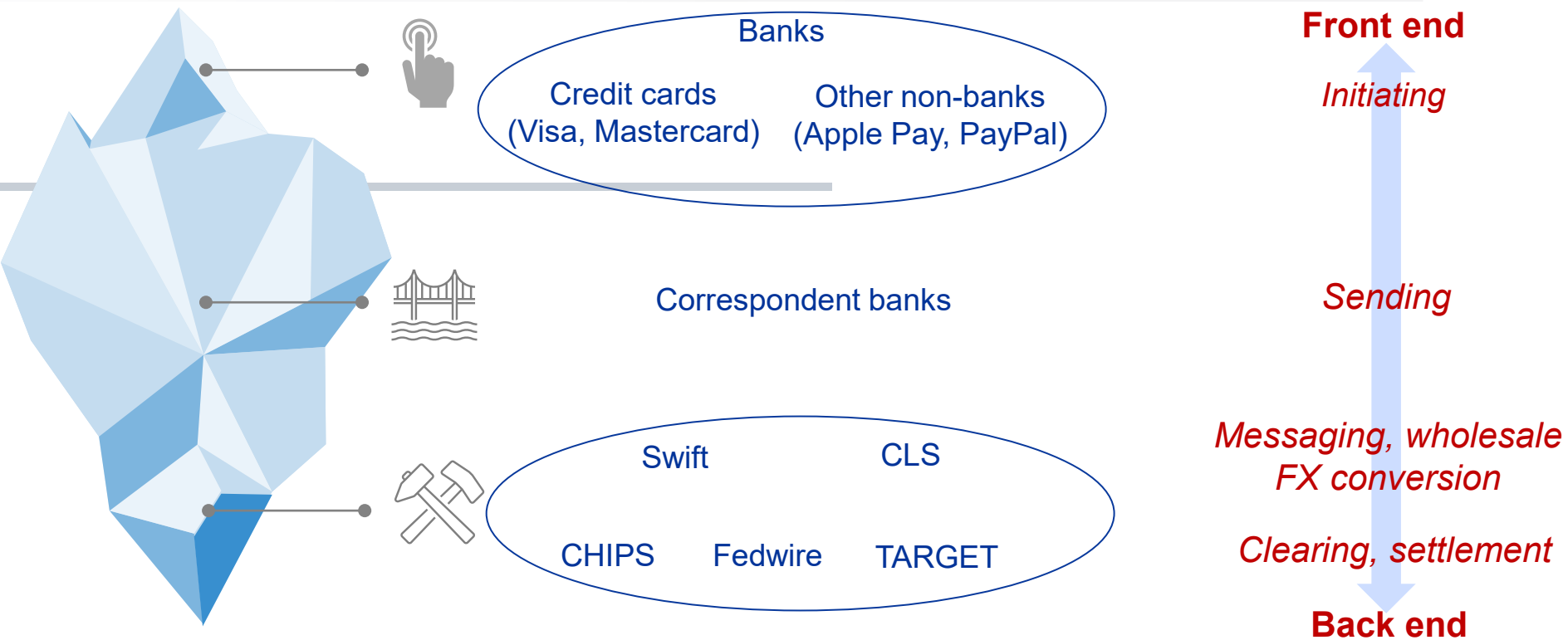
Chapter 3: Financial fragmentation in global payments

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20 October 2025

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Global payments rely on Western-based infrastructure, technologies and services for processing international transactions



Global payments attracting increasing attention

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West Orders Seven Russian Banks Off Swift, But Leaves Others On

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Putin's plan to dethrone the dollar

He hopes this week's BRICS summit will spark a sanctions-busting big bang



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Iranian banks to be cut off from international payment system

Transfer hub will disconnect Iranian banks that are subject to sanctions imposed by EU

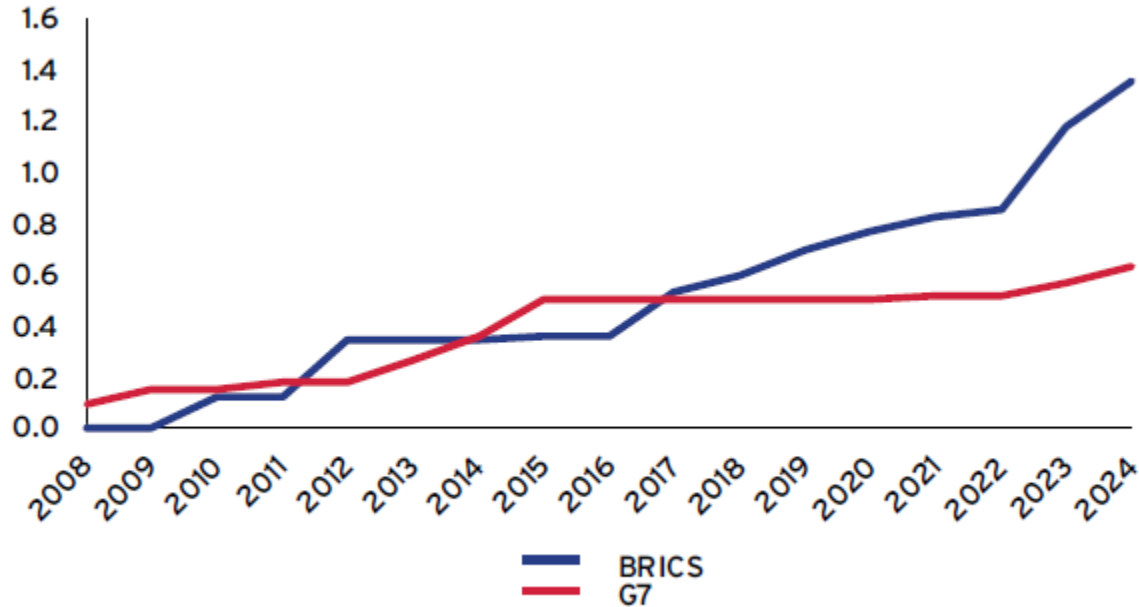


Agencies

Thu 15 Mar 2012 17:31 CET

BRICS leaders' interest in payments sparked first, now also a focus for G7

Text analysis of initiatives on cross-border payment systems in G7 and BRICS leaders' communiqués



Source: ECB staff calculations.

Evidence so far? Flurry of announcements, few concrete initiatives

Selected initiatives

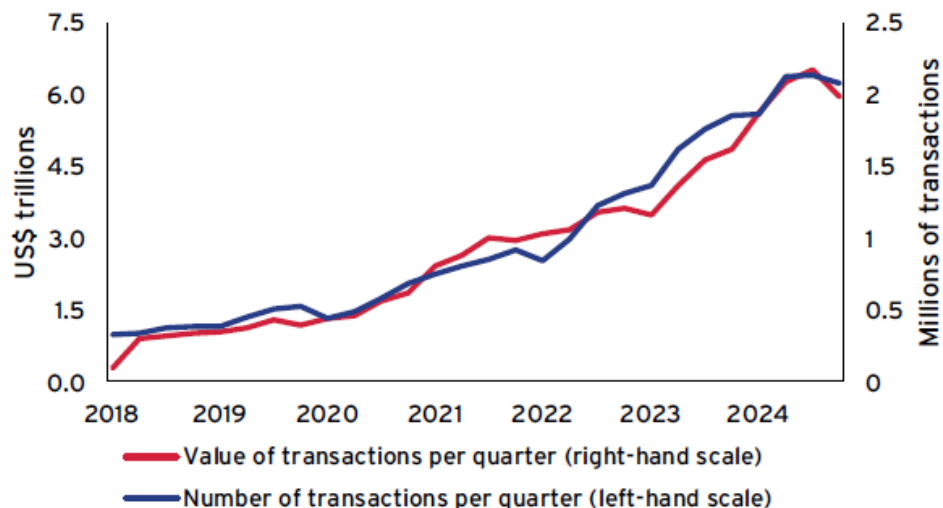
BRICS: Discussion of BRICS Clear and BRICS Clear (2024)

China: Cross-Border Interbank Payment System (2015)

Russia: System for Transfer of Financial Messages (2014)

Iran: System for Electronic Payment (2013).

Activity in China's Cross-Border Interbank Payment System (CIPS)



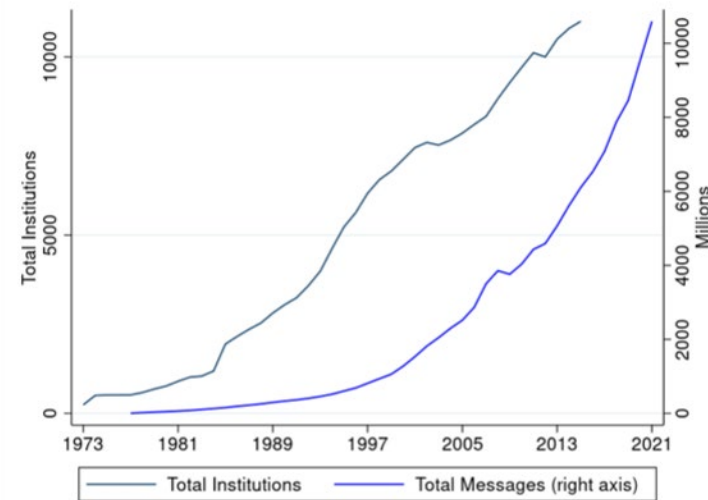
Notes: The figure shows the evolution of activity in CIPS including the number of transactions in millions and the value of the transactions in question in USD trillions.

Source: People's Bank of China and authors' calculations.

But still small compared to the amount of messages in SWIFT

- As of December 2023, 11500+ institutions connected to swift of 200+ countries and territories
- In 2023, 11.9 billion messages were sent over SWIFT
- ... accounting for an average of 47.6 million average daily messages

Importance of the Swift network



Sources: See Cipriani et al. (2023). Calculations based on SWIFT annual reports.

Some evidence of shifts in trade invoicing patterns due to geopolitics

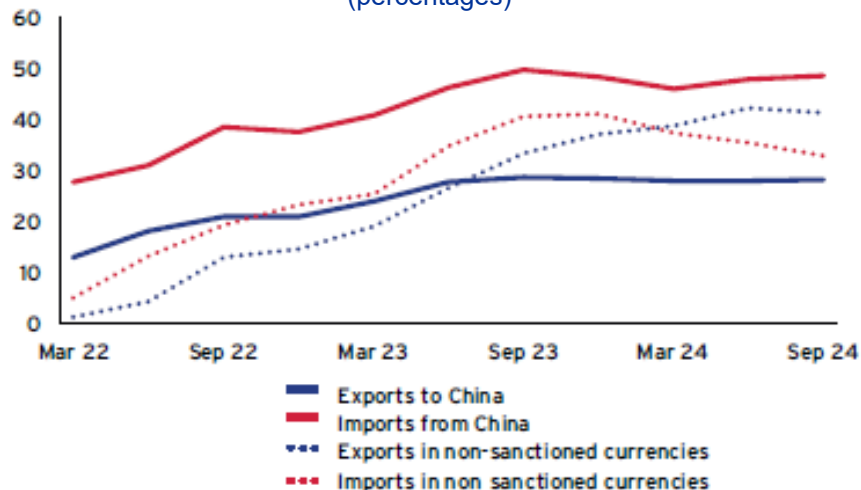
Use of the renminbi for settlement of China's external trade (percentages)



Notes: The figure shows the evolution in the use of the renminbi for settlement of China's external transactions in goods and services, respectively as percentage shares of settlements in all currencies.

Source: People's Bank of China and authors' calculations.

Russia's trade with China and invoicing in currencies of countries not sanctioning Russia (percentages)

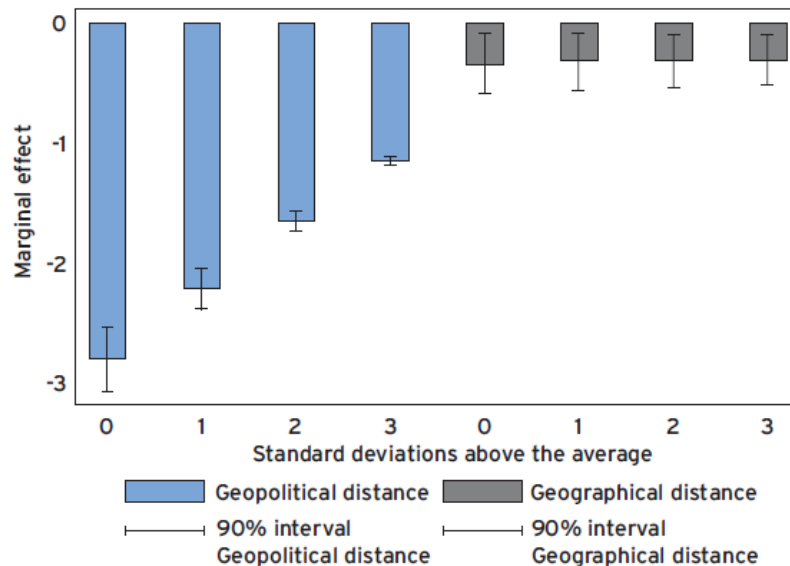


Notes: The figure shows the evolution of Russia's trade with China and invoicing in non-sanctioned currencies in percentages. The list of currencies of countries sanctioning Russia includes major currencies like the euro, US dollar, British pound, Swiss franc, Japanese yen, Canadian dollar, and Australian dollar.

Source: CEIC, IMF Direction of Trade Statistics, and authors' calculations.

Policy and technology also shaping global payments: fast payment systems

Marginal effects of geopolitical and geographical distance



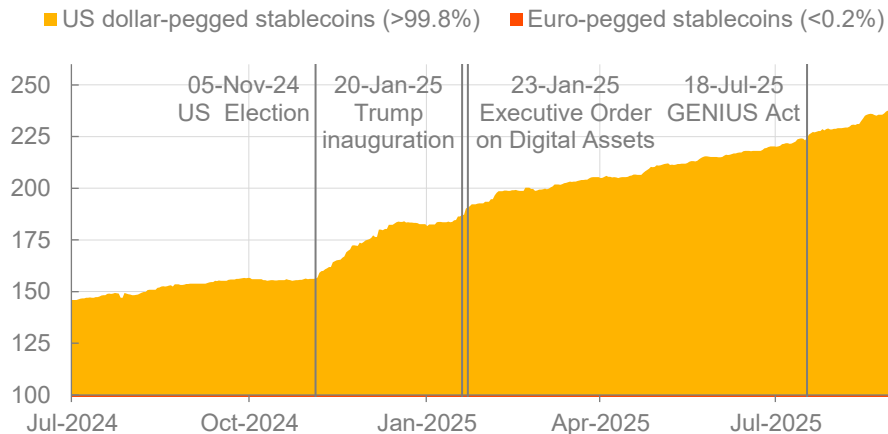
Notes: The figure shows the marginal effects on the log-odds of observing a fast payment link between two countries in response to one-standard-deviation increases in geopolitical and geographical distances, respectively. Changes are computed using logit estimates of the log odds of interlinking fast payment systems within a pair of countries in a sample of 117 countries, using data on fast payment links from 2016 to 2023. The marginal effects are computed for different initial levels, i.e., from the sample average (0) up to 3 standard deviations above it. All the other variables are kept at their respective sample means. Black whiskers show 95% confidence intervals.

Source: Ferrari Minesso et al. (2025).

Policy and technology also shaping global payments: stablecoins

Market capitalization of stablecoins

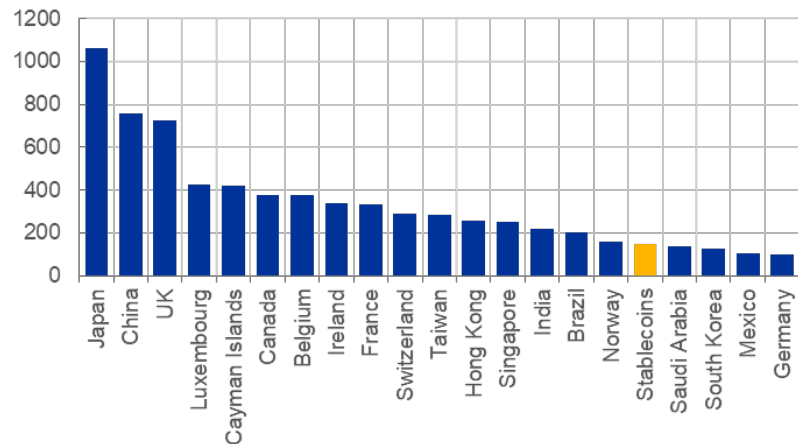
(USD billions)



Sources: CryptoCompare and CoinGecko.
Latest observation: 1 September 2025.

Major foreign country holders of US Treasury securities (bills, bonds and notes)

(USD billions)



Sources: US Department of the Treasury, independent auditors'/accountants' reports on Tether (USDT) and USD Coin (USDC) reserves, and ECB staff calculations.
Note: Data refer to the end of 2024. Stablecoins' include the holdings of US Treasury securities and repos of Tether (USDT) and Coin (USDC) reserves.

Potential impacts of increased fragmentation in global payments

- Greater **transaction opacity and complexity**, causing delays, disrupting liquidity during stress, and facilitating money laundering and terrorism financing
- Increased **technical flaws and cyber risks**, threatening international financial stability through settlement disruptions and liquidity shortages
- **Loss of effectiveness of sanctions** as a deterrent
- **More profound changes in the international monetary system** due to the central role of trade invoicing in determining currencies' global standing



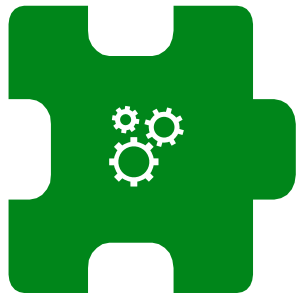
Way forward



Enhancing legacy infrastructure

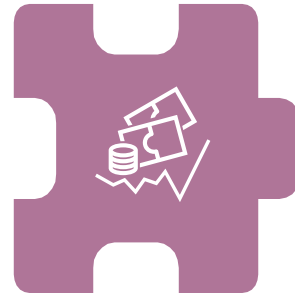
G20 Roadmap

Interlinking fast payment systems



New infrastructure if private solutions insufficient

Central bank money settlement of
DLT-based wholesale transactions
Projects Agorá and Aurora
(unified ledger, use of AI)



Interoperability in financial market infrastructures

ISO 20022 message standard
Harmonised APIs
Legal entity identifiers



Sustaining global cooperation

AML/CFT
Crypto-assets (e.g. FSB
recommendations)

Thank you!

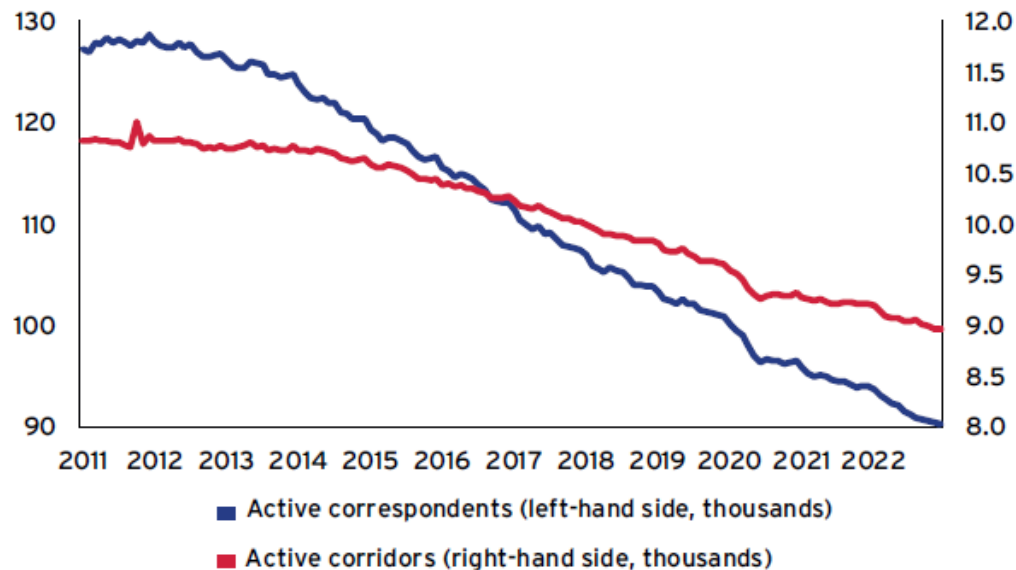
Why it matters

- Fragmented global payments hinder scale, raising **costs**
- Tends to be monopolistic and source of geoeconomic **power**
- Crucial for **stability** and integrity of global financial system



Correspondent banking network has contracted significantly in past 15 years

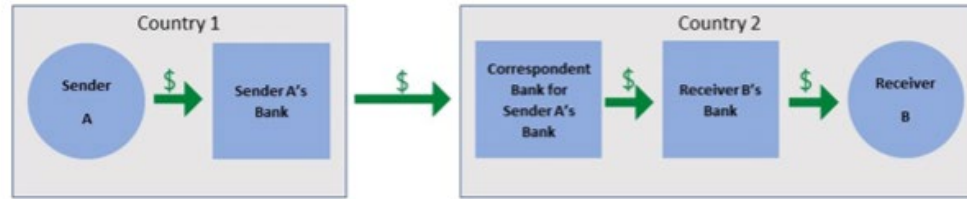
Evolution of the number of correspondent banks and corridors since the global financial crisis



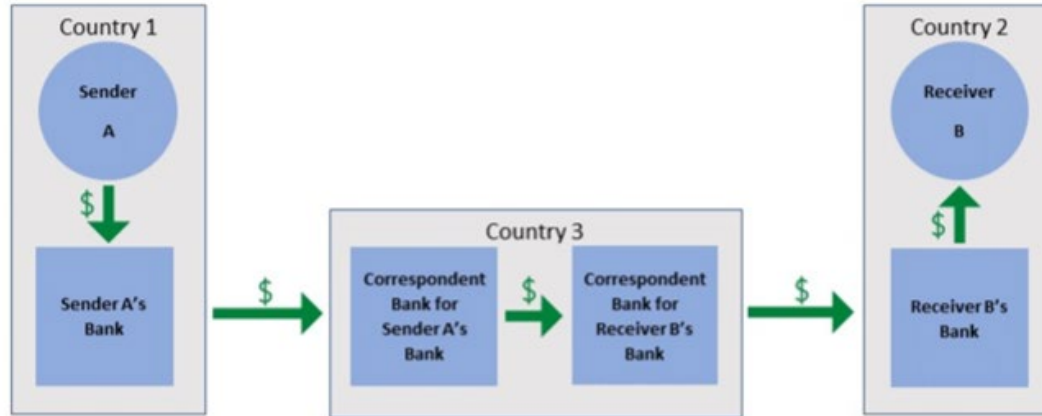
Notes: The figure shows the evolution of the number of active correspondents (banks that have sent or received at least one cross-border payment message in a given year) and the number of active corridors (jurisdiction pairs that processed at least one cross-border payment message in a given year) since 2010. Corridors are unidirectional (e.g. Germany to India is one corridor and India to Germany is another corridor). The data are aggregated, hence it is not possible to identify the entire payment chain.

Source: BIS and Swift.

Cross border payment system and correspondent banking



(a) Two countries

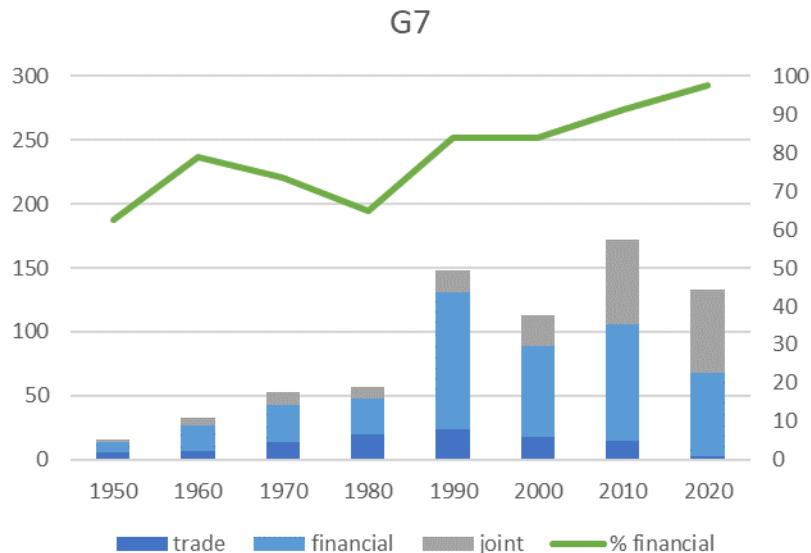
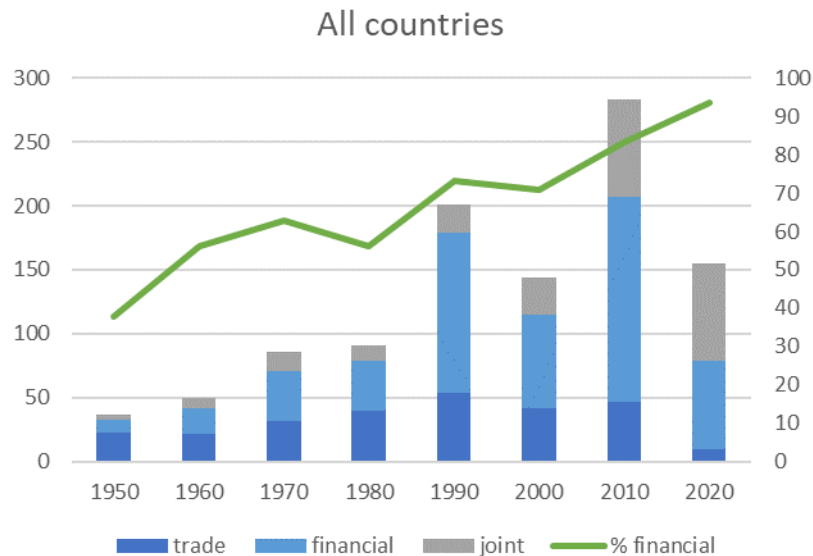


(b) Three countries

Source: Marco Cipriani, Linda S. Goldberg, and Gabriele La Spada (2023). Financial Sanctions, SWIFT, and the Architecture of the International Payments System. Federal Reserve Bank of New York Staff Reports, no. 1047

Prevalence of sanctions over time

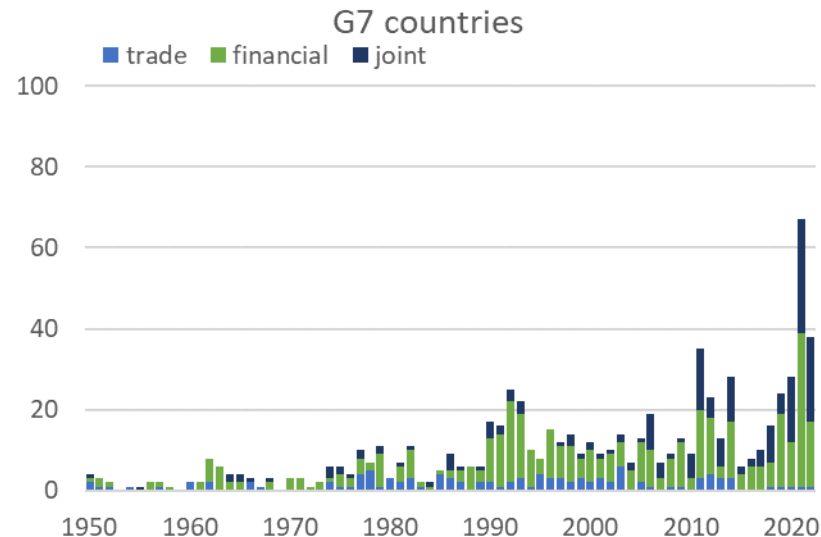
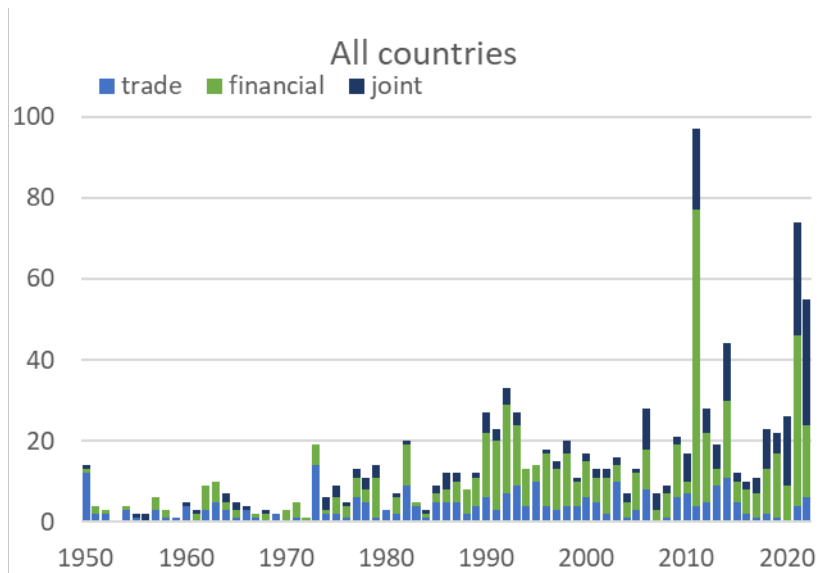
Trade versus financial sanctions (count, LHS; % of financial sanctions, RHS)



Sources: Own calculations using Global Sanctions Database by Felbermayr, Kirilakha, Syropoulos, Yalcin and Yotov (2022). This figure displays the number of sanctions within each decade by sanction type. Sanctions are only counted in the first decade of implementation. Joint sanctions have both economic (e.g., import restrictions) and financial (e.g., asset freezes, investment screens) elements. The green line represents the percentage of sanctions with a financial component over time (right axis). Note that 2020 only represents the counts for 2020, 2021 and 2022.

Prevalence of economic sanctions over time

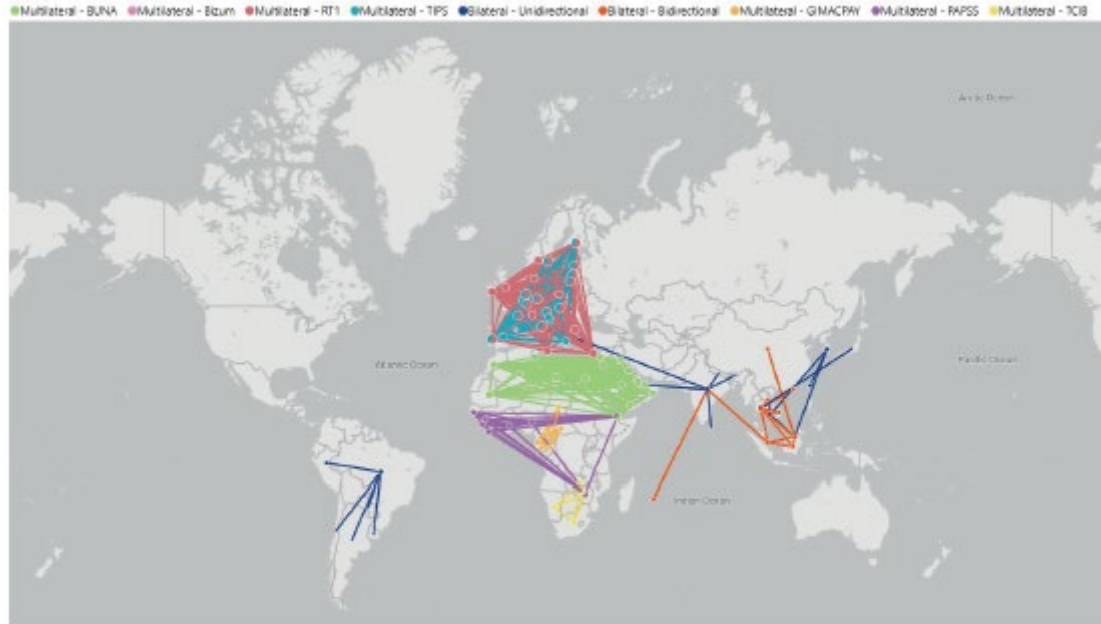
Economic sanctions by type (number of sanctions)



Sources: Own calculations using Global Sanctions Database by Felbermayr, Kirilakha, Syropoulos, Yalcin and Yotov (2022). This figure displays the number of sanctions within each year by sanction type. Sanctions are only counted in the first year of implementation. Joint sanctions have both a trade (e.g., import restrictions) and financial (e.g., asset freezes, investment screens) elements.

The landscape of cross-border fast payment connections reveals distinct clusters

Global network of fast payment system connections



Notes: The figure shows cross-border fast payment connections in 2024. The figure shows bilateral connections, split between unidirectional and bidirectional (depending on the originating currencies enabled). Moreover, the figure shows multilateral connections, represented as dyads and coloured by regional platforms.

Empirical framework

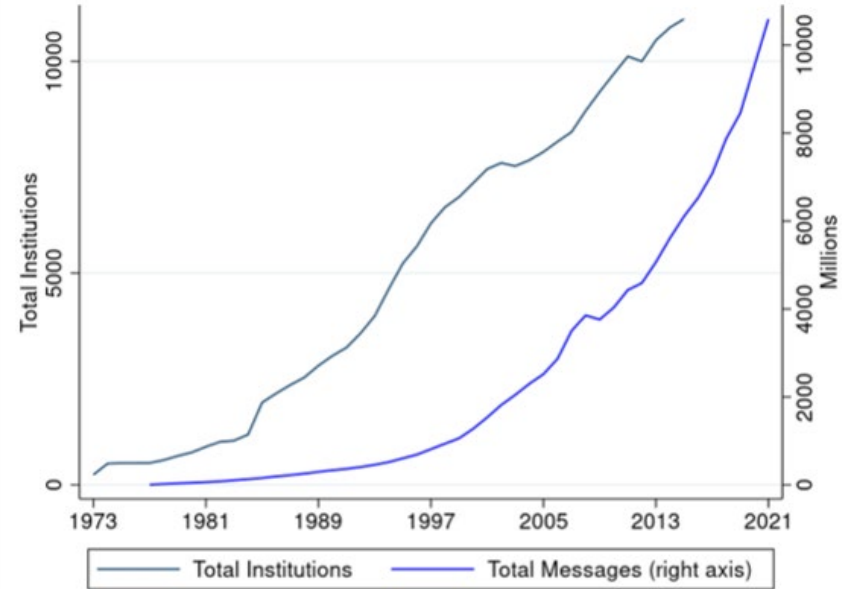
$$P(y_{i,j,t}|\mathbf{X}) = \frac{1}{1 + e^{-(\beta'X + \alpha_i + \alpha_j + \lambda_t)}}$$

- $y_{i,j,t} = 1$ if the fast payment systems of country i and j are connected in year t
- α_i , α_j and λ_t are origin, destination and time fixed effects
- X includes output, trade, geographical distance; and geopolitical distance (ideal point distance in United Nations' General Assembly voting)
- All variables standardized; and errors are clustered at the dyad level

CIPS still small compared to Swift network

- 11,500+ institutions connected to swift of 200+ countries and territories as of December 2023
- Almost 12 billion messages sent over SWIFT in 2023 (about 48 million daily messages on average)

Scale of Swift network



Sources: See Cipriani et al. (2023). Calculations based on Swift annual reports.

Some countries actively exploring alternatives to traditional cross-border payment systems

Recent announcements

- **China** encourages state-owned enterprises to use RMB in overseas expansion (April 2025)
- **Hong Kong** plans for Asian international settlement house (March 2025)
- **Russia** allowing use of crypto-assets in cross-border trade (September 2024)
- **BRICS** ' members discuss BRICS Clear (October 2024) and BRICS bridge (February 2024)
- **Russia-Iran** trade in national currencies with own interbank systems (December 2023)
- **Iran** announces that the Asian clearing union will use its messaging system (May 2023)
- **India-UAE** sign MoU to settle cross-border transactions in national currencies (July 2023)
- **Brazil and China** set up an infrastructure for renminbi clearing (March 2023)

Implications from deeper geopolitical rifts

- Policy debates focused on North-South tensions, **bigger risk Western fragmentation**
- **New vulnerabilities** undermining rules-based global order: cyber threats, opacity, illicit flows, regulatory arbitrage, weaker sanctions
- Intensified **currency competition** and rising macroeconomic instability
- **Greater systemic risks** due to fragmented global liquidity pools, complicating crisis response efforts.