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Research Article

Is Russia Getting Paid for Its Exports? New Evidence on the Impact of Economic Sanctions

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Abstract

Since Russia's full-scale invasion of Ukraine in 2022, Russia has accumulated an unprecedented volume of trade credits against the rest of the world. We argue that this buildup is linked to the effects of economic sanctions, as restrictions to payment networks limit Russia's exporters' ability to receive foreign exchange payments for their exports. This previously undocumented channel of sanctions transmission may help explain, alongside other sanctions-related and macroeconomic developments, recent bouts of volatility in the ruble exchange rate.

Keywords: Economic sanctions, financial sanctions, trade credits, international payments, foreign exchange liquidity, balance of payments, ruble volatility, geoeconomics, Russia, Ukraine
JEL Classification: F31, F32, F34, F51

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1. Introduction

Since the invasion of Ukraine, Western countries have imposed an unprecedented wave of economic sanctions on Russia. The most severe measures include freezing Russia's official reserves, ejecting several Russian banks from international payments, disrupting the functioning of its domestic exchange, imposing a cap to the price of its oil exports and restrictions on critical and dual-use technologies.

The effects of Western sanctions on Russia remain a subject of intense debate. On trade, Borin et al. (2023) show that EU sanctions severely affected Russian capacity to directly import restricted goods from the continent, however they also stress the risks of rerouting and circumvention. Hausman et al. (2024), argue that the ensuing welfare losses are significantly larger for Russia than for sanctioning countries. On finance, Drott et al. (2024) show that EU sanctions significantly reduced financial transactions with sanctioned Russian banks on the European TARGET2 payment system. All the while, Cocozza et al. (2023) documented the increasing role of Russia's private sector in managing Russia's foreign assets as sanctions on the central bank hampered its operations.

On balance, the impact of Western sanctions on Russia's economy and on its ability to sustain the war effort presents a complex picture. On one hand, inflation and interest rates have reached record highs[1] – indicating significant economic strain – and debt is mounting (Kennedy 2025). On the other hand, Russia's economic growth remains resilient, its military spending at historical highs,[2] and its political resolve unshaken. While evaluating the overall success of sanctions is beyond the scope of this discussion, several factors contribute to this nuanced picture. These include Russia's pivotal role in global energy markets, the specific design and implementation of sanctions, the role played by non-sanctioning countries, Russia's policy responses to mitigate economic pressure, and its structural shift towards a war economy (Itskhoki and Ribakova 2024; Gorodnichenko et al. 2024; ODNI, 2023).

Within this context, we unveil a new dimension of the impact of sanctions: a sizable buildup in trade credits that Russian firms hold vis-à-vis their customers. As payment issues mount, Russian exporters seem to be financing a significant portion of the country's exports themselves, by extending trade credit to their buyers. The ensuing shortfall in foreign exchange liquidity, together with other sanctions on Russia's foreign exchange market, may contribute to the recent bouts of exchange rate volatility.

[1] See "Statement by Bank of Russia Governor Elvira Nabiullina in follow-up to Board of Directors meeting on 14 February 2025," February 14, 2025, https://www.cbr.ru/eng/press/event/?id=23378.

[2] See The Guardian, "Russia to raise defence budget by 25% to highest level on record," September 30, 2024, https://www.theguardian.com/world/2024/sep/30/russias-defence-spending-to-rise-by-25-next-year-the-highest-since-the-cold-war; Politico, "Russian defense spending overtakes Europe, study finds," February 12, 2025, https://www.politico.eu/article/russian-defense-spending-overtakes-europe-study-finds/.

2. From Sanctions to Payment Issues

The multiple rounds of Western sanctions since February 2022 have progressively affected Russia's ability to process and settle international payments. To date, more than 100 banks, including all of Russia's largest ones are subject to full blocking sanctions by the US Treasury, while nearly 50 are excluded from SWIFT,[3] and subject to an EU transaction ban. As a result, between January 2022 and April 2024, Russian banks lost more than half of their correspondent banking relationships with western countries (Bank of Russia 2024a). The exclusion of ever larger chunks of the Russian banking system from payment circuits in dollars and euros is compounded by the threat of secondary sanctions against third-country banks that continue to trade with Russia.[4] While Russian companies seek alternatives through complex sourcing and payment arrangements, trade remains difficult and expensive.[5]

From an accounting perspective, the growing difficulties in cross-border payments give rise to an interesting phenomenon: the accumulation of a large (and largely illiquid) pile of trade credits that Russian firms hold against their customers. As settlement of trade bills becomes increasingly difficult, Russian exporters seem to be financing a significant portion of the country's exports *themselves*, by extending trade credit to their buyers. Indeed, Bank of Russia reports repeatedly acknowledge the role of payment delays in the rise of trade credits (Bank of Russia 2023; 2024c; 2024d; 2024e).

Russian exporters have accumulated trade credits to such a scale that this phenomenon likely contributes to the increasing volatility of the ruble. As the exchange rate is largely determined by the balance of supply and demand for foreign currency among Russian importers and exporters,[6] issues in payments limit the availability of foreign currency in the domestic market, weighing on the ruble exchange rate – somewhat like forced capital outflows.

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[3] SWIFT is the Society for Worldwide Interbank Financial Telecommunication, a provider of financial communication services that is central to global cross-border payments. (Farrell and Newman, 2019; Cipriani et al., 2023).

[4] Pressures have mounted up since December 2023, when an executive order issued by President Biden granted the US Treasury Department granted the authority to impose secondary sanctions on financial entities assisting Russians trading with third countries. Reports from media indicate that several banks in China and India have ceased their cooperation with Russia due to concerns over sanctions and the uncertainty surrounding the regime.

[5] The Bank of Russia has recently highlighted in public statements and documents the impact of international payments difficulties on the broader economy. The Governor Nabiullina has pointed out that "(…) risks associated with cross-border settlements have grown and this is evident from the challenging payments situation, which is doubtless having an impact on imports," Statement by Bank of Russia Governor Elvira Nabiullina in follow-up to Board of Directors meeting on 26 July 2024 https://www.cbr.ru/eng/press/event/?id=18870. See also, Bank of Russia 2024a.

[6] Harsh capital controls imposed by Russian authorities since end-February 2022 have curtailed financial inflows and outflows by residents and non-resident investors, *de facto* sealing the financial account (Bank of Russia, 2024a).

3. The Rise of Trade Credits

Since the beginning of the war, Russia logged record-breaking export revenues, fueled in large part by its energy exports (Figure 1). This resulted in foreign exchange inflows, that, after paying for imports, salaries of foreign nationals and financial obligations to non-residents, piled up in foreign assets (Cocozza et al. 2023).

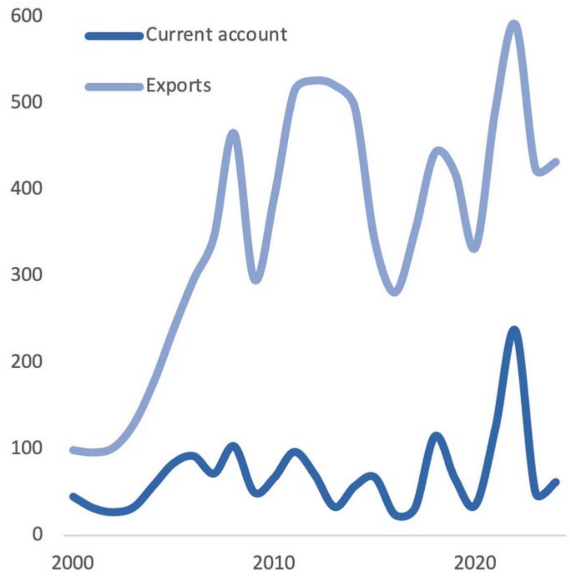

FIGURE 1. Russia's goods exports and current account

Note: Annual balance-of-payments flows, in USD billions.
Source: Bank of Russia; authors' elaboration.

In normal times these surpluses would have led to the accumulation of official reserves, FDI, portfolio and other credits vis-à-vis the rest of the world. However, since 2022, Russia's current account surpluses mostly resulted in the accumulation of "Other Investment" assets (Milesi Ferretti and Conner, 2024).[7] Notably, there has been a sharp increase in liquid foreign assets, captured under "Loans, Currency and Deposits",[8] and "Other Account Receivables", the latter essentially capturing trade

[7] According to the Bank of Russia: *"Other investment is the residual category of financial instruments, which have not been included in direct and portfolio investment, financial derivatives, and reserve assets. Other investment includes other equity, currency and deposits, loans, insurance, pension, and standardized guarantee schemes, trade credit and advances, special drawing rights (SDR) related to liabilities, and other accounts receivable/payable (including debt on declared but unpaid dividends on shares of Russian enterprises owned by foreign portfolio investors)."*

[8] See Cocozza et al., 2023 for a discussion of this item.

credits (Figure 2).[9] This is particularly interesting, both because of its sheer size, and because of what it tells us on the impact of economic sanctions.

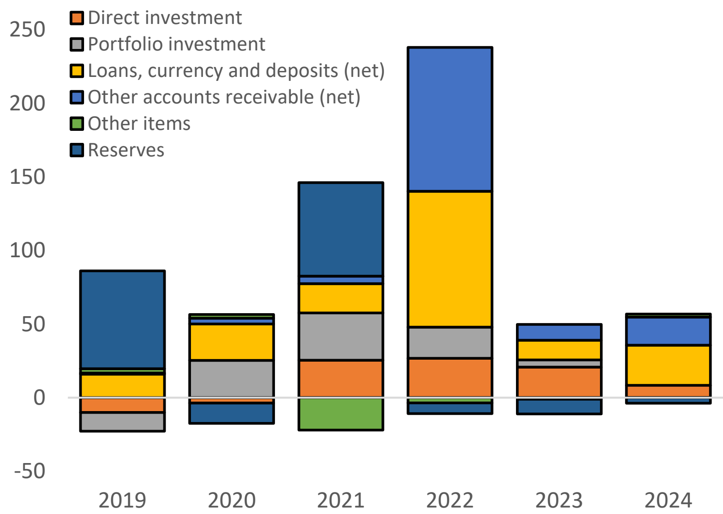

FIGURE 2. Russia's financial account

Note: Values are in USD billions.
Source: Bank of Russia; authors' elaboration.

In terms of size, since 2022, 40 percent of current account surpluses ended up in trade credits. As a result, the stock of Russian trade credits against the rest of the world reached an astounding USD 180 billion (about eight (8) percent of GDP, Figure 3).

To see how this relates to sanctions, it helps to take a brief exploration of the mechanics of export payments and external sector accounting. As exports are usually paid with some delay, the shipment of a good from Russia to another country gives rise to a claim by a Russian exporter on a foreign buyer. In external statistics, this shows as the export being financed by a trade credit. When the foreign buyer settles, external statistics write off the trade credit, turning it into an asset that can actually be used to pay for imports, be invested in search of returns, be used to settle liabilities vis-à-vis nonresidents, or be stashed away in foreign reserves. But if for some reason the foreign buyer doesn't pay, trade credits pile up.

[9] In CBR statistics, Other Accounts Receivables is composed of: (i) Insurance, pension, and standardized guarantee schemes; (ii) Trade credit and advances; and (iii) Other accounts receivable. Although the full breakdown is no longer available, up to end-2021, trade credits constituted 80 percent of the aggregate.

Trade credits, thus, are not ordinary financial assets. First, their accumulation is unlikely to be the result of a deliberate choice by a Russian entity, but of a foreign buyer's inability to pay. Second, as trade credits are claims on foreign private non-financial entities, they are much less liquid than other assets, and can hardly be used to pay for imports or service external debt.

Trade with India might show this in action. Since the beginning of the war, as trade between India and Russia thrived, press reports signaled payment issues between the two countries.[10] Interestingly, during this time, India's trade and other liabilities hedged up in tango with Russia's trade credits. External statistics however do not show bilateral balances; it is therefore impossible to determine the nexus between the two trends (Figure 4).

FIGURE 3. Russia's account receivables

Note: Values are in USD billions.
Source: Bank of Russia; authors' elaboration.

[10] Bloomberg News, "Russian Companies Face Mounting Payment Issues as Sanctions Bite," July 25, 2024, https://www.bloomberg.com/news/articles/2024-07-25/russian-companies-face-mounting-payment-issues-as-sanctions-bite.

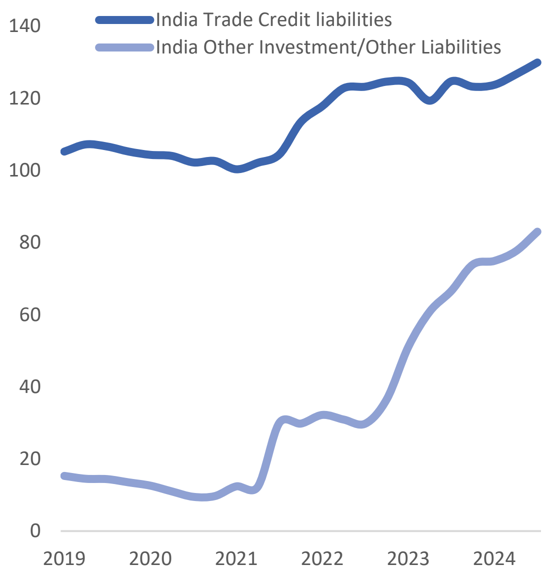

FIGURE 4. India's trade credit and other liabilities

Note: Values are in USD billions.
Source: Reserve Bank of India; authors' elaboration.

4. Assessing the Macroeconomic Significance

From a macroeconomic standpoint, the accumulation of trade credits may limit the availability of foreign exchange and hamper Russia's ability to meet its external obligations.

Regarding the first point, it is helpful to compare the size of trade credits with foreign exchange liquidity in Russia's currency market. As US sanctions blocked Russia's domestic exchange infrastructure, this can be done only with a level of approximation. In mid-2024, the US imposed blocking sanctions on the Moscow Exchange – Russia's central foreign exchange infrastructure. As a consequence, its dollar and euro correspondent accounts were frozen, and Russia's forex market was pushed into an over-the-counter structure. [11] The move may have been partially anticipated by the Russian authorities (Savini Zangrandi 2022), which had started

[11] See: Bank of Russia, "Information on transactions in US dollars and euros due to sanctions against Moscow Exchange Group," June 12, 2024, https://www.cbr.ru/eng/press/pr/?file=638538773185105939ENG_PP.htm; Bank of Russia, "Bank of Russia suspends releasing statistics on OTC foreign exchange market," July 15, 2024, https://www.cbr.ru/eng/press/pr/?id=39884. For a discussion of the complexities in the transition to the new market structure, see Bank of Russia (2024d).

nurturing an over-the-counter back-up as early as 2022.[12] Within this context, the Bank of Russia monitors the foreign currency sales of the 29 major exporters on the over-the-counter market (Bank of Russia 2024a), which constitute a large source of forex liquidity. As the central bank's reports indicate, since 2023, Russia's major exports injected over USD 250 billion into the foreign exchange market. During the same period, Russia's exporters accumulated nearly USD 75 billion in trade credits (Figure 5).[13] Tentatively then, had trade credits been converted into usable assets, they could have boosted forex liquidity by nearly 30 percent at a time when Bank of Russia repeatedly flagged liquidity concerns in the foreign exchange market (Bank of Russia 2023b; 2023c; 2024a; 2024b).

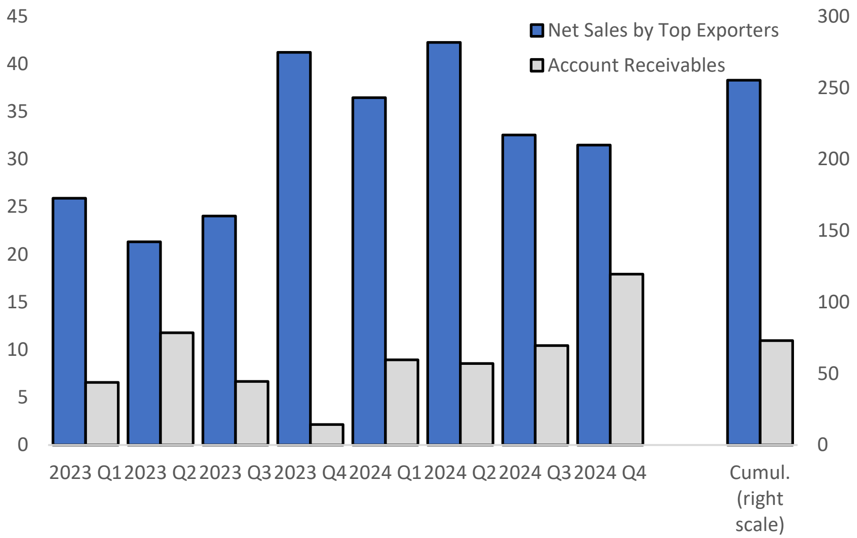

FIGURE 5. Net foreign exchange sales and account receivables

Note: Quarterly values are in USD billions. Net FX sales are shown on the left axis; cumulative values are shown on the right axis. 2023 Q1 net sales are estimated.
Source: Bank of Russia (2024b, 2025), author's elaboration.

With regards to the second point, it is helpful to look at how Russia's Gross External Financing Needs (GEFN) would change if exports did not yield spendable assets.

GEFN is a measure of the resources that a country requires to meet its external obligations, calculated as the difference between the country's debt stock maturing within a year and its current account balance. In 2023, Russia faced USD 140 billion

[12] Bank of Russia Ordinance No. 6290-U.

[13] To keep a flow-to-flow comparison, this figure refers to cumulated Balance-of-Payment asset flows.

in principal payments within the year, but could count on a USD 50 billion current account surplus. Its financing needs thus stood at USD 90 billion.

However, in 2024 Russia also accumulated USD 30 billion in trade credits, which do not effectively generate foreign exchange cash flow. Subtracting this from the current account balance, Russia's financing needs increase to USD 120 billion (Figure 6). Combining the accumulated stock of trade credits with some USD 300 billion of frozen reserves, Russia has a substantial pool of assets – close to USD 500 billion – that cannot be used to meet its external financing needs.

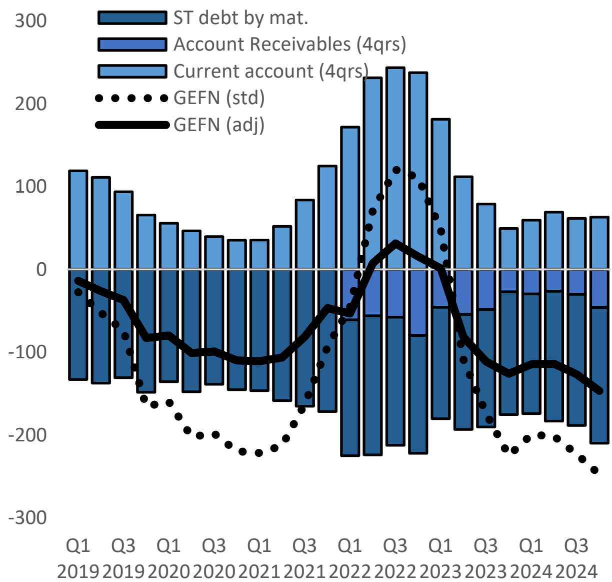

FIGURE 6. Russia's Gross External Financing Needs

Note: *Values are in USD billlions.* ST debt by mat. *indicates short term debt and medium to long term debt with less than 1 year of remaining maturity. GEFN indicates gross external financing needs. Standard (std) GEFN is calculated as the sum of current account balance and short term debt by remaining maturity. Adjusted (adj) GEFN is calculated by subtracting trade credits to the latter. 4qrs indicates a 4 quarters rolling sum.*
Source: Bank of Russia; authors' elaboration.

5. Conclusions

This analysis has highlighted the unusual surge in Russia's trade credits, discussing their potential connection to economic sanctions and their implications for the country's external finances.

Sanctions are constraining Russia's ability to engage in international transactions, resulting in a sharp rise in illiquid assets, with potential macroeconomic implications. In addition, the ensuing shortfall in foreign exchange liquidity weighs on a foreign exchange market that has already been forced into an over-the-counter structure by US sanctions on its central infrastructure, and where the main correspondent banking relationships have been severed – creating the conditions for increased exchange rate volatility (Figure 7).

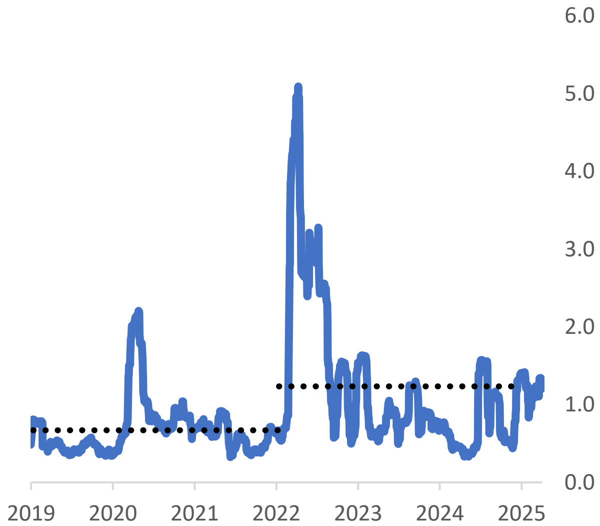

FIGURE 7. Daily volatility of USD/RUB exchange rate

Note: Values are percentages.
Source: CEIC; authors' elaboration.

Given the size and resource base of the Russian economy, however, this should not be interpreted as a sign of imminent dislocations. It is also important to stress the dynamic and rapidly evolving nature of the unfolding economic side of the conflict.

Beyond offering insight into current sanctions, this analysis contributes to the growing literature on financial sanctions and their impact. Although they are widely regarded as one of the most powerful modern-day economic weapons, much remains to be understood about financial sanctions. In this sense, additional research would be required on the role that alternative financial systems play in sanctions evasion, and on their long-term consequences on western countries' ability to wield this weapon.

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