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Dedollarization efforts in Russia's foreign trade against the backdrop of Russia's war in Ukraine and intensifying Western sanctions (2013–2023)

Stephan Barisitz, Tatiana Evdokimova¹

Dedollarization trends in Russia's foreign trade have accelerated profoundly since Russia invaded Ukraine in 2022. Efforts to dedollarize date back to 2014, when Russia's annexation of Crimea triggered the first sanctions. In the following eight years, the US dollar share in Russia's foreign trade with its main trading partners dropped, albeit to varying degrees. Opportunities to dedollarize were smaller for Russian exports than for imports as Russian exports are dominated by commodities, which are historically mostly traded in hard currencies. Prior to 2022, the euro was deemed a relatively secure alternative to the US dollar and often replaced it as dedollarization unfolded. This strategy, however, limited genuine risk diversification once the United States and the European Union massively tightened their sanctions against Russia in 2022 in a synchronized way. Heightened difficulties and risks in processing US dollar and euro payments prompted a rapid shift to national currencies in Russia's foreign trade. As of spring 2023, about 60% of Russia's foreign trade was settled in Russian ruble and renminbi-yuan, compared to an average of around 20% in early 2022. Numerous initiatives regarding settlements in Turkish lira, United Arab Emirates dirham and Indian rupee were announced in 2022 and continue to be pursued in 2023, but financial infrastructure limitations have so far prevented any major breakthrough. These shortcomings may gradually be tackled though, creating opportunities for further invoicing currency diversification. Still, we do not consider these rapid shifts in Russia's foreign trade invoicing a major threat to the predominance of the US dollar and the euro in global trade. On a regional level, however, a degree of currency fragmentation appears possible or likely.

JEL classification: F19, F31, F42

Keywords: dedollarization, currency fragmentation, foreign trade invoicing, Russian ruble, sanctions, trade settlement in national currencies, renminbi-yuan

Ever since Russia's annexation of Crimea and the Western sanctions imposed on Russia from 2014, the authorities in Moscow have pursued a dedollarization policy, which gained strong momentum after Russia invaded Ukraine in February 2022 and the United States and the European Union put in place unprecedented punitive economic and financial measures against Russia. This study will focus on *dedollarization in Russia's foreign trade*, leaving aside the numerous domestic and foreign non-trade related aspects of this multifaceted phenomenon that would go far beyond the scope of this paper. Our key contribution to the rapidly growing literature on invoicing patterns is a timely investigation of Russian foreign trade dedollarization efforts amid the swiftly changing sanctions environment. Prior to February 2022,

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changes in Russia's invoicing patterns had some similarity to globally observed trends that were consistent with the dominant currency paradigm discussed in Gopinath and Itskhoki (2021). Since the start of the war against Ukraine, Russia's invoicing choices have seemed to be more affected by sanctions risks than by standard invoicing determinants.

This paper is structured as follows: Section 1 briefly defines foreign trade dedollarization, including its drivers and potential challenges. Section 2 gives an overview of Russia's foreign trade geography and product structure. In section 3, we describe dedollarization trends of the last decade, focusing on several subperiods and the role of sanctions. Section 4 lists some key impediments to further dedollarization. Section 5 wraps up, providing an outlook and conclusions.

1 Dedollarization of Russian foreign trade: definition, reasons and challenges

In a general sense, we adhere to the view of Kokenyne, Ley and Veyrune (2010, p. 3) that a successful dedollarization policy makes the local currency more attractive to residents than foreign currencies. For the purpose of this study, we use *dedollarization* in the wider sense of the Russian term “devalyutizatsia” to mean the *transition to settling trade with nonsanctioning countries in their national currencies*, thus avoiding the use not only of the US dollar, but also of other sanctioning (Western) countries' reserve currencies, e.g. the euro, the pound sterling or the Japanese yen.²

Reasons for dedollarization include boosting the importance of the domestic currency and thus also enlarging national economic policy room for maneuver. Using national currencies for foreign trade payments can avoid having to take recourse to widely used reserve currencies, like the US dollar or the euro. It can thus prevent a drawdown or depletion of foreign reserves, which may be needed for debt servicing. At least theoretically, it can even cut transaction costs as it requires only one exchange between two respective national currencies as opposed to first converting national currency A into the reserve currency used and then converting the latter into national currency B. This notwithstanding, the attractiveness of a currency for foreign trade payments is also influenced by domestic monetary stability, i.e. primarily by the question whether a country has a track record of low inflation or not (Nabiullina, 2022).

For Russia, the most important reason for dedollarization is to reduce its exposure to possible Western sanctions connected to the use of the US dollar or the euro. Since most large Russian banks were excluded from the international Swift system of financial messaging in March 2022, US dollar transactions have become very difficult, complicated or risky for Russian banks, euro transactions have become more difficult as well, and most correspondent accounts with Western banks have been closed. The Russian authorities therefore consider the US dollar and the euro “toxic” currencies that are to be avoided as much as possible. But Western sanctions also provide companies from nonsanctioning countries wishing to trade with Russia with an incentive to steer clear of the US dollar or the euro to cut potential costs and risks of being sanctioned themselves (see section 3.2.1).

² We choose this approach because existing sanctions that have already been expanded may easily be further extended to restricting the use of sanctioning countries' currencies.

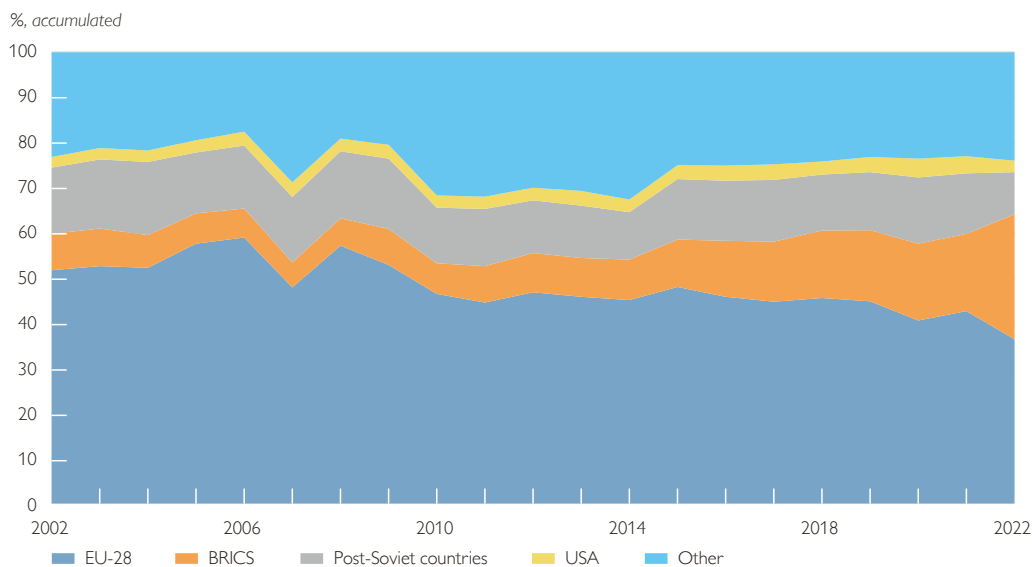
Challenges to dedollarization comprise relatively low liquidity and the lack of full convertibility of many national currencies. The tightening of Western sanctions led to a significant decline in Russian ruble liquidity on the foreign currency market (trading volumes dropped by around one-half), while – following the implementation of capital controls by the Bank of Russia in February and March 2022 – the ruble was no longer fully convertible. Taken together, these factors limited the ability to use the ruble as a substitute to reserve currencies. Trade between countries using national currencies should be relatively balanced because in case of large disequilibria it may be more difficult for a country recording a bilateral surplus to efficiently use earned proceeds than in a situation where proceeds denominated in widely used reserve currencies can be spent almost globally. Finding the appropriate exchange rate between currencies of limited liquidity may also be a challenge. Moreover, it takes time to set up alternative payment infrastructures (e.g. systems of correspondent accounts, messaging networks, infrastructures for foreign currency transactions, modern technologies).

2 Point of departure: some stylized facts on Russia's trade geography, product structure and dollarization in 2013

In recent decades, the EU was Russia's key trading partner, accounting for around 45% of Russia's exports and more than a third of Russia's imports, but its market share was declining gradually (charts 1 and 2). Russia's cooperation with China was scaling up rapidly between 2010 and 2021: China's share in Russian exports and imports increased from 5% to 14% and from 17% to 25%, respectively. At the same time, the US share in Russia's exports and imports remained below 3.5% and 2%, respectively, implying a considerable mismatch between the geography of trade and the use of invoicing currencies (chart 3). A similar pattern is also observed globally, as documented by Boz et al. (2020).

Chart 1

Russia's exports to its main trading partners

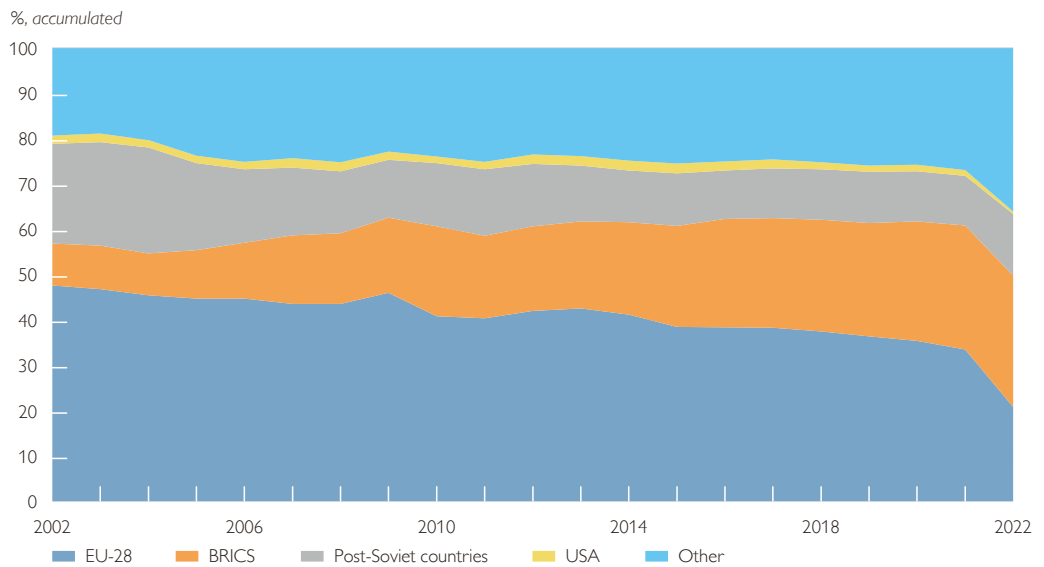


Source: Trade Map, Bank of Russia.

Note: Estimates for 2022 are based on mirror data and may not be fully comparable. Post-Soviet countries excluding the Baltic countries.

Chart 2

Russia's imports from its main trading partners



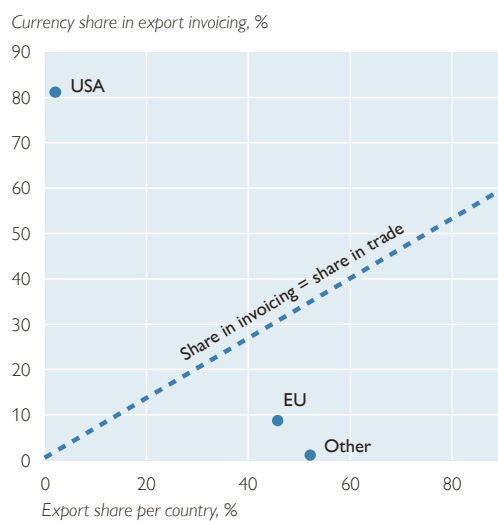
Source: Trade Map, Bank of Russia.

Note: Estimates for 2022 are based on mirror data and may not be fully comparable. Post-Soviet countries excluding the Baltic countries.

The currency mismatch was particularly visible in export payments, where US dollar predominance was linked to the high share of commodities in Russia's exports (up to two-thirds of export receipts came from exporting hydrocarbons and another 10% from metals). The product structure of imports was much more diversified, with the dominant category of machinery and equipment (45% on average) being largely supplied by EU companies and settled in euro (chart 4).

Chart 3

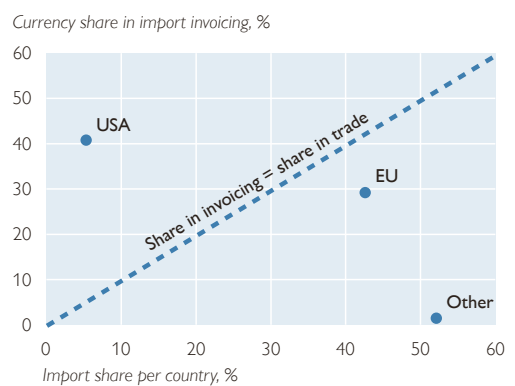
Russian exports: regions vs. invoicing currencies (2013)



Source: Trade Map, Bank of Russia.

Chart 4

Russian imports: regions vs. invoicing currencies (2013)



Source: Trade Map, Bank of Russia.

3 Dedollarization pushes and strategies

3.1 Was there an attempt to dedollarize prior to the annexation of Crimea and the initial sanctions?

Prior to the global financial crisis of 2008 and 2009 and the first round of sanctions against Russia in 2014, dedollarization was not very high on the agenda of Russian policymakers. In the absence of sanctions, exporters and importers were favoring reserve currencies (notably the US dollar and the euro) as the means of payment in line with the dominant currency paradigm discussed in Gopinath and Itskhoki (2021). Operations in these currencies helped keep transaction costs to a minimum thanks to highly liquid foreign exchange markets, the better pricing of trade finance instruments, a very wide network of correspondent accounts and the availability of hedging products.

At the same time, the Russian government pursued the medium-term goal to enhance the role of the Russian ruble in trade with Eastern European countries, the Caucasus countries and Central Asia and to increase the importance of Moscow as a regional financial center. Economic integration within the Eurasian Economic Community (Belarus, Kazakhstan, Kyrgyzstan, Russia and Tajikistan) strengthened the position of the ruble. However, these efforts were mostly focused on regional trade with no strategic target of reducing reliance on reserve currencies in trading with other partner countries.

3.2 Dedollarization strategy between 2013 and 2022

3.2.1 Reliance on the US dollar

With the introduction of sanctions in 2014, the risks associated with the use of the US dollar increased. This was also the moment when Russia's efforts to reduce reliance on the US dollar in foreign trade became clearly visible. The trend accelerated in the period from 2018 to 2019, following a new wave of US sanctions including the adoption of the Countering America's Adversaries Through Sanctions Act (CAATSA) in August 2017, restrictions on RUSAL, the world's second largest aluminum producer, in April 2018 and initial sanctions on Russian sovereign debt in August 2018. These new rounds of sanctions confirmed the trend toward a further tightening of US restrictions which could potentially target any private, publicly traded company.

The CAATSA marked the start of secondary sanctions related to transactions with Russian companies on the Specially Designated Nationals and Blocked Persons (SDN) list. Unlike primary sanctions, which introduce restrictions for US individuals and entities in dealing with SDN-listed foreign entities, secondary sanctions target non-US persons and entities that engage in activities with SDN-listed entities. Secondary sanctions (such as denial of export licenses or loans from US financial institutions, or potential inclusion in the SDN list) are thus of an extraterritorial nature. In fact, they represent the threat to foreign entities of being isolated from the US financial market. In many cases, the risk of becoming subject to secondary sanctions triggered overcompliance and multiple precautionary checks by banks and thus caused substantial delays in the execution of transactions with Russian entities.

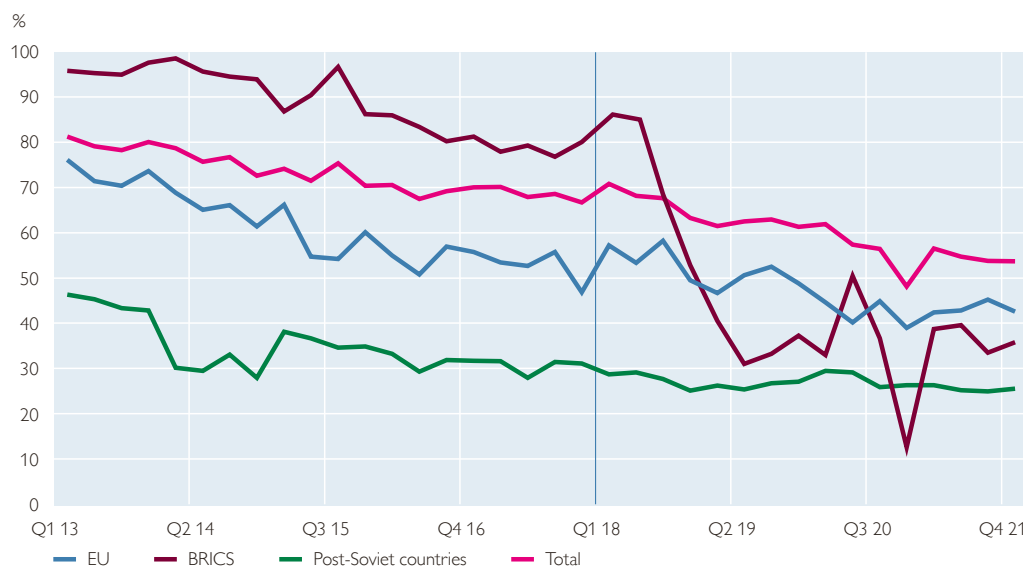
In this environment, the euro was viewed as a relatively safe haven, i.a. because EU sanctions did not include secondary sanction clauses and hence did not create risks for non-EU entities. Even though the trends observed between 2013 and 2021 can be labeled as dedollarization, Russia's reliance on Western currencies remained, in fact, very high. A switch toward the euro, which might have seemed a more secure alternative to the US dollar, proved to provide little genuine diversification in foreign trade invoicing. A swift transition toward the use of national currencies was complicated as the corresponding payment infrastructure was lacking.

The Bank of Russia started publishing statistics on the currency composition of settlements for Russian trade in goods and services in 2013. Between 2013 and 2021, the share of the US dollar in payments for total Russian exports dropped from 81% to 54% (chart 5). Many Russian commodity exporters switched from the US dollar to the euro in that period. In 2019, Rosneft, the largest Russian oil company, and Novatek, Russia's largest producer of liquified natural gas (LNG), announced their complete transition to invoicing in euro (Reuters, 2019; Vedomosti, 2019).

This downward trend in US dollar use was observed in Russia's trade with most of its key trading partners but was particularly pronounced in trade with the BRICS³, where the US dollar share declined from 95% in 2013 to 36% in 2021. A very similar trend was observed in China and India, Russia's two key trading partners among the BRICS. Given that hydrocarbons account for around 60% of Russian exports to the BRICS countries (chart 7), the decline of the US dollar

Chart 5

Share of USD in payments for Russian exports by region



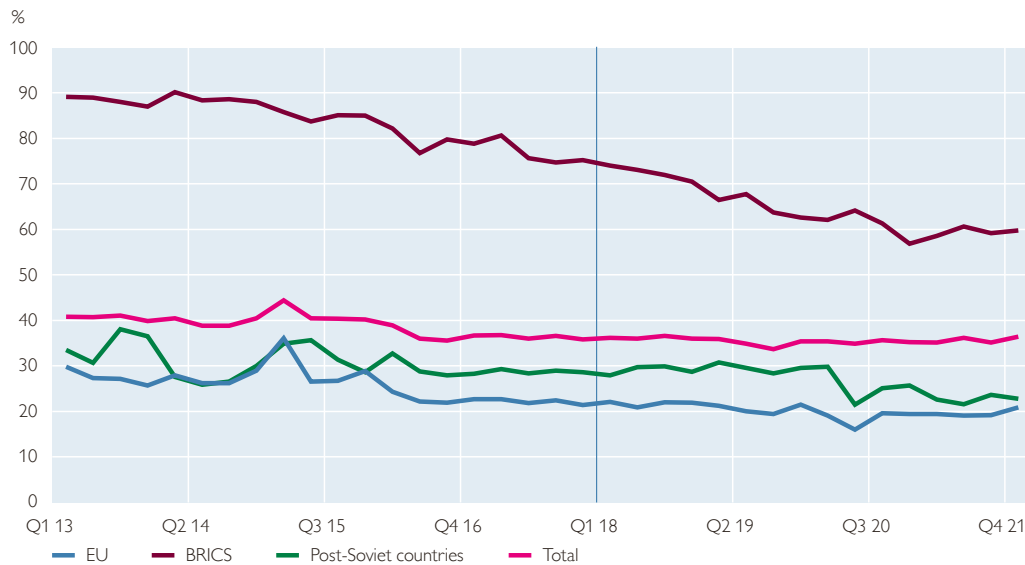
Source: Bank of Russia.

Note: Post-Soviet countries excluding the Baltic countries.

³ BRICS is the acronym for a group of five leading emerging economies: Brazil, Russia, India, China and South Africa. In 2014, the BRICS established the New Development Bank (NDB), a multilateral emerging market development bank. As of end-May 2023, Bangladesh, Egypt and the United Arab Emirates joined the NDB, and Saudi Arabia is negotiating to become an NDB member (Leahy, 2023).

Chart 6

Share of USD in payments for Russian imports by region



Source: Bank of Russia.

Note: Post-Soviet countries excluding the Baltic countries.

share in this segment to around 30% from 2019 to 2021 suggests that a substantial part of oil and gas exports to the BRICS switched to alternative currencies, notably the euro. The dedollarization of Russian exports to China proceeded very quickly in 2018 and 2019 and was likely reinforced by trade tensions between the USA and China that intensified in the same period. The quick pace of dedollarization is also likely to be linked to a high concentration of Russian exports: Russia's top 200 exporters generate more than 80% of export revenue.⁴

Russia's trade with *Europe* was also gradually dedollarized, with the euro being used as a natural substitute. By 2020, the share of the US dollar in the EU's trade with Russia (42.2% for imports from Russia and 18.5% for exports to Russia) was already lower than in the EU's total external trade (49% and 28% respectively), according to Eurostat. Russian goals to reduce reliance on the US dollar went hand in hand with European efforts to strengthen the international role of the euro.

The *post-Soviet countries*, historically, were the countries that relied least on the US dollar in paying for Russian exports, but even they managed to further reduce the US dollar share in these payments from 46% to 25%.

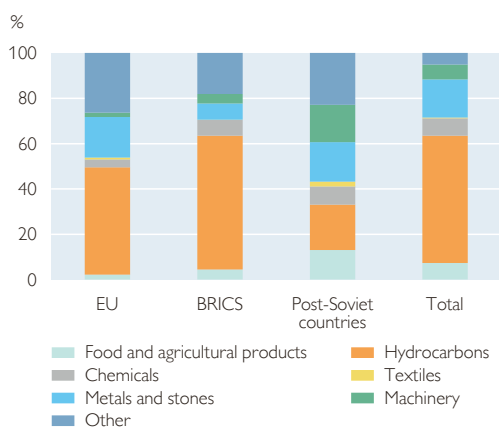
Dedollarization trends in Russian *import* payments were much more benign: Here, the share of the US dollar declined from 40% to 36% (chart 6). The inherently higher dollarization of Russian exports is linked to the high share of commodities in Russian exports (chart 7). Like with the currency composition of export payments, the most significant changes occurred in trade with the BRICS: Here, the share of the US dollar decreased from 90% to 60%.

It is hard to establish a robust link between the product composition of Russian trade and the propensity to invoice in certain currencies. Unfortunately, more

⁴ Calculations based on the rating of the top 200 Russian exporters by the Russian Analytical Center Expert.

Chart 7

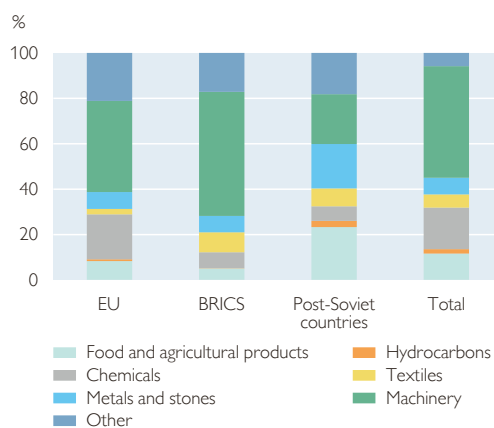
Product structure of Russian exports (2021)



Source: Trade Map, Rosstat.
Note: Post-Soviet countries excluding the Baltic countries.

Chart 8

Product structure of Russian imports (2021)



Source: Trade Map, Rosstat.
Note: Post-Soviet countries excluding the Baltic countries.

granular data on the currency structure of trade by types of goods are not available. Evidence from French customs data presented in Berthou (2022) suggests that the propensity to invoice in US dollar clearly declined in trade in dual-use goods given secondary sanctions risks for non-US firms.

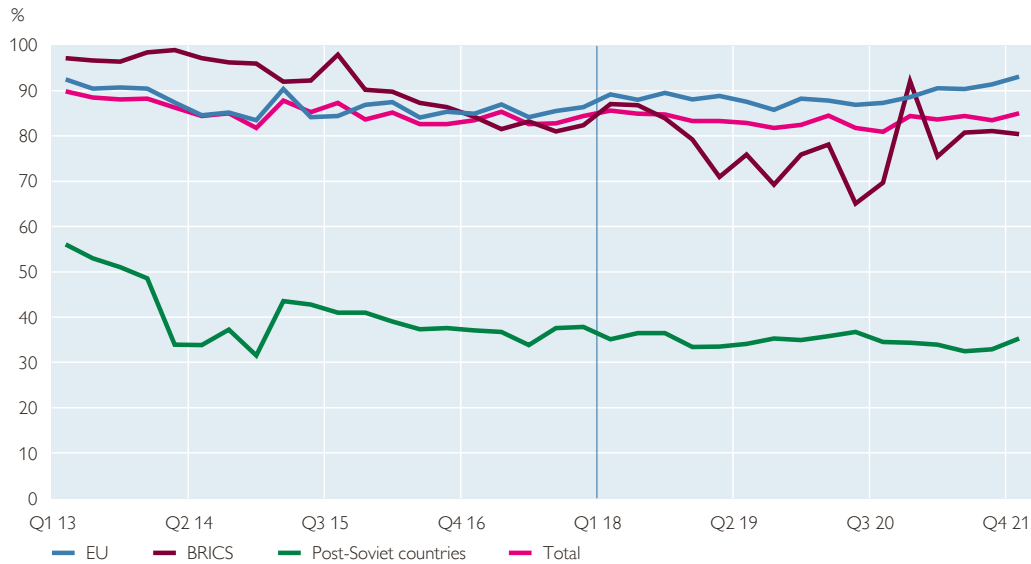
3.2.2 Reliance on the US dollar and the euro

Russia's progress in reducing reliance on major reserve currencies in general was much weaker than in reducing reliance on the US dollar alone. From 2014 to 2021, the joint share of the US dollar and the euro continued at around 80% and 65% in Russian export (chart 9) and import (chart 10) settlements, respectively. The Western sanctions do not seem to have triggered a decisive substitution of Western currencies with alternative invoicing currencies. As with dedollarization in its narrow sense, the most noticeable progress was accomplished in Russia's trade with the BRICS countries.

Over the period from 2013 to 2021, the importance of the US dollar decreased for most of Russia's trading partners. However, the currencies that served as a substitute for the US dollar were different across regions (charts 11 and 12). Trade with Europe became increasingly settled in euro. In the case of the BRICS, the pattern was different for export and import payments. Declining reliance on the US dollar was almost fully counterbalanced by an increased reliance on the euro for Russian exports and by reliance on the BRICS countries' national currencies for Russian imports. Notably, Chinese companies tended to offer more beneficial terms for contracts settled in renminbi-yuan. The post-Soviet countries were the only region where dedollarization was happening in favor of the Russian ruble.

Chart 9

Combined share of EUR and USD in payments for Russian exports

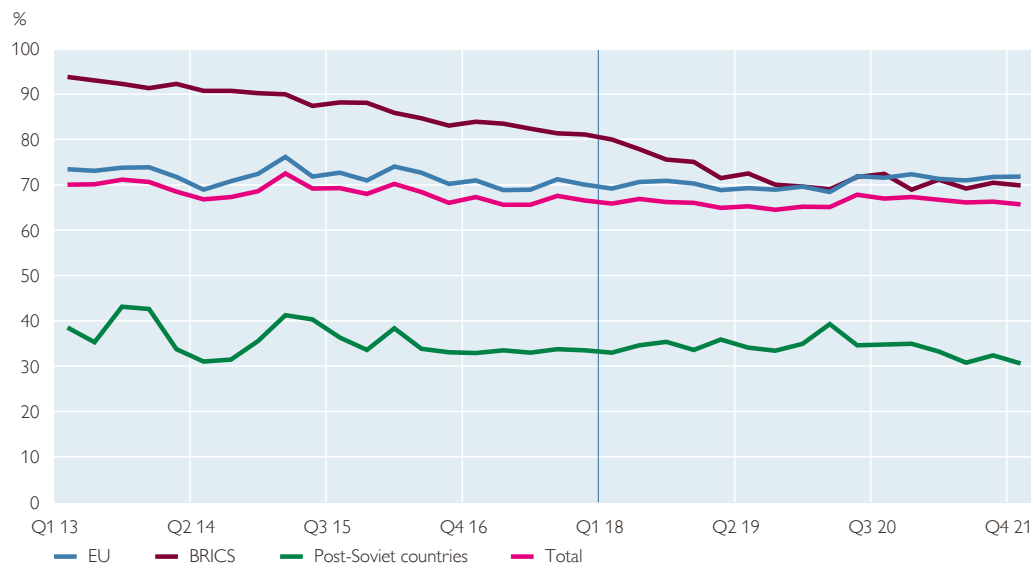


Source: Bank of Russia.

Note: Post-Soviet countries excluding the Baltic countries.

Chart 10

Combined share of EUR and USD in payments for Russian imports

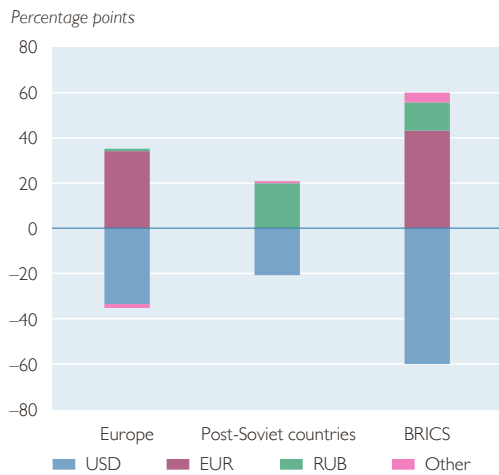


Source: Bank of Russia.

Note: Post-Soviet countries excluding the Baltic countries.

Chart 11

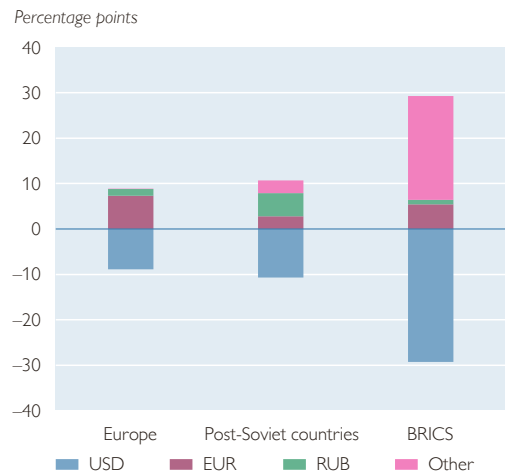
Change in the currency composition of payments for Russian exports between Q1 13 and Q4 21



Source: Bank of Russia.
Note: Post-Soviet countries excluding the Baltic countries.

Chart 12

Change in the currency composition of payments for Russian imports between Q1 13 and Q4 21



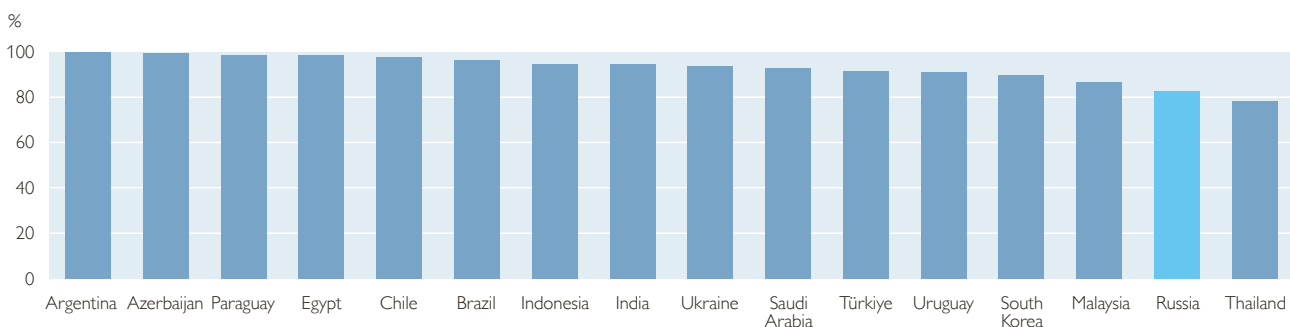
Source: Bank of Russia.
Note: Post-Soviet countries excluding the Baltic countries.

Despite this seemingly slow progress in currency diversification, Russia was still in the forefront of this trend in global terms. According to the International Monetary Fund's (IMF) database on the currency composition of international trade payments, by 2019, only a few emerging market economies (Thailand, Uruguay and Saudi Arabia) had a lower combined share of the US dollar and euro in their import (chart 14) or export (chart 13) payments than Russia.

These dedollarization trends of the previous decade were accompanied by significant efforts to develop foreign exchange markets in national currencies. Specifically, the Moscow Exchange launched spot operations in renminbi-yuan at the end of 2010 and introduced a futures market in renminbi-yuan in 2015. In 2018, it started Turkish lira-Russian ruble trading. Moreover, the Kazakhstan tenge and the Belarusian ruble have been quoted on the Russian exchange market since 1998.

Chart 13

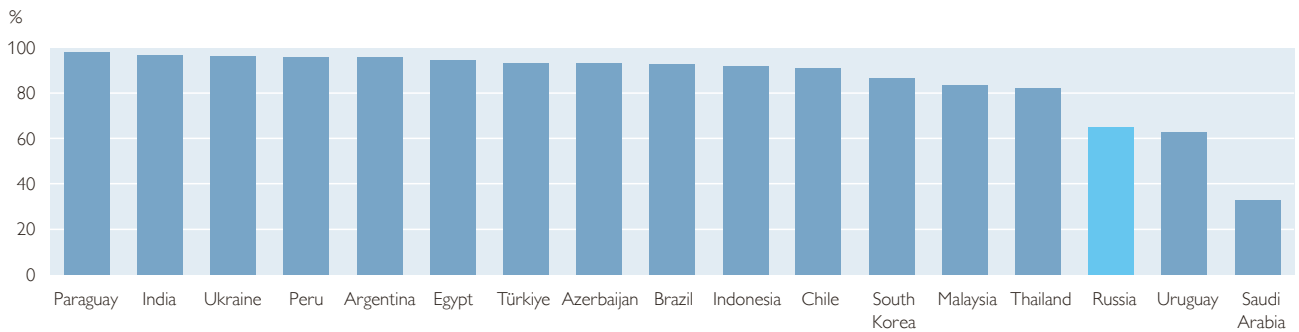
Combined share of EUR and USD in countries' export payments¹



Source: Boz et al. (2020).
¹ 2019 or latest data available.

Chart 14

Combined share of EUR and USD in countries' import payments¹



Source: Boz et al. (2020).

¹ 2019 or latest data available.

Overall, the dedollarization trends observed during the period 2013–2021 had some similarities to global patterns reported in the empirical literature. The euro's share in Russian-European trade invoicing became relatively well aligned with that share in trade in which at least one euro area country is involved – a pattern that was also observed globally by Boz et al. (2020). The stable combined share of the US dollar and the euro in the currency composition of Russian trade is also in line with the stylized fact documented by Boz et al. (2020) regarding the increasing global concentration of invoicing in US dollar and euro over time despite the declining share of world exports to the USA and the euro area. Amiti et al. (2022) provide empirical evidence on firm-level decision-making about currency choices in external trade. The high degree of synchronization in the transition of Russian exporters to euro invoicing from 2016 to 2018 is in line with their finding regarding the influence of competitors' decisions on firms' currency choices. A more stable currency composition of import invoicing compared to export invoicing is also consistent with the stylized fact that the choice of invoicing currency is a less active firm-level decision for imports than for exports since suppliers tend to be more powerful in their choice of currency. The conclusions drawn in Amiti et al. (2022) that firm-specific characteristics, in particular firms' import intensity and size, affect the choice of invoicing currency more than industry-related factors imply that highly granular firm-level data are required to uncover the key determinants of the trends described above. Such microdata are unfortunately not available for Russia yet.

3.3 Developments since the invasion of Ukraine and the adoption of major Western financial sanctions

The situation changed abruptly with the start of the war in Ukraine in 2022. Additional financial sanctions, especially the successive ban of major Russian banks from Swift, considerably complicated the processing of US dollar and euro cross-border payments. Given the highly coordinated nature of the sanctions, transactions in euro became subject to similar operational risks as transactions in

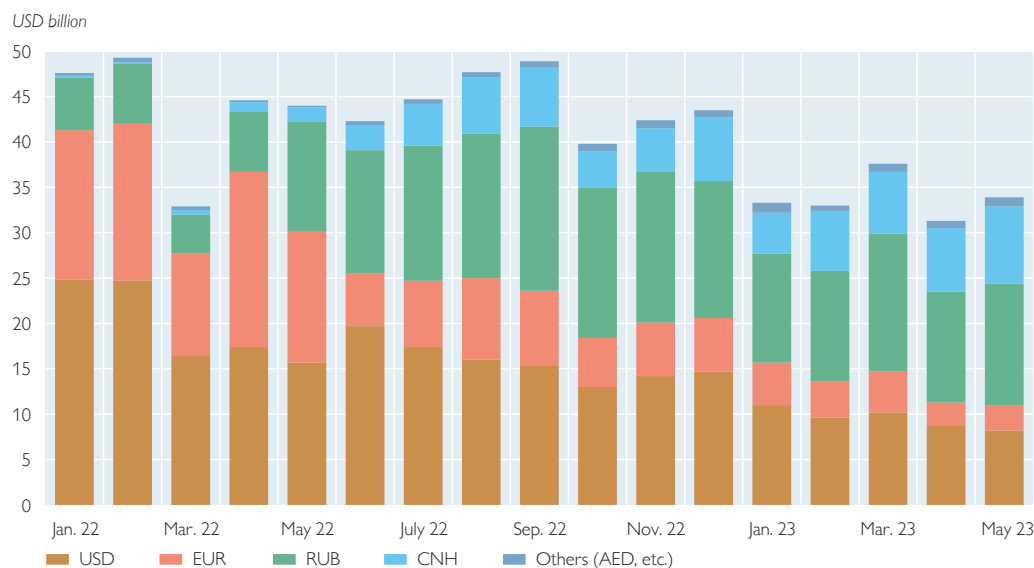
US dollar.⁵ These developments have progressively narrowed Russia's opportunities to carry out transactions with foreign counterparties in Western currencies and triggered a true reorientation toward alternative invoicing currencies.

According to the Bank of Russia, the share of *export payments* executed in euro and US dollar dropped from 87% in January 2022 to 33% in May 2023 (see chart 15).⁶ The combined market share of the US dollar and the euro was overtaken by the share of the Russian ruble and the renminbi-yuan, whose shares in payments increased from 12% to 39% and from 0.5% to 25%, respectively, in the period from January 2022 to May 2023 (Bank of Russia, 2023c, p. 4–5).⁷ Thus, the combined share of the Russian ruble, renminbi-yuan and other nonreserve currencies, e.g. the United Arab Emirates (UAE) dirham, has recently reached two-thirds of all Russian export payments. Apart from a redirection of trade flows from Europe to Asia, this also reflected practices of switching settlement currencies in existing contracts (Wheatley and Smith, 2022). Moreover, Russia's demand in spring 2022 that "unfriendly" European sanctioning countries pay for Russian gas in Russian ruble certainly had an impact, although it is difficult to quantify given the quick decline of pipeline gas deliveries to the EU.

Regarding *import payments*, dynamics do not differ much, as chart 16 shows. For a decade, the joint share of the US dollar and the euro remained quite stable

Chart 15

Russian exports broken down by settlement currencies (2022–2023)



Source: Bank of Russia (2023a, p. 4–5; 2023c, p. 4–5).

Note: AED = UAE dirham; CNH = renminbi-yuan.

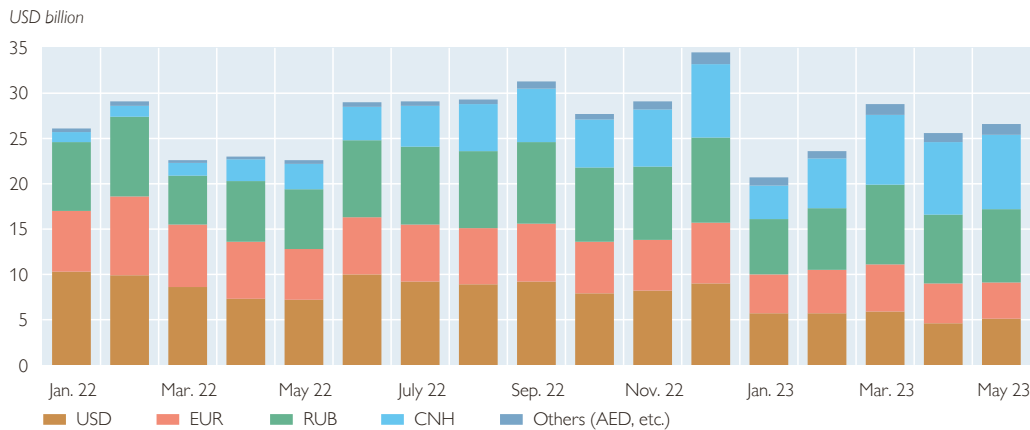
⁵ Yet a number of medium-sized or smaller Russian banks remain connected to Swift (for the time being), and a tendency has developed to redirect the settling of payments to as yet nonsanctioned banks, e.g. in trade with India (see below).

⁶ Note that total Russian exports (measured in USD) in the first five months of 2023 declined by 22.5% against the corresponding period of the previous year, largely due to the EU embargo on oil and oil products and the G7 price cap for Russian oil that had entered into force in late 2022 and early 2023.

⁷ The share of other currencies remained marginal and rose from less than 1% to below 3%.

Chart 16

Russian imports broken down by settlement currencies (2022–2023)



Source: Bank of Russia (2023a, p. 4–5; 2023c, p. 4–5).

Note: AED = UAE dirham; CNH = renminbi-yuan.

between 60% and 70%, but it dropped to 34% by May 2023. The combined share of the Russian ruble and the renminbi-yuan rose from 34% in January 2022 to 61% in May 2023. While the share of the ruble remained largely stable at 29% to 30%, that of the renminbi-yuan went up sharply from 4% to 31%. Here, too, the combined share of the ruble, renminbi-yuan and other nonreserve currencies has lately almost reached two-thirds of Russia's total import settlements. That said, notwithstanding multiple announcements regarding the use of other nonreserve currencies (apart from ruble and renminbi-yuan) as a means of payment in foreign trade with Russia, the so far only moderate rise from 2% to 4% from 2022 to early 2023 does not indicate any “takeoff” yet (Bank of Russia, 2023c, p. 4–5). Summing up, in late 2022 and early 2023 – apart from the Russian ruble – the renminbi-yuan was by far the most-used alternative currency to the US dollar and the euro in both Russia's exports and imports.

3.3.1 Russia's experience and plans for further dedollarization in 2022 and 2023

Overall trade

Given increasing sanction risks for Russian banks and other economic agents using the US dollar or the euro, the Eurasian Economic Union (EAEU) followed a request by its largest member, Russia, and officially decided, in March 2022, to move step by step to full mutual payments in national currencies. In September 2022, the Samarkand Declaration, which was published after the Shanghai Cooperation Organization⁸ heads of state had met in Samarkand, Uzbekistan, approved a roadmap for gradually increasing the share of national currencies in mutual trade payments between member countries (see table 1). In November 2022, Russian Deputy Foreign Minister Alexander Pankin pointed to negotiations

⁸ The Shanghai Cooperation Organization (SCO) is a Eurasian intergovernmental organization founded in Shanghai in 2001. The SCO aims at strengthening regional security and economic cooperation and development. Its members are China, India, Iran, Kazakhstan, Kyrgyzstan, Pakistan, Russia, Tajikistan and Uzbekistan. Iran joined the SCO in early July 2023, Belarus is expected to become a member next year (Ivanova, 2023).

between Russia and a number of (undisclosed) G20 countries that proceeded during the G20 summit in Indonesia. Negotiations focused on possibilities of activating the use of national currencies in mutual trade (RIA Novosti, 2022). In 2022, a number of countries purchasing Russian gas accepted settling these purchases in ruble (Otkryti Zhurnal, 2022). In early July 2022, the Russian United Grain Company (Obedinennaya zernovaya kompania – OZK), the world's largest grain exporter, announced that it was switching to receiving payments in national currencies from “friendly countries” (TASS, July 6, 2022).

EAEU and CIS countries

Trade with EAEU member countries slightly grew to about 10% of Russia's total foreign trade turnover in 2022. In the preceding year, the lion's share (73.5%) of mutual trade settlements among EAEU members was already carried out in national currencies (overwhelmingly in Russian ruble); the share of the US dollar was 19%. Notwithstanding the above-mentioned official EAEU decision to move to payments in national currencies and Armenia's and Belarus' transition to paying for gas purchases from Russia in ruble (instead of US dollar) announced in spring 2022, the share of national currencies in mutual settlements only slightly increased to 75% in 2022 (Ostwirtschaftsreport, 2022; PrimePress, 2023). In the case of Russian-Belarusian trade, the respective bilateral share was reportedly above 80% and reached 85% in June 2023 (BeITA, 2022; RIA Novosti, 2023).

China

In 2022, Chinese-Russian trade soared by about one-third to over USD 190 billion (close to 22% of Russia's total foreign trade turnover) as data released by Chinese customs showed. Shipments from China to Russia came to USD 76.1 billion worth of goods (29.4% of Russia's total imports in 2022), up 12.8% since 2021, while Russian exports to China surged by 43.4% to USD 114.1 billion (19.3% of Russia's total exports). Bilateral trade expansion upheld its high tempo in the first six months of 2023: The growth rate (year on year) of Russia's imports from China accelerated to 78%, while Russian exports to China still strongly expanded by 19%. In August 2022, the Chinese ambassador to Russia, Zhang Hanhui, assured Moscow that China will continue to increase settlements in national currencies in its trade with Russia (FARS, 2022). In September, Gazprom started to sell its expanding pipeline gas deliveries (via the Sila Sibiri pipeline launched in 2019) to the China National Petroleum Corporation for ruble and renminbi-yuan, in equal proportions (replacing US dollar payments that had been predominant until then).

In late 2022, the Chinese and Russian authorities also decided to promptly switch supplies of oil, oil products and coal to settlement in national currencies. While the renminbi-yuan and the Russian ruble made up 20%–25% of Chinese-Russian trade settlements in the summer of 2022, this share is estimated to have increased to about 50% in late 2022 and early 2023 (Kommersant, 2022; Gaidav, 2023). According to Russian president Vladimir Putin, the share of bilateral trade settled in national currencies rose further to about two-thirds in March and to 80% in June 2023 (BRICS International News, 2023). Apparently in response to the above-mentioned instructions of the authorities, as of May 2023, nearly all of China's purchases of oil, fuel oil, coal and of some metals from its northern neighbor

were paid in renminbi-yuan according to trade executives with direct knowledge of the matter (Chen, 2023).

Moreover, during 2022, the renminbi-yuan became more important for Russia's trade with a number of countries outside China and the EAEU: Some emerging markets, e.g. Brazil, are reportedly ready to pay for Russian fertilizers in renminbi-yuan to steer clear of risks connected to the use of sanctioning countries' currencies, the co-owner of the fertilizer corporation UralChem, Dimitry Mazepin, said at a meeting with President Putin in November 2022 (Interfax, November 23, 2022).

India

From a modest basis, Russian-Indian trade expanded spectacularly in 2022 and in spring 2023. This expansion has been driven by multiplying Indian purchases of cheap Russian crude oil and fertilizers, which drove up Russian exports to India from USD 9.1 billion in 2021 to over USD 37 billion in 2022 (i.e. about 6% of Russia's total exports), while Indian deliveries to Russia shrank from USD 4.4 billion to about USD 3 billion (around 1% of Russia's total imports) (Sharma, February 17, 2023). In the first quarter of 2023, Russian exports to India more than quadrupled (year on year) to USD 15.5 billion, while Russia's much smaller imports from India grew by about one-third to USD 0.95 billion; thus, the major bilateral trade imbalance has so far not been tackled. Given that oil⁹ accounts for most Russian exports to, and thus trade with, India and that oil is largely paid for in US dollars, a considerable share of Russia's trade with India – at least until late 2022 – was settled in US dollar.¹⁰ Yet, because of high sanctions-induced risks connected to using the US dollar, both the Russian and the Indian authorities have shown interest in adopting measures to avoid the US dollar in their bilateral trade and to expand payments in national currencies (Russland Aktuell, 2023).

In July 2022, in a bid to encourage wider use of the Indian rupee (which is not yet fully convertible though) as well as to reduce pressure on India's international reserves and curtail the Indian economy's dependence on the US dollar, the Reserve Bank of India, India's central bank, introduced guidelines to promote invoicing and paying the country's exports and imports in Indian rupees (table 1) (Laskar, 2022; Business Standard, 2022; Chenoy, 2023). Yet, a breakthrough toward the Indian rupee settlement scheme in Russian-Indian trade had not been reached by early July 2023. Given Russia's large bilateral export surplus, exporters are concerned about having to deal with a glut of Indian rupees which, they argue, they cannot easily spend in India. The Russian ruble/Indian rupee exchange rate has also been an area of concern. In early February 2023, Indian refiners started paying for most of their Russian oil purchased via Dubai-based traders in UAE dirham instead of US dollar, something Russia had already requested in July 2022. India's second-largest commercial bank, the publicly owned State Bank of India, has been clearing these UAE dirham settlements (Verma, 2023). In June and July 2023, however, the renminbi-yuan may have seen a breakthrough in Russian-

⁹ In 2022, Russia overtook Saudi Arabia and Iraq and became India's largest oil supplier (Loginova, 2023).

¹⁰ According to Bank of Russia data, in late 2021 – before the oil-triggered quadrupling of Russian exports to India – the share of the US dollar in the settlement of Russian exports to India had been 37% and the share of the Russian ruble had exceeded 50%.

Indian oil trade: Indian Oil Corporation, the country's biggest buyer of Russian crude oil, became the first state refiner to pay for some purchases from Russia in renminbi-yuan. It was joined by at least two of India's three private refineries (Reuters, 2023b).

Türkiye, Iran, Pakistan and some other nonsanctioning countries

Trade turnover between Russia and Türkiye doubled year on year to USD 46.9 billion from January to September 2022 (against USD 23.3 billion in the corresponding period of 2021). This equals 7.7% of Russia's total trade turnover in the first nine months of 2022. In early November 2022, the Turkish Minister of Energy and Natural Resources, Fatih Donmez, announced that Türkiye and Russia had reached a consensus on a step-by-step movement to mutual settlements in Russian ruble and Turkish lira.¹¹ While more technical work needed to be concluded, Donmez added that the two countries had already started trading in national currencies, with Türkiye paying part of its gas supplies in Russian ruble (TASS, November 8, 2022).

Russia-Iran trade, though much smaller than Russia's trade with Türkiye, is also expanding. Bilateral trade turnover rose by 15% in 2022 to USD 4.6 billion (0.6% of Russia's total trade), with Russian exports exceeding imports and expanding more dynamically than the latter (Eliseeva, 2022). Yet progress in moving to national currencies may initially have been sluggish. In mid-November 2022, Iranian Vice President Mohammad Mokhber urged to drop the US dollar and expand trade in national currencies. As of end-2022, however, according to Vyacheslav Volodin, Russia's State Duma speaker, the share of the Iranian rial and the Russian ruble in mutual settlements had exceeded 60%, and as of May 2023, according to Russian Deputy Prime Minister Alexander Novak, this share had reached 80% (Tehran Times, 2023; Frontier India, 2023). Recently, Russia and Iran appear to have established direct banking links that are independent of Swift: At end-January 2023, the two countries signed an agreement to connect their national financial messaging systems that allow for financial communications and interbank transfers, namely Russia's SPFS (Systema peredachi finansovoykh soobschenii, i.e. system for the transfer of financial messages) and Iran's SEPAM (Russia Briefing, December 20, 2022; Heilmann, 2023).

In April 2023, Pakistan¹² and Russia concluded a dedollarized oil delivery agreement. The first shipment arrived at the port of Karachi in May (Landrin, 2023, p. 15), and Pakistan paid for this shipment in renminbi-yuan (instead of US dollar, as had been the country's practice in oil purchases to this point). According to Pakistan's Minister of State (Ministry of Energy, Petroleum Division) Musadik Malik, Pakistan has set a target of lifting imports of Russian crude oil to one-third of its total oil imports (The Times of India – Energy World, 2023b; Shahid and Shahzad, 2023).¹³

¹¹ The Turkish and Russian heads of state had already expressed their intention to move to settling trade in their national currencies five years earlier, in 2017 (Russland Aktuell, 2022).

¹² With its 230 million inhabitants, Pakistan accounted for only about 0.1% of Russia's foreign trade turnover in 2021.

¹³ Pakistan has recently been grappling with swelling current account deficits because of oil payments. Cheap Russian oil and trade in renminbi-yuan may help here to stave off a depletion of US dollar reserves.

The central bank of Bangladesh¹⁴ also stated in mid-November 2022 that it was looking for a new payment mechanism with Russia, given that bilateral trade may be threatened by sanctions by the USA and its allies (New Nation, 2022). In April 2023, Bangladesh agreed with Russia to settle a USD 300 million payment related to the building of a nuclear power plant near Dhaka in renminbi-yuan (Kauffmann, 2023; The Times of India – Energy World, 2023b). Other emerging markets like Egypt, Iraq and Nigeria have also expressed their interest in, or are in consultations on, switching to national currencies in their trade settlements with Russia (Vitvitsky, 2023; Baikova, 2023).

3.3.2 Some other emerging markets' trade dedollarization efforts (not directly involving Russia)

There is no doubt that attempts to move toward payments in national currencies and to reduce dependence on the US dollar go beyond Russia's efforts (Jamrisko and Carson, 2022).¹⁵ As mentioned above, the Indian authorities are promoting the Indian rupee settlement scheme for trade with a number of neighboring countries, but this promotion is not necessarily linked to Russia. Central Asian countries plan to expand payments in national currencies not only in their trade with Russia but also in their trade with China (Trend News Agency, 2022). Most recently, China marked further progress in its quest to promote its own currency and dedollarize: In March 2023, the renminbi-yuan for the first time overtook the US dollar in China's cross-border transactions, with its share in China's total cross-border payments and receipts reaching 48% (from nearly zero in 2010), while the US dollar's share declined to 47% (from 83% in 2010), according to research by Bloomberg citing data from the Chinese State Administration of Foreign Exchange (Bloomberg News, 2023).

Over the course of 2022, Saudi Arabia increased its cooperation with China to the point of envisaging the possibility of selling a substantial share of its oil for renminbi-yuan instead of US dollar (Kodmani, 2022). At a meeting with leaders of member states of the Gulf Cooperation Council (GCC)¹⁶ in mid-December 2022, Chinese President Xi Jinping confirmed that Beijing was ready to shift its energy purchases to payments in renminbi-yuan. A month later, China asked GCC members to make full use of the Shanghai Petroleum and Natural Gas Exchange for renminbi-yuan settlement of oil and gas trades over the next three to five years (Pozsar, 2023). In mid-March, it was reported that the Export-Import Bank of China (China Exim-Bank) had concluded a first agreement on cooperation and borrowing with the largest commercial bank of Saudi Arabia, Saudi National Bank, with the objective to secure future bilateral settlements in the two countries' national currencies (Migunov, 2023). In late March 2023, the French multienergy conglomerate TotalEnergies and China National Offshore Oil Corporation settled China's first LNG transaction in renminbi-yuan. The deal on the shipment of 65,000 tons of LNG from the United Arab Emirates was made on the Shanghai

¹⁴ Bangladesh accounted for 0.4% of Russia's foreign trade turnover in 2021.

¹⁵ While US sanctions are, of course, far from being the only driving force for dedollarization efforts (see section 1), more and more countries appear to be targeted by US sanctions involving the US dollar. About 30% of all countries in the world are assessed to be subject to US, EU, Japanese or UK sanctions, as against only about 10% in the 1990s (Sharma, April 23, 2023).

¹⁶ Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates.

Petroleum and Natural Gas Exchange (The Times of India – Energy World, 2023a; Lei, Chen and Gu, 2023).¹⁷

Also in late March 2023, the two BRICS members Brazil and China signed an agreement to drop the US dollar and use their national currencies (Brazilian real and renminbi-yuan) in bilateral trade and financial transactions (table 1). They further announced the creation of a clearinghouse that is to provide settlements and lending in national currencies (Silk Road Briefing, 2023; The Economist, 2023a, p. 40). Overall, the renminbi-yuan's share in global trade settlements reportedly rose from 2% in February 2022 to 4.5% in spring 2023 (The Economist, 2023b).

In late March 2023, an official meeting of Association of Southeast Asian Nations (ASEAN) finance ministers and central bank governors focused on discussions to reduce trade and financial dependence of the Southeast Asian nations on the US dollar, euro, Japanese yen and pound sterling and move to mutual settlements in national currencies through the region's Local Currency Transaction scheme (Devonshire-Ellis, 2023). In April 2023, Malaysian Prime Minister Anwar Ibrahim pointed out that it was necessary for his country to curtail its dependence on the US dollar, adding that Malaysia and China were in talks to use the Malaysian ringgit and the renminbi-yuan for trade deals (Tayeb, 2023). In early May 2023, the central bank of Indonesia signed a Memorandum of Understanding (MoU) with its South Korean counterpart to cooperate on promoting the use of their national currencies for bilateral transactions (current account and direct investment) (Reuters, 2023). In May 2023, the central bank of Indonesia launched an Indonesian credit card, a domestic card payment system for government institutions and state companies that is to replace use by these entities of Visa and Mastercard in order to reduce reliance on foreign systems and protect official transactions from possible geo-

Table 1

Overview of selected recent dedollarization policy steps in emerging markets

Month	Dedollarization decision or agreement
March 2022	<i>Eurasian Economic Union</i> decides to gradually move to mutual payments in national currencies
July 2022	<i>Reserve Bank of India</i> introduces guidelines to promote invoicing and payment of India's exports and imports in Indian rupees
September 2022	<i>Samarkand Declaration of Shanghai Cooperation Organization</i> approves roadmap for gradually increasing share of national currencies in mutual payments
November 2022	<i>Türkiye</i> and <i>Russia</i> agree to gradually move to mutual settlements in national currencies
December 2022	<i>China</i> and <i>Russia</i> decide to switch to settlements in national currencies in their trade in oil, oil products and coal
January 2023	<i>Russia</i> and <i>Iran</i> sign agreement to connect their national financial messaging systems (SPFS and SEPAM)
March 2023	<i>Export-Import Bank of China</i> concludes agreement with <i>Saudi National Bank</i> , <i>Saudi Arabia's</i> largest commercial bank, to secure future bilateral settlements in national currencies
April 2023	<i>Brazil</i> and <i>China</i> sign agreement to use their national currencies in bilateral trade and financial transactions <i>Pakistan</i> agrees to pay discounted <i>Russian</i> oil in renminbi-yuan and commits to expanding transactions <i>Bangladesh</i> agrees with <i>Russia</i> to settle USD 300 million payment for building nuclear power plant near Dhaka in renminbi-yuan
May 2023	Central bank of <i>Indonesia</i> signs agreement with <i>South Korean</i> central bank to cooperate on promoting use of national currencies in bilateral transactions
July 2023	<i>Reserve Bank of India</i> and <i>Central Bank of the United Arab Emirates</i> sign MoUs on using national currencies for cross-border transactions and on interlinking their payment and messaging systems

Source: Authors' compilation.

¹⁷ So far, China has also concluded oil deals in renminbi-yuan with Iran and Venezuela, two strongly sanctioned countries (Petring, 2023, p. 37).

political disruptions (CNBC Indonesia, 2023). In mid-July 2023, the Reserve Bank of India and the Central Bank of the United Arab Emirates exchanged MoUs on promoting the use of their national currencies for cross-border transactions and on interlinking their payment and messaging systems (Bhattacharjee, 2023).

4 Impediments for dedollarization faced by Russia

Developing a country's foreign exchange infrastructure is an important step toward promoting the use of national currencies in foreign trade payments. Previously, importers and exporters often cited poor trading infrastructure as a significant impediment to further dedollarization. The appeal of national currencies was reduced by the lack of financial instruments to facilitate hedging and trade financing in national currencies, by low liquidity and, consequently, by large trading spreads implying additional transaction costs. These constraints were further amplified by a lack of trust in national currencies and higher risks to macroeconomic stability in the countries concerned. In the case of Russia, the Bank of Russia as well as the Ministry of Finance have aimed at establishing track records of low inflation, prudent budget policies and modest public debt in the last two decades. According to the Bank of Russia, modernized national currency settlement infrastructures are currently being set up bilaterally with interested countries (Yudaeva, 2022). For this purpose, the Bank of Russia established its International Settlements Department in mid-February 2023 (Bank of Russia, 2023b).

The dedollarization of Russian exports and imports made substantial progress in 2022 and early 2023. The combined use of the US dollar and the euro dropped from an average of over three-quarters of total transactions at the beginning of 2022 to below 40% in March and April 2023. The Moscow Exchange plans to introduce new hedging instruments in 2023, in particular Turkish lira/Russian ruble, Hong Kong dollar/Russian ruble and US dollar/renminbi-yuan futures. However, their costs will likely remain high amid relatively low liquidity and high interest rates around the globe. Since 2016, the Eurasian Development Bank has also contributed to infrastructure development by performing market maker functions for trading in Kazakhstan tenge/Russian ruble to increase liquidity and limit transaction costs.

The further dedollarization of Russian exports will require the continued dedollarization of trade in commodities. In this area, some trading partners, e.g. Indian enterprises, are experimenting with invoicing in alternative currencies (Indian rupee, Russian ruble, UAE dirham and, most recently, renminbi-yuan). Moreover, some large Middle Eastern producers reportedly consider dedollarizing their oil exports at least in part. Yet, as the Indian example shows, satisfactory solutions have not yet been found everywhere, and players are proceeding prudently. High and persistent trade imbalances can certainly constitute a challenge for settlements in national currencies.

5 Conclusions and possible implications for the international role of the US dollar and the euro: Are we witnessing an erosion of unipolarity?

Doubtlessly, the sweeping Western financial sanctions taken in response to Russia's invasion of Ukraine, including restrictions on the Bank of Russia, have provided a major impetus to Russia's ongoing dedollarization policies and have accelerated dedollarization in foreign trade and other areas. This transition, even though rapid

and efficient, certainly creates additional transaction costs for Russian companies engaged in foreign trade. Also, it is interesting to note that the sanctions prompted joint efforts with foreign trading partners, both enterprises and governments, in a number of areas, aimed to structurally overcome newly imposed obstacles on bilateral trade. Of course, the discounts Russian enterprises offered, e.g. for oil, have provided additional incentives for foreign trading partners to cooperate in moving to settlements in national currencies. Apart from that, other countries have also put forward motives (not necessarily linked to Russia) of reining in pressure on their international reserves and, more generally, reducing their economies' dependence on the US dollar.

Turning to the impact these developments may have on the role of the US dollar and the euro as the world's major and second-most important currency, respectively, we find that the two currencies do not appear threatened as the dedollarization efforts described above are still in their initial stages and mostly regional in character. Backed by very large economies, deep markets, full convertibility and a highly developed financial infrastructure, the dominance of the US dollar and the euro is not likely to be challenged for the time being. Yet, on a regional level (e.g. in transactions linked to Russia's, China's or, possibly, India's or some Southeast Asian countries' trade with their neighbors), some dissemination of dedollarized trading practices, and thus a limited degree of fragmentation of the overall system, seems possible or likely. The US authorities themselves appear quite aware of the US dollar's exposure to sanctions-triggered forces that, over time, could somewhat erode its international role (Channel News Asia, 2023; Financial Times, 2023).

Moreover, in a broader context, these changes at the regional level are happening amid a trend of rising fragmentation risks in global trade. Following supply chain disruptions during the COVID-19 pandemic, many companies have put a stronger focus on the security of their supplies and on opportunities for near-shoring and reshoring. Should these developments lead to a higher regionalization of global trade, the move toward national currencies in trade invoicing could gradually increase further. At the same time, the Russian experience shows that in the absence of tough constraints on using reserve currencies, the process of transition has, at least so far, been very slow.

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