

Transformation of the international financial system: reviewing the tools

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Main aspects:

Vehicle instrument

Reserve instrument

Invoicing instrument



Vehicle currency

- Minimalistic requirements to the instrument (reduced to intergroup IOUs in some set-ups)

- Multiple conventional FX markets may be illiquid and require active cyclical arbitrage operations. Consider automatic market making instead.

Commercial

C Liquidity provision

F wCBDC redemption

FX transaction

(E) Payment

Liquidity pool token

Uniform technical wCBDC standard

Relayers

Three-currency AMM

Source: BIS (2023)

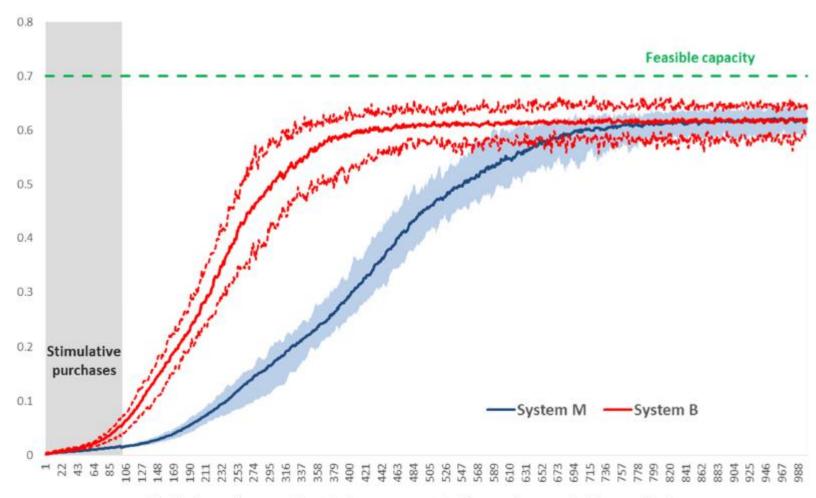


Fig. 2. Share of payment flows in the new systems (median, maximum and minimum values).

Source: Leonidov et al. (2025) A primer on a closed-loop system for international settlements in emerging market economies

Reserve instrument

- <u>Currency choice</u>. Arguably, linked to the existing vehicle instrument on the FX market (the issue of exchange rate predictability and UIP).

- <u>Sovereign choice</u>. Consider multinational pooling and entrenchment.

The entrenchment concept

Brunnermeier et al. (2011) European Safe Bonds (ESBies)

Brunnermeier et al. (2016) ESBies: Safety in the tranches

Brunnermeier and Huang (2018) A Global Safe Asset for and from Emerging Market Economies

Figure 3: Balance sheet of an ESB securitization vehicle

Assets	Liabilities
Diversified portfolio of sovereign bonds	Senior Bonds (ESBies)
	Junior Bonds
	(EJBies)

Note: Figure shows the balance sheet of an ESB securitization vehicle, whereby its diversified portfolio of sovereign bonds is financed by the issuance of two securities, with ESBies senior to EJBies.

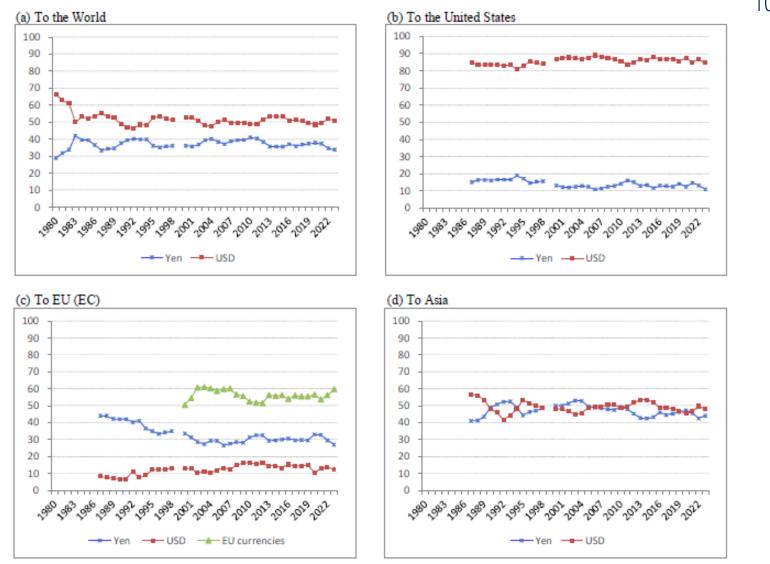


Invoicing currency

- Part of the foreign trade firms' risk management problem related to exchange rate / prices fluctuations.

- Arguably, the design of the contracts may be further improved. Consider country/product-specific currency choices.

Figure 1. Invoice Currency Choice in Japanese Exports (Percent): 1980–2023



Source: Yoshimoto et al. (2025) THE MYTH OF U.S. DOLLAR DOMINANCE IN JAPANESE EXPORTS: NEW EVIDENCE FROM JAPANESE CUSTOMS LEVEL DATA

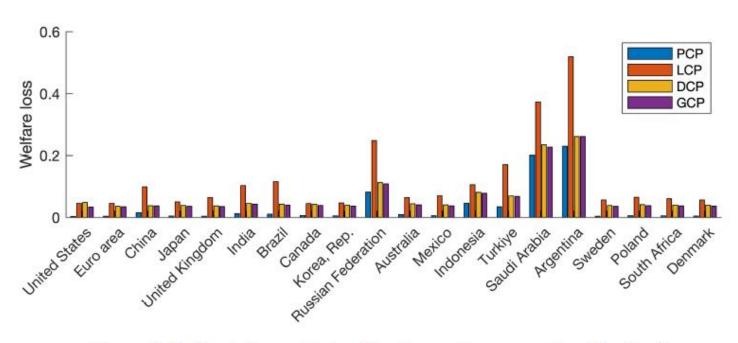


Figure 8: Calibrated countries' welfare loss under cooperation $(\Sigma_z, \Sigma_{\mu,a})$

Note: Figure 8 shows 20 country's welfare loss under cooperative monetary policies. All countries commit to the optimal cooperative monetary policy to deal with productivity shocks while the money supply experience unexpected monetary shocks. The productivity shocks draw from Σ_z and monetary shocks draw from $\Sigma_{\mu,a}$.

Source: Devereux et al. (2025) A MODEL OF GLOBAL CURRENCY PRICING



Conclusions

There is no shortage of the economic tools that are applicable to redesigning the international financial system.

These tools may be adapted for the emerging markets' objectives and employed in the relevant circumstances.

