

# Macro Notes – Russia: Payments Systems and Digital Ruble



February 2, 2022

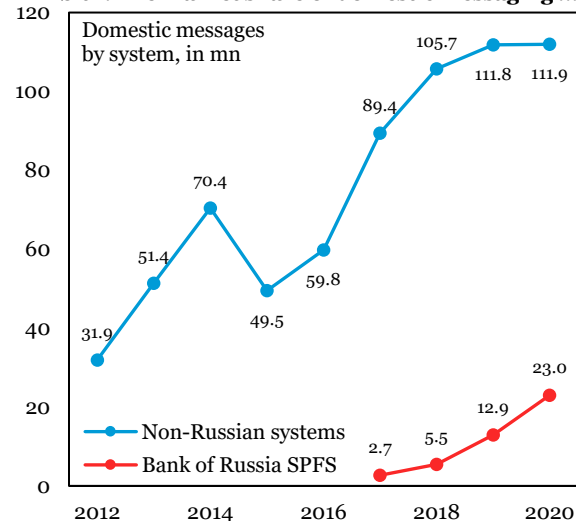
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- Disconnection from global payments systems is increasingly proposed as a “nuclear option”.
- In response to sanctions, Russia has developed domestic payments and messaging systems.
- But limited international connectivity means cross-border transactions remain challenging.
- Some Russian banks have been cut off in the past; the choice of financial institutions matters.
- Targeting of non-systemic banks would likely have a limited effect on the Russian economy.
- In addition to domestic financial infrastructure, the CBR is also developing the *Digital Ruble*.

In recent publications, we have taken a look at several issues related to the possibility of additional international sanctions on Russia—including the [Nord Stream 2](#) pipeline, Russia’s [diversification](#) of reserves away from the U.S. Dollar, a shift in the currency composition of trade settlements towards the Euro, and financial de-dollarization. In this *Macro Notes*, we take stock of Russia’s efforts to develop domestic, sovereign payment systems and plans for a *Digital Ruble*. In response to the introduction of sanctions in 2014, Russia began to create domestic wholesale and retail payments systems and has made substantial progress in this area. However, the key challenge remains that these systems are insufficiently connected internationally to reduce [dependence](#) on non-Russian financial services providers. Partially motivated by economic sovereignty concerns, Russia is embracing digitalization, including in the area of finance, faster than other countries, and Covid has only accelerated this process further.

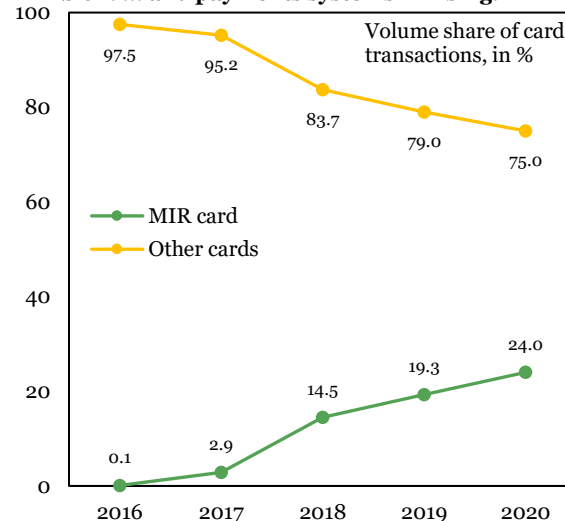
In 2014, the Bank of Russia (CBR) began to develop its own Financial Communications System (SPFS) and, as of now, more than 400 primarily domestic institutions are linked to the system. While it is less flexible than existing international systems, SPFS would be able to handle all domestic messaging traffic if necessary. In 2020, the number of messages almost doubled to two million, and more than 20% of total traffic is already executed via the system, with the CBR actively trying to increase the share (Exhibit 1). Although this process is likely to take time, the most critical weakness remains its insufficient international connectivity and limitations to the ability to execute cross-border transactions. Even some of the international banks operating in Russia are not yet connected. In addition to improvements to the system, institutions may be required to link to SPFS in the future.

Exhibit 1. The market share of domestic messaging ...



Source: Bank of Russia, BIS, IIF

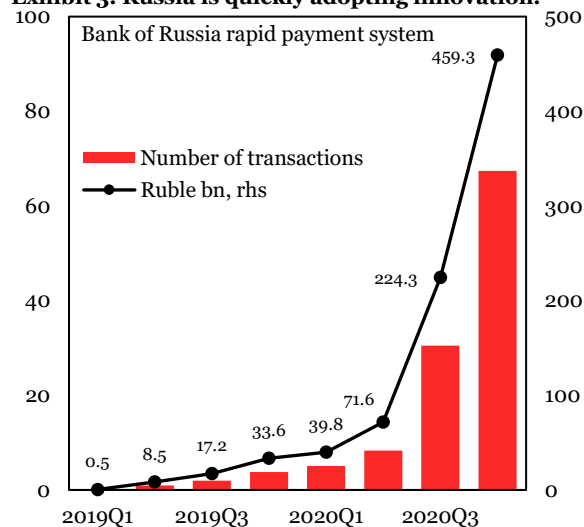
Exhibit 2. ... and payments systems in rising.



Source: Bank of Russia, IIF

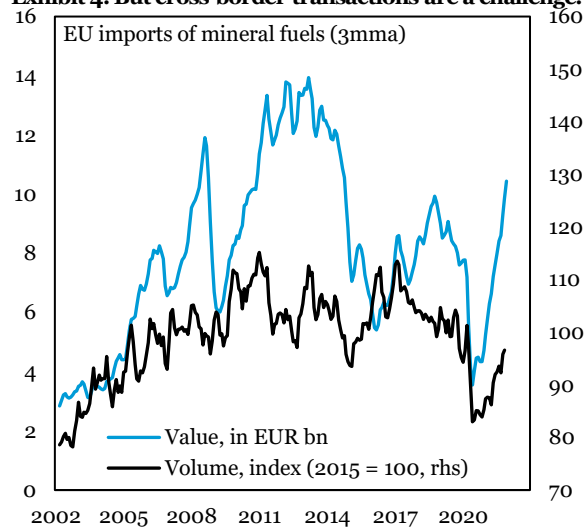
Similar to SPFS, Russia, in 2014, launched a domestic alternative to U.S.-based card payment companies. The National Payment Card System Joint Stock Company (NSPK JSC) is the operator of the MIR payment system. About 95 million MIR cards have been issued—over 30% of all such cards in Russia—and the share of MIR cards in total payments stood around 24% in 2020 (Exhibit 2). MIR cards are also accepted in some Russian tourist destinations such as Turkey and CIS countries, but the reach of the system across Russia’s borders overall remains small. Furthermore, the CBR introduced a rapid payments system, where consumers can transfer money and execute payments nearly instantaneously via a phone number or QR codes (Exhibit 3).

**Exhibit 3. Russia is quickly adopting innovation.**



Source: Bank of Russia, IIF

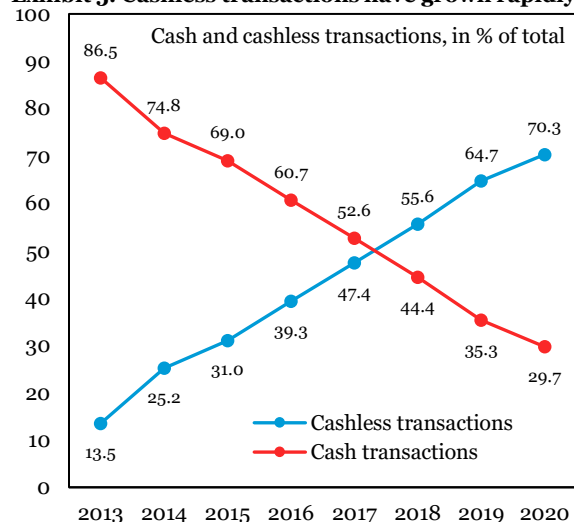
**Exhibit 4. But cross-border transactions are a challenge.**



Source: Eurostat, IIF

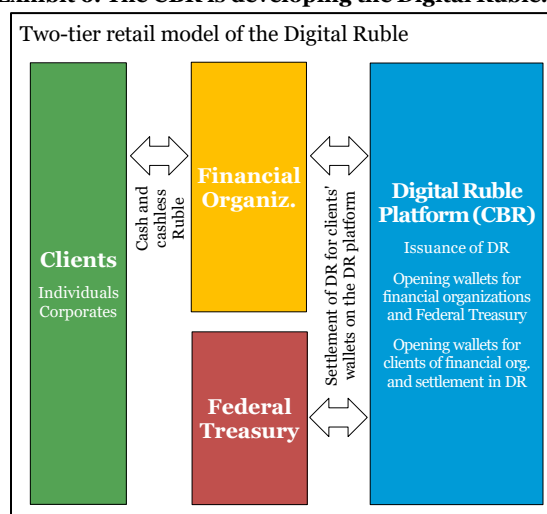
Russia's payments systems currently have limited reach outside of the country. Thus, sanctions on Russian banks and/or international payments messaging systems could have a profound impact on banks' and corporates' ability to transfer money across borders. This would affect their ability to receive and make payments exports and imports of goods as well as debt repayments and foreign investments. Trade with the European Union would be particularly hard hit as the EU accounts for more than 35% of Russia's gross trade flows of above \$700 bn per year, with EU imports of mineral fuels alone reaching close to \$100 bn (Exhibit 4). Due to SPFS' limited international reach, Russia has undertaken efforts to link the system to China's own national payments system (CNAPS), which the country began to develop in 2015. While Russian and Chinese authorities made announcements that SPFS and CNAPS had been connected, it is not clear if the link is indeed operational. A future expansion appears possible as members of the Eurasian Economic Union (EAEU) and BRICS partners, as well as Turkey and Iran, have expressed interest in joining the enterprise. However, we are not aware of any concrete steps, and China's CNAPS only accounts for 0.3% of global traffic at this time.

**Exhibit 5. Cashless transactions have grown rapidly.**



Source: Bank of Russia, IIF

**Exhibit 6. The CBR is developing the Digital Ruble.**



Source: Bank of Russia, IIF

The [Digital Ruble](#) pilot is scheduled to begin in 2022, following a period of [extensive consultations](#) regarding its potential impact on monetary policy, financial stability, and financial infrastructure. The CBR hopes that the *Digital Ruble* will make payments cheaper and faster, and selected twelve banks to be involved in the launch. Following the pilot, Russia plans to publish the roadmap for its rollout, which would theoretically put the country ahead of many countries as far as central bank digital currencies (CBDCs) are concerned—although implementation is still a ways off. The rapid digitalization of payments in Russia—cashless transactions already account for 70% of the total (Exhibit 5)—could facilitate acceptance of the *Digital Ruble*.

Russia is following in the footsteps of China's central bank which started testing the [Digital Renminbi](#) in 2021, and is also implementing a two-tier system (Exhibit 6) in which the CBR will open wallets for financial institutions and these, in turn, open wallets for their customers. At this time, the *Digital Ruble* is only intended to serve for payments, i.e., as a medium of exchange, rather than to store value as wallets will not be interest remunerated. This way, the CBR aims to avoid creating a risk of disintermediation for the banking system. The Bank of Russia has simultaneously released a [consultative document](#) that suggests that the use and mining of cryptocurrencies should be banned in Russia as they may carry additional risks.