Features and Fragilities of the International Monetary System

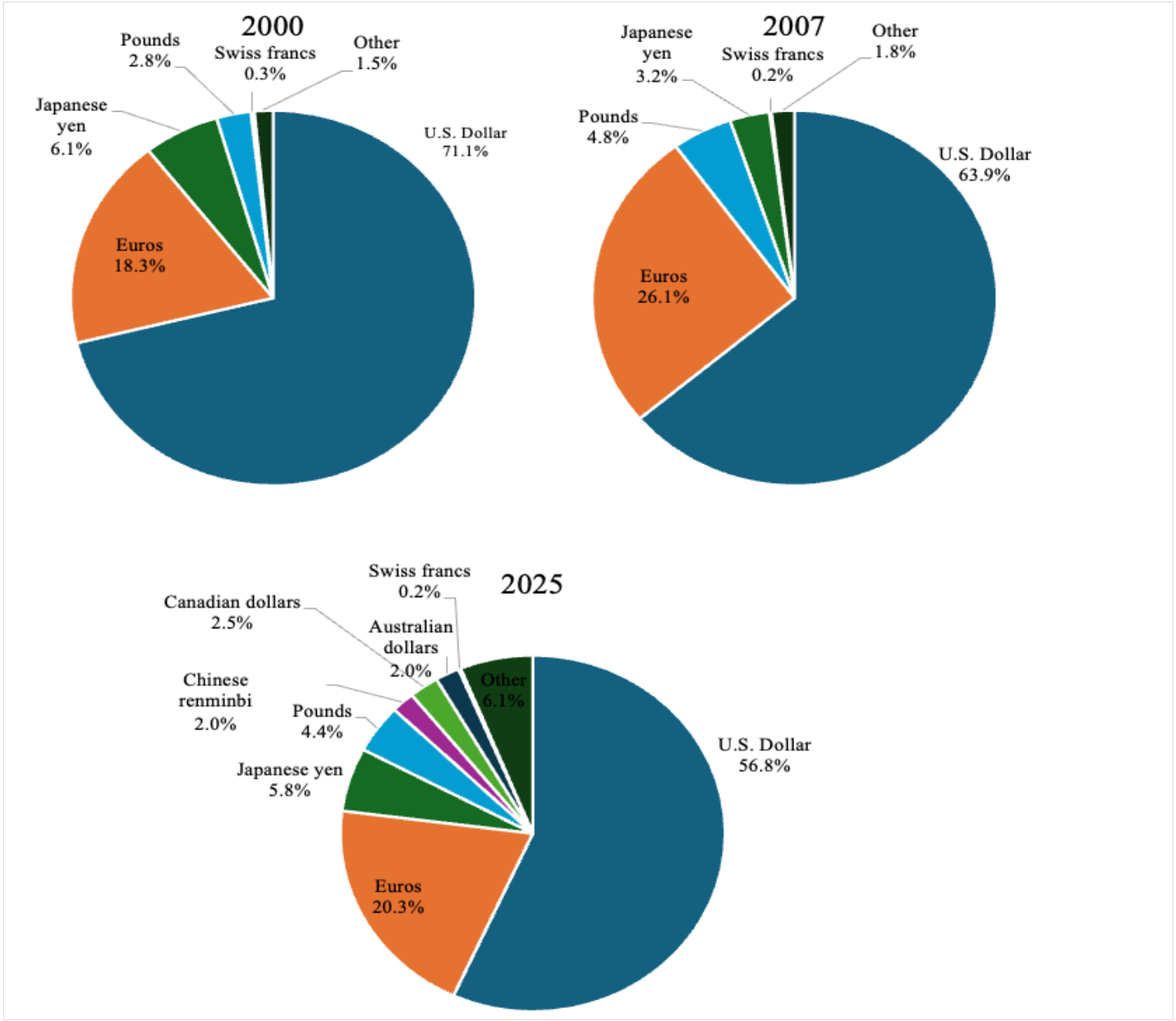
Eswar Prasad

Cornell University, Brookings Institution, NBER

Shifts and Paradoxes

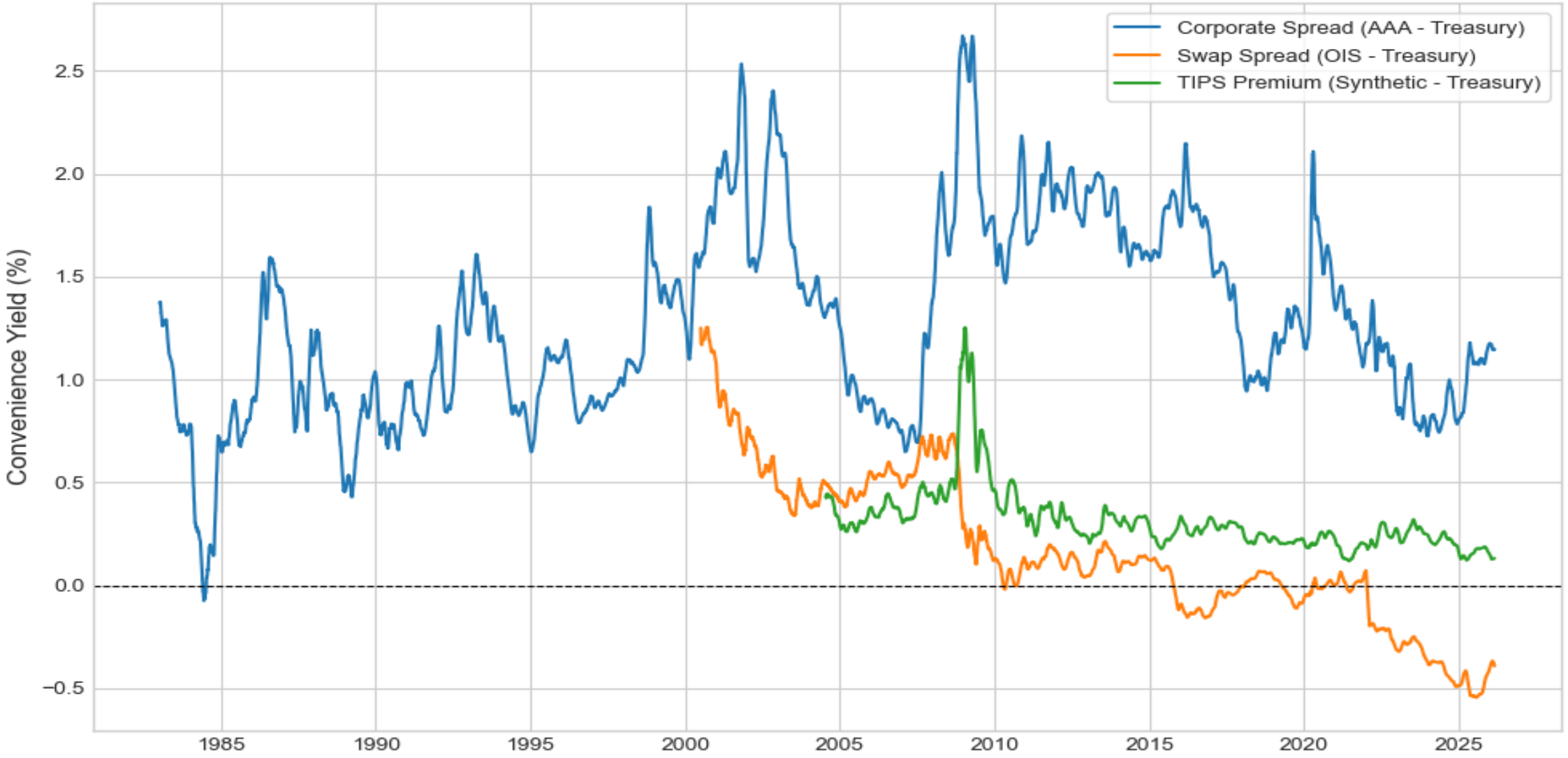
- Shifts in reserve currency configuration
- Safety of US Treasuries—price and quantity aspects
- Other aspects of currency dominance
- Demand for and supply of safe assets
- Financial innovations and their implications
- A spectrum of outcomes
- A simple solution to limit self-insurance, imbalances

Shares of Foreign Exchange Reserves

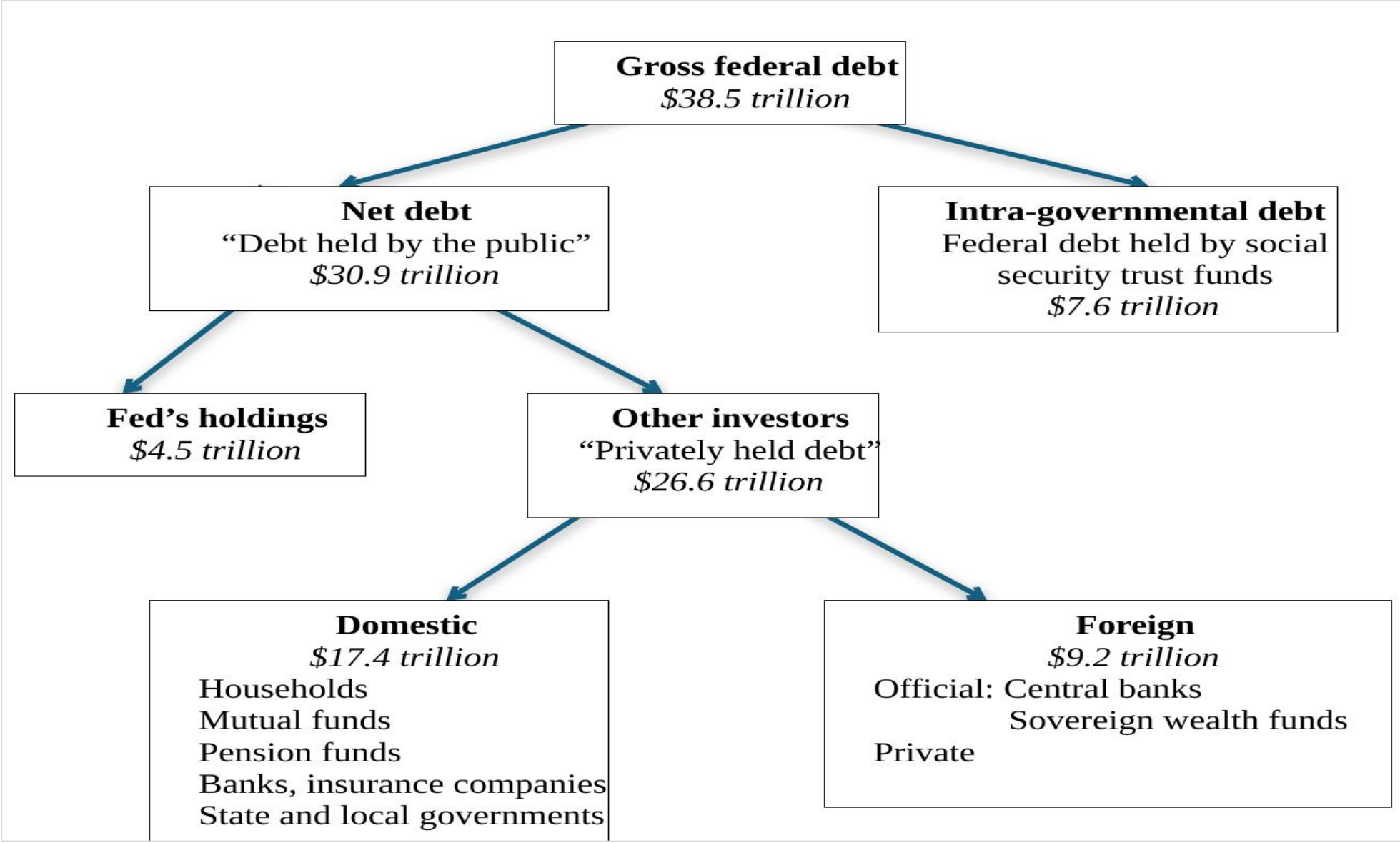


Estimates of the Convenience Yield on U.S. Treasury Securities

(30-day moving average)

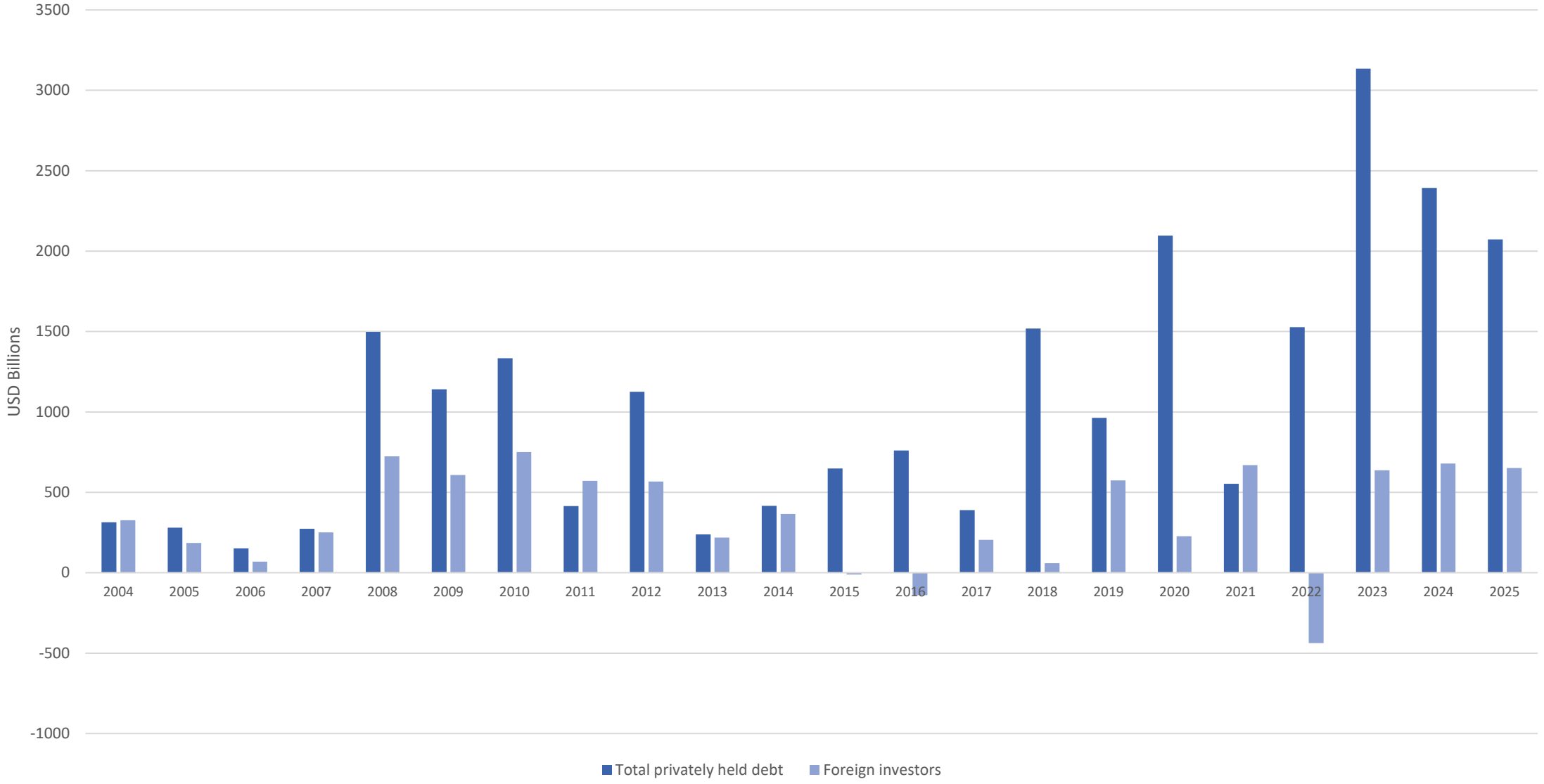


Who Holds U.S. Federal Government Debt?



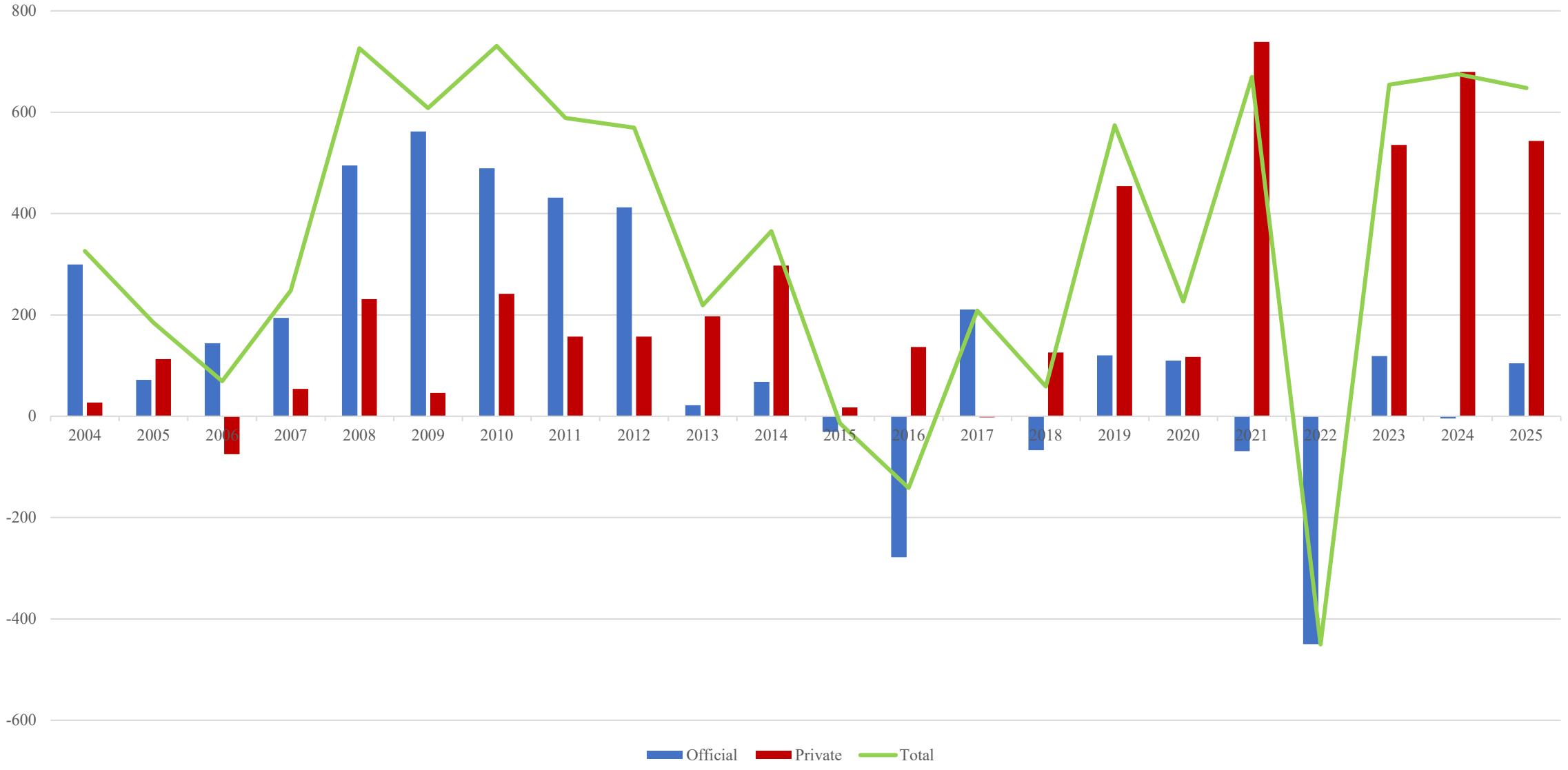
Foreign Financing of Privately Held U.S. Federal Government Debt

(in billions of U.S. dollars)



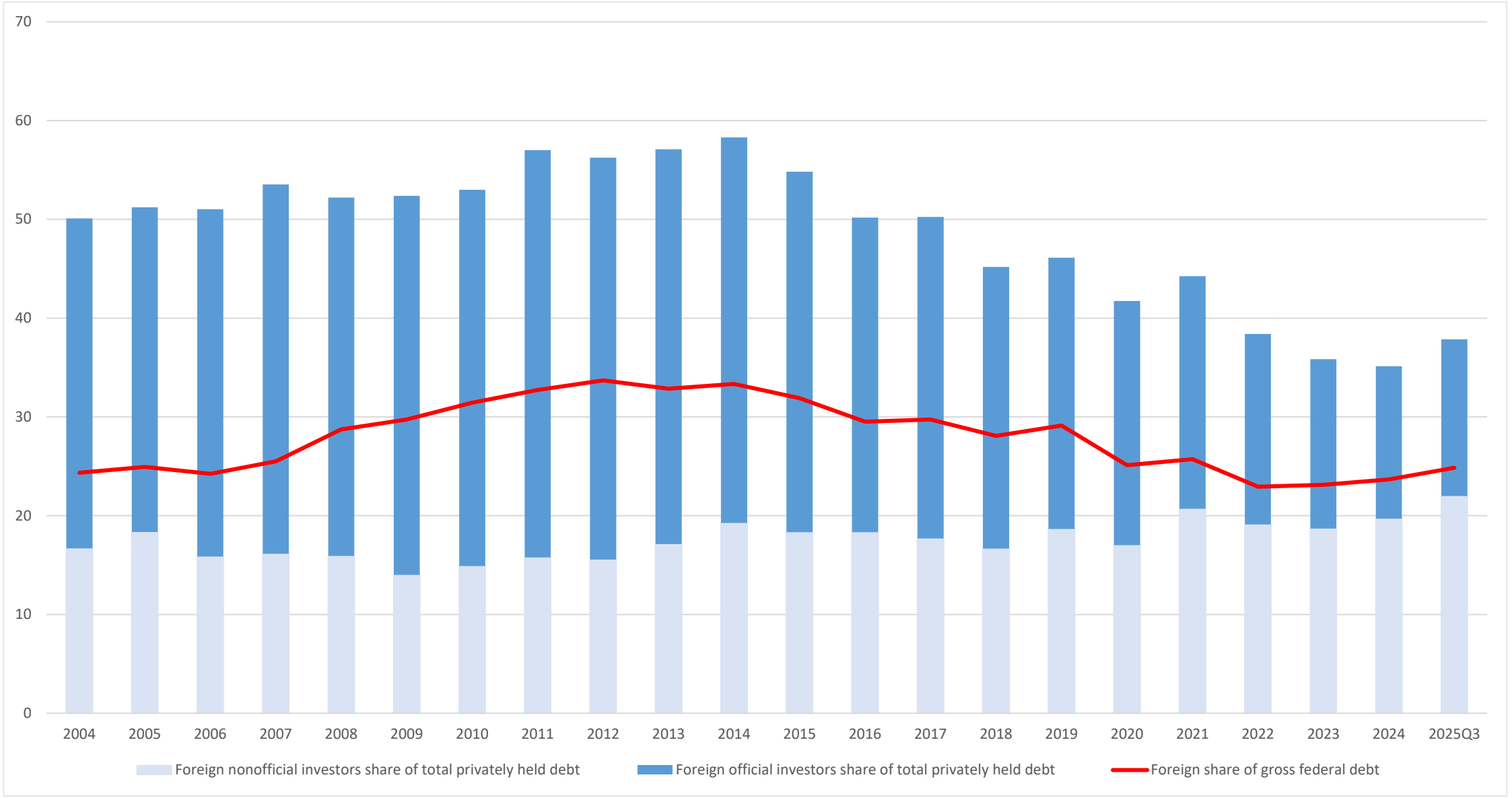
Official, Private Financing of U.S. Federal Government Debt

(in billions of U.S. dollars)



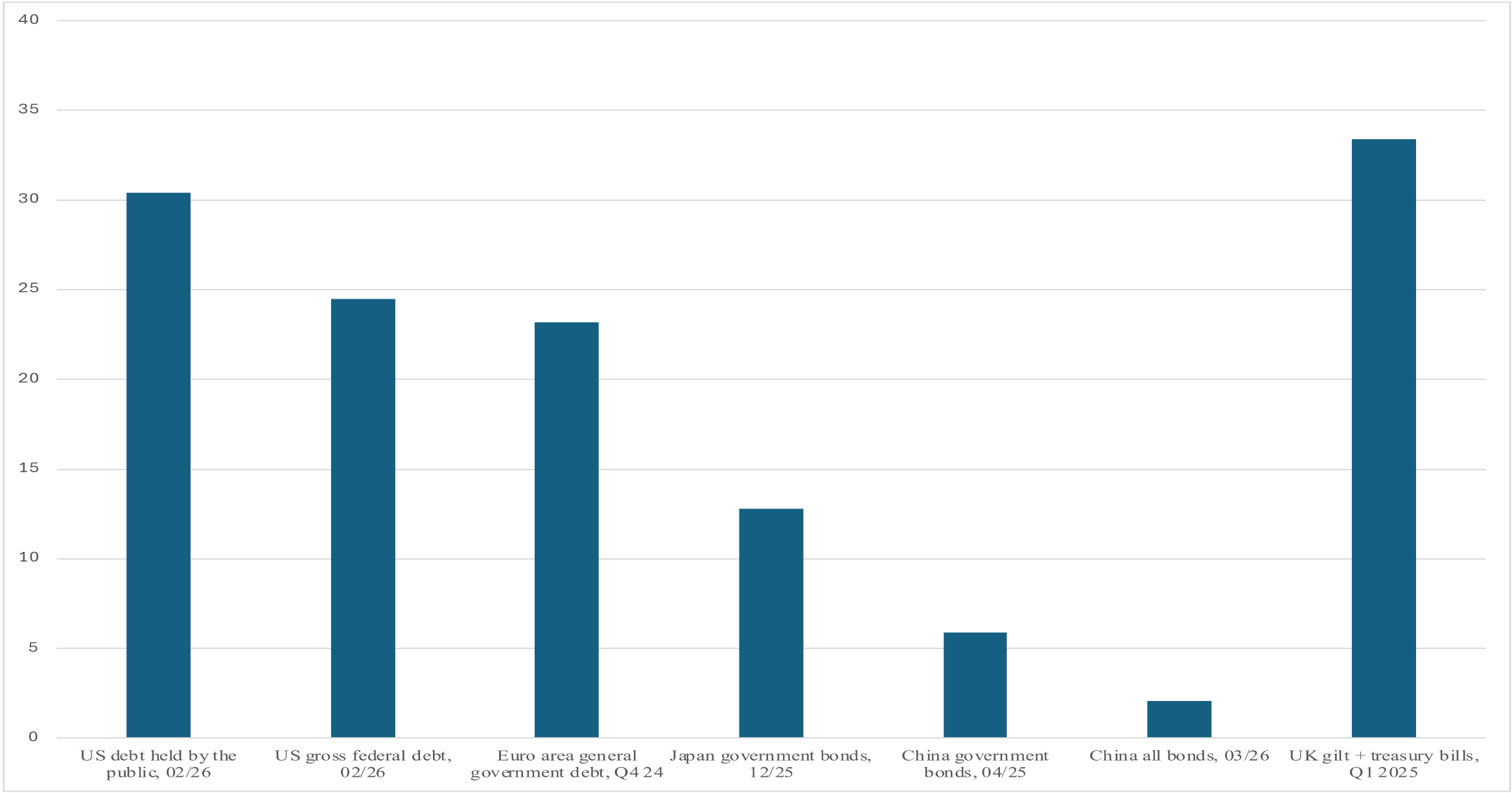
Foreign Ownership of U.S. Federal Government Debt

(in percent)



Foreign Ownership of Public Debt

(percent)



Debt Markets in Key Economies

(Nominal value, USD trillions, 2025 Q3)

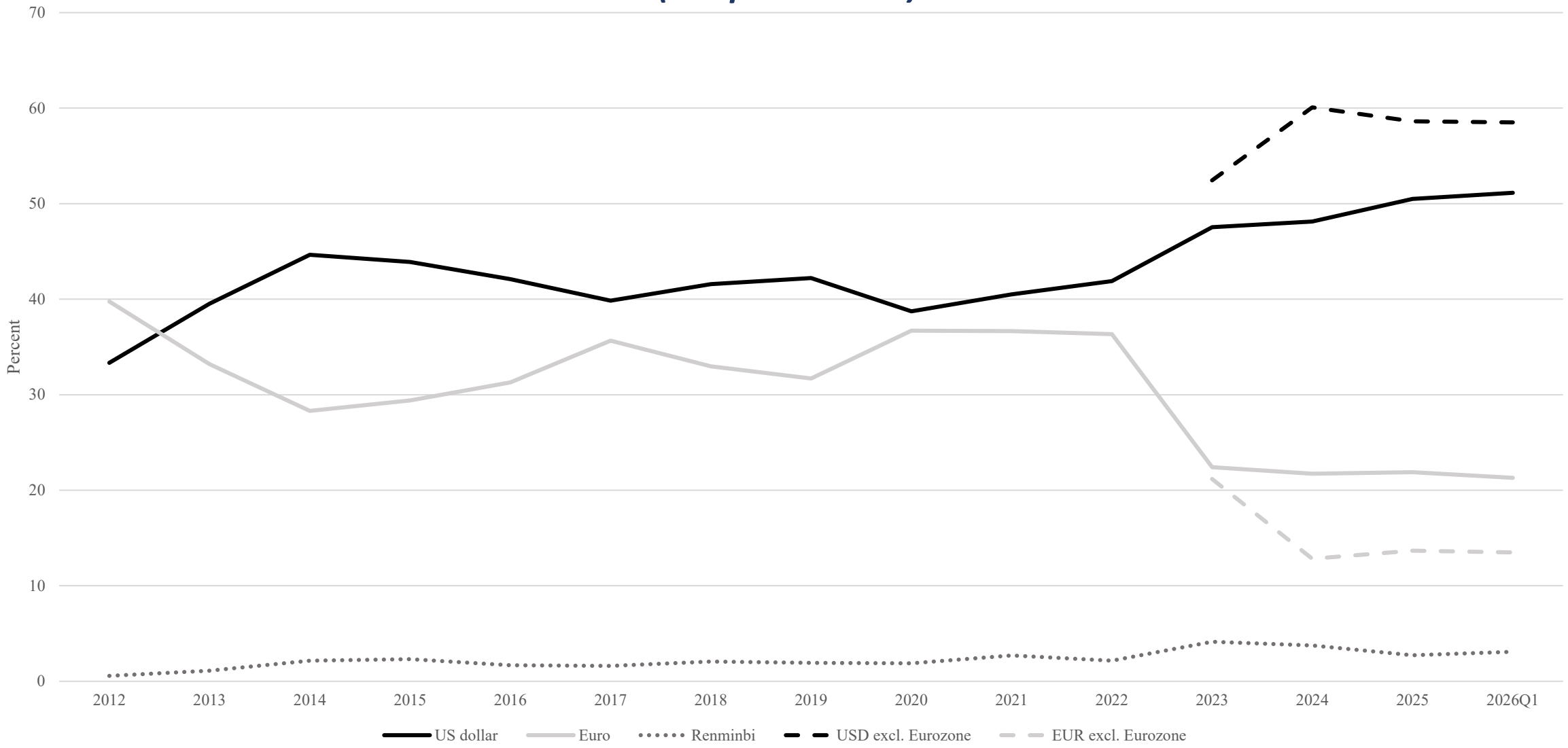
	United States	United Kingdom	Japan	China	Euro area
Total Debt	**60.3**	**6.8**	**11.4**	**27.9**	**27.9**
Government debt	33.1	3.6	8.5	13.4	14.5
Nongovernment debt	**27.2**	**3.1**	**2.9**	**14.5**	**13.3**
Non-financial corporations	8.7	0.6	0.7	4.9	2.2
Financial Corporations	18.5	2.6	2.1	9.6	11.2

Shifts and Paradoxes

- Shifts in reserve currency configuration
- Safety of US Treasuries—price and quantity aspects
- **Other aspects of currency dominance**
- Demand for and supply of safe assets
- Financial innovations and their implications
- A spectrum of outcomes
- A simple solution to limit self-insurance, imbalances

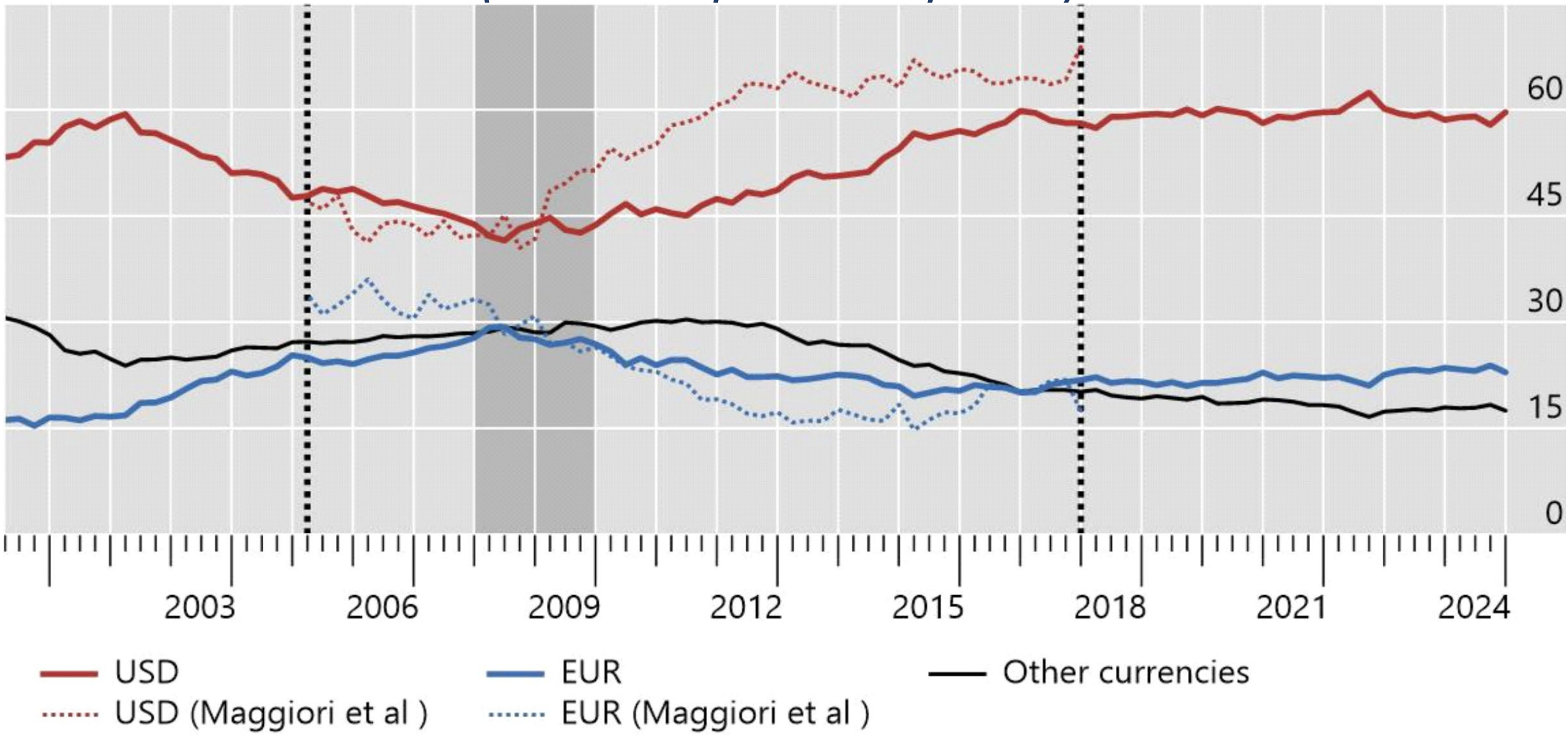
Shares of International Payments

(in percent)

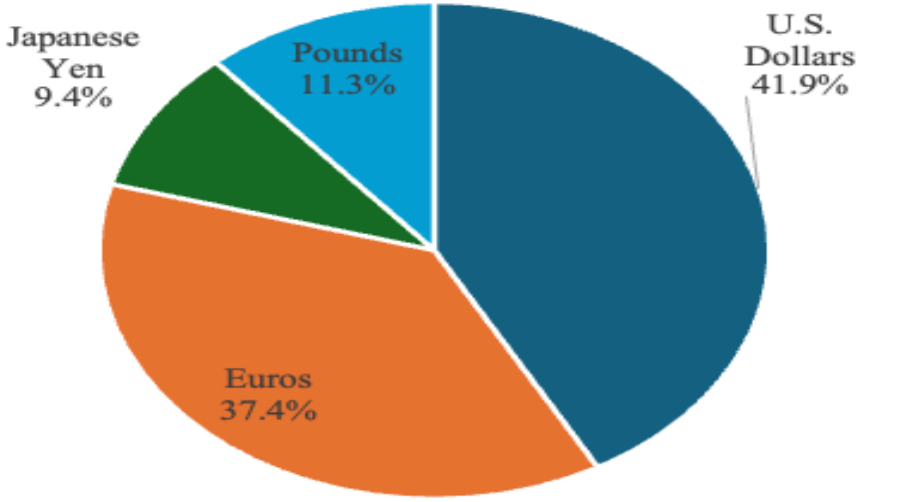


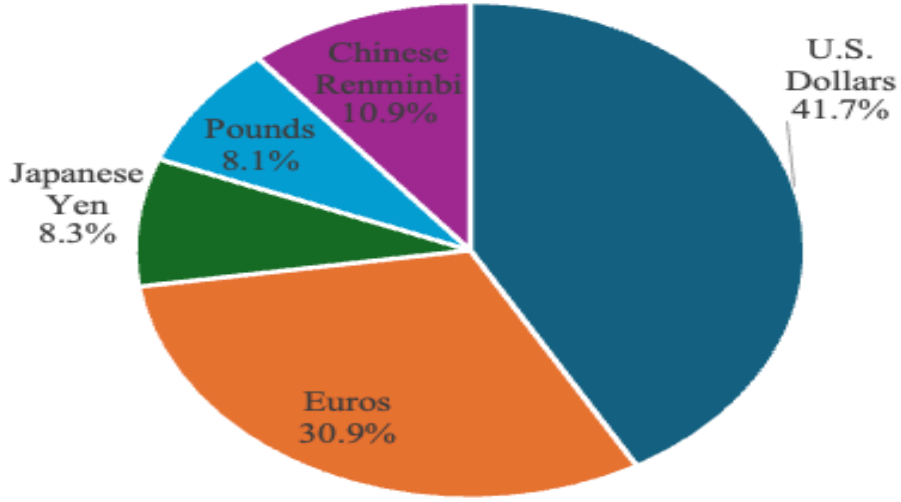
The Currency Denomination of International Debt Securities

(shares in percent of total)

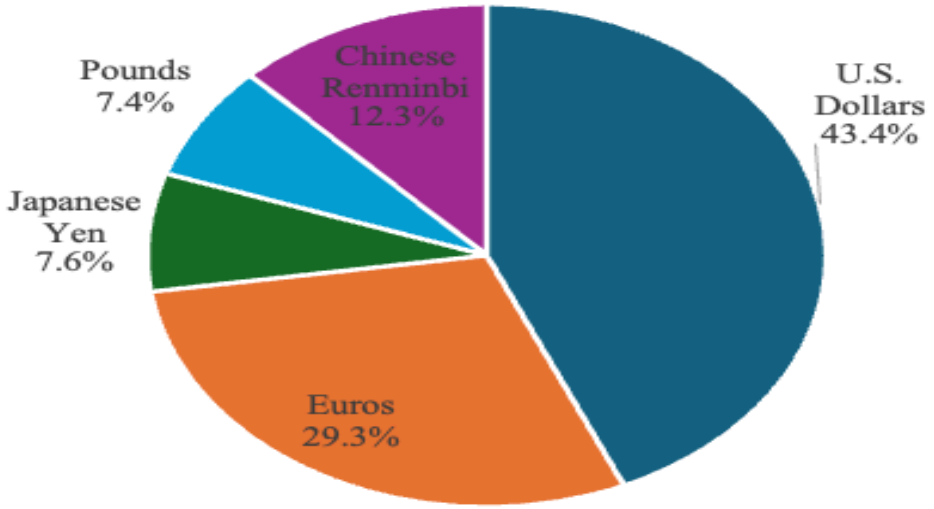


Composition of the IMF's SDR Basket





Most Recent (2022)



Shifts and Paradoxes

- Shifts in reserve currency configuration
- Safety of US Treasuries—price and quantity aspects
- Other aspects of currency dominance
- **Demand for and supply of safe assets**
- Financial innovations and their implications
- A spectrum of outcomes
- A simple solution to limit self-insurance, imbalances

Factors That Affect Reserve Adequacy Per the IMF

Component	Floating regime	Fixed / intermediate
Exports of goods and services	0.05	0.10
Broad money (M2)	0.05	0.10
Short-term external debt	0.30	0.30
Other portfolio liabilities	0.15	0.20
Total weights	**0.55**	**0.70**

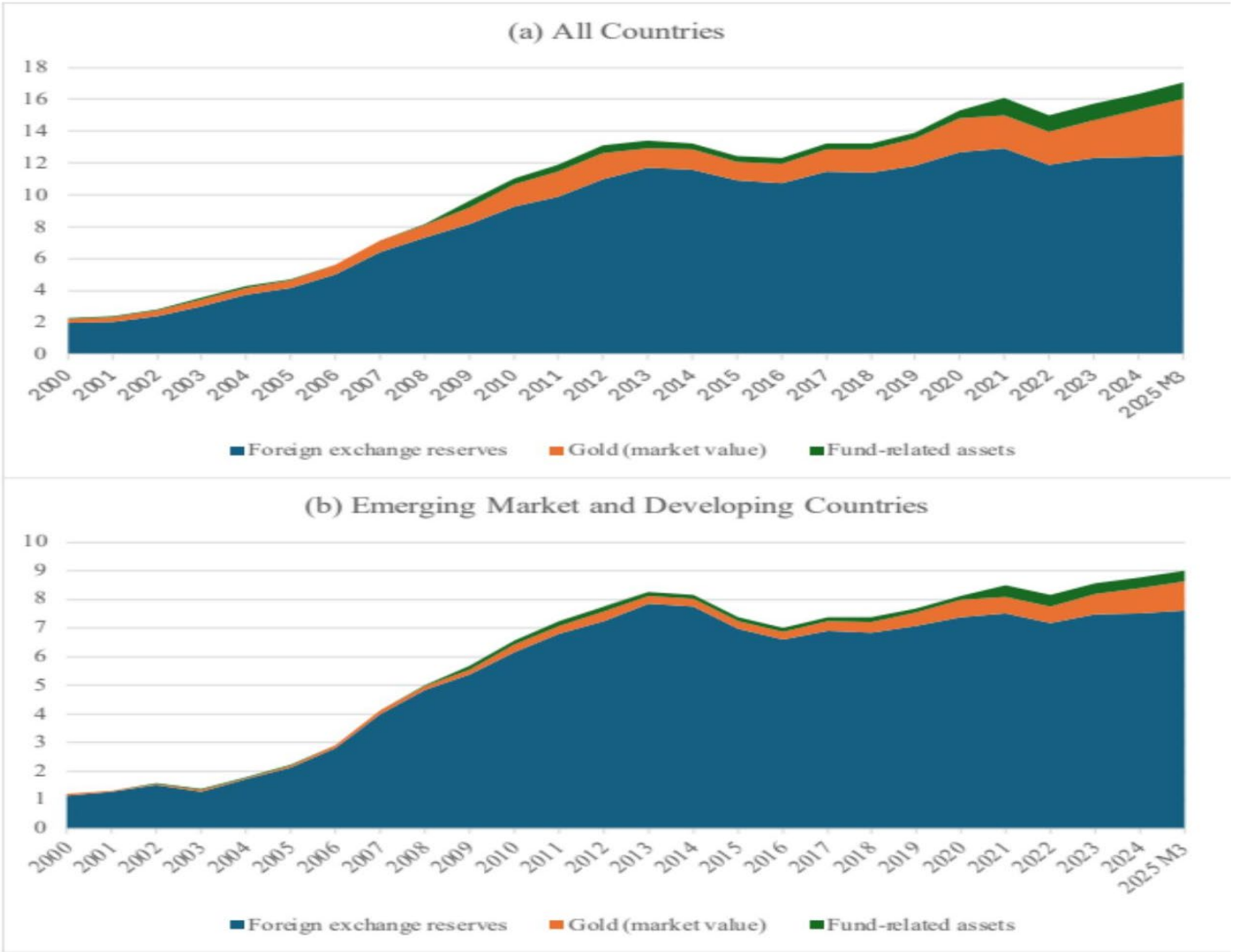
Evaluating Reserve Adequacy

(USD billions, end-2025)

Option	Methodology	Aggregate ARA 2025	Aggregate Reserves 2025	Coverage 2025
A	Standard (unadjusted) ARA for all 61 economies	$9,294 bn	$8,235 bn	**88.6%**
B	Capital-control-adjusted ARA for all 9 countries that have one (Angola, Argentina, China, India, Morocco, Pakistan, Tunisia, Ukraine, Venezuela); standard for the other 52	$6,720 bn	$8,235 bn	**122.5%**
C	Capital-control-adjusted ARA for China only; standard for the other 60	$6,920 bn	$8,235 bn	**119.0%**

Composition of International Reserves

(trillions of U.S. dollars)



Central Bank Gold Reserves

End-of-year value	2020	2021	2022	2023	2024	2025
Gold price, $/oz	**1,895**	1,823	1,820	2,064	2,609	**4,311**
World — stock (t)	**35,305**	35,533	35,508	36,003	36,254	**36,553**
World — value ($ bn)	**2,150**	2,083	2,077	2,389	3,041	**5,067**
EMDEs — stock (t)	**9,906**	10,147	10,543	10,804	11,098	**11,421**
EMDEs — value ($ bn)	**603**	595	617	717	931	**1,583**

Decomposition of Changes in the Market Value of Gold Reserves

	World		EMDEs	
	$ billions	share of ΔV	$ billions	share of ΔV
Price effect ($\Delta P \times Q_{ava}$)	+2,792	95.7%	+829	84.6%
Quantity effect ($\Delta Q \times P_{ava}$)	+124	4.3%	+151	15.4%
Total change in market value	**+2,916**	**100.0%**	**+980**	**100.0%**

Net FX Reserves Supplied by Reserve Currency Economies

	2007Q1			2012Q1			2025Q4		
	Share	FX Reserves (USD Billion)	Net Reserves (USD Billion)	Share	FX Reserves (USD Billion)	Net Reserves (USD Billion)	Share	FX Reserves (USD Billion)	Net Reserves (USD Billion)
World		5591			10440			13137	
U.S.	0.65	42	**3596**	0.62	46	**6411**	0.57	39	**6992**
Eurozone	0.25	229	**1173**	0.25	259	**2310**	0.20	395	**2112**
Japan	0.03	888	**-713**	0.04	1210	**-808**	0.06	1164	**-449**
China							0.02	3358	**-3116**
U.K.	0.05	61	**196**	0.04	59	**361**	0.04	155	**392**
Australia							0.02	45	**206**
Canada							0.02	98	**210**
Switzerland	0.00	37	**-28**	0.00	263	**-238**	0.00	915	**-891**

Financial Innovations and the IMS

- Improvements in cross-border payment systems
- Decentralized cryptocurrencies (Bitcoin, Ether)
- Stablecoins
- Tokenized bank deposits and government bonds
- Central bank digital currencies

Implications for the IMS

- Reduced frictions, more efficient cross-border payments
- International diversification opportunities
- Global pools of capital
- Greater capital flow and exchange rate volatility
- For some currencies, threat of displacement

Possible Outcomes

- Intensified competition, more balance
- Fragmentation, with currency fragility
  - Coordination problems in crisis periods
- Greater concentration, with different kind of fragility
  - Undisciplined, volatile policies with continued spillovers
  - Global lender of last resort—but geopolitical favoritism

Solutions

- Individual countries
  - Better macro, regulatory frameworks
  - Deep, liquid financial markets
  - Robust institutions
- International
  - Rethink governance structure
  - Rules of the game—fair, transparent, evolves with changing structure of economic power
  - Global liquidity insurance

Global Liquidity Insurance

Why necessary?

Rising exposure to vulnerabilities from open capital accounts, large gross positions
Self-insurance costly: quasi-fiscal costs, financial repression, capital losses
Collective action problem

Insurance pool

Modest entry fee for initial capital base, administrative costs
Premium linked to (i) level of insurance desired (ii) domestic economic policies
Nonlinear premium schedule: policy deviations from benchmarks, prolonged deviations

Payouts

Credit line open for a year, non-punitive interest rate
Pool backed up by ex-ante credit lines from Federal Reserve, ECB, Bank of Japan

Global Liquidity Insurance

Politically feasible for a national government to pay premiums for such insurance?

Cheaper than quasi-fiscal costs of sterilizing reserves

No currency risk

Relatively modest premium

Participation

Broad participation to deal with the stigma effect

Make participation condition for continued membership in body such as FSB

Alternatives to GLI?

Why can't the IMF provide such insurance?
Stigma, history
Tension between surveillance & insurance with only ex-ante conditionality

Why can't the Fed or the ECB directly provide credit lines to countries?
Uncertain and unreliable as political judgments involved

Can SDRs provide such insurance?
Limited value, as no fiscal backing of sovereign govt.
Reallocation of SDRs to where most needed a political decision

Global Liquidity Insurance

Broader benefits

- Reduces incentives for self-insurance
- Separates out mercantilist, insurance motives for reserve accum.
- Allows EMs to focus on better domestic macro policies, mitigation of liquidity risks associated with capital account opening
- Increased discipline on advanced economy fiscal policies
- Mitigates risk of spiraling global macroeconomic imbalances