Box 1 The Russian invasion of Ukraine and international currencies

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The Russian invasion of Ukraine and financial sanctions imposed on Russia, such as the decisions to freeze about half of its official foreign reserves and to ban selected Russian banks from SWIFT,⁴ have fuelled speculation about the implications of these developments for the prospective roles of the US dollar and the euro globally.

It has been argued that the recent sanctions might provide a fillip to countries seeking to bypass the US dollar and the euro in the international monetary and financial system.⁵ Russia had already cut its US dollar exposures significantly after the seizure of Crimea and the introduction of international sanctions in 2014. Russia had diversified its official foreign reserve holdings of USD 630 billion away from the US dollar, had attempted to shift the currency denomination of its international payments and reduced domestic dollarisation. By mid-2021, gold exceeded the US dollar. The share of the renminbi, at 13%, was close to that of the US dollar, while euro-denominated assets accounted for the largest share (32%). Virtually all of Russia's official holdings of US Treasuries have been liquidated.⁶

Following the latest sanctions, Russia and other countries may, it is alleged, diversify their portfolios further away from the US dollar and other traditional reserve currencies into other assets, such as the renminbi, gold and crypto-assets. They may try to find alternatives to SWIFT for international payments, such as China's Cross-Border Interbank Payments System, which would bolster the renminbi's global role. International payment systems could become more segmented. Russia has demanded that importers of Russian gas should no longer pay in dollars or euro, but in roubles. The Russian invasion of Ukraine is therefore seen as accelerating the "stealth erosion" of the US dollar's role as a global reserve currency. Since the turn of the millennium, the share of the US dollar in global foreign exchange reserves has declined by more than 10 percentage points, mainly to the benefit other non-traditional reserve currencies, including the Chinese renminbi (see **Chart A**).⁷

However, the implications of these developments on the global appeal of the major international currencies remain unclear.

First, the direction of causality between reserve management decisions and other international currency uses matters. Recent research has pointed to the fact that the role of a currency in global trade and finance determines its importance in global foreign exchange reserves.⁸ There are strong complementarities between the various functions of international currencies, but causality flows primarily in one direction. Therefore, unless more significant changes to international payments or

⁴ SWIFT is a global messaging network through which international payments between banks are conducted.

⁵ See, for example, Buttonwood (2022), "Can foreign currency reserves be sanction-proofed?", *The Economist*, London, 15 March.

⁶ Back in 2013, before the invasion of Crimea, Russia was the eleventh largest holder of US Treasuries, with holdings to the tune of almost USD 140 billon. In January 2022, Russia's holdings stood at barely USD 4 billion. However, it is possible that some holdings are being held indirectly in other jurisdictions.

⁷ See Arslanalp, S., Eichengreen, B. J. and Simpson-Bell, C. (2022), "The stealth erosion of dollar dominance: active diversifiers and the rise of non-traditional reserve currencies", *Working Paper*, No 2022/058, International Monetary Fund, Washington, March 24.

⁸ Gopinath, G. and J. Stein (2021), "Banking, trade, and the making of a dominant currency", *Quarterly Journal of Economics*, Volume 136, Issue 2, pp. 783-830.

debt issuance patterns occur, shifts in the currency composition of global reserve portfolios might not necessarily herald broader changes in other dimensions of international currency use.⁹

Second, although the share of the US dollar as a global reserve currency has declined, in other dimensions of international currency use, it has remained stable, such as in global foreign exchange turnover and for the invoicing of global trade, or it has increased significantly, such as in international bond issuance.

Third, alternatives to major international currencies often lack the depth, liquidity or other economic and financial attributes required to appeal to global investors. At more than USD 23 trillion, the US Treasury market remains deeper and more liquid than markets in any other safe assets, including the euro government debt market, which is still fragmented among different issuers.¹⁰ China's government debt market in renminbi, at more than USD 7 trillion, might offer an alternative to US Treasuries in the medium term. The share of the renminbi in global official foreign exchange reserves has more than doubled since 2016 to almost 3% in 2021. However, despite recent measures to lift restrictions, access to renminbi-denominated bonds and bank deposits for foreign official investors is not fully liberalised. The rebalancing of global official foreign exchange reserves away from the US dollar in the past two decades has mostly benefited currencies more easily traded than the renminbi (see Chart A).¹¹ Foreign official investors hold between one-fifth and onethird of the stock of general government debt issued by the United States, the euro area or the United Kingdom, but less than 5% of the stock issued by China (see Chart B). About a guarter of the USD 12 trillion in global official foreign exchange reserves are held by China and cannot be diversified into renminbi. Gold may not be a more attractive alternative for official reserve managers seeking to diversify away from the US dollar or the euro, being neither remunerated nor usable for international payments; it is also subject to physical storage costs. Rebalancing portfolio holdings into crypto-assets is challenging, too. Some of the crypto-assets, such as bitcoin, are supplied in fixed quantities, have highly volatile prices and behave similarly to risky speculative assets. This makes them unappealing to official reserve managers. Stablecoins might be more attractive in the future. However, at least so far, they may lack guarantees in terms of redeemability - if issuers are able to lock tokens in the wallets of holders - and the required scale, with a market capitalisation of just USD 185 billion in 2021 - only 1% of global foreign exchange reserve holdings. Most stablecoins are pegged to the US dollar, which suggests that complementarities between the various uses of international currencies benefit the incumbent unit – the US dollar.¹² In addition, financial supervisors are increasingly scrutinising market transactions to identify those that might be conducted with a view to evading financial sanctions, and encourage crypto exchanges to remain mindful of reputational risk.

⁹ According to press reports, Saudi Arabia has held discussions with China to denominate their bilateral oil transactions in renminbi rather than US dollars. Russia has also recently started to invoice its exports of coal and oil to China in renminbi.

¹⁰ In a related vein, it has been argued that the dominant role of the US dollar as a reserve currency is unlikely to be affected as the United States has the largest, most liquid government bond market and a fully open capital account (see Brunnermeier, M.K., James, H., Landau, J. P., "Sanctions and the international monetary system", VoxEU, 5 April 2022).

¹¹ Such as the Australian dollar, Canadian dollar, Swedish krona and Swiss franc. See also Arslanalp, S., Eichengreen, B. J. and Simpson-Bell, C., op. cit.

¹² See Box 5, "Euro-based stablecoins", in this report for further details.

Chart A



The decline of the role of the US dollar in global foreign exchange reserves

Change in the share of selected currencies in global official holdings of foreign exchange reserves since 1999 (percentage points, at constant Q4 2021 exchange rates)

Sources: IMF and ECB calculations.

Notes: The change in the share of the renminbi is estimated using data available since 2016; the change in the shares of the Australian and Canadian dollars are estimated using data available since 2012. The latest observation is for the fourth quarter of 2021.

Finally, the Russian invasion of Ukraine might serve as a reminder of the relevance of sound institutions, macroeconomic fundamentals, including price stability over the medium term, and geopolitical considerations as determinants of international currency status. Research suggests that, since the early nineteenth century, the leading international currency or currencies have been those of countries where the rule of law is respected, which emphasise checks and balances, build durable international alliances, and where creditors are well represented.¹³ Moreover, research also stresses that the choice of international reserve currencies depends on broad strategic and geopolitical considerations. In particular, one study found that military alliances boost the share of a currency in the partner's foreign reserve holdings by about 30 percentage points.¹⁴

Overall, time will tell whether more significant changes in the international role of currencies will unfold. What is possible, however, is that the Russian invasion of Ukraine might have acted as a catalyst in related domains. For instance, some countries have accelerated plans to explore central bank digital currencies (CBDC) in the wake of the invasion, which may have implications for the global appeal of major currencies.¹⁵

¹³ Barry Eichengreen (2013), "Number one country, number one currency?", World Economy, Volume 36(4), April, pp. 363-374.

¹⁴ See Eichengreen, B., Mehl, A. and Chiţu, L. (2019), "Mars or Mercury? The geopolitics of international currency choice", *Economic Policy*, Volume 34(98), April, pp. 315-363.

¹⁵ On 9 March 2022 President Biden signed an executive order that directs the US Government to assess the technological infrastructure and capacity needs for a potential US CBDC and encourages the Federal Reserve to continue its research, development, and assessment efforts for a US CBDC.

Chart B

Share of foreign official investors in government debt: high for the US dollar and the euro, low for the Chinese renminbi

Share of foreign official holdings of outstanding general government debt



Sources: BIS, IMF and ECB calculations. Notes: * Euro area sovereigns rated AA or above include Belgium, Germany, France, Luxembourg, the Netherlands, Austria and Finland. The latest observation is for September 2021.