Financial Sanctions and the US-Dollar

By Carsten Hefeker*

Summary

The paper discusses whether US dollar based financial sanctions will undermine the dollar's dominant international role. Despite long-standing attempts to reduce the role of the dollar, these have had limited success so far. I discuss why this is the case and why alternatives to the dollar are unlikely to challenge its position at present. However, a fractionalization of the global financial system may happen in the longer run. An important step to avoid such a fractionalization will be to make the use of financial sanctions less unilateral and arbitrary.

Zusammenfassung

Der Aufsatz diskutiert, ob Finanzsanktionen die internationale Bedeutung des US-Dollars schwächen werden. Obwohl es seit längerem Versuche gibt, den Einfluss des Dollars zu verringern, sind diese bislang weitgehend erfolglos geblieben. Es wird beschrieben, warum dies der Fall ist und warum es auch auf absehbare Zeit so bleiben wird. Langfristig kann es allerdings durchaus zu einer Fragmentierung des globalen Währungs- und Finanzsystems kommen. Um eine Fragmentierung zu verhindern, sollten Finanzsanktionen künftig stärker koordiniert und weniger einseitig und arbiträr verhängt werden.

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1. Introduction

The swift and comprehensive reaction of Europe and the United States to the Russian attack on Ukraine in February 2022 surprised most observers. It took only a few days to impose the first of a series of sanction programs (reaching 14 at the time of writing) on Russia, which had been coordinated and prepared in advance among the United States, the European Union, the United Kingdom,

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Japan, Canada, Switzerland and Australia (Baker 2024). They targeted around eighteen-thousand individuals and firms, freezing and confiscating their assets, banning technology exports and certain imports, and put a (largely ineffective) price ceiling on Russia's oil exports. The alliance also decided to freeze Russian currency reserves and central bank assets in the amount of 300 billion US dollars, about half of the Russian central bank's total currency reserves of 630 billion.

Given the size and international importance of the Russian economy, the extent of sanctions is exceptional in modern times and goes further than sanctions following the occupation of Crimea in 2014, when the reaction was less united and comprehensive. It also intensified an ongoing debate about the long-term consequences of financial sanctions for the international financial system (Demarais 2022; Weiss 2022). While financial sanctions in general are nothing new, the seizure of central bank assets is different. If currency reserves, which were so far considered immune to sanctions, are seized, countries around the world might reconsider to continue using the US dollar. Using currencies not aligned with the Western coalition against Russia would make them less exposed to be sanctioned in future conflicts.

The financial sanctions are a reminder of how far-reaching the power of the United States is in obstructing other countries' use of the US dollar. Russia and China had already earlier begun diversifying away from using the dollar as a reserve currency to reduce their vulnerability and looking for alternatives to the US-dollar before the recent sanctions (McDowell 2023). The discussion has, however, intensified and become part of a broader discussion about "fragmentation" between economic blocs in trade policy, industrial policy and access to critical technology and resources. The International Monetary Fund, for instance, warns of such a fragmentation and even draws comparisons to the Cold War (Aiyar et al. 2023; Catalán et al. 2024; Gopinath et al. 2024).

The present paper asks what the consequences of financial sanctions for the global financial system will be. It begins by discussing the importance of the US dollar for international financial transactions and whether the increasing use of financial sanctions may undermine the dollar's role. Despite long-standing attempts of many countries, including American allies, to reduce the dominant role of the dollar, these have had only limited success so far. I therefore discuss next why this is the case and why alternatives to the dollar will not challenge the dollar soon. However, this does not preclude that, going hand in hand with a

¹ Sanctions imposed on Iran are similarly comprehensive but target a smaller economy less integrated into the world economy than Russia. Iran accounts for less than one percent of world GDP, Russia for about three percent (Krahnke et al. 2024). For a comprehensive account of the design and implementation of sanctions against Russia since 2014, see Baker (2024).

fractionalization of the trading system, a fractionalization of the global financial system may happen in the longer run. In conclusion, I discuss possible ways to avoid such a fractionalization. An important step will be to make the use of financial sanctions less unilateral and arbitrary. A regulatory framework that conditions the use and scope of permissible financial sanctions, or at least stronger coordination between countries, could lower incentives to reduce the use of the dollar, which is ultimately also in the interest of the United States.

2. The Use of Financial Sanctions

Imposing sanctions and embargoes against the trade of individual countries is a standard policy measure in international conflicts and wars (Blackwell and Harris 2016; Felbermayr et al. 2020; Krahnke et al. 2024; Mulder 2022). Blocking trade obstructs access to important goods and, even if sanctions are not watertight, they increase costs. Over time, however, sanctions and embargoes become porous and lose effectiveness. This can also be seen with trade sanctions against Russia where states like China, Turkey or Kazakhstan either directly or through re-exports provide access to all kinds of goods, including weapons and technologies needed for war related purposes (Hilgenstock et al. 2024).

Given the higher centralization of the international financial system, however, it is more difficult to bypass financial sanctions. Financial sanctions are more effective due to the dominant role of the US dollar in international financial transactions, which gives the United States unique power of punishing enemies, and sometimes friends, that it does not have with other forms of sanctions. Since September 11, 2001, the United States and its allies make abundant and increasing use of unilateral and multilateral financial sanctions against countries such as Iran, Afghanistan, Burma, Libya, Syria or Venezuela (see Cipriani et al. 2022; Krahnke et al. 2024). While less often used, there have also been cases of central bank asset freezes in Syria, Iran and Afghanistan before those imposed on Russia. Krahnke et al. (2024) report ten cases of asset freezes for the 2000s alone.

The dominant role of the US dollar becomes apparent first in the fact that it is used in about 90 percent of all foreign exchange transactions.³ Moreover, around 50 percent of international loans and more than 60 percent of international debt are denominated in dollars.⁴ The dollar makes up nearly 60 percent of officially

 $^{^2\,}$ The United States Office of Foreign Assets Control (OFAC) provides details for each case. See https://home.treasury.gov/policy-issues/office-of-foreign-assets-control-sanc tions-programs-and-information.

³ Out of a total of 200 percent since each transaction involves two countries.

⁴ The importance of the dollar may be even larger than shown in statistics because of "FX swaps", forward transactions with dollars that can create undocumented dollar obligations. Estimates of these swaps run up to 39 trillion US-dollars (Borio et al. 2022).

declared international currency reserves (ECB 2024), down from around 70 percent twenty years ago as the IMF's Currency Composition of Official Foreign Exchange Reserves (COFER) database shows.⁵

Concerning the composition of currency reserves, Laser et al. (2024) develop a new dataset, based on official data and national central bank reports. They show that over the last five years the dollar's share has dropped in Europe, South America and Asia, but increased in Africa, Australia and Oceania. The renminbi's share in contrast has risen in all regions with exception of the eurozone. Nontraditional reserve currencies like the Australian and Canadian dollars and currencies collected in the "other currencies" category increased in all regions other than Australia and Oceania, hinting at a gradual reduction of the importance of dollar and euro (see also Arslanalap et al. 2022). Recent press reports, in contrast, suggest that central banks are actually planning to increase their dollar reserves, particularly in Asia (McDougall 2024). This is in line with Goldberg and Hannaoui (2024) who show a significant reduction of Russian and Chinese holdings of the dollar but do not see this as a general phenomenon. In their view, the decline in dollar shares can be mainly attributed to a strong increase in overall reserves (mainly by Switzerland) not denominated in dollars.

While the exact composition of currency reserves may be disputed, it is not disputed that central banks have increased their gold reserves in recent years so that gold makes up about ten percent of total reserve holdings now. While gold purchases have been 400 and 600 tons over the 2010s, in 2022 and 2023 they jumped to over 1000 tons, with China alone increasing its gold holdings by 225 tons (ECB 2024). But even as central banks diversify their reserve holdings, the dollar's dominant role in currency reserves remains.

The second factor that gives the United States unique power is its control over the global financial infrastructure. International financial flows usually consists of two parts: there is first a notification between banks that a payment will follow, before in a second step the actual execution of the payment takes place. Communication between banks mostly takes place via the Society for Worldwide Interbank Financial Telecommunication (SWIFT) located in Belgium. Before the creation of SWIFT by private banks in 1973, banks notified each other by Telephone or Fax and so the creation of the network has reduced transaction costs and made verifiability much easier. Because SWIFT is not based in the United States, it is not subject to American legal oversight. But threatening SWIFT with losing access to the United States financial network has been enough in the past to force the organization to implement also unilateral sanctions of the US government. In the case of Iran, for instance, the organization decided to exclude Iranian banks from the network without a formal European

⁵ See https://betadata.imf.org/Datasets/COFER.

legal requirement, based on the mere threat of US sanctions (Cipriani et al. 2023).

While exchanging information is possible without using SWIFT, the actual execution of a significant payment involving dollars needs an American bank. Clearing of dollar payments among banks takes place through the Clearing House Interbank Payment Systems (CHIPS), created by private banks in 1970. Today it comprises about 50 American banks or US branches of foreign banks, including Chinese (but not Russian) banks. CHIPS directly clears payments among member banks or on behalf of third banks that have access to member banks. Payments are netted once a day, and funds at CHIPS are prefunded by participating banks through Fedwire, the Federal Reserve Bank's gross-settlement system, to transfer money from their Fed accounts to CHIPS.

Consequently, banks that are part of an international financial transactions in dollars either need to be a direct member of CHIPS or use a correspondent bank that transfers dollars to the receiving bank or its partner bank. An American bank wishing to transfer money to a foreign individual will first transfer the payment to a domestic bank participating in CHIPS which then transfers it to the CHIPS account of a foreign bank. The latter then transfers the payment to its customer abroad or another bank located in the respective country. The US government can forbid American banks to interact with certain foreign banks and a bank excluded from CHIPS has no longer access to the clearing system and the necessary dollar funds for a transaction. The same applies to similar clearing networks in other countries such as the Clearing House Automated Payment System (CHAPS) in the United Kingdom or the payment systems operated by the European Banking Association in the European Union (EBA Clearing). While banks might find ways around SWIFT by using less efficient technologies, it is much more difficult to work around clearing systems.

Even if banks would consider doing transaction with dollar funds located in offshore markets such as Singapore or Hong Kong, the threat of exclusion from the network against individual banks or countries has so far been enough to making them comply. The threat of secondary sanctions is legally contested, but it can be very powerful nevertheless. The United States often extends sanctions to all payments which are somehow connected to a sanctioned entity or individual. A correspondent bank may not be involved directly in a sanctioned payment but as long as it needs dollars to refinance itself, this exposes it to sanctions and therefore offshore markets are not outside secondary sanctions. This extension of sanction reach is considered "unlawful" and criticized as extraterritorial jurisdiction not only by foes but friends of the United States as well (Emmenegger and Zuber 2022).

3. Reducing Vulnerability

Given their exposure to dollar sanctions, several countries have tried to reduce their vulnerability. Starting with the occupation of Crimea in 2014 this is most obvious in Russia and China, but there are also longer-standing attempts by oil and gas producing Arab states to move away from denominating energy in dollars. Even allies of the United States, like the European Union, have declared their intention to reduce the role of the dollar and their exposure to unilateral sanctions by setting up an alternative system.

Before the invasion of Ukraine, close to 80 percent of Russia's imports were invoiced in dollars or euros, but after the invasion of Ukraine its imports became increasingly invoiced in renminbi. By the end of 2022, renminbi payments accounted for 20 percent of Russia's imports, up from 3 percent a year earlier, while the share of dollar and euro declined to less than 70 percent. Partly this reflects more trade with China and other non-sanctioning countries. Renminbi invoices of imports from China increased from 23 to 63 percent between 2021 and 2022 and in trade with third countries the share of renminbi increased from less than 1 percent to more than 5 percent during 2022 (Chupilkin et al. 2023).

Russia also restructured its currency reserve holdings. Following the first round of sanctions in 2014, the Russian central bank started to convert part of its reserves to gold and declared in 2022 that its entire gold holdings had been moved to Russia (Corsetti et al. 2024). Russia does not disclose the composition of its currency reserves anymore since the invasion of Ukraine, but even before it had shifted its reserves away from the dollar, holding about a third of them in renminbi (Eichengreen 2024). Not expecting that currency reserves would be frozen by European countries, however, it continued to hold part of its reserves in Europe which explains why almost half of them could be frozen. While Russia had reduced the share of its reserves down to 6.6 percent in the United States in 2021, it continued to hold around 25 percent in France, Germany, the UK and Austria (Kamminga 2023).

After 2014 Russia also started to develop its own financial communication system, the System for Transfer of Financial Messages (SPFS), as an alternative to SWIFT. According to Cipriani et al. (2023) more than 400 banks, mostly from Russia, but also from Germany, Switzerland, France, Japan, Turkey, Sweden and Cuba, joined SPFS. As of April 2022, banks from 52 countries were connected to the system, whose participants Russia no longer discloses. In 2021, however, only about 20 percent of intra-Russian transfers used SPFS.

China as well has taken steps to promote the use of its own currency instead of the dollar. While this has been China's strategy for more than a decade now (Prasad 2014), it has accelerated since the Russian invasion. China has concluded a number of clearing agreements with Pakistan, Argentina and Saudi Arabia

since 2022. Moreover, new clearing banks for renminbi payments have been established in Laos, Kazakhstan, Pakistan, Brazil and Serbia (Sandlund 2024). There have also been negotiations and agreements with the Gulf Cooperation Council countries (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates) to pay in renminbi for its oil and gas imports. Also, Iraq and Bolivia agreed to settle their trade with China in renminbi (Eichengreen 2024). Overall, around 30 percent of China's trade in goods is now settled in its own currency, up from around 7 percent in 2012 (ECB 2024). Despite these initiatives, however, the international role of the renminbi is still a minor one. In late 2023, only 2.4 percent of official currency reserves were held in renminbi and it accounted for only 5.1 percent of global trade payments and only 5 percent of currency turnover (Eichengreen 2024).

Given the importance of a clearing system, and the vulnerability to being excluded from it, the Chinese central bank, the People's Bank of China, as well launched its own clearing system in 2015, the Cross-Border Interbank Payment System (CIPS). It is in principle organized similarly to CHIPS but works as a gross-settlement system as compared to a netting system like CHIPS. There are also direct participants and indirect ones which go via a member bank located in China (two-fifths) and abroad (three-fifths). CIPS also has its own messaging system which banks use besides communicating through SWIFT. In comparative size, however, CIPS is clearly dwarfed by CHIPS. The latter has 11,000 participating banks as compared to 1,300, it has 10 times more transactions, and a daily volume of close to 2 trillion USD as compared to an equivalent of only 46 billion (Eichengreen 2022). Presently, most banks continue to prefer SWIFT for messaging because they do not have access to a separate CIPS terminal (Cipriani et al. 2023).

In April 2022, Russian Minister of Finance Siluanov suggested linking the Russian and Chinese payment system and including other BRICS members as well (Eichengreen 2022).⁶ At the October 2024 BRICS meeting in Kazan, Russia, President Putin again promoted the idea of an own clearing system for the organization, called BRICS Bridge, but the response of other members was not enthusiastic (Clover and Mosolova 2024). This is not surprising: A clearing system with nonconvertible, or only partly convertible, currencies is not attractive. Current account surpluses with a country whose currency cannot be used to pay for imports from other sources are not desirable and so members will aim at balanced trade. Only the renminbi may be more widely accepted as a means of payment because of China's importance as a global exporter. Given the control of China over its currency and the political risk involved, however, it is unlikely

⁶ Members of BRICS are Brazil, Russia, India, China and South-Africa; Egypt, Ethiopia, Iran and the UAE joined this year. The group has association agreements with 13 states, and around 40 more countries have expressed their intention of joining.

that BRICS members like India, South Africa or Brazil have a strong incentive to switch from dollar to renminbi on a larger scale, including their currency reserves. Presently, it can therefore not be expected that a BRICS clearing mechanism will find widespread support beyond Russia.

There is also a long-standing discussion about the intention of Gulf Cooperation Council countries to move the denomination of oil trade away from the dollar (Momani 2008). One initial reason behind the consideration was the American invasion of Iraq in 2003 and the advocacy of Iran to move away from the dollar in international oil trade. The euro was initially seen as a possible alternative but the euro-crisis after 2010 shelved this plan. There is now a new discussion about the possibility of denominating at least part of oil trade in renminbi which is actively promoted by China, and since 2018 renminbi denominated oil futures are traded in the Shanghai International Exchange (Kamel and Wang 2019).

A second factor is that the incentive to keep currency reserves in dollars has declined in Gulf countries. There was allegedly an agreement since the early 1970s between the United States and Saudi-Arabia, that the former would provide a military security umbrella for the region. In exchange, dollar revenues from oil trade would be recycled into US treasury papers by Saudi Arabia (Spiro 1999). That has reportedly ended some while ago and Gulf states slowly diversify their investments away from the United States (Momani 2008; The Economist 2023). The diversification incentive is supported by the fact that the dollar exchange rate and the price of oil have become positively correlated in recent years (Hofmann et al. 2023). Pegging to the dollar and holding dollar reserves serves as a stabilizer when oil and dollar are negatively correlated but procyclical when the correlation is positive. Risk aspects suggest that diversification away from the dollar will continue.

Finally, even the European Union has taken measures to reduce its vulnerability to dollar sanctions. In response to the 2018 unilateral and uncoordinated reimposition of sanctions by the United States against Iran, France, Germany and the United Kingdom created their own clearinghouse for trade with Iran, the Instrument in Support of Trade Exchanges (INSTEX). Their attempt to bypass the dollar payment system entirely was joined by other countries and finally the system was opened to all EU countries (Cipriani et al. 2023). INSTEX was designed not only as a messaging system but as a clearinghouse that would manage payments between Europe and Iran. Payments should be netted within the system, and payments between Iran and the European Union would only occur to settle import-export imbalances. The system, however, was a failure. Although it still exists, there was only one transaction in 2020, covering the import of medical equipment by Iran. The system was declared as being useless by the Iranian central bank in 2021 (Corsetti et al. 2024).

4. Alternatives to the Dollar

Despite these efforts to challenge the dollar's dominance, significant obstacles remain. One important factor is that the use of dollar, in its roles as a means of payment and a store of value, shows strong complementarities. For the role of a means of payment, liquidity and network effects matter. Broad and liquid currency markets are inexpensive, and currencies are attractive as a vehicle if they are widely used. Currency reserves in turn are attractive if they are stable in value, can be stored easily and safely, and are readily converted to serve as a means of payment. So central banks will hold reserves in a currency that national firms use for trading, to be able to provide liquidity, and firms and households will borrow in currencies to which their central banks can provide access.

The US dollar is unique in the degree to which it serves both functions at the same time and it is unlikely that any rival currency could challenge this status soon. First, there are strong lock-in effects from using the dollar (Prasad 2014). Reducing the demand for dollars or selling dollar holdings is likely to have negative price effects. A strong reduction of the dollar's value in turn hurts the value of the remaining stock of dollars. Thus, by diversifying away from the dollar the remaining holdings lose value. The more aggressively large dollar holders move away from it, the stronger the price effect will be. Consequently, any diversification must be gradual as it has been the case with China's diversification of currency reserves. A large group of countries doing so would quickly backfire on them.

Secondly, there is no convincing alternative to the dollar. While China is trying to promote the external use of the renminbi, the success has not been impressive as argued above. Even though countries like India and Russia use the renminbi to some extent, they are unlikely to increase it significantly. As a means of payment, the renminbi is still not entirely convertible, although there is more freedom to use it offshore than onshore. But since China controls and restricts the use of the renminbi, a widespread use of it is not attractive. To the extent that countries wish to buy from China renminbi are useful, but if they cannot be used in trade with third countries they are not attractive as a vehicle currency.

The renminbi is even less attractive as a means of saving for private individuals or official currency reserves. Since China is not a democracy, there are no checks and balances on government action, including monetary policy or unexpected constraints of the use of renminbi accounts. The Chinese government can constrain the use of renminbi at its will and holders of renminbi always run the risk to see their savings become unusable and basically worthless overnight. This argument, of course, applies to a potential electronic renminbi, emitted by the Chinese central bank, as well.

In this perspective, the euro would be the obvious alternative to both, dollar and renminbi. The problem with the euro is that there are simply not enough high-quality euro denominated bonds for foreign governments to hold reserves in. A reserve currency must provide enough liquidity to function as safe asset (Caballero et al. 2017) and the euro-zone does this only to an insufficient amount. Individual government debt of many European countries often does not have top-ranking status, and a large part of AAA rated bonds are held by the European Central Bank. The once-off emission of common debt, the NextGenerationEU, prompted by the Corona-pandemic, is too small at just 800 billion euros. Thus, there simply is no deep and liquid market for euro denominate government papers comparable to the US treasury market (Corsetti et al. 2024). While the European Commission, under presidents Juncker and von der Leyen, expressed their ambition to position the euro as a leading international currency (European Commission 2019), the lack of progress in this respect is due to the absence of a safe asset.

Lastly, often mentioned alternative assets to hold as reserves or means of payment are gold, Special Drawing Rights (SDR) at the International Monetary Fund, or digital currencies. Gold is attractive for diversification but costly to hold, even more costly to use for payments and so cannot substitute for a liquid currency. The expansion of SDR, in turn, is a long-standing requirement of developing and emerging market countries but regularly blocked by the United States. It is not clear why the US government should change its position, especially when it would challenge the dominance of the dollar. Gold and SDR are therefore unlikely to become a substitute for the dollar, and it is also unlikely that the idea of an international digital currency, once proposed by former Bank of England head Mark Carney (Carney 2019), will be realized.

Private digital currencies, like Bitcoin and Ethereum, instead are volatile in value, whereas so-called stable coins, like Tether, promise a stable dollar value but need access to dollars to fulfill the promise and so are vulnerable to sanctions too. Both are therefore improbable to acquire a larger role as a means of payment and store of value. Central bank digital currencies (CBDC), however, could become an alternative to the dollar. The Bank for International Settlement (BIS) experimented for a while with a platform called mBridge (see https://www.bis.org/publ/brochure_mbridge.pdf), that enabled direct transfers between national central banks without using the United States financial system. While this project raised the interest of Russia, China and others as a potential mechanism to bypass the dollar, the number of participants was restricted to China, Hong Kong, Thailand, Saudi Arabia and the. The project was terminated in November 2024 but similar projects may be pursued in the future.

5. Fractionalization of the International Monetary System

The International Monetary Fund has documented in a series of reports and papers a disintegration or "fractionalization" of trading relations. It finds a similar result for foreign direct investment and portfolio flows between a Western bloc, comprising the United States, Europe, Japan, Australia and other allies, and a bloc centered around China including Russia (Aiyar et al. 2023; Catalán et al. 2024; Gopinath et al. 2024). In particular, trade between the United States and China has decreased sharply since 2018 and triggered a reorientation of supply chains. The International Monetary Fund (2023) also reports a decline in cross-border financial flows since the Global Financial Crisis, and increased restrictions on capital inflows and outflows. Overall, financial linkages have declined and become more concentrated on fewer partner countries. To some extent, this seems to be driven by geopolitical affinity, as measured by the voting behavior in the United Nations General Assembly. The consequences for trade have not been dramatic, however, due to the emergence of so-called connector countries, whose trade and investment links with opposing blocs have increased and which might substitute for direct inter-bloc links (Aiyar and Ohnsorge 2024). But the fragmentation may in the longer run reduce the dollar's role in trade and financial flows.

Partly this is driven by political reasons, but one can also identify economic reasons behind it. Because of the decline of the relative economic size of the United States and Europe, Gourinchas et al. (2019) and Gopinath et al. (2024) expect an eventual multipolar financial system as other countries and their currencies gain importance. The United States alone will no longer be able to provide liquidity for a growing world economy because providing more liquidity requires issuing more treasury bonds. An increasing amount of US debt in turn will eventually undermine the credibility of the dollar as a government default becomes ever more likely (Pflueger and Yared 2024). This long-run reassessment of the dollar's fiscal risk may be accelerated by perceptions of an increasing political risk in the United States, depending on the fiscal policy of future administrations.

Another political risk stems from the excessive use of United States financial power of which at least part of the political leadership seems to be aware. Shortly before leaving office as Secretary of the Treasury under President Obama, Jack Lew gave a speech in which he warned that the dominant role of the dollar also carried the risk that policymakers would overreach by excessively using unilateral dollar sanctions.⁷ There are indications that such a backlash is already under way. The coordinated and united sanctions against Russia in 2022 and since should not distract from the fact that many earlier unilateral sanctions that

⁷ See https://home.treasury.gov/news/press-releases/jl0398.

the United States imposed did not find the support of Europeans. The sanctions against Cuba and Iran, for instance, were not supported, and secondary sanctions on third countries were interpreted as partly aiming at undermining the competitive position of European firms. An example are sanctions against the gas pipeline Nordstream 2 between Russia and Germany under President Trump which is often interpreted as a pretense to create a market for American liquefied natural gas (Demarais 2024).

European policymakers indeed believe that American sanctions undermine European sovereignty and the creation of INSTEX can be seen as a response to that, even if it failed. Neither has the European Commission given up its position that Europe should become less reliant on the dollar. In fact, the Commission aims to "...promote the international role of the euro, strengthen the EU's financial market infrastructures, improve the implementation and enforcement of EU's sanctions' regimes, and increase the EU's resilience to the effects of the unlawful extra-territorial application of unilateral sanctions and other measures by third countries." (European Commission 2021, p. 1).

Increasing political and economic polarization between the United States and its allies and another bloc centered around China, however, could also have a different consequence. A confrontation between blocs may lead to trade and currency blocs (Gopinath et al. 2024), but it could also lead to stronger financial relations within blocs at a different level. Not only may investments become more concentrated for fear of confiscations, but political and military allies of the United States have traditionally held relatively large amounts of dollars as currency reserves which is often seen as compensation for the security umbrella that the United States provides to their allies (Weiss 2022). If military tensions continue to rise, this can become an incentive for allies to hold more dollar reserves.

Moreover, a stronger coordination between the United States and its allies in the use of financial sanctions and less unilateralism could lower reasons to fear a weaponization of the dollar and reduce incentives to become more independent from the dollar. Coordination in the use of sanctions would lower fears among allies that they are potential targets as well. It would not, however, address the currently observable split between the G7 and its allies on the one side; China, Russia and their partners on the other side; and the large group of countries that do not take side. To find the support of countries that do not support Russia's aggression but neither like the dominant role of the dollar, however, an international regulatory framework that conditions the use and scope of permissible financial sanctions could help. The often discussed reform of the international monetary system should thus also include a mechanism dealing with financial sanctions. And reducing the incentives to lower reserves held in dollar should ultimately be also in the self-interest of the United States. Whether such

an agreement has the chance of being realized is, however, a different question in the present situation.

6. Conclusion

Despite attempts of countries like China and Russia to diversify away from the dollar and reduce their vulnerability to financial sanctions, the overall dominance of the dollar has not suffered a lot. A sudden collapse of its importance cannot be expected, but a more gradual process toward a more multilateral international monetary system may have begun and accelerate in coming years. Part of the resilience of the dollar as dominant currency is due to path-dependency, but the lack of a serious and attractive alternative is at least as important. Given the tight control of China over financial flows, the use of the renminbi as an asset is not attractive, and nontraditional reserve currencies, as well as the euro, do not provide sufficiently large markets to serve a major role as trading and reserve currencies. Both may change over time, but it will not happen quickly.

One could therefore conclude that the United States government itself is the main threat for the dominant position of the dollar. Its large and increasing international deficits may eventually erode the credibility of the dollar (Gourinchas et al. 2019; Pflueger and Yared 2024) and its unilateral weaponization of the dollar is an incentive for countries to reduce their vulnerability. A sudden move away from the dollar, unlikely as it is, would seriously affect the stability of the entire international financial system and affect not only the United States. But even a gradual reduction of dollar use is not in the American interest. In this respect, the Biden administration's close coordination of financial sanctions against Russia with its European and G 7 allies has been helpful. Not only are coordinated sanctions more effective, but they are also less arbitrary, reduce the risk of abusing financial power, and are therefore more acceptable to others. A closer coordination with its allies is therefore in the United States own interest. Whether the next Trump administration will follow this path remains to be seen.

Independent from the future course of the American policy, a reduced dependence on the dollar and a stronger role of the euro are in Europe's interest anyway. Being able, for instance, to pay for its energy imports in euro instead of dollars would reduce cyclicality. Given the recent trend of oil prices and the dollar exchange rate to move together, which traditionally has not been the case, makes oil and gas imports more expensive in times of crisis when the dollar tends to appreciate. To be able to pay for those imports in euros would hedge partly against that risk. However, the European Union has so far not been successful in promoting the use of the euro and a clearer strategy of how to achieve

this is needed. The European Commission and member states should take this issue more seriously. One way of boosting the role of the euro would be to make it more attractive as an international reserve currency. For this, the creation of a deep and liquid market in euro denominated bonds would be a precondition.

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