Features and Fragilities of the International Monetary System

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1. Introduction

The international monetary system encompasses individual countries' financial markets and currencies, and the connections—exchange rates between currencies and capital flows between countries—that bind them together, along with various rules of the game that countries have agreed to honor and that are refereed by international institutions such as the IMF, the BIS, and the OECD. The smooth functioning of the IMS has significant implications for global economic prosperity and stability, with emerging market and developing economies, in particular, exposed to both the bounties and vagaries of the IMS.

In this paper, I review the current status of the IMS and discuss prospective changes. I make three main points. First, despite the erosion of the economic and institutional underpinnings of the dollar's dominance in global finance, that dominance has remained unaffected in many dimensions due to the absence of viable alternatives. The dollar's share of global foreign exchange reserves has declined over the last three decades. But this is not the result of the emergence of a strong rival. With neither the euro nor the Chinese renminbi in a position to seriously rival the dollar, the reserves landscape has fragmented. Moreover, by some measures, such as the currency denomination of cross-border payments and international debt securities, the primacy of the dollar has hardly been affected by U.S. economic policies and political dysfunction, the erosion of U.S. institutions, or the weaponization of the dollar through financial sanctions.

Second, the rising demand for reserves and the desire to diversify away from the dollar have been constrained by the lack of alternatives. One consequence has been a surge in the share of gold reserves, but such strategies pose their own problems. Third, new financial technologies will bring many benefits, including greater efficiency and lower costs in domestic and cross-border payments, but could result in the further concentration of currency power. The benefits of these changes could be larger for EMDEs but so could the perils.

I conclude by discussing the two unsavory alternatives the world faces—continued dollar dominance versus a fragmented currency system. I argue that both pose substantial risks and

make some suggestions for how to break out of this currency doom loop, including by discussing a proposal for global liquidity insurance.

2. Currency configurations

There have been some important changes in the structure of the IMS in this century, especially the roles of different currencies. One feature that has persisted for many decades, though, is the centrality of the US dollar. The US dollar remains by far the world's dominant currency in every respect—as a unit of account for invoicing cross-border transactions, as a medium of exchange for payments involving multiple currencies, and as a store of value for global investors. The dollar's absolute supremacy has waned in some dimensions while it has strengthened in others. In this section, I examine these changes and what they mean for global capital flows.

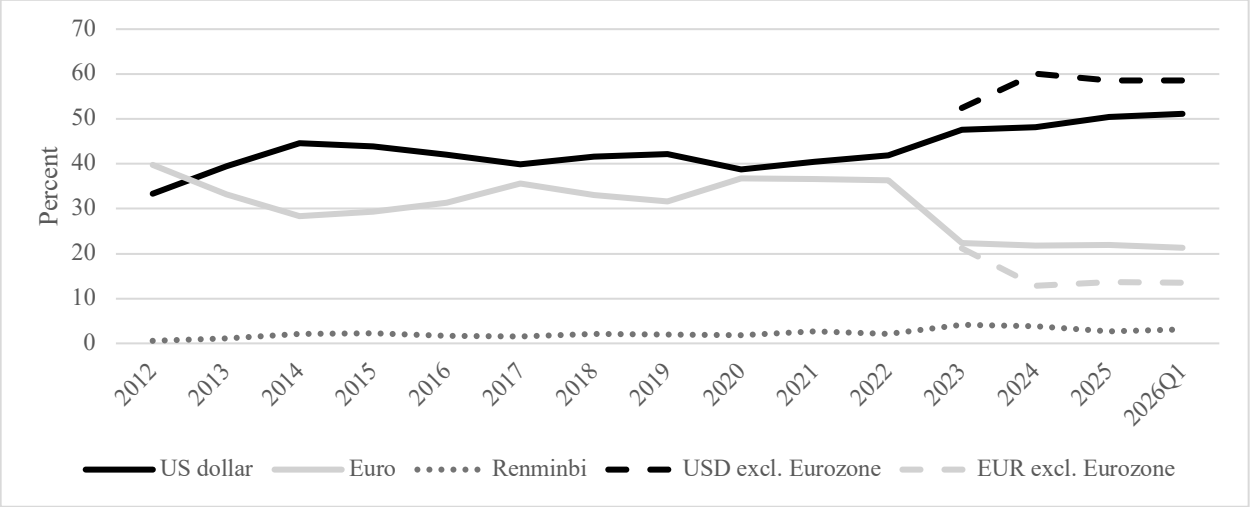
2.1. International payments

SWIFT remains a key underpinning of the cross-border payment system, as it constitutes the messaging system used for most such transactions. SWIFT's Global Currency Tracker provides a key source of data on the currency denomination of cross-border payments for which messaging is done through the SWIFT platform. The Currency Tracker provides data excluding payments within the euro zone, which are presumably all denominated in euros, starting only in 2023. Figure 1 shows that the dollar now accounts for 59 percent of the value of all such international payments. The euro is a distant second, clocking in at 14 percent, with the British pound sterling and the Japanese yen accounting for roughly 5 percent each. The renminbi's share peaked at 4 percent in 2023 and has since fallen back to 3 percent.[2]

Including payments within the euro zone, the share of the dollar in early 2016 was about 8 percentage points lower (51 percent) and that of the euro was correspondingly higher. But whether one excludes or includes payments within the euro zone, the share of the dollar in international payments has gone up in the last couple of years while the euro's share has fallen.

[2] The numbers reported here are based on the March 2026 edition of the Global Currency Tracker, which has data through February 2026.

Figure 1. Shares of International Payments
(in percent)



Data source: Monthly SWIFT Global Currency Tracker (formerly RMB Tracker).

Notes: December data shown for all years up to 2025. Dashed lines show the shares of the US dollar and euro as international payments currencies excluding payments within the Eurozone, available from 2023. The renminbi share is shown as a dotted line. Starting from July 2023, SWIFT has altered its reporting due to changes in market practice: "Following Europe's migration to the ISO 20022 standard for domestic and cross-border payments in March 2023, Swift has become aware of a change in market practice in the region. A number of European central banks are now using camt.xxx reporting messages for liquidity management and to inform commercial banks of their open credit lines instead of MT 202 payment instruction messages that they used previously for these notification purposes. This behaviour shift creates a more accurate classification of financial data going forward, but also has the effect of excluding these previously counted messages from the RMB tracker data. This new market practice has led to a decrease of EUR by 15% over the past six months. As more markets and payments shift to the new standard, there could be similar changes in market practice in other parts of the world that would, in turn, lead to some recalibration in the overall data and currency positions."

SWIFT also tracks the usage of different currencies in trade finance. The US dollar dominates trade finance even more heavily than general payments, accounting for 82 percent of the value of such payments and reflecting the dollar's entrenched role as the currency of international commodity and goods trade. The renminbi and euro account for about 6 percent each, respectively, with all other currencies of minimal significance in this dimension.

China's Cross Border Interbank Payments System (CIPS) has gained traction in recent years and also has messaging capabilities that could enable bypassing of the SWIFT network. This

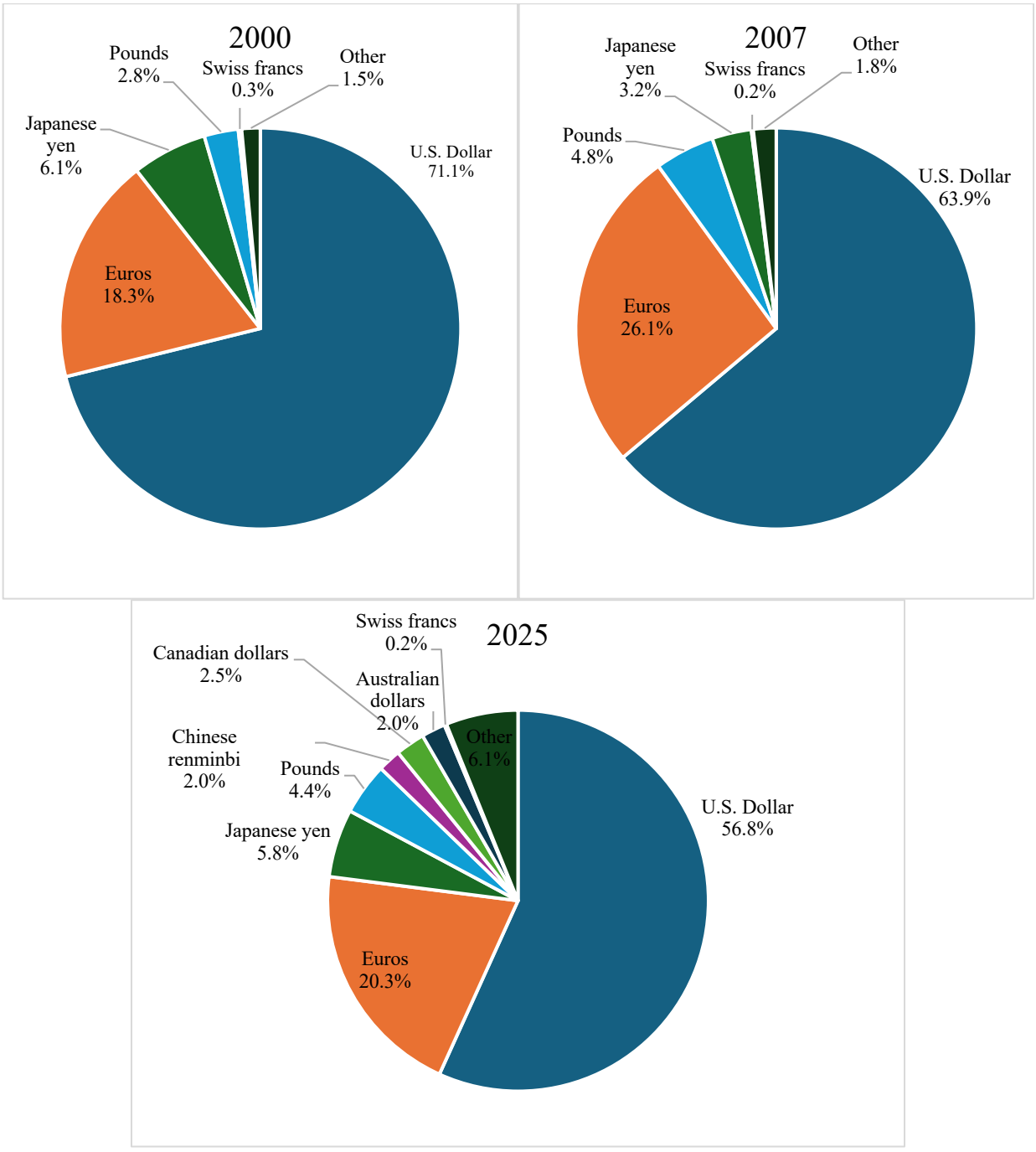
suggests that the renminbi's role in cross-border payments may be understated in the SWIFT data. But most of China's major trading partners still use SWIFT, with the likely exceptions of countries like Russia that have restricted access on account of financial sanctions. Hence, this understatement might not amount to a substantial downgrading of the renminbi's status as a payment currency for cross-border transactions. This is certainly a consideration that bears watching, though, in view of China's prowess as a trading power and the eagerness of countries around the world to disentangle from the dollar-dominated financial system.

2.2. Currency composition of reserves

The currency denomination of foreign exchange reserves is an important marker of a currency's prominence in the IMS. Figure 2 shows that the dollar's share of global reserves fell from 71 percent in 2000 to 64 percent in 2007, just before the onset of the global financial crisis. This share then stabilized for a few years before resuming its decline to a level of 57 percent at the end of 2025. The euro's share rose sharply in the initial years following its creation in 1999, from 18 percent in 2000 to 26 percent in 2007. Since then, however, the euro's share has fallen by 6 percentage points, leaving the gap between the dollar and its closest rival at about the same level in 2025 as in 2007. The Chinese renminbi now accounts for about 2 percent of global foreign exchange reserves, up from essentially zero in 2010 and the Japanese yen's share has risen by about 2 percentage points.

The major shift in the currency composition of reserves, as highlighted by Arslanalp, Eichengreen, and Simpson-Bell (2022), is that economic and geopolitical forces have in recent years boosted some smaller reserve currencies such as the Australian and Canadian dollars, the Swedish kroner, and even the Korean won and Indian rupee. Individually, these currencies are still bit players in global finance but collectively they now account for a much larger share of reserves than a couple of decades ago. Whether this fragmentation in the second tier of currencies, a group in which I include all currencies other than the dollar, is a source of stability is an open question that I address in more detail later in this paper.

Figure 2. Shares of Foreign Exchange Reserves



Data source: IMF Currency Composition of Official Foreign Exchange Reserves (COFER).

Notes: The IMF started separately identifying reserve holdings in renminbi and some of the other smaller reserve currencies only in 2016. The IMF has dropped the distinction between allocated and unallocated reserves, and the COFER tables now impute the currency shares of unallocated reserves. In December 2025, the share of imputed reserves in total foreign exchange reserves was 10.75 percent.

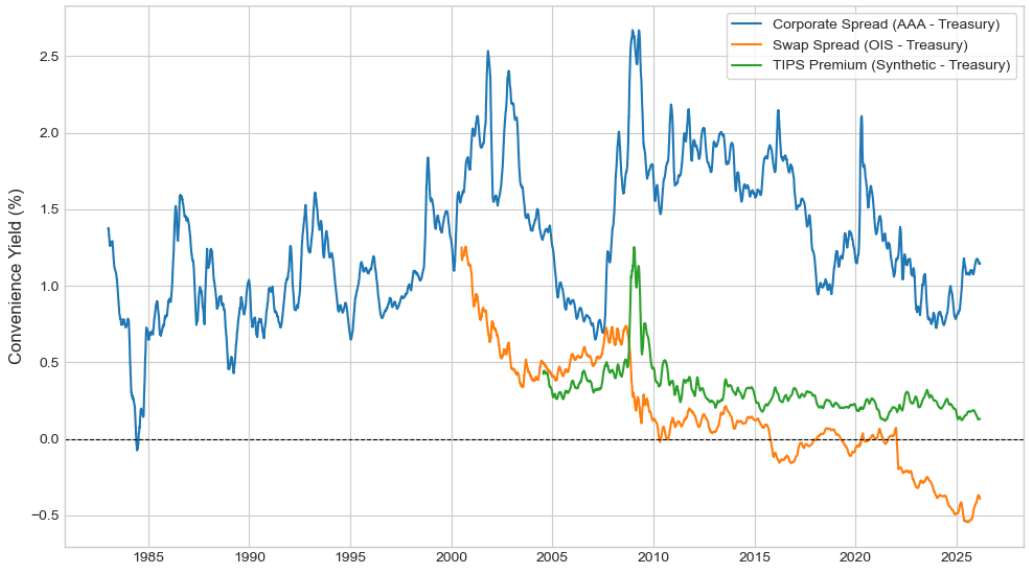
2.3. The dollar's shaky safe haven status

The United States remains a dynamic and resilient economy even as the burdens on the economy and the currency continue to grow. Gross federal public debt as of early May 2026 was $39 trillion, roughly 125 percent of annual GDP. Debt held by the public, a concept that excludes intragovernmental holdings (mainly by the Social Security trust funds) but includes the Federal Reserve's holdings of Treasury securities, stood at $31.3 trillion, about 100 percent of GDP (see Appendix Figure A-1 for a breakdown of the US federal debt into different categories). The trajectories of US deficits and debt raise serious concerns about US fiscal sustainability.

Beyond the size of its economy and financial markets, the U.S. institutional framework is essential for maintaining the trust of domestic and foreign investors. Each of the pillars of this framework has been under pressure in recent years. In particular, the independence of the Federal Reserve, which is a bulwark of foreign investors' faith in the stable long-term value of the dollar, has come under direct threat. The institutionalized system of checks and balances has proven to be fragile. The weaponization of the dollar through aggressive use of US financial sanctions against both US rivals and allies has also engendered concerns about the dollar's dominance.

The consequences for the status of US Treasuries as the dominant global safe asset have been significant. Figure 3 shows that various measures of the convenience yield on long-maturity US Treasuries have declined in recent years, with one measure even turning negative. This does not necessarily mean that the dollar's status as a safe haven currency has ended. Du, Keerati, and Schreger (2025) make the point that the convenience yield on the US dollar, as measured by risk-free assets other than Treasuries, has held up better. Moreover, despite all the chatter about diversification away from the dollar, foreign inflows into US financial markets including Treasuries have held up quite well.

Figure 3. Estimates of the Convenience Yield on U.S. Treasury Securities
(30-day moving average)

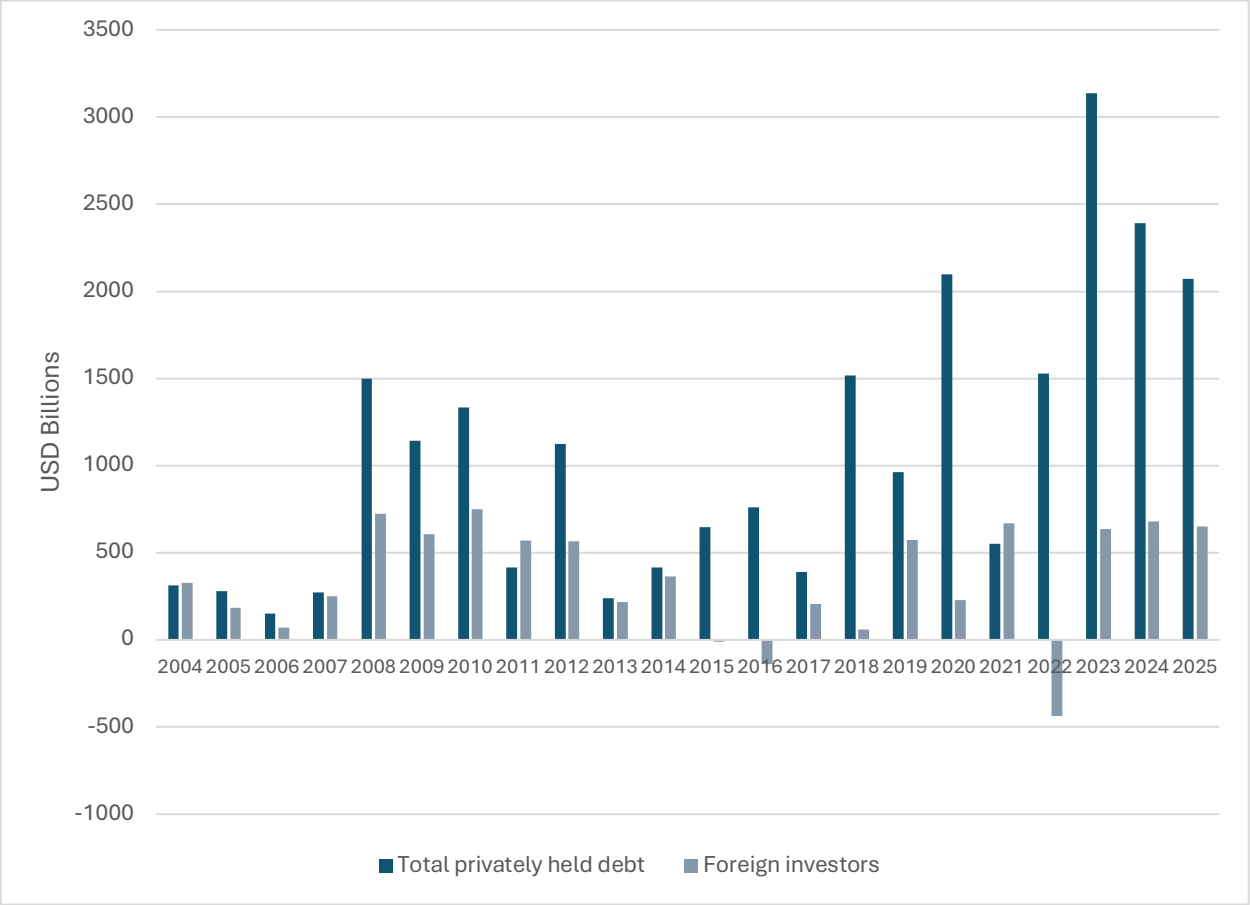


Notes: Following Krishnamurthy and Vissing-Jorgensen (2012), the baseline spread is measured by comparing the yield of a highly rated corporate bond to a Treasury with the same maturity: $CY_t^{Corp} = y_t^{AAA} - y_t^{Treasury}$. An alternative proxy for the risk-free rate is the interest swap rate (Jiang, Richmond, & Zhang, 2025). Here historical data from the LIBOR Swap rate is combined with the modern SOFR Overnight Index Swap (OIS) rate. This approach takes the difference between the swap rate and the Treasury yield with the same maturity: $CY_t^{Swap} = y_t^{Swap} - y_t^{Treasury}$. This is calculated using the combined swap column minus GT10. The third methodology follows Fleckenstein, Longstaff, and Lustig (2014) to construct a synthetic nominal Treasury. The authors define a strategy to convert the inflation-linked cash flows of a Treasury Inflation-Protected Security (TIPS) into fixed cash flows using zero-coupon inflation swaps. The difference in yield between this synthetic nominal bond and an actual nominal Treasury serves as a proxy for the convenience yield. $Proxy_t = \left(y_t^{TIPS} + y_t^{InflationSwap}\right) - y_t^{Treasury}$. This is calculated as (GTII10 + USSWIT10) minus GT10. Calculated values are available only from 2004, since there is no available swap data before that date.

Figure 4 shows the role foreign investors have played in the financing of privately held US federal debt. The dark blue bars show net issuance in each year while the thin blue bars show the amount of net purchases by foreign investors. In the aftermath of the global financial crisis, the increase in privately held debt averaged $1.3 trillion per year during 2008-2010. Foreign investors purchased nearly half of this debt issuance. There are some years such as 2015 and 2016 when foreign investors' net purchases turned slightly negative. The net issuance of privately held debt rose to $2.1 trillion in 2020, when the COVID-19 pandemic hit, and then rose

to $3.2 trillion in 2023. In these two years, foreign investors contributed to a relatively modest share of the purchases. And in 2022, foreign investors on net sold US Treasuries. A more disaggregated analysis is warranted, though, before concluding that such episodes signal a flight out of Treasuries.

Figure 4. Foreign Financing of Privately Held U.S. Federal Government Debt
(in billions of U.S. dollars)



Data source: U.S. Treasury Bulletin, March 2026: Table OFS-2.

Notes: Each bar denotes changes in privately held debt—the total level and the level accounted for by foreign investors—calculated as the change in end-of-year debt stocks (as reported in columns (3) and (11) in Table OFS-2 of data source). Privately held debt excludes Treasury securities held by government agencies and the Fed. Foreign financing in a given year can exceed total annual debt financing (as in 2021) if domestic investors reduce their holdings of Treasury securities in that year.

Figure 5 breaks down the total purchases of U.S. privately-held federal government debt into purchases by official agencies (central banks and sovereign wealth funds) and private investors,

although the line between these two categories can sometimes be a bit blurry. There are periods when central banks sell reserves to mitigate deprecation pressures on their currencies, which result in overall net sales of Treasuries. During 2014-2016, for instance, when the Chinese renminbi was facing significant depreciation pressures, the People's Bank of China used about $1 trillion in reserves to support the renminbi. In 2016, the official sector overall registered significant net sales of Treasuries. The same happened in 2022, when many emerging market currencies faced significant depreciation pressures. So it is worth keeping in mind that overall net sales by foreign investors do not necessarily signal flight from Treasuries. During 2023-2025, private sector purchases of U.S. Treasuries amounted to a total of nearly $1.5 trillion.

Figure 5. Official, Private Financing of U.S. Federal Government Debt
(in billions of U.S. dollars)

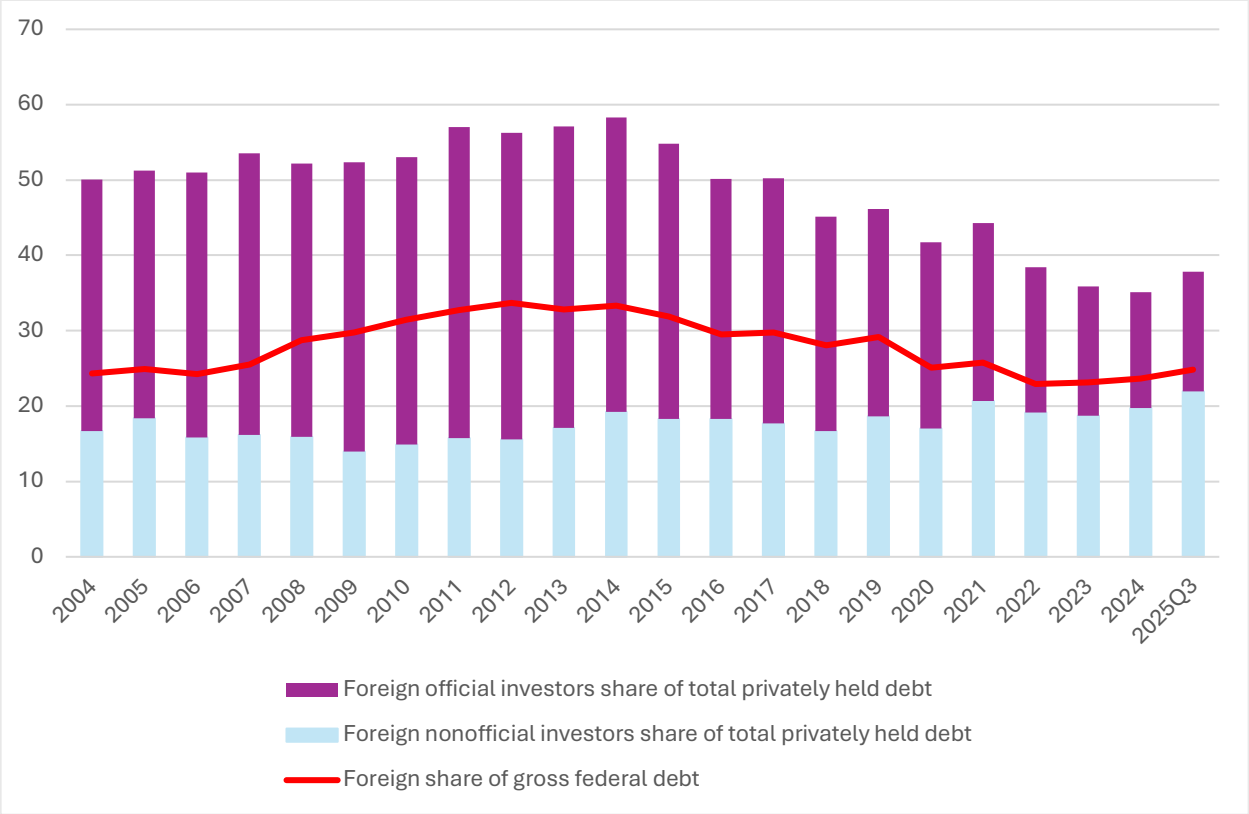
Data source: U.S. Treasury, Major Foreign Holders of U.S. Treasury Securities (MFH table).

Notes: Each bar denotes changes in debt held by foreign investors calculated as the change in end-of-year debt stocks.

Figure 6 shows that, by the end of 2025, foreign investors accounted for about 38 percent of total privately held debt, down from the peak of 58 percent in 2014. In 2025, foreign private and

official investors accounted for 22 percent and 16 percent, respectively, of privately held debt. Their collective share of gross federal debt was 25 percent. In short, foreign investors, both official and private, have hardly shied away from Treasuries but U.S. domestic investors have increased their ownership share over the last decade. It is also worth noting that, since 2022, despite the copious amount of U.S. debt issuance and concerns about the dollar, foreign investors' share has actually gone up slightly.

Figure 6. Foreign Ownership of U.S. Federal Government Debt
(in percent)



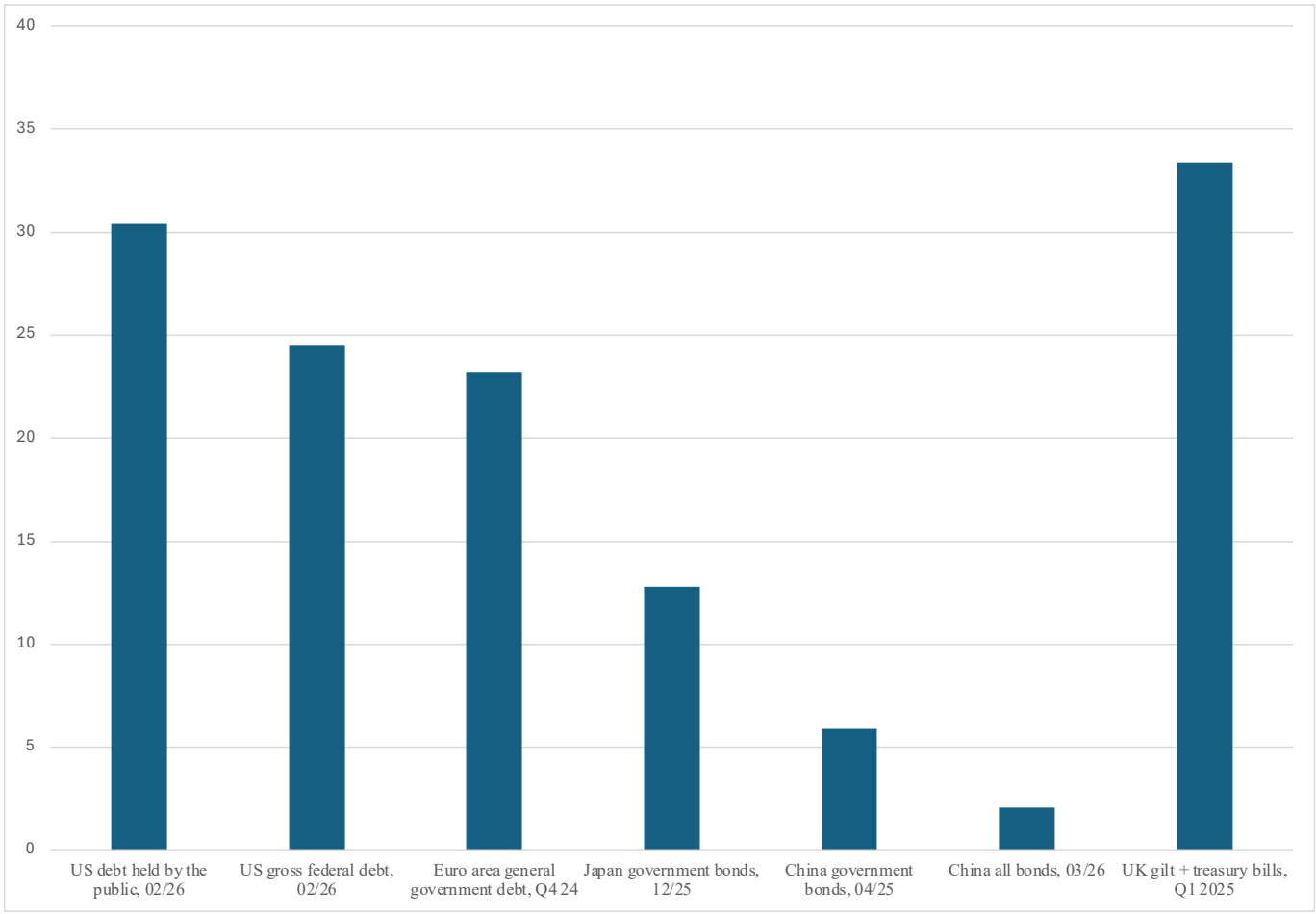
Data sources: U.S. Treasury Bulletin, March 2026; U.S. Treasury, Major Foreign Holders of U.S. Treasury Securities (MFH table).

Notes: Each bar represents the percentage of total privately held U.S. federal government debt attributable to foreign investors. The top section of each bar denotes the percentage of total privately held debt attributable to foreign nonofficial investors, and the bottom section denotes the percentage of total privately held debt attributable to foreign official investors. The line represents total foreign ownership of U.S. federal government debt as a percentage of gross federal debt.

The two take-aways from this figure are that foreign investors account for a lower share of US federal debt than was the case a decade ago, but the share is still quite sizable and rose modestly in the last two years, notwithstanding extensive concerns about the safety and liquidity of Treasury securities as well as the stated desire of foreign governments and central banks to de-risk from the dollar.

Figure 7 shows that the share of foreign ownership of U.S. federal public debt is much higher than the corresponding figures for the euro area, Japan, and China. Interestingly, though, the share of foreign ownership of U.K. public debt has risen substantially in recent years and now stands at a level even higher than that of the United States. But there is clearly no evidence yet of a wholesale shift of foreign investors out of Treasuries.

Figure 7. Foreign Ownership of Public Debt
(percent)



Data sources: U.S. Treasury TIC System and Monthly Statement of Public Debt; ECB international investment position; Bank of Japan, Flow of Funds; CCDC/Xinhua via Bond Connect; UK DMO Quarterly Review.

Notes: Data dates vary by country, reflecting the latest available at the time of compilation (ranging from Q4 2024 to March 2026). Debt definitions differ across countries: U.S. debt held by the public excludes intragovernmental holdings; U.S. gross federal debt includes intragovernmental holdings; Euro area data covers debt securities issued by general governments, with foreign defined as non-euro-area residents; Japan data includes central government securities, FILP bonds, and treasury discount bills; China government bonds covers central government bonds held in the interbank market; China all bonds covers all bonds in the interbank market; U.K. data covers gilts at market value.

2.4. Bond markets

As one reviews the landscape of reserve currencies, it is also worth comparing the absolute magnitudes of assets available to foreign investors looking for safety. An important determinant of a safe haven currency's status is the size and liquidity of the country's fixed income markets.

The BIS provides data on outstanding debt stocks, comprising both government (general government, a broader category than central government) and nongovernment debt securities. Drawing on these data, Table 1 provides a comparison of the size of fixed income markets in the major reserve currency issuing economies. The value of outstanding government debt in the United States amounted to $33 billion in 2025Q3, roughly two and a half times the corresponding amounts for China and the euro zone, and amounting to 45 percent of the total for these five economies. The stock of nongovernment debt in the United States roughly matches the combined sum of that in China and the euro area. The US share of total bond market capitalization, including nongovernment debt, is also 45 percent. In other words, the United States continues to have the largest markets for fixed income assets, which are typically viewed as safer assets than equities and other types of financial instruments. Thus, in terms of the overall supply of fixed income assets, the United States still towers over other major reserve currency issuers.

Table 1. 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

Data source: BIS Debt Securities Statistics, 2025 Q3.

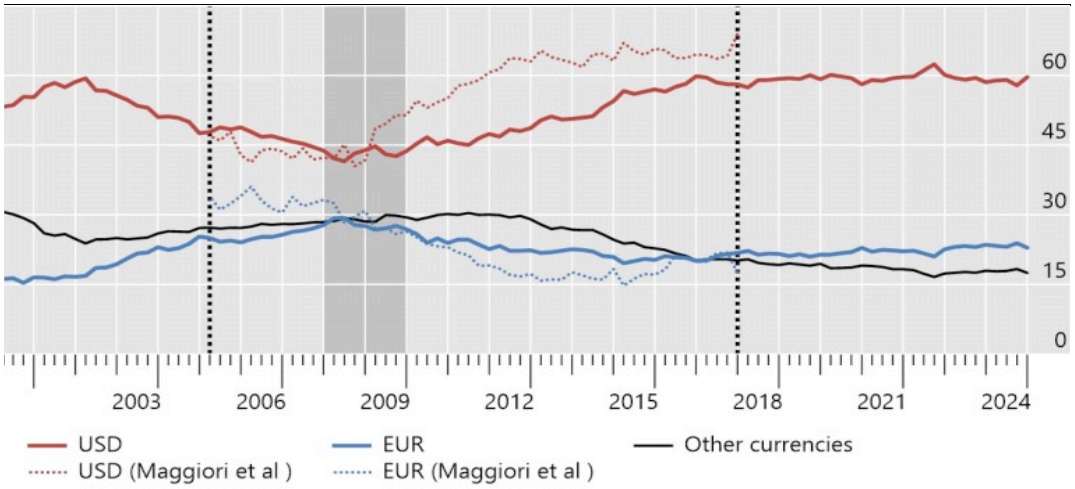
Notes: Values shown in USD trillions at nominal value. Euro area refers to the 20 member countries as of 2023.

2.5. International debt securities

In joint work with co-authors at the BIS and the Federal Reserve (Pradhan, Prasad, Takats, and Temesvary, 2026), I examine the currency denomination of international debt securities, defined as bonds listed in, registered in or following the legal covenants of financial markets outside the country in which the issuer resides. The currency denomination of these securities is a marker of the relative importance of different currencies in global financial markets and how this importance has evolved over time.

We find that the dollar has been dominant in IDS issuance since 2000, although this dominance took a hit in the early to mid-2000s after the creation of the euro (see Figure 8). The euro's share and the collective shares of other currencies have faded since the late 2000s, however, with the dollar's share rising to 60 percent of outstanding IDS stocks since 2016 and staying in a narrow range around that level since then. Data on new issuances of IDS (rather than outstanding stocks) reveal a similar picture (not shown here).

Figure 8. The Currency Denomination of International Debt Securities
(shares in percent of total in all currencies)



Notes: This figure, taken from Pradhan, Prasad, Takats, and Temesvary (2026), shows the shares of outstanding stocks of IDS denominated in different currencies. IDS issued within the euro area by euro area nationality issuers are excluded from the calculations. The dotted lines show the shares of the dollar and the euro in the Maggiori et al (2020) dataset (the period of coverage of that dataset is marked by dotted vertical lines; data provided by the authors). The black line is the composite share of all other currencies in which IDS are denominated.

2.6. Composition of the SDR

Another example of the shifting balance of financial power, but in a direction that favors rather than weakens the dollar's position, can be seen in the determination of the value of the IMF's SDR. The weights of currencies in the SDR "basket" are based on a formula that takes account of a country's GDP, its share of world trade, and the share of global foreign exchange reserves held in that currency.[3]

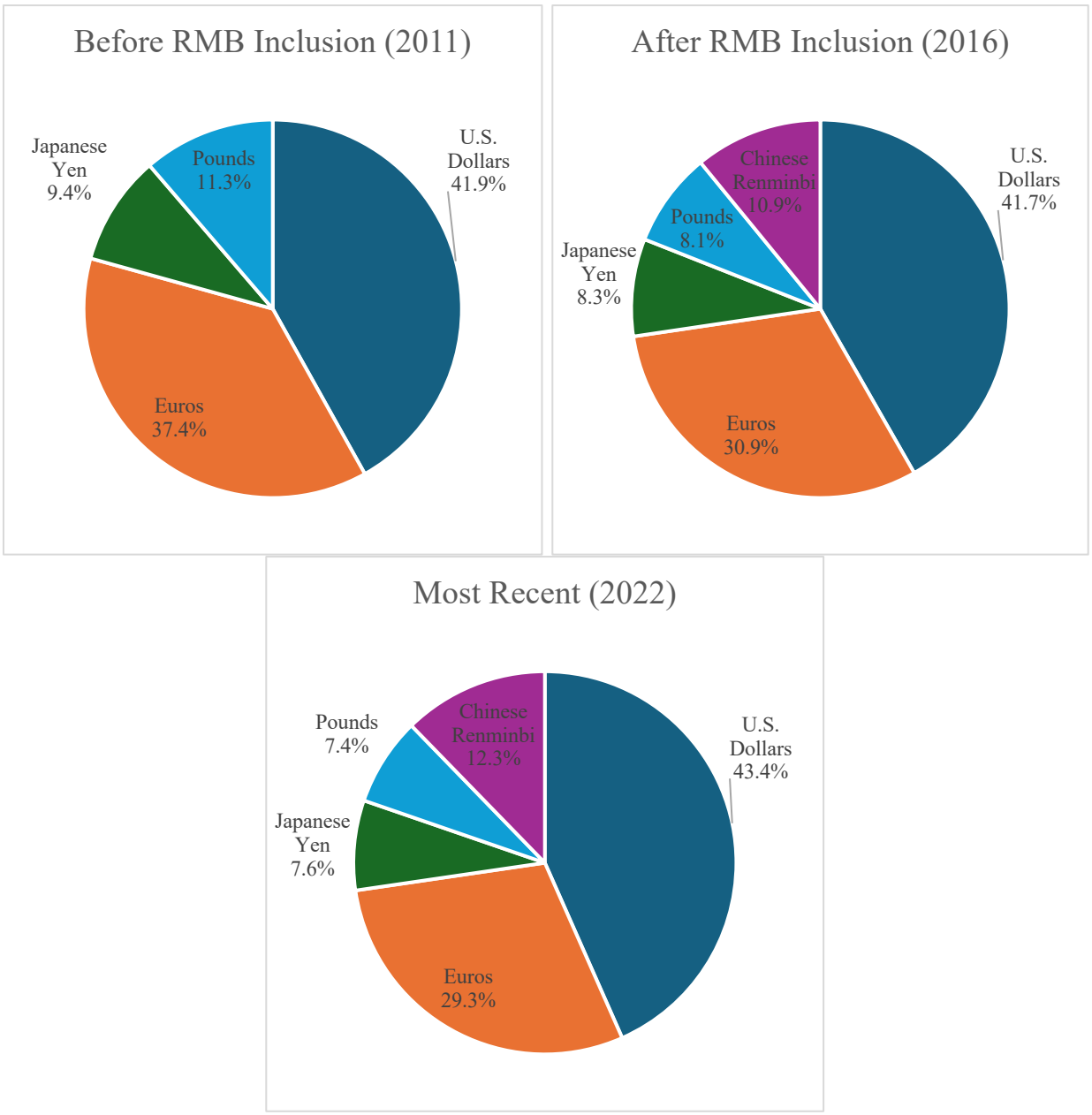
When the IMF included the RMB in the SDR basket in 2016, the formula assigned the RMB a weight of 10.9 percent (Figure 9). That 10.9 percent had to come out of the shares of the other

[3] The numbers discussed in this section are taken from https://www.imf.org/-/media/Files/About/Infographics/board-approved-sdr-basket-currency-weights-at-past-quinquennial-reviews.ashx. For the currency composition of the SDR before 1999, see https://fx.sauder.ubc.ca/SDR.php.

four currencies that then comprised the SDR basket—the US dollar, the euro, the British pound sterling, and the Japanese yen. Virtually all of it in fact came from the other three major reserve currencies, with the US dollar's share barely affected. The euro was the biggest loser, with its weight shrinking from 37 percent to 31 percent.

The IMF changes the weights roughly every five years to reflect changes in the variables that go into the formula. The latest revision, which took place in 2022, increased the weight of the RMB to 12.3 percent. Interestingly, for all the talk of American decline, the hard facts on the ground resulted in the US dollar's weight *increasing* by nearly 2 percent. Again, the other three currencies lost additional ground, with the euro's weight shrinking further to 29 percent.

Figure 9. Composition of the IMF's SDR Basket



Data source: IMF.

Notes: This figure shows currency weights in the SDR (and SDR interest rate) basket.

2.7. The dollar trap

US trade and current account deficits over the last our decades have been financed by borrowing from the rest of the world. This has resulted in an increasingly negative net international investment position (NIIP). By 2014, US foreign liabilities were $32 trillion and US foreign assets amounted to $25 trillion, rendering the United States a net debtor to the tune of $7 trillion. In principle, this puts the United States in a vulnerable position.[4]

In my 2014 book *The Dollar Trap* I highlighted one crucial point (drawing on the work of numerous scholars of international finance). US liabilities to the rest of the world are denominated in dollars while its assets are denominated mostly in foreign currencies. So what would happen if the world turned away from the dollar, sending its value plummeting relative to other currencies?[5]

If the world did try to shun the dollar, from the US perspective the value of US liabilities to foreigners would not be affected—they would still be worth the same number of dollars. But US foreign assets would now have a higher value in dollars because each unit of foreign currency would be worth more dollars. Conversely, foreigners would take mark-to-market losses on the value of their dollar assets when converted back to their home currencies. So, in effect, a fall in the value of the dollar would amount to a financial transfer from the rest of the world to the United States.

Recognizing this perilous position, countries around the world should obviously have reduced their exposure to the dollar trap. In fact, the opposite has happened. By the end of 2025, America's foreign liabilities and assets were $71 trillion and $43 trillion, respectively, quadrupling the US net debtor position to $28 trillion over the past 11 years and tightening the dollar trap.

[4] Data on the US international investment position, including foreign assets and liabilities, are available at https://www.bea.gov/data/intl-trade-investment/international-investment-position.
[5] Gourinchas and Rey (2007) note that "Almost all U.S. foreign liabilities are in dollars, whereas approximately 70 percent of U.S. foreign assets are in foreign currencies."

The bottom line is that the dollar's stature in international finance has not diminished much, especially in a relative sense, despite global frustration with this state of affairs.

3. Demand for and supply of international reserves

In this section, I discuss the demand for international reserves based on measures of reserve adequacy, the evolution of reserve aggregates, and the potential for and implications of diversification into gold, which has rapidly come to account for a significant share of overall reserves.

3.1. Demand for reserves

Self-insurance through accumulation of reserves is costly for EMDEs. The costs include the quasi-fiscal costs of sterilization (as the yield on advanced economy government bonds, in particular, tends to be lower than on domestic bonds used to sterilize the monetary expansion associated with intervention in foreign exchange markets to limit currency appreciation) and the opportunity cost of foregone investment that could yield good returns in labor-rich economies.

What is an adequate level of international reserves? Over time, various rules of thumb have been developed with the goal of determining the level needed to ensure consumption smoothing in the face of balance of payments difficulties. One criterion based on reserve coverage of a few months of imports gave way, after the debt crises experienced by many EMDEs during the 1980s and 1990s, to one that reserves should equal or exceed the value of short-term external debt maturing over the next year (the Greenspan-Guidotti rule).

As it has become clearer that banking and balance of payments crises are often closely related, deposit flight from domestic banks has come to be viewed as an additional vulnerability. Since a majority of deposits in most countries are denominated in domestic currencies, such deposit flight could turn into capital flight.[6]

[6] Substitution from domestic currency to foreign currency accounts in domestic banks could have less adverse implications for the exchange rate than outright capital flight. But depositors fearful about

The IMF has developed a broader framework for assessing reserve adequacy (ARA), which takes account of four factors that could represent potential drains on a country's balance of payments and attaches risk weights to each of them. The IMF describes the four factors and the justification for including them as follows: "(i) export income to reflect the potential loss from a drop in external demand or a terms of trade shock; (ii) broad money to capture potential residents' capital flight through the liquidation of their highly liquid domestic assets; (iii) short-term debt to reflect debt rollover risks; and (iv) other liabilities to reflect other portfolio outflows. The relative risk weights for each component are based on the 10th percentile of observed outflows from EMs during exchange market pressure episodes."

The IMF assigns larger risk weights to each of these factors for fixed and managed exchange rate regimes on the argument that these countries lack the buffer provided by a flexible exchange rate. The risk weights under the two regimes are shown in Table 2.

banking system stability are unlikely to view such deposit switching within the same institutions as sufficient to assuage their fears.

Table 2. The IMF's ARA Calculations

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**

Data sources: IMF (2015), Assessing Reserve Adequacy — Specific Proposals; IMF (2016), Guidance Note on the Assessment of Reserve Adequacy and Related Considerations.

Notes: Weights are expressed as decimals (e.g., 0.30 = 30% multiplicative coefficient). For each country, the ARA Metric (in USD billion) is computed by multiplying each component's stock value by its weight and summing. Calibration follows the 10th-percentile observed outflow during exchange-market-pressure episodes for each component variable.

The ARA framework covers about 78 countries that are either classified as EMDEs or as open economies (such as Israel and Poland) that are vulnerable to capital flow volatility. In the latest available October 2025 data, only about 61 economies have an ARA value for 2024 and about 60 have a value for 2025. Aggregate reserves across these 60 economies were estimated at $8,235 billion in 2025, up from $7,593 billion in 2024.

The ARA does not cover some countries that have large stocks of reserves--Saudi Arabia and other oil exporters in the Gulf; advanced economies such as Japan, Korea, Singapore, Switzerland—and other groups such as low income countries and small islands.

One important consideration in using the ARA risk weights is that capital controls reduce the risk of deposit flight. The standard metric treats a country's entire stock of M2 as a potential drain on reserves, a worst-case scenario in which a country's residents would convert all of their domestic currency denominated deposits into foreign currencies. For a country such as China, which has implicit and explicit barriers to resident outflows, this scenario may be less realistic than for a country with open capital accounts.

Table 3 shows aggregate measures of reserve adequacy based on the standard ARA metric, the capital control-adjusted metric applied to China, and the adjusted metric applied to all nine economies for which data are available.

Table 3. 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%**

Data source: IMF Assessing Reserve Adequacy dataset (October 2025 vintage)

Notes: Aggregates are computed across the 61 emerging-market economies for which the IMF publishes a 2025 ARA value. Since it has no published 2025 ARA, Sri Lanka is excluded from the 2025 aggregates. Option A applies the IMF's standard (unadjusted) ARA metric across all 61 economies. Option B applies the IMF's capital-control-adjusted ARA metric across the 9 economies with available data, and the standard metric is applied to the other 52 economies. Option C applies the capital-control-adjusted metric only to China and the standard metric to the rest of the economies. Since the above evaluation only changes the *benchmark and* not the reserves that countries actually hold, the reserve totals are the same in all three options ($8,235 billion).

While the median country reserve adequacy estimate is within the IMF's 100–150% "adequate" band, a cluster of stressed economies (Argentina, Sri Lanka, Turkey, Egypt, Pakistan, Tunisia, Ecuador, Bolivia, Venezuela) has a median below this band. (The ARA metric for individual countries, with and without the capital control adjustment, is shown in Tables A-2 and A-3 in the appendix). Nevertheless, the overall picture is that the countries assessed in the ARA framework collectively possess enough reserves. It is equally clear that this has not deterred further reserve accumulation, which raises a question about future demand for reserves.

From 2020 to 2025, the annual average growth rate of collective nominal GDP (measured in US dollars at market exchange rates) of EMDEs was about 5.9 percent. Making the crude

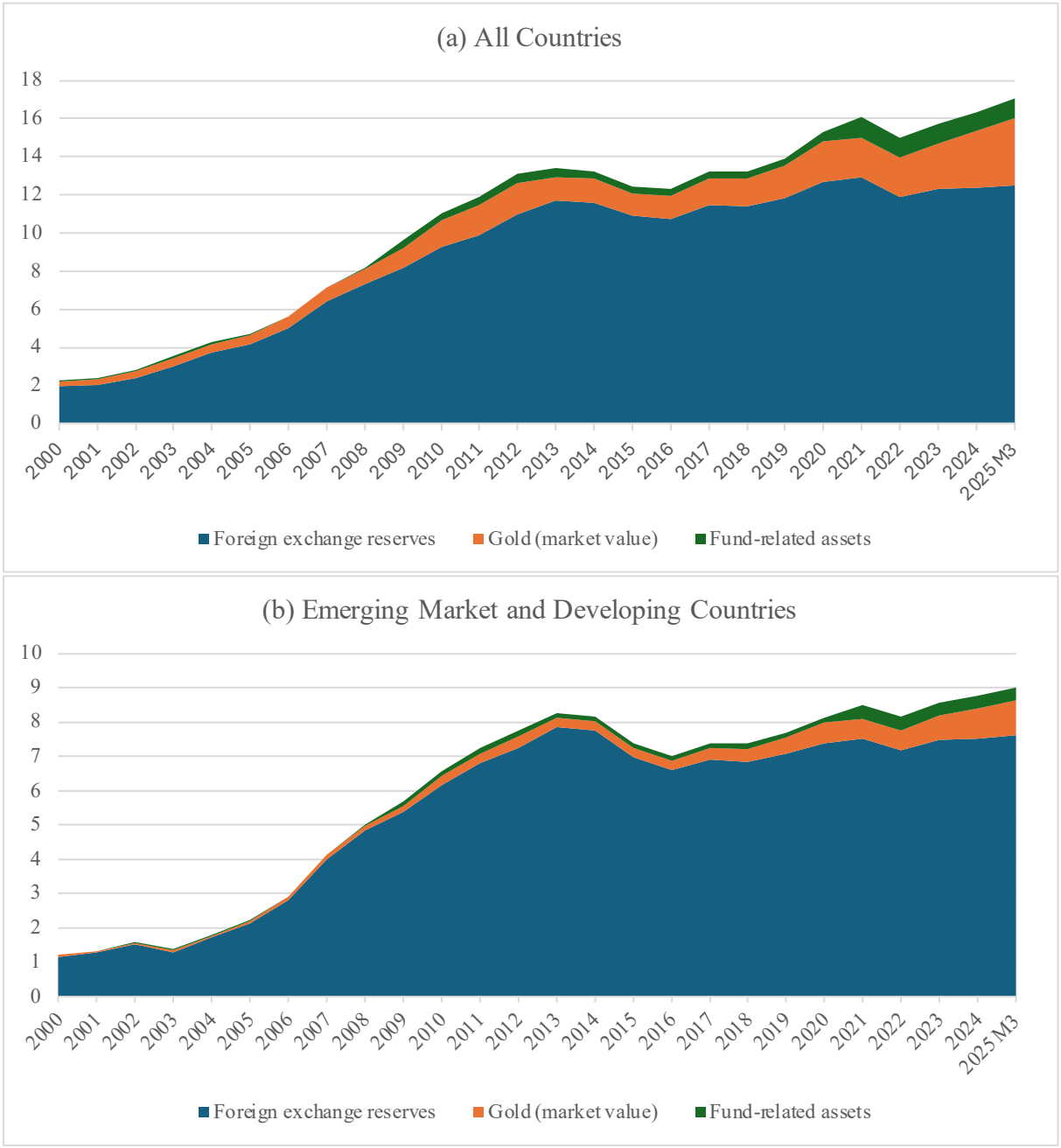
assumptions that annual nominal GDP growth will be maintained in the range of 5-6 percent, that the main components of the ARA metric will rise at about the rate of nominal GDP growth (and, further, that short-term external debt will not rise as fast on account of prudent borrowing policies), reserve adequacy will rise by about 3-5 percent per year. As it happens, from 2017 to 2024 foreign exchange reserves of EMDEs increased at an annual average rate of 3.1 percent while total reserves including gold increased at an annual rate of 4.1 percent, suggesting that this is a reasonable range for purposes of forecasting the growth in reserve demand. Making the further bold assumption that similar considerations will apply to all of the countries included in the calculations in Table 3 (whose total reserves in 2025 stood at $8.2 trillion), the demand for reserves will grow by $250 billion to $400 billion per year. In fact, as we will see in the next section, average annual reserve accumulation worldwide over the last two and a half decades has been slightly above the top end of this range.

3.2. The evolution of reserves

In March 2026, total international reserves stood at $12.8 trillion, an increase of $11 trillion since 2000. Foreign exchange reserves have risen more than six-fold from $1.5 trillion in 2000 to $9.4 trillion in 2026. EMDEs currently account for 60 percent of foreign exchange reserves and 52 percent of total reserves, virtually unchanged from the corresponding shares in 2000. This implies that reserve accumulation by EMDEs, which presumably reflects self-insurance against balance of payments stresses, has been accompanied by substantial reserve accumulation by advanced economies such as Japan and Switzerland, usually as a consequence of their trying to limit currency appreciation.

The stock of SDRs has risen from $19 billion in 2000 to $660 billion at present, with EMDEs accounting for about $250 billion of this increase. The value of gold reserves has risen from $200 billion in 2020 to $2.65 trillion in 2026, with gold's share of total reserves rising from 11 percent to 21 percent over this period.

Figure 10. Composition of International Reserves
(trillions of U.S. dollars)



Data sources: IMF Annual Report, Appendix I.1 (various editions). IMF SDR Valuation.

Notes: Gold valued at London market price, as reported in the IMF Annual Report. Fund-related assets include SDR holdings and reserve positions in the IMF. For 2000–2002, subgroup data uses the IMF's earlier 'industrial/developing' classification. From 2003, 'advanced economies/EMDE' classification. Values are converted to USD using end-of-year SDR/USD exchange rates from the IMF SDR Valuation.

Foreign exchange reserves have risen, both for all countries and the group of EMDEs, nearly monotonically since 2000. The exception is the period 2015-2017, with this dip accounted for mainly by China's shedding of about $1 trillion in reserves in the process of protecting its currency from sharp depreciation amid a surge of capital flight and intense speculative pressures. It is worth recalling that in June 2014, Chinese reserves peaked at the astronomical level of nearly $4 trillion, a level that seemed to provide ironclad protection against balance of payment stresses. And yet, China lost about a quarter of its reserves within a twelve-month period after that peak and was forced to tighten controls on capital outflows.

3.3. Provision of reserves

Advanced economies such as Japan and Switzerland as seen as providers of reserve assets and as safe havens. However, as noted earlier, these countries have also accumulated reserves themselves, adding to the demand for safe assets. The same is true of China, which has promoted the renminbi's use as a reserve currency, but is itself a major source of demand for safe assets.

In Table 4, I provide a perspective on which countries are on net providing reserve assets to the world. In 2007Q1, for instance, about 0.03 percent of total foreign exchange reserves of $5.6 trillion were denominated in Japanese yen. In that period, Japan's own reserve holdings amounted to $888 billion, implying that Japan was holding $713 billion more in reserves than it had provided to the rest of the world. China and Switzerland are in similar positions now of holding substantially more reserves than they provide to the world. It is clear that the United States is an even more dominant provider of safe assets to the world based on this net supply metric and the euro's share is also larger than the traditional measure of its share of global foreign exchange reserves. The United Kingdom, Canada, and Australia are also net reserve providers.

The implication of this rather rudimentary analysis is that shifting away from the current configuration of reserve currencies is going to be more difficult if some of the traditional providers of safe assets and countries whose currencies are being promoted as reserve currencies themselves continue to demand reserves.

Table 4. 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**

Data sources: IMF Currency Composition of Official Foreign Exchange Reserves (COFER); IMF International Reserves and Foreign Currency Liquidity; Federal Reserve International Summary Statistics

Notes: Net reserves reflect the difference between global FX reserves held in assets denominated in a given central bank's currency minus the FX reserves reported on that central bank's balance sheet. I assume that each currency's share of global FX reserves is the same as its share in "allocated reserves" (unallocated reserves are those for which the IMF has no information on currency composition). Eurozone FX reserves include those of the ECB plus those of all eurozone central banks. The shares of the Chinese renminbi, Australian dollar, and Canadian dollar were not previously reported separately by the IMF.

3.4. Diversification through gold

The rising share of gold in international reserves suggests that, in the absence of good alternatives, central banks are turning to precious metals as a diversification strategy. Table 5 shows that the market value of gold reserves has risen by nearly $3 trillion over the last five years, from $2.2 trillion in 2020 to $5.1 trillion in 2025 (end of year data), with EMDEs contributing about one-third of this increase and with much of this increase taking place since 2022. Data shown in this table (and used in the analysis below) are from the IMF. The World Gold Council has data on official investor holdings that differ from IMF data, although the trends are similar. Appendix Table A-1 provides a comparison of IMF and WGC data.

Table 5. 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**

Data sources: IMF International Liquidity (IL) database, dataset IMF.STA:IL (13.0.1). Series: G001.RGV_REVS.FTO.A (World) and G200.RGV_REVS.FTO.A (Emerging Market and Developing Economies).

Notes: Fine Troy Ounces (millions), end-of-year, converted to tons at 32,150.7466 troy ounces per metric ton. Prices are end-of-year gold price (USD/oz). Values: stock × price.

Table 6, which presents a decomposition of the increase in the value of gold reserves into price and quantity effects, reveals that 96 percent of the increase is attributable to the price effect. Consistent with reports of significant gold purchases by EMDE central banks, a smaller but still substantial share of the increase in the market value of their gold holdings—85 percent—is accounted for by price effects.

From a portfolio perspective, one interpretation is that much of the desire for central banks' reserve diversification strategy has been boosted by price effects. If, however, it is true that central bank purchases have been a key driver of gold prices, this then raises the troubling prospect that these reserves could quickly lose value if, at a time of financial stress, a number of central banks try to liquidate their gold holdings concurrently. Thus, while gold does provide a route for diversification of reserves, it could pose considerable risks to central banks that need rapid access to large amounts of foreign currency liquidity at times of global financial stress.

Table 6. 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%**

Notes: The quantity effect follows the IMF's published method for reserve quantity-change calculations: ΔQ × (P_2020 + P_2025)/2 (see IMF Annual Report 2025, Appendix I, footnote to Table I.3; IMF, 2025). The price effect is the residual. In effect, the interaction term is split evenly between the two effects.

4. How the digitalization of currencies could affect the IMS

New and evolving financial technologies, including the advent of cryptocurrencies and CBDCs, will have implications for certain aspects of the IMS, but these are not likely to be revolutionary and will be realized only over a number of years. Some changes will be limited primarily to the operation and structures of financial markets themselves rather than any fundamental reordering of the IMS. Moreover, network effects exert a powerful force against rapid change—the widespread international use of a currency or payment method makes it more convenient to continue using it rather than switching to an alternative.

The digitalization of payments and currencies has gathered force in recent years. This has meant more efficient domestic payments in many countries, with physical currency fast becoming an anachronism in many countries. Decentralized cryptocurrencies, stablecoins, and central bank digital currencies are gaining traction as payment mechanisms, particularly for cross-border transactions.

More efficient payment systems will bring a host of benefits, making it easier and cheaper for economic migrants to send remittances back to their home countries. It will become easier even for investors with modest savings to diversify their portfolios and seek higher returns through better access to international investment opportunities. In principle, financial capital will be able to flow more easily within and across countries to the most productive investment opportunities,

raising global economic welfare—at least as measured by GDP and consumption capacity. With easier capital flows across national borders, though, many countries will also face risks related to the volatility of those flows and the complications that it creates for managing their exchange rates and their economies. New channels for transmitting payments more quickly and cheaply across borders will render it difficult to regulate and control capital flows. The resulting challenges will be especially thorny for EMEs and other small open economies.

The landscape of global reserve currencies might seem to be at the threshold of disruption as cryptocurrencies gain traction as mediums of exchange and stores of value. In reality, despite all the hype, the proliferation of cryptocurrencies will not have a substantial disruptive effect on the major reserve currencies, especially the US dollar. Unbacked cryptocurrencies are much too volatile to be considered stable sources of value or reliable mediums of exchange. On the other hand, stablecoins backed by major corporations such as Amazon and Google are likely to gain traction as means of payment. But insofar as their stable values depend on their being backed by fiat currencies, stablecoins are unlikely to become independent stores of value.

The topography is likely to shift a great deal more for smaller and less developed economies. National currencies issued by their central banks could lose ground to private stablecoins and perhaps also to CBDCs issued by the major economies.

Even among the major reserve currencies, there are some shifts in store. The US dollar could lose some ground as a payment currency, although it will remain dominant both in this dimension and as a store of value. Equally, though, there is the possibility that the proliferation of dollar-backed stablecoins could result in the dollar becoming even more prominent in cross-border payments. A digital renminbi, in tandem with China's CIPS, will help the currency gain traction as a payment currency but the digitization of the currency by itself will do little to boost its status as a reserve currency. The renminbi's further rise, even if gradual and modest, and the advent of additional stablecoins, could reduce the importance of the second-tier reserve currencies, including the euro, the British pound sterling, the Japanese yen, and the Swiss franc.

Greater financial integration offers many benefits, but these potential benefits come at a price, especially for smaller and less developed economies. More broadly, emerging market and developing economies are vulnerable to the whiplash effects of volatile capital flows, with this volatility caused in part by monetary policy spillovers from the major advanced economies, especially the Fed. New and relatively friction-free channels for cross-border financial flows could exacerbate these "spillover" effects. These new channels could not only amplify financial market volatility but also transmit it more rapidly across countries. In other words, the availability of more efficient conduits for cross-border capital flows could intensify global financial cycles and all the domestic policy complications that result from them.

5. Global liquidity insurance mechanism[7]

Faced with capital flow and exchange rate volatility from policy spillovers and various external shocks, EMDEs have sought protection by accumulating reserves. Self-insurance by EMDEs in the form of reserve accumulation is suboptimal for individual countries as well as the system more broadly. Existing alternatives to self-insurance come with their own lacunae. Currency swap lines offered by major central banks such as the Federal Reserve or the People's Bank of China are vulnerable to shifts in geopolitical alignments. The IMF's programs such as the Flexible Credit Line and Precautionary and Liquidity Line have been met with little enthusiasm because of the stigma effect. Is there another way out?

A solution to the systematic provision of foreign exchange liquidity during periods of crises is an insurance pool for the world's major economies—mainly but not necessarily just for the EMDEs.[8] The design features of the Global Liquidity Insurance Mechanism (GLIM) would be as follows. Each country would pay a modest entry fee, between $1 billion and $10 billion, depending on the size of its economy as measured by GDP, to provide an initial capital base.[9]

[7] This section draws heavily on Prasad (2014) and Prasad and Coulibaly (2021) https://www.brookings.edu/articles/a-new-proposal-for-the-g-20-to-strengthen-the-global-financial-safety-net/.

[8] The insurance scheme proposed here is not relevant for the major reserve currency economies, which are covered by institutionalized bilateral swap lines that can cover their foreign currency liquidity needs.

[9] If this scheme was later extended to cover smaller and less developed economies, the entry fee could be reduced or even waived as the insurance pool would presumably have built up reserves by that time.

The country would then pay an annual premium for insurance that it could call upon in the event of a crisis. The premium would depend on the level of insurance desired and could on average be about 3 percent of the face value of the insurance policy (e.g., $3 billion in annual premiums for $100 billion of insurance). This premium level is roughly the same order of magnitude as the current quasi-fiscal cost of reserve accumulation through sterilized intervention, so the premium would be calibrated to cost no more than the implicit cost of self-insurance.

The initial contribution and the annual premiums would be invested in a portfolio consisting of government bonds of the major countries in the Special Drawing Rights (SDRs) basket, (i.e., United States, Euro zone, United Kingdom, Japan, and China) in proportion to their importance in international trade and finance. In return for this financing for some of their debt, the central banks of these countries would be obliged to backstop, as needed, the pool's lines of credit in the event of a global crisis. This would simply institutionalize such ex-ante swap arrangements that the G-3 central banks opened up during the crisis to provide liquidity to other central banks. The pool can also be backstopped by SDRs if the G20 commits ex-ante to authorize the IMF to leverage unused SDRs or create new ones in the event of a systemic global shock. In other words, the IMF could serve as an additional guarantor for a portion of the credit lines in the event of a catastrophic global shock. This could be useful early in the operation of the insurance pool, before it has built up substantial reserves.

The insurance payout would be in the form of a credit line open for a short period, e.g. one year, rather than an outright grant. The interest rate would be non-punitive and based on the yields on short-term government securities in the countries backing up the insurance pool. The country drawing on this insurance would be required to pay back the borrowed amount within the one-year period in the same hard currency of the original loan. If a country's currency depreciated in the ensuing year, its debt burden would rise in domestic currency terms. This mitigates moral hazard that could ensue from any incentive the country's policymakers have to undertake undisciplined policies under the protection provided by the credit line. The country would not be able to purchase additional insurance prior to a full repayment of the initial draw from the pool. Premiums would rise substantially if a country wished to renew its insurance in a subsequent period after drawing on the credit line without any measurable improvements in its policies.

Thus, the insurance would only be suitable for liquidity crises. For an economy beset by a solvency crisis, the insurance payout would effectively buy a limited amount of breathing space. Once the credit line lapses and if the country proves to have a solvency rather than liquidity problem (which may be difficult to determine ex-ante), then the premiums would rise to punitive levels. In that case, the country would have to go to the IMF for traditional borrowing with ex-post conditionality, with any funds drawn through the GLIM (and not yet paid back) becoming folded into such an arrangement.

The mechanism outlined above is different from traditional insurance where the idea is to pool risks. In this case, the main risk may be global rather than country specific. This also makes it hard to price the premiums in an actuarially "fair" way as the major risks are by definition correlated across countries if the underlying shock is global. This mechanism is simple and could easily be managed by an institution such as the Bank for International Settlements. Since the BIS itself does not monitor countries' policies, it could run the mechanism as a neutral party.

The crux of the proposal is that it broadens and depoliticizes access to foreign liquidity, either from the major advanced economy central banks or through SDR allocations, in the event of a major global shock. It would free up the IMF to do what it does best—conduct surveillance and fix the policies of countries with deeper solvency problems in terms of domestic or external debt.

5.1. Participation

Broad participation by the large economies, such as those in the G-20, would be important for obviating the stigma that the very act of seeking insurance might signal a country's weakness. Unlike in health insurance where broadening the pool by mandating universal participation reduces premiums and adverse selection, the broad mandate here would mainly be to deal with the stigma effect.

One solution could be to make participation in this pool a condition for continued membership in a body such as the Financial Stability Board (FSB), where all countries would like to have a seat

as it will have an important role in developing principles for international financial regulation (participation in the insurance pool would, however, not be a guarantee of membership in the FSB). This would address the stigma issue as well as connect financial policies to macroeconomic policies, as their interaction is clearly crucial for global economic outcomes. No country would be forced to buy insurance, but would have to pay the basic membership fee to be part of the pool.

5.2. Some practical considerations

The implementation of the proposed insurance mechanism raises at least two issues. First, whether it is politically feasible for a national government to pay premiums for such insurance and, second, whether the insurance could encourage unreasonable risk taking.

On political feasibility, given that the GLIM option would be cheaper (or at least not more expensive) than the quasi-fiscal costs of sterilizing reserves that are built up for insurance purposes, not involve currency risk, and requires a relatively modest premium, it should not be difficult for a government to make a strong case to its constituents for participation in GLIM.[10] For some emerging markets, it would be seen as a small price to pay for avoiding IMF loans with attached conditionality. Similarly, moral hazard is less likely to be a problem because national policies and their outcomes are publicly observable. This makes it unlikely that balance of payments protection provided by the insurance scheme would encourage undisciplined policies. A related problem is that investors might be more willing to lend money to participating countries in the GLIM because their debts are seen as repayable. This could also encourage fiscal profligacy. Rising insurance premiums as debt levels increase would help mitigate this problem.

5.3. Design features to promote global financial stability

The design features of the GLIM can be enhanced to strengthen further global financial stability

[10] Countries with weak policies would be charged higher-than-average premiums. This would match their correspondingly higher costs of self-insurance through reserve accumulation; their sterilized intervention costs would be higher than average as they would typically face wider spreads on government (or central bank) bonds relative to the interest earned on reserves.

in addition to institutionalizing and broadening access to foreign exchange liquidity.

First, the level of the premium in a particular year could depend not only on the level of insurance desired but also the quality of a country's policies. There would be higher premiums for a country that chose to run large budget deficits or that accumulated large amounts of debt, thereby increasing its vulnerability to crises. The principle is analogous to car insurance, where owners of more expensive cars and riskier drivers (based on verifiable characteristics like age and gender) face higher premiums. There would be discounts from the base level for countries that have demonstrated policy discipline.

Second, premiums would have to be based on simple and transparent rules. For instance, a current account deficit larger than 2 percent of a country's GDP triggers a higher premium. Other criteria that affect premiums could be based on variables such as budget deficits, public debt, and external debt (all relative to GDP). In the interest of simplicity and tractability, there would be no country-specific adjustments—such as adjusting the budget deficit for business cycle conditions, which would be contentious and also difficult to deal with in real time. The premiums would increase in a nonlinear fashion with the persistence and levels of policies that contributed to an economy's vulnerability. A country running large budget deficits or continuing to accumulate large stocks of external debt in successive years would pay rising premiums in each of those years. In this way, the country's contributions to rising global risks would be accounted for. The scheme would be a transparent rules-based mechanism to strengthen the power of moral suasion to get a country to at least partially internalize the effects of its own policies on global risks. There is no specific stigma or signaling effect associated with the premium levels as they are based on country variables that are all public knowledge.

To avoid concerns about procyclicality of premiums—a country having to face higher payment amounts at a time of heightened need for foreign currency liquidity, which is precisely when its macroeconomic situation might worsen—the premiums could be based on one-year lagged values of the variables that enter the premium calculations.

Finally, the existence of such an insurance scheme would also help separate out the motives—mercantilist versus precautionary—behind foreign exchange intervention and related reserve accumulation. The costs of reserve accumulation are seen by some emerging market policymakers as being balanced by the joint benefits of insurance and maintaining trade competitiveness. By providing an alternative (and cheaper) option for insurance, this mechanism would force emerging market economies to more directly consider the costs of protecting trade competitiveness through intervention in currency markets.

5. Discussion and implications

To assess the current state of the IMS, it is worth reflecting on what a first-best structure ought to look like. Currency competition is healthy and one could envision a system with multiple currency anchors. This would have a disciplining effect, as any country with undisciplined macroeconomic policies or facing an erosion of its institutions would face consequences, as investors would turn away from that currency. Whether this is a stable equilibrium would depend on the foundations of each of those currencies, the ability of each of the countries to provide reserves, and whether network effects were important from an efficiency standpoint.

A different conception of the first best might be one in which countries did not even have to undertake self-insurance through reserve accumulation, which is sub-optimal from the perspective of individual countries as well as the system as a whole. The mechanism for global liquidity insurance that I laid out earlier in this paper would substitute for self-insurance through reserves.

The reality is far from the first best, though, with countries beset by weak financial systems and institutions and with no easy access to liquidity insurance. In these circumstances, the absence of a dominant anchor currency could be worse than the alternative in certain states of the world.

Consider a situation such as the global financial crisis, when an even worse disaster was prevented by the ability of one central bank, the Fed, to provide exactly the type of liquidity that the entire world wanted and in essentially infinite quantities. In other words, the existence of one

currency that the entire world could coordinate on and that was issued by a trusted central bank proved to be a blessing.

If multiple currencies, each with its own weaknesses, were to serve as putative anchors, the effect at a time of financial panic could be catastrophic. Investors unsure of which currency to coordinate on and facing unreliable information could frequently and instantaneously switch between currencies at the first sign of trouble, adding instability to an already highly volatile situation. Furthermore, infusions of liquidity by multiple central banks might result in a less stable outcome than a single, widely-trusted liquidity backstop.

One concern, though, is that in a Trump era the Fed might be constrained in how much global liquidity it can offer. Under the present administration, U.S. international engagement on a variety of economic and geopolitical issues has come to be seen through the lens of narrowly-defined, short-term domestic interests. Even if technically feasible to do so, the Fed might find itself politically constrained in how much liquidity support it can offer to other central banks and the global financial system.

Solutions to fix the IMS are as obvious in theory as they are difficult to implement in practice. Individual EMDEs and open economies need to develop better policy frameworks, conduct disciplined macroeconomic policies, improve financial market structures and regulation, and fortify their institutions. This will make countries less vulnerable to capital flight and associated exchange rate volatility, create buffers for coping with external economic and geopolitical shocks, and boost the prospects for robust and equitable growth. Ultimately, though, these countries will still remain at the mercy of volatility engendered by forces beyond their control, including some policies of the United States and other advanced economies.

At the international level, countries that already issue reserve currencies or that aspire to do so need to take similar measures as those suggested above for EMDEs, but in this case it would also be to give their currencies a fighting chance on the international stage and for reducing dependence on the dollar. A better system of international governance—that helps administer a

commonly agreed set of rules in a transparent and even-handed manner—would help underpin more stable trade and financial flows in addition to limiting unwelcome policy spillovers.

For now, the IMS is far from the first best. The challenge for policymakers is to work on change, no matter how difficult, rather than accepting the current situation as unchangeable reality.

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APPENDIX

Figure A-1. Who Holds U.S. Federal Government Debt?

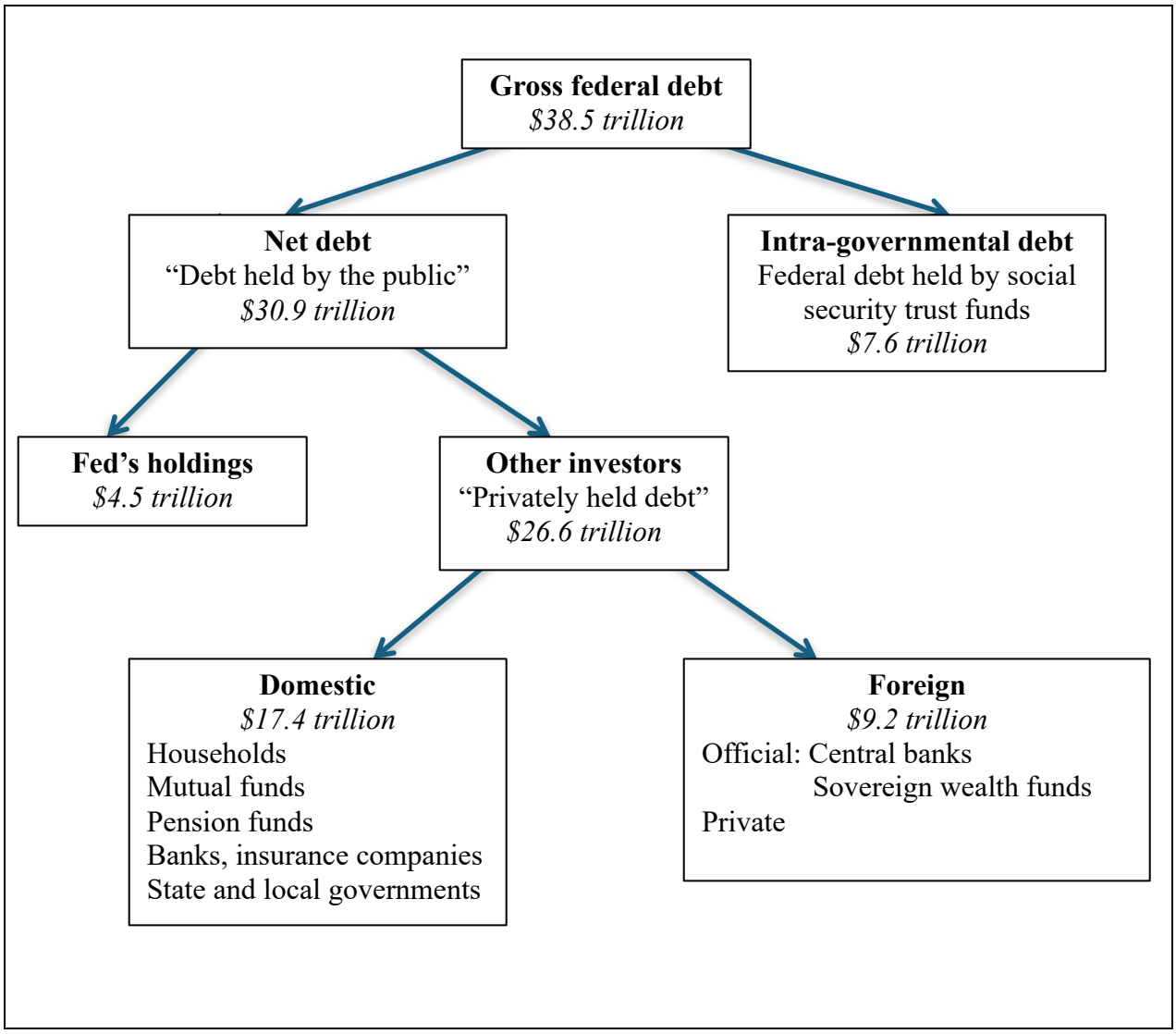

Table A-1. IMF and WGC central bank gold reserve aggregates compared, 2020–2025

Source / measure	End-2020	End-2025	Δ tons	Δ percent
World				
IMF International Liquidity (IL)	35,305	36,553	+1,247	+3.5
WGC stock measure (country-level)	30,610	32,452	+1,842	+6.0
WGC demand-side (cumulative purchases)	—	—	+4,537	—
Advanced Economies				
IMF International Liquidity (IL)	21,938	22,160	+221	+1.0
WGC stock measure (country-level)	21,458	21,658	+201	+0.9
EMDEs				
IMF International Liquidity (IL)	9,906	11,421	+1,515	+15.3
WGC stock measure (country-level)	9,152	10,793	+1,641	+17.9

Data sources: IMF International Liquidity (IL) database and World Gold Council country-level tonnage file (end-of-year reserves, 2020–2025) and Gold Demand Trends: Q4 and Full Year 2025.

Notes: The WGC compiles data on gold holdings using IMF International Financial Statistics while making its own adjustments (World Gold Council [WGC], 2026). Based on WGC data, world official gold holdings increased from about 30,610 tons at the end of 2020 to roughly 32,452 tons by the end of 2025, an increase of around 1,842 tons compared to the IMF IL aggregate change of +1,247 tons. The differences can be explained by differences in country coverage and reporting mechanisms between the WGC and the IMF.

Table A-2. Reserve Adequacy by Country, end-2025 — Standard ARA Metric
(USD billions)

Country	ARA Metric	Total Reserves	Gold	SDRs	FX Reserves	Res./ARA
Albania	3.2	7.6	0.5	0.3	7.8	237.5%
Angola	15.9	14.3	2.6	0.3	12.3	89.9%
Antigua and Barbuda	0.6	0.4	—	—	—	66.7%
Argentina	72.2	30.9	8.6	0.1	32.0	42.8%
Armenia	6.1	3.8	—	0.0	5.1	62.3%
Belarus	10.8	10.4	7.5	1.4	5.5	96.3%
Bolivia	9.9	2.3	—	—	—	23.2%
Bosnia and Herzegovina	6.8	11.3	0.5	0.0	10.1	166.2%
Brazil	260.3	329.7	23.9	20.1	298.1	126.7%
Bulgaria	27.5	53.2	6.0	2.0	38.9	193.5%
Chile	56.6	48.3	0.0	3.5	45.3	85.3%
China	5,988.7	3,790.2	319.4	55.8	3,357.9	63.3%
Colombia	50.0	63.6	0.6	3.5	60.9	127.2%
Costa Rica	16.2	14.9	—	0.6	16.4	92.0%
Croatia	21.3	3.1	—	1.4	2.5	14.6%
Czech Republic	55.8	179.6	10.1	3.5	159.8	321.9%
Dominican Republic	17.6	14.4	0.1	0.0	14.5	81.8%
Ecuador	27.6	10.0	3.7	0.0	6.1	36.2%
Egypt	71.9	46.4	18.2	0.1	12.1	64.5%
El Salvador	7.9	4.3	0.3	0.2	4.3	54.4%
Georgia	6.0	5.0	1.0	0.5	4.7	83.3%
Guatemala	13.9	30.4	1.8	0.7	30.1	218.7%
Honduras	6.9	9.8	0.1	0.1	9.9	142.0%
Hungary	45.9	58.9	15.3	2.2	37.8	128.3%
Iceland	5.0	6.6	0.3	0.6	6.8	132.0%
India	638.1	709.6	111.3	18.8	552.9	111.2%
Indonesia	124.9	155.4	11.9	7.6	135.1	124.4%
Israel	82.7	241.9	—	4.0	222.3	292.5%
Jamaica	6.1	5.8	—	0.2	6.1	95.1%

Country	ARA Metric	Total Reserves	Gold	SDRs	FX Reserves	Res./ARA
Jordan	20.1	22.0	10.1	0.0	16.3	109.5%
Kazakhstan	27.4	54.4	47.2	2.1	15.9	198.5%
Lithuania	23.0	11.2	0.8	0.8	5.3	48.7%
Malaysia	116.7	121.4	5.4	6.0	110.5	104.0%
Mauritius	38.0	9.8	1.7	0.3	8.2	25.8%
Mexico	182.3	242.7	16.9	16.5	218.8	133.1%
Moldova	2.7	5.8	0.0	0.0	6.0	214.8%
Mongolia	6.9	5.0	1.1	0.1	5.8	72.5%
Morocco	45.7	45.6	3.1	2.0	43.2	99.8%
North Macedonia	4.9	5.7	1.0	0.0	4.8	116.3%
Pakistan	45.4	20.7	—	—	—	45.6%
Panama	39.6	7.1	—	0.5	5.6	17.9%
Paraguay	6.2	9.8	1.1	0.3	9.1	158.1%
Peru	33.5	86.6	4.8	2.5	81.8	258.5%
Philippines	56.5	104.9	18.6	3.9	81.8	185.7%
Poland	153.9	238.7	76.5	5.9	187.2	155.1%
Romania	74.6	82.2	14.4	3.8	72.4	110.2%
Russia	191.2	657.8	326.5	24.3	398.4	344.0%
Serbia	21.8	34.0	7.3	0.0	26.7	156.0%
Seychelles	0.9	0.9	—	0.0	0.9	100.0%
Slovak Republic	29.8	16.2	—	—	—	54.4%
Slovenia	14.7	3.6	0.6	1.0	1.6	24.5%
South Africa	69.5	75.5	17.5	6.2	51.3	108.6%
Sri Lanka	—	—	0.1	0.0	6.7	—
St. Kitts and Nevis	0.4	0.3	—	—	—	75.0%
Thailand	114.6	251.5	—	—	—	219.5%
Trinidad and Tobago	5.8	6.6	—	—	—	113.8%
Tunisia	17.6	8.7	—	—	—	49.4%
Turkey	225.5	166.2	112.4	7.6	63.9	73.7%
Ukraine	35.9	53.4	3.9	0.0	53.4	148.7%
Uruguay	9.9	19.5	0.0	0.9	17.9	197.0%
Venezuela	22.6	5.2	—	—	—	23.0%
TOTAL	**9,294.0**	**8,235.1**	**1,214.7**	**212.2**	**6,588.8**	**88.6%**

Data source: IMF Assessing Reserve Adequacy dataset (October 2025 vintage); IMF International Reserves and Foreign Currency Liquidity (IRFCL) database.

Notes: This table uses the IMF's standard (unadjusted) ARA metric for all 61 economies, including China and the eight other countries with a published capital-control-adjusted variant. Sri Lanka's end-2025 ARA is not yet published and is shown as —. “Total Reserves” uses the IMF’s WEO definition (the same figure the IMF uses to compute its published adequacy ratios). Gold, SDRs, and FX (from the IRFCL database) may not sum exactly to Total because the two reporting frameworks define reserves slightly differently; the largest gaps are India, Czech Republic, and Argentina, each under $35 bn. Gold is reported at market value — the gold-price rally during 2025 lifts gold values for major holders.

Table A-3. Reserve Adequacy by Country, end-2025 — Capital-Control-Adjusted ARA for All 9 Eligible Countries
(USD billions)

Country	ARA Metric	Total Reserves	Gold	SDRs	FX Reserves	Res./ARA
Albania	3.2	7.6	0.5	0.3	7.8	237.5%
Angola*	15.1	14.3	2.6	0.3	12.3	94.7%
Antigua and Barbuda	0.6	0.4	—	—	—	66.7%
Argentina*	66.7	30.9	8.6	0.1	32.0	46.3%
Armenia	6.1	3.8	—	0.0	5.1	62.3%
Belarus	10.8	10.4	7.5	1.4	5.5	96.3%
Bolivia	9.9	2.3	—	—	—	23.2%
Bosnia and Herzegovina	6.8	11.3	0.5	0.0	10.1	166.2%
Brazil	260.3	329.7	23.9	20.1	298.1	126.7%
Bulgaria	27.5	53.2	6.0	2.0	38.9	193.5%
Chile	56.6	48.3	0.0	3.5	45.3	85.3%
China*	3,614.7	3,790.2	319.4	55.8	3,357.9	104.9%
Colombia	50.0	63.6	0.6	3.5	60.9	127.2%
Costa Rica	16.2	14.9	—	0.6	16.4	92.0%
Croatia	21.3	3.1	—	1.4	2.5	14.6%
Czech Republic	55.8	179.6	10.1	3.5	159.8	321.9%
Dominican Republic	17.6	14.4	0.1	0.0	14.5	81.8%
Ecuador	27.6	10.0	3.7	0.0	6.1	36.2%
Egypt	71.9	46.4	18.2	0.1	12.1	64.5%
El Salvador	7.9	4.3	0.3	0.2	4.3	54.4%
Georgia	6.0	5.0	1.0	0.5	4.7	83.3%
Guatemala	13.9	30.4	1.8	0.7	30.1	218.7%
Honduras	6.9	9.8	0.1	0.1	9.9	142.0%
Hungary	45.9	58.9	15.3	2.2	37.8	128.3%
Iceland	5.0	6.6	0.3	0.6	6.8	132.0%
India*	467.7	709.6	111.3	18.8	552.9	151.7%
Indonesia	124.9	155.4	11.9	7.6	135.1	124.4%
Israel	82.7	241.9	—	4.0	222.3	292.5%
Jamaica	6.1	5.8	—	0.2	6.1	95.1%

Country	ARA Metric	Total Reserves	Gold	SDRs	FX Reserves	Res./ARA
Jordan	20.1	22.0	10.1	0.0	16.3	109.5%
Kazakhstan	27.4	54.4	47.2	2.1	15.9	198.5%
Lithuania	23.0	11.2	0.8	0.8	5.3	48.7%
Malaysia	116.7	121.4	5.4	6.0	110.5	104.0%
Mauritius	38.0	9.8	1.7	0.3	8.2	25.8%
Mexico	182.3	242.7	16.9	16.5	218.8	133.1%
Moldova	2.7	5.8	0.0	0.0	6.0	214.8%
Mongolia	6.9	5.0	1.1	0.1	5.8	72.5%
Morocco*	34.7	45.6	3.1	2.0	43.2	131.4%
North Macedonia	4.9	5.7	1.0	0.0	4.8	116.3%
Pakistan*	38.2	20.7	—	—	—	54.2%
Panama	39.6	7.1	—	0.5	5.6	17.9%
Paraguay	6.2	9.8	1.1	0.3	9.1	158.1%
Peru	33.5	86.6	4.8	2.5	81.8	258.5%
Philippines	56.5	104.9	18.6	3.9	81.8	185.7%
Poland	153.9	238.7	76.5	5.9	187.2	155.1%
Romania	74.6	82.2	14.4	3.8	72.4	110.2%
Russia	191.2	657.8	326.5	24.3	398.4	344.0%
Serbia	21.8	34.0	7.3	0.0	26.7	156.0%
Seychelles	0.9	0.9	—	0.0	0.9	100.0%
Slovak Republic	29.8	16.2	—	—	—	54.4%
Slovenia	14.7	3.6	0.6	1.0	1.6	24.5%
South Africa	69.5	75.5	17.5	6.2	51.3	108.6%
Sri Lanka	—	—	0.1	0.0	6.7	—
St. Kitts and Nevis	0.4	0.3	—	—	—	75.0%
Thailand	114.6	251.5	—	—	—	219.5%
Trinidad and Tobago	5.8	6.6	—	—	—	113.8%
Tunisia*	15.2	8.7	—	—	—	57.2%
Turkey	225.5	166.2	112.4	7.6	63.9	73.7%
Ukraine*	33.7	53.4	3.9	0.0	53.4	158.5%
Uruguay	9.9	19.5	0.0	0.9	17.9	197.0%
Venezuela*	22.5	5.2	—	—	—	23.1%
TOTAL	**6,720.4**	**8,235.1**	**1,214.7**	**212.2**	**6,588.8**	**122.5%**

Data source: IMF Assessing Reserve Adequacy dataset (October 2025 vintage); IMF International Reserves and Foreign Currency Liquidity (IRFCL) database.
Notes: This table uses the IMF's capital-control-adjusted ARA metric for the nine countries marked with an asterisk (Angola, Argentina, China, India, Morocco, Pakistan, Tunisia, Ukraine, Venezuela). All other 52 economies use the standard metric, because no capital-control-adjusted value is published for them. Sri Lanka's end-2025 ARA is not yet published and is shown as —. “Total Reserves” uses the IMF’s WEO definition (the same figure the IMF uses to compute its published adequacy ratios). Gold, SDRs, and FX (from the IRFCL database) may not sum exactly to Total because the two reporting frameworks define reserves slightly differently; the largest gaps are India, Czech Republic, and Argentina, each under $35 bn. Gold is reported at market value — the gold-price rally during 2025 lifts gold values for major holders.