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**TRENDS AND OUTLOOKS**

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The review "Russian Economy. Trends and Outlooks" has been published by the Gaidar Institute since 1991. This is the 44th issue. This publication provides a detailed analysis of main trends in Russian economy, global trends in social and economic development. The paper contains 5 big sections that highlight different aspects of Russia's economic development, which allow to monitor all angles of ongoing events over a prolonged period: the monetary and budget spheres; financial markets and institutions; the real sector; social sphere; institutional changes. The paper employs a huge mass of statistical data that forms the basis of original computation and numerous charts confirming the conclusions.

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## Introduction. From the editors

In 2022, the Russian economy encountered a major negative shock, the fourth one in the past 15 years, which determined the downward dynamics of GDP and households' real incomes and a rise in inflation. In 2022, this shock was mainly caused by unprecedented sanctions against the financial and economic sectors after the start of the special military operation on February 24, 2022. At the same time, it is worth mentioning that unlike previous crises of 2009, 2015 and 2020 prices for oil and petrochemicals produced no negative effect. Further, prices for oil and particularly gas were at multi-year highs for almost a year (though in case of gas there was an effect from the reduction in physical export volumes of pipeline gas).

In H1 2022, shortly after the first packages of sanctions were introduced by the US, the European Union and other unfriendly countries, most foreign and Russian forecasts predicted that Russia would repeat the fate of Iran and Venezuela which found themselves after sanctions imposed against them in a deep crisis coupled with a multi-year decline in GDP, dramatic decrease in the level of households' incomes and consumption, growth in unemployment, spiraling inflation and a rapid fall of the national currency. However, for Russia the results of 2022 were quite favorable: a decrease in real GDP did not exceed 2.1% (less than in 2009 or 2020), instead of growth the unemployment fell to historic lows, real incomes decreased by 1 p.p. (mainly owing to inflation), the consumer price index increased by 11.9% (less than in 2015) and the rouble strengthened against the dollar after a fall in February-March and by the end of the year the nominal exchange rate of the rouble to the dollar was 4.7% higher as compared with the end of 2021.

In our view, in 2022 the main factors explaining a moderate reaction of the Russian economy to external economic and financial sanctions are the following:

- 1) external demand for Russian export goods continued after sanctions were declared; the actual introduction of sanctions into force was postponed to the end of 2022 or 2023. In particular, throughout 2022, except for

- December, prices for oil were markedly above the level of prices in 2021. Eventually, the current account surplus reached historic highs;
- 2) the Russian economy was weakly integrated into global value-added chains and there was a lack of relevant critical links between Russian and foreign companies for mass production. At the same time, the accumulated reserves of spare parts and intermediate goods helped all sectors support the output of their products in 2022 despite restrictions on imports to Russia, particularly in respect of critical goods (which were not produced in Russia, nor were available in neutral countries) and technologies;
  - 3) Russia pursued a competent macroeconomic policy (monetary and fiscal policies) responding to challenges and maintained a macroeconomic stability. The Russian government kept from “light” populist decisions which, as seen from the experience of Iran and Venezuela, could become the factors aggravating the crisis, rather than instruments of protection of the population. The adopted measures quickly calmed financial markets and maintained the functioning of the organized forex market, while economic agents’ confidence in the anti-inflation policy remained at the pre-crisis level. Simultaneously, despite growing budget expenditures the federal budget deficit remained under the RF Finance Ministry’s control and the debt policy was in compliance with the principles of maintaining a safe level of the debt burden on the budget.

So, the results of 2022 form a good base for the development of the Russian economy even with the sanctions pressure continuing in future. In particular, as regards the 2023 prospects, if not taking into account extreme scenarios such as leading developing economies’ (China, India, Turkey and other) joining anti-Russian sanctions, a breakout of the global financial crisis similar to the Great Depression or the 2008 crisis or serious faults in the internal economic policy, the chances for the situation to get better (that is, a return to real GDP positive growth rates) are higher than those of a further fall in GDP and deeper recession than in 2022. This is evidenced by the IMF’s and the World Bank’s revised outlook for Russian GDP. The positive outlook is based on the following factors: Russia still receives high revenues (above the base ones under the fiscal rule) from its exports (despite the fact that in the first few months of 2023 prices for oil markedly declined, while a discount on Russian oil increased), the economic sectors and companies have adapted their activities under sanctions, new chains and logistics routes for import supplies have been formed and investments and sales of goods and services increased on the domestic market.

## Section 1. Monetary and fiscal spheres

### 1.1. Monetary policy<sup>1</sup>

#### 1.1.1. The main trends of the monetary policy

In 2022, the Russian economy experienced a profound negative shock associated with the imposition of sanctions against Russia by a number of developed countries, including the freeze of the Bank of Russia's international reserve assets, Russian banks being cut out of international payment systems, restrictions on imports of Russian goods and services and exports of technologies to Russia, and some other measures. The shock gave rise to pronounced instability in Russia's financial market and forced the Central Bank of the Russian Federation to sharply tighten its monetary policy in order to prevent the outflow of funds from the banking system.

At the same time, on the eve of the crisis, the movement pattern of inflation in Russia was already significantly above the target because of the aggressive expansion of aggregate demand after the COVID-19 pandemic coupled with limited opportunities for increasing supply. According to the results as of end of January 2022, it stood at 8.7%, thus determining the next raise of the key rate by the Bank of Russia on February 11, 2022, by 1 p.p. to 9.5% per annum, which is a record high of the entire period since May 2017.

In late February 2022, as a result of an unprecedented deterioration in external conditions, the risks of a destabilization of prices and financial instability increased significantly, which urged the Bank of Russia, together with the Russian Government

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and other bodies of authority, to launch a package of anti-crisis measures. At the end of February 2022, the Central Bank of the Russian Federation, in the situation of a record capital outflow and the ruble weakening to a historic low,<sup>1</sup> having lost the ability to exert a stabilizing effect on the foreign exchange market by forex interventions as a result of the freeze of its most liquid international currency reserves, imposed tight restrictions on the movement of capital (banning the payment of coupons and dividends to non-residents; temporarily banning non-residents from selling Russian assets; introducing a commission on the purchase of foreign currency on the stock exchange and banning the sale of cash currency; requiring the mandatory sale of 80% of export earnings within a period of no more than 3 days after its receipt; banning the export from Russia of foreign cash in excess of the equivalent of \$10,000; establishing a special procedure for withdrawing cash from individual foreign currency deposits with banks; introducing a 30% commission for the individuals buying foreign currency through brokers, etc.). Alongside these measures, the Bank of Russia on February 28, at its extraordinary Board of Directors' meeting, raised the key rate by 10.5 p.p. to a record high of 20% per annum. The imposed restrictions coupled with the tightening of monetary policy made it possible to curb the rapid capital outflow and strengthen the ruble.<sup>2</sup>

From April 2022 onwards, when the risks to price and financial stability were no longer on the rise, the Bank of Russia launched a monetary policy easing cycle, during which the key rate was reduced six times in a row: on April 11, April 29, and May 16, by 3 p.p. to 11% per annum; on June 10 and July 22, by 1.5 p.p. to 8.0% per annum; and on September 16, by 0.5 p.p. to 7.5% per annum. The downward movement of the key rate ended on October 28, when the regulator left it unchanged at 7.5% per annum. This happened in response to the increasing medium-term inflationary risks associated with the expectations of tightening trade and financial restrictions, problems on the supply side (difficulties with the supply of components and equipment, and mounting tension in the labor market caused by the partial mobilization). In addition, the decision of the Central Bank of the Russian Federation was adopted with due regard for the rising inflationary expectations in the context of increasing uncertainty and geopolitical tensions, as well as the pro-inflationary nature of the budget policy (an increase in budget expenditure to Rb29.43 trillion in 2023, while the planned budget expenditure for 2022 amounted to Rb23.7 trillion; and risks of a widening budget deficit in 2023–2024). At the Bank of Russia Board meeting on December 16, the key rate was also kept unchanged.

As the situation in the foreign exchange market was becoming stabilized, and the ruble had significantly strengthened, the Central Bank of the Russian Federation began to gradually relax some of its foreign exchange control measures. Thus, the requirement for the mandatory sale of export earnings was reduced from 80% to 50%, and on June 10 it was altogether canceled. Besides, the commission for the purchase of foreign currency on the exchange for individuals was abolished,

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1 Rb120.4 per US dollar as of March 11, 2022.

2 By the end of Q1 2022, the ruble strengthened enough to reach its pre-crisis level.



and the limit on currency transfers abroad by individuals was significantly raised, from \$5,000 to \$10,000 in April, and then to \$50,000 in May 2022. In addition, from the second half of April, banks were allowed to sell foreign currency cash to individuals, and it was delivered to the cash desks on April 9. From May 20 onwards, the Central Bank of the Russian Federation allowed banks to sell any foreign currency cash to individuals without restrictions, with the exception of US dollars and euros. From August 8, 2022, non-residents from friendly countries, as well as non-residents whose ultimate beneficiaries were Russian individuals and legal entities, were admitted to trading on the Moscow Exchange.

By introducing capital control measures and timely implementing a tight interest rate policy, the Bank of Russia managed to stabilize the situation in the domestic forex market and reduce inflationary pressure: after inflation reached a peak value of 17.8% in April, it dropped to 12.6% by October. It should be noted that throughout the year 2022, inflation was accelerating in most countries around the world due to high prices for energy carriers and other commodities, the consequences of long-term stimulus policy in the major developed economies during the COVID-19 pandemic, and problems with logistics. Thus, as of the end of June 2022, inflation in the USA hit its record high of 9.1% since 1981. In the euro area, inflation reached a historic high of 10.6% by October 2022, and in the UK, a 40-year peak of 11.1%.

In face of dominant pro-inflationary risks, the central banks of the majority of developed and developing economies tightened their monetary policies. In developed countries, the tightening of monetary policy began somewhat later than in developing countries, and the key rates were being raised at a slower pace, thus lagging behind the inflation rates (*Table 1*). For example, at its July meeting, the European Central Bank raised the monetary policy rate for the first time since 2011, in a one-time jump by 50 p.p. After the next steps towards monetary policy tightening had been implemented in September, November and December 2022, the key rate of the ECB reached 2.5% per annum.

At the same time, at year-end 2022, in spite of the active key rate increases by central banks, the real rates measured on the basis of actual inflation remained negative in most regions: -7.9% per annum in the EU; -7% per annum in the UK; -3.2% per annum in Norway; -3.6% per annum in Kazakhstan; and -1.6% per annum in Chile (*Fig. 1*). As inflation was climbing up in 2022, the key rate in Russia moved from positive to negative zone in real terms (-4.4% per annum in December 2022). At the end of December 2022, a positive real key rate was observed in Brazil (7.96% per annum), Mexico (2.68% per annum), and India (0.5% per annum).

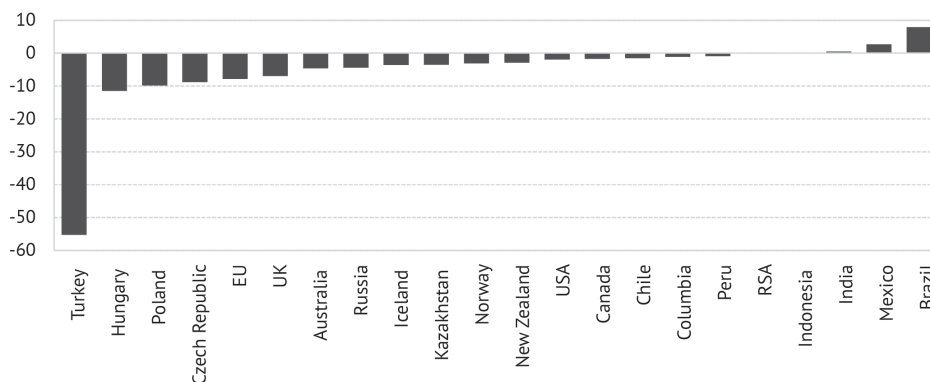
According to the Bank of Russia estimates, in order to gradually move inflation towards the target, it will be necessary to maintain the key rate within the average range of 7–9% per annum in 2023, and 6.5–7.5% per annum in 2024. In response to the easing inflationary pressure, the Bank of Russia will be bringing down the key rate, returning it to the long-term neutral range of 5–6% per annum in 2025.

Table 1

**Inflation and key rates in some developed and developing countries**

	<b>Actual inflation, December 2022 to December 2021, %</b>	<b>Key rate, as of end of December 2022, % per annum</b>
<i>Developing countries</i>		
Indonesia	5.51	5.5
India	5.72	6.25
Brazil	5.79	13.75
South Africa	7.20	7.00
Mexico	7.82	10.50
Peru	8.46	7.5
<b>Russia</b>	<b>11.90</b>	<b>7.50</b>
Chile	12.8	11.25
Colombia	13.12	12
Poland	16.60	6.75
Kazakhstan	20.30	16.75
Hungary	24.50	13.00
<i>Developed countries</i>		
Norway	5.9	2.75
Canada	6.3	4.5
USA	6.5	4.5
New Zealand	7.2	4.25
Australia	7.8	3.1
Iceland	9.6	6
EU	10.4	2.5
United Kingdom	10.5	3.5
Czech	15.8	7
Norway	5.9	2.75
Canada	6.3	4.5

Source: central banks' websites.



*Fig. 1. Real key rate as of end of December 2022, % per annum (based on the actual inflation pattern over the previous 12 months)*

Source: central banks' websites; Gaidar Institute calculations.

### 1.1.2. The money market

Against the backdrop of high turbulence and uncertainty in the money market in late February-March 2022, commercial banks displayed an increased demand for ruble liquidity. In this connection, the Bank of Russia implemented a package of measures designed to support the banking sector. As a result, by year end 2022, the amount of loans attracted by credit institutions from the Bank of Russia increased by 45%, to Rb4.5 trillion (vs Rb3.1 trillion as of January 1, 2022) (Fig. 2).

Thus, over the period from February 28 to March 1, REPO auctions were held without a set maximum allotment amount, and funds were provided to all their participants in the amounts requested by them against appropriate security. Banks' debt under REPO auctions averaged Rb4.6 trillion, which is higher than the corresponding average indices recorded during the previous crisis episodes. By way of doing its utmost to cover the possible need of banks for current liquidity, the Bank of Russia significantly extended its Lombard List and relaxed the requirements for collateral in the framework of refinancing operations for non-marketable assets. The debt of banks on loans secured by non-marketable assets in the period from late February to mid-March 2022 averaged Rb3 trillion, which corresponds to the level of 2015. The reason behind the increased demand for this type of loans was the fact that since March 1, the interest rate for 2-to-90-day loans secured by non-marketable assets was reduced to match the upper limit of the interest rate band.

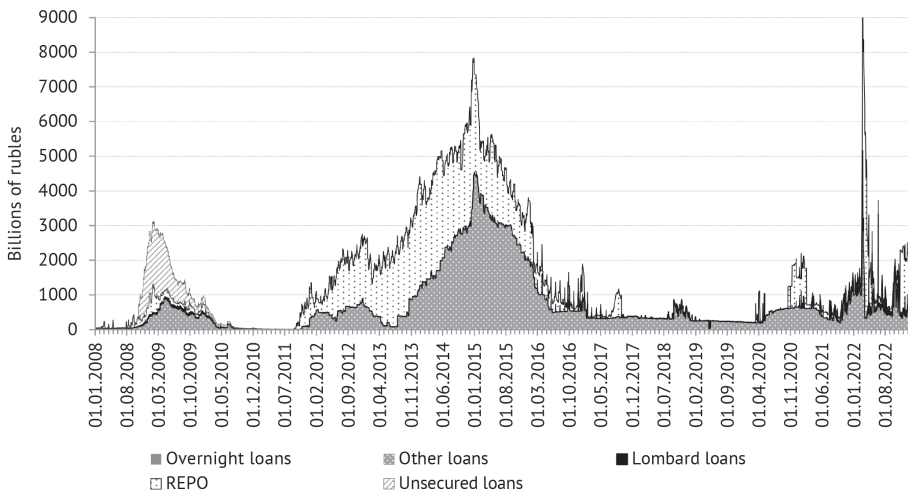


Fig. 2. Debt of commercial banks to the Bank of Russia, rubles, 2008–2022

Source: Bank of Russia.

From March 25, the Bank of Russia introduced Lombard loans for terms from 2 to 90 days at a floating rate, which also corresponded to the upper limit of the interest rate band. As a result, over the period from March through December 2022, the banks' average debt on Lombard loans amounted to Rb73.2 bn, while a year earlier it stood at zero.

In order to maintain the stability of credit institutions and bring the overnight money market rate closer to the key rate, the Bank of Russia, over the period from late February through early April 2022, held on a daily basis fine-tuning overnight auctions in the amount of Rb3 trillion. The average daily value of closed transactions was Rb1.4 trillion, at a weighted average rate of 19.5% per annum.

In 2022, the banking sector continued to display demand for the Bank of Russia's deposit auctions. This could be explained by the heterogeneous situation with liquidity among banks: some banks attracted funds, while others, on the contrary, placed their funds as deposits. The volume of funds raised by the Bank of Russia through weekly deposit auctions averaged Rb1.8 trillion at a weighted average rate of 8.45% per annum (vs Rb1.3 trillion in 2021 at a weighted average rate of 5.75% per annum). In order to maintain short-term money market rates close to the key interest rate in 2022, the Bank of Russia repeatedly held fine-tuning overnight deposit auctions. The average volume of funds raised through these transactions amounted to Rb1.1 trillion at a weighted average rate of 16.04% per annum (vs Rb1.0 trillion in 2021 at a weighted average rate of 6.0% per annum).

The proximity to the key rate of the short-term money market overnight rates in the interbank lending segment and their position within the interest rate band, ensured by the Bank of Russia's measures designed to provide and absorb liquidity, created proper conditions for the Bank of Russia to be able to effectively influence, by its key rate decisions, the interest rate fluctuations across the economy, thus achieving inflation targets. In the context of tightening monetary policy, the RUONIA rate reached 10.4% per annum on average in 2022 (vs average 5.6% per annum in 2021) (*Fig. 3*).

Over January-March 2022, the situation in the money market was characterized by a shortage of liquidity.<sup>1</sup> While in January 2022 this happened because of an outflow of liquidity from budget operations, the liquidity deficit in late February and March was caused primarily by the outflow of funds into cash in face of general panic and uncertainty (+14%, or by Rb2 trillion in February 2022). In April 2022, as a result of the stabilization of the situation with ruble liquidity, the money market returned to a state of liquidity surplus: over the period from April through September 2022, the structural liquidity surplus amounted on average to Rb2.1 trillion (vs Rb1.4 trillion in April-September 2021) (*Fig. 4*). It emerged thanks to the return of cash to banks and an inflow of funds generated by budget operations.

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<sup>1</sup> According to the Bank of Russia's definition, the structural liquidity deficit/surplus is the difference between its aggregated claims on the banking sector and its aggregated liabilities to the banking sector. The banking sector structural liquidity deficit is the state of the banking sector which implies the existence of banks' permanent need for raising funds with the Bank of Russia operations. A reverse situation, that of a permanent need of allocating funds through the Bank of Russia operations, represents a structural liquidity surplus.

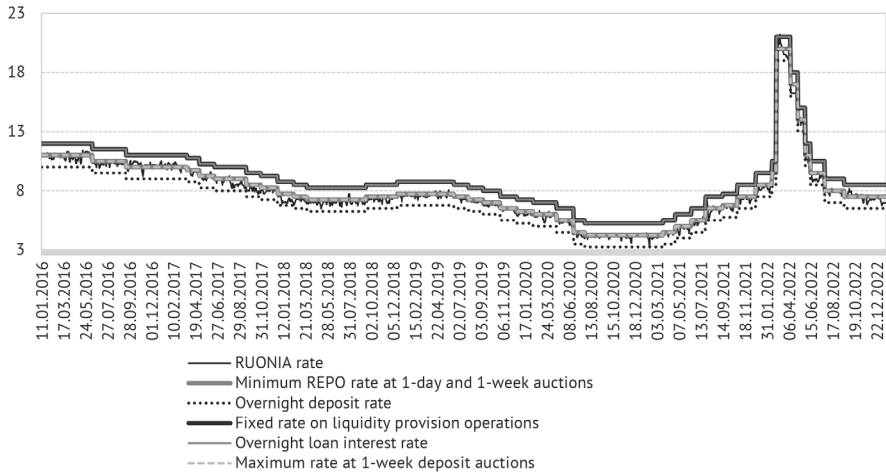


Fig. 3. The Bank of Russia interest rate band and the movement of interbank market interest rates, 2016–2022

Source: Bank of Russia.

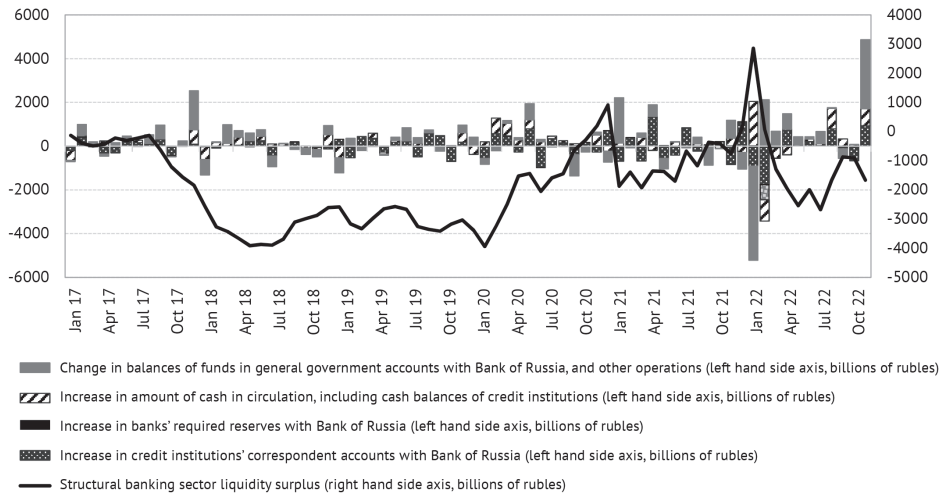


Fig. 4. The banking sector structural liquidity surplus and its components, 2017–2022

Source: Bank of Russia.

In late September 2022, after the start of the announced partial mobilization, there was once again an increase in cash in circulation. Thus, its growth in September relative to August 2022 reached 6.5% (vs 0.7% in September 2021

relative to August 2021). An additional outflow of liquidity from the banking sector in October-December 2022 had to do with the placement of OFZ bonds, to be bought in the main by commercial banks. Thus, over the period from October through December 2022, the Ministry of Finance of the Russian Federation managed to attract Rb3.14 trillion. However, this was offset by an increase in the placements of Federal Treasury funds with banks (Rb2.7 trillion), as well as large-scale budget expenditures at the year-end (Rb3.1 trillion in December 2022). As a result, by January 1, 2023, the structural liquidity surplus grew to RB2.8 trillion.

In the context of a liquidity surplus in the banking sector, the positive movement of the monetary base was determined in the main by that of deposits of credit institutions with the Bank of Russia. In 2022, the broad monetary base increased by only 20.1%, to Rb24,429 bn (in 2021, it increased by 10.1% to Rb20,339 bn). Meanwhile, the most substantial positive growth in the monetary base occurred in December 2022 (+14.2%, or by Rb3,037 trillion). According to the year-end results of 2022, the fastest growing components of the broad monetary base were deposits of credit institutions with the Bank of Russia (+76.5%, to Rb4,951 bn) and cash in circulation (+16.2%, to Rb16,348 bn). The correspondent accounts of credit institutions gained 12.6%, increasing to Rb2,984 bn. At the same time, required reserves decreased by 5.6 times, to Rb146 bn. It should be noted that such a sharp drop in required reserves is associated with a decrease, from March 3, 2022, in the required reserve ratio for ruble liabilities from 4.75% to 2%. As noted earlier, in the context of suspended issuance and placement of the Bank of Russia's coupon bonds in Q4 2021, by January 1, 2022 their value fell to zero and remained at this level throughout 2022, while at the beginning of 2021 it amounted to Rb0.6 trillion (*Table 3*). In general, in the context of a growing demand for liquidity across the banking sector, the volume of excess reserves for 2022 increased by 1.5 times, to Rb7,935 bn (*Table 2*).

As noted earlier, in the context of sanctions imposed against the Bank of Russia by the EU and the United States, a part of the RF Central Bank's international

*Table 2*
**The broad money dynamic in 2020–2022, Rb bn**

	<b>01.01.2021</b>	<b>01.01.2022</b>	<b>01.01.2023</b>
Monetary base (broad)	18,472.4	20,338.9	24,428.6
currency in circulation, including cash balances of credit institutions	13,419.6	14,068.1	16,347.7
correspondent accounts of credit institutions with Bank of Russia	2,548.5	2,650.6	2,983.6
required reserves	713.6	815.3	145.9
deposits of credit institutions with Bank of Russia	1,220.7	2,805	4,951.4
Bank of Russia bonds held by credit institutions	570	0.0	0.0
<i>For reference: excess reserves</i>	4,339.2	5,455.6	7,935

Source: Bank of Russia.

*Table 3*

### The Bank of Russia's balance sheets in 2020–2022

	31.12.2020		30.12.2021		31.10.2022*	
	Rb bns	% of assets / liabilities	Rb bn	% of assets / liabilities	Rb bn	% of assets / liabilities
Funds placed with non-residents and foreign issuers securities	31,447.5	60.4	31,447.5	60.4		
Loans and deposits	4,442.5	8.5	4,442.5	8.5	4,244.8	8.7
Precious metals	10,446.0	20.0	10,446.0	20.0		
Securities	1,020.0	2.0	1,020.0	2.0	1,074.6	2.2
Other assets	2,779.9	5.3	2,779.9	5.3	8,769.0	18.1
<b>Total assets</b>	<b>52,105.9</b>	<b>100.0</b>	<b>52,105.9</b>	<b>100.0</b>	<b>48,556.0</b>	<b>100.0</b>
Currency in circulation	13,181.3	25.3	13,181.3	25.3	15,489.8	31.9
Funds in accounts with Bank of Russia	17,798.8	34.2	17,798.8	34.2	14,523.3	29.9
<i>including RF Government</i>	<i>12,645.9</i>	<i>24.3</i>	<i>12,645.9</i>	<i>24.3</i>		
<i>resident credit institutions</i>	<i>4,643.4</i>	<i>8.9</i>	<i>4,643.4</i>	<i>8.9</i>		
Credit float						
Securities issued	555.0	1.1	555.0	1.1		
Liabilities to IMF	1,640.9	3.1	1,640.9	3.1	2,171.3	4.5
Other liabilities	9,475.2	18.2	9,475.2	18.2	164.5	0.3
Capital	9,454.7	18.1	9,454.7	18.1	16,207.0	33.4
Profit for reporting year	–		–		–	
<b>Total liabilities</b>	<b>52,105.9</b>	<b>100.0</b>	<b>52,105.9</b>	<b>100.0</b>	<b>48,556.0</b>	<b>100.0</b>

\* Some cells are empty because of a temporary reduction in the volume of statistical information released by the Bank of Russia.

Source: Bank of Russia.

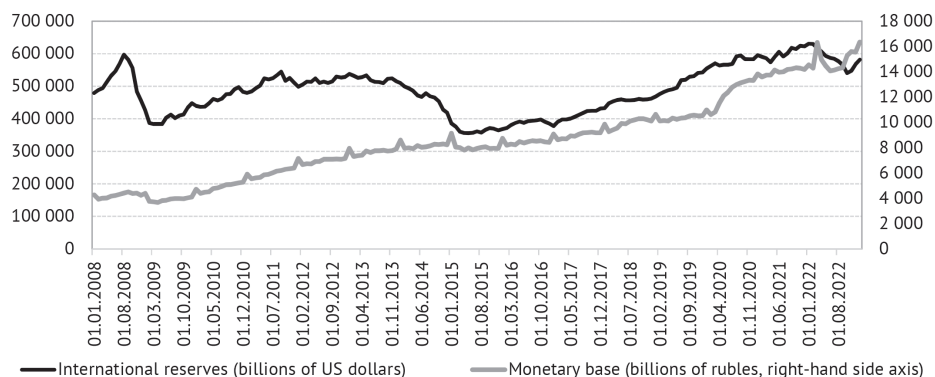
reserve assets was frozen. As a result, about 50% of the reserves were affected by sanctions (\$300 bn out of \$630 bn available as of February 1, 2022).<sup>1</sup> In 2022, the total amount of international reserves<sup>2</sup> decreased by 7.7% to \$582 bn (*Fig. 5*). This happened mainly as a result of negative currency and market revaluation.

According to data released by the Bank of Russia, as of the year beginning 2022, international reserves were denominated in euros (33.9%), gold (21.5%), yuan (17.1%), US dollars (10.9%), GBP (6.2%), and yen (5.2%).<sup>3</sup> At present, the international reserve assets of the Central Bank of the Russian Federation that

1 URL: <https://www.rbc.ru/economics/13/03/2022/622dd6ee9a7947081b63341c>

2 Data on the structure of international reserves is unavailable because of a temporary reduction in the volume of statistical information released by the Bank of Russia.

3 URL: [https://cbr.ru/Collection/Collection/File/40915/ar\\_2021.pdf](https://cbr.ru/Collection/Collection/File/40915/ar_2021.pdf)



*Fig. 5. The movement of the monetary base (narrow definition) and gold and foreign exchange (international) reserves in the Russian Federation, 2008–2022*

Source: Bank of Russia.

have not been frozen consist in the main of yuan and gold. The new structure is somewhat less liquid, because the international reserves denominated in yuan can be used to a limited extent only – for example, in settlements between the Russian Federation and China, as well as for paying off external debt under future contracts concluded in yuan. It is also possible to purchase the currencies of friendly countries for yuan and then make payments in yuan, but this, however, is associated with transaction costs. The current structure of the non-frozen part of international reserves imposes serious constraints on forex market operations because the demand for the yuan is lower than that for the US dollar and the euro.

The freeze of part of the international reserves resulted in their reduced availability when measured by generally accepted indicators. According to some of the traditional criteria, the non-frozen foreign exchange reserves are no longer sufficient for neutralizing the consequences of comprehensive macroeconomic shocks, while simultaneously financing imports over the next 3 months and making the external debt payments over the next 12 months.<sup>1</sup> Nevertheless, it should be taken into account that the traditional criteria for the sufficiency of international reserves do not fully correspond to the current geopolitical conditions, when due to retaliatory Russian sanctions, the external debt payments are made in limited volumes in rubles.

The freeze of international reserves also made it impossible to implement the fiscal rule mechanism in its previous form. Previously, the Central Bank of the Russian Federation, on behalf of the Ministry of Finance of the Russian Federation, carried out purchases (or sales) of foreign currency in the domestic forex market depending on the ratio of actual and base oil prices, which significantly reduced

<sup>1</sup> *Bozhechkova A., Sinelnikova-Muryleva E., Trunin P. Capital control stabilized the situation on the currency market // Monitoring of Russia's Economic Outlook. Trends and Challenges of Socio-Economic Development. 2022. No. 5 (158).*

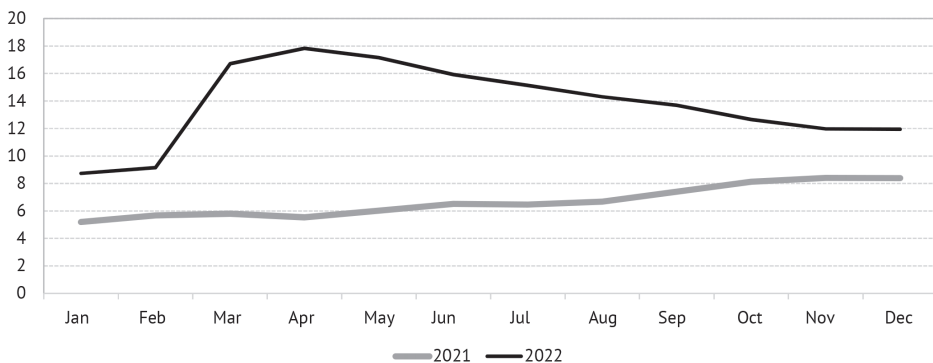


the correlation between oil price movements and the nominal ruble exchange rate. When the Central Bank of the Russian Federation had become unable to carry on transactions in the foreign exchange market (at least transactions with major reserve currencies), the correlation became closer, thus increasing the Russian economy's exposure to external shocks. As a result, in 2022, excess oil and gas revenue (about Rb5.1 trillion) was drawn to cover budget expenditures.

The growth of budget expenditures to support the economy made a significant input in the movement of the money supply. Thus, in 2022, the average monthly growth of M2 (compared with the corresponding period of last year) reached 19.3%, while in 2021 it was 10.7%. Given that the average growth rate of the monetary base in 2022 amounted to 4.4% (vs 7.9% in 2021), the money multiplier (the ratio between M2 and the monetary base) turned out to be 3.5 (vs 3.1 in 2021). In addition to the effect of the fiscal factor, the accelerated growth of M2 compared to that of the monetary base can be explained by the devaluation of deposits. Thus, by the beginning of October 2022, the share of foreign currency deposits in total deposits had hit a historic low (less than 11% of household deposits). Over time, the accelerated growth of M2 may lead to an increased inflationary pressure, thus necessitating monetary policy tightening by the regulator.

### 1.1.3. Inflationary processes

On the eve of the crisis that broke out in late February 2022, inflation in Russia had been significantly above the target, amounting to 8.7% at the end of January 2022 relative to January 2021 as a result of the active expansion of aggregate demand, labor shortages, the pro-inflationary situation in the world markets, and high inflationary expectations. At the end of April 2022, in response to the mounting inflationary risks caused by a sharp depreciation of the ruble, growing uncertainty and a surge in consumer demand for certain groups of goods, inflation



*Fig. 6. The CPI growth rate in 2021–2022 (% for the previous 12 months)*

Source: Rosstat.

jumped to 17.83%, which exceeds the inflation rates observed during the previous crises and corresponds to the level of February 2002 (*Fig. 6*).

Then annual inflation gradually declined to 11.98% in November as the ruble had been strengthening and rush demand had been giving way to more restrained consumer activity. It should be noted that June-August 2022 was a period of deflation (-1.2% over three months), caused in the main by the movement of food prices, and in particular, prices for fruits and vegetables as a result of a good harvest. Another important factor responsible for the inflation slowdown was the adjustment of prices for goods and services after their rapid growth in March in face of a sharp weakening of the ruble. However, it is highly probable that so far, the influence of that factor has already been exhausted. In the autumn, as a result of the waning effects of the ruble strengthening, the pro-inflationary fiscal policy, the rising inflationary expectations of households and businesses in response to mounting geopolitical tensions and uncertainty, and the unscheduled upward indexation of utility tariffs by 9% in December 2022 (announced in September), inflationary risks increased once again. In December 2022, amid a deteriorating external economic situation and a significant depreciation of the ruble against the US dollar (by 15% by year end 2022, to Rb70.34), coupled with the indexation of housing and utility tariffs, the annual inflation slowdown rate declined significantly. At the end of December 2022, inflation stood at 11.94% relative to December 2021 (vs 8.39% in December 2021 relative to December 2020) (*Table 4*).

In April 2022, having reached a multi-year high of 20.4% relative to April 2021, core inflation also gradually declined, being above headline inflation (spread from 2 to 4 p.p. in May-December 2022). This means that the main reason for the slowdown in general inflation was the movement pattern of regulated and volatile CPI components (lower prices for fruits and vegetables, cheaper gasoline, cheaper household appliances and electronics).

In December 2022, food inflation amounted to 10.29% relative to December 2021 (vs +10.62% in December 2021 relative to December 2020). The leaders in price growth were milk and dairy products (+15.24% relative to December 2021), butter (+14.7% relative to December 2021), pasta (+14.64% relative to December 2021), and granulated sugar (+13.5% relative to December 2021). At the same time, prices for fruits and vegetables plunged by 1.97% on December 2021 as a result of a good harvest and limited export opportunities (*Table 4*).

The increase in prices for non-food products in December reached 12.7% relative to December 2021 (vs 8.58% in December 2021 relative to December 2020). The fastest growth rate was demonstrated by prices for washing and cleaning products (29.82% in December 2022 relative to December 2021 vs 7.43% in December 2021 relative to December 2020); passenger cars (29.8% in December 2022 relative to December 2021 vs 11.5% in December 2021 relative to December 2020); electrical equipment and other household appliances (15.26% in December 2022 relative to December 2021 vs 4.3% in December 2021 relative to December 2020); textiles (10.82% in December 2022 relative to December 2021 vs 2.73% in December 2021 relative to December 2020); as well as pharmaceuticals (10.78% in December 2022 relative to December 2021 vs 4.63% in December 2021 relative to

*Table 4*

**The annual growth rate of prices for certain types of consumer goods and services in 2020–2022, %, December relative to December of previous year**

	2020	2021	2022	2020–2022
<b>CPI</b>	<b>4.9</b>	<b>8.4</b>	<b>11.94</b>	<b>27.3</b>
<b>Foodstuffs</b>	<b>6.7</b>	<b>10.62</b>	<b>10.29</b>	<b>30.2</b>
Meat and poultry	2.7	17.53	4.04	25.6
Cereals and legumes	20.1	16.11	9.03	52.0
Eggs	15.1	16.04	-6.51	24.9
Pasta	12.1	14.95	14.64	47.7
Fruits and vegetables	17.4	13.98	-1.97	31.2
Sugar	64.5	30.6	13.5	143.8
Fish and seafood	5.2	10.66	14.03	32.7
Bread and Bakery	7.3	10.27	12.96	33.7
Milk and dairy products	3.6	9.84	15.24	31.1
Sunflower oil	25.9	8.65	5.2	43.9
Alcoholic beverages	2.8	2.56	8.14	14.0
<b>Non-food goods</b>	<b>4.8</b>	<b>8.58</b>	<b>12.70</b>	<b>28.2</b>
Construction materials	5.3	23.75	3.58	35.0
Tobacco products	8.2	16.37	10.24	38.8
TV and radio equipment	-0.6	12.74	-4.25	7.3
Gasoline	2.5	8.84	0.91	12.6
Washing and cleaning products	6	7.43	29.82	47.8
Pharmaceuticals	9.8	4.63	10.78	27.3
Knitwear	2	4.16	9.74	16.6
Clothes and underwear	1.6	3.36	7.93	13.3
<b>Services</b>	<b>2.7</b>	<b>4.98</b>	<b>13.19</b>	<b>22.0</b>
Passenger transport services	1.1	9.58	10.68	22.6
Outbound tourism	-0.46	2.64	70.68	74.4
Insurance	3.25	6.73	28.24	41.3
Personal and household services	3.3	6.91	10.98	22.6
Sanatoria and health resort services	3.8	5.94	10.83	21.9
Medical services	4.3	5.82	11.72	23.3
Education services	1.9	5.54	6.08	14.1
Housing and utilities	3.6	4.14	11.57	20.4

Source: Rosstat.

December 2020). It should be noted that over the period June-August 2022, for the first time in recent history, the category of non-food products was characterized by deflation. The main reason for the decline in prices was the reduction in the cost of household appliances and electronics, which, apparently, had to do with the strengthening ruble alongside a slight shrinkage in consumer demand.

In December 2022, paid services to the population rose by 13.19% on December 2021 (vs 4.98% in December 2021 relative to December 2020). Rapid growth was also displayed by prices for outbound tourism services (by 70.68%), insurance

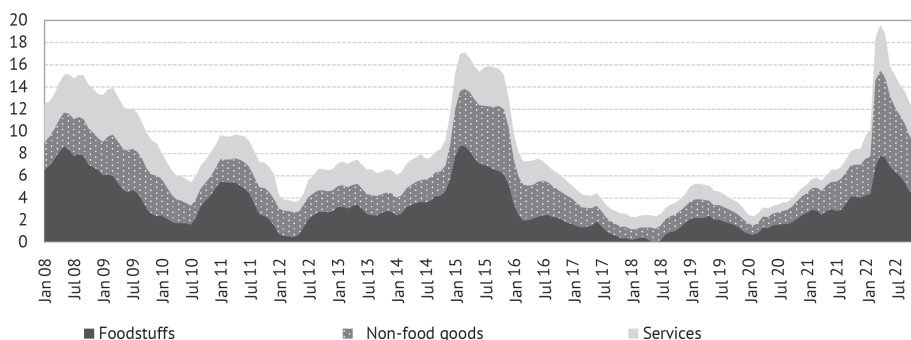
services (by 28.24%), sanatoria and health resort services (by 10.83%), medical services (by 11.72%), and housing and utility services (by 11.57%).

In general, the decomposition of inflation (which stood at 11.9% in December 2022) by its components demonstrates that the greatest input was made by the increased prices for non-food products (4.5%), while the inputs of food products and the services amounted to 3.9% and 3.5% respectively (Fig. 7).

An important factor of inflation slowdown in July–October was the strengthening of the ruble that had occurred in Q2 (the nominal effective exchange rate of the ruble in Q2 jumped by 33.8% relative to Q1 2022 and, as demonstrated by the period-end results of the first 9 months of 2022, the ruble was then 18.5% stronger than in the corresponding period of 2021) and its gradual pass-through effect. However, over the course of that year, the input of this factor gradually dwindled, and in Q4 2022, as a result of the ruble weakening against the US dollar, it once again began to exert an upward pressure on the CPI movement pattern.

The sluggish consumer activity had a restraining effect on inflation. In 2022, a decline in retail trade turnover continued for three quarters in a row (-9.8% YOY in Q2; -9.4% YOY in Q3; -9.5% YOY in Q4 2022), and according to the year-end results, it stood at 6.7%. Real personal money income was shrinking at an accelerating pace over the first three quarters of 2022 (-1.6% YOY in Q1, -2.2% YOY in Q2, and -2.5% YOY in Q3 2022).

According to a survey by InFOM, individual inflationary expectations were at a consistently high level throughout the year 2022. Having hit in March 2022 their 11-year record high of 18.3%, in April–May they plunged to 11.5%, and then in July reached a local record low of 10.8% for the first time since March 2021. Thereafter, individual inflationary expectations were steadily on the rise for three straight months, by the end of October amounting to 12.8%. In November–December 2022, individual inflationary expectations slid to 12.1%, while generally remaining at an elevated level. Likewise, over the year 2022, the price growth expectations of enterprises for the most part remained at an elevated level. It should be noted



*Fig. 7. The structure of inflation in 2008–2022, %, month to the corresponding month of the previous year*

Source: Rosstat; Gaidar Institute calculations.

that climbing inflationary expectations will contribute to a persistently elevated inflation rate also in 2023.

Thus, among the most significant inflation risks in 2023 we may point out the weakening of the ruble, high inflationary expectations, a gradual consumer activity recovery, fiscal policy, changes in the labor market associated with a shortage of workforce in certain specialties as a result of the partial mobilization, and external anti-Russia sanctions.

According to the forecast,<sup>1</sup> quarterly seasonally adjusted annualized inflation will be 5.6%, 6.6%, 7.0%, and 7.2%, in Q1, Q2, Q3, and Q4 2023, respectively. This quarterly inflation forecast corresponds to a slowdown in annual inflation to 3.7% at the end of Q1 (data as of the end of March); at the end of June, annual inflation will be at 4.1%; and by the year end, it will accelerate to 6.6%<sup>2</sup>, to average in 2023 at 5.0%.<sup>3</sup>

In view of the current monetary policy, inflation is going to return to the target of 4% only in 2024.

#### 1.1.4. The balance of payments and the ruble exchange rate

According to the preliminary balance of payments estimates for 2022 released by the Bank of Russia, the current account balance amounts to record-high \$227.4 bn, which is 86% more than the corresponding figure for 2021 (\$122.3 bn). Because of the less detailed balance of payments published by the Central Bank of the Russian Federation compared to the previous periods, the structure of the current account can be described in terms of two main balances: the balance of trade in goods and services and the balance of primary and secondary income.

*The balance of trade in goods and services* amounts to \$282 bn, which is 66% higher (by \$112 bn in absolute terms) than in 2021 (\$170.1 bn). A decisive role in this increase was played by a significant rise in the value volume of exports of goods and services - from \$550.0 bn in 2021 to \$628 bn in 2022 (by 14%), and a significant shrinkage in the volume of imports of goods and services - from \$379.9 bn in 2021 to \$346 bn in 2022 (by 9%).

Nevertheless, in Q4 2022, the positive upward trend in the balance of trade in goods and services relative to 2021 that had been observed throughout Q1–Q3 2022 was reversed. The balance of trade in goods and services for Q4 2022 amounted to just \$45.9 bn, which is 26% lower (by \$16.3 bn in absolute terms) than in Q4 2021 (\$62.2 bn). Such dynamics is caused by a decrease in world and regional prices for the main Russian export goods (primarily for oil, gas and petroleum products, due in part to the warm weather in the EU countries, and in part to the price ceiling), which happened alongside a shrinkage in the physical volume of exports because of the embargo on Russian oil supplies to the EU (it came into force only on December 5, 2022) (*Table 5*).

1 For more details, see *Perevyshin, Yu.N.* Short-Term Inflation Forecasting in the Russian Economy // *Economic Policy*. 2022. V. 17. No. 5. P. 1–18.

2 Close to the upper range of inflation in the Bank of Russia's forecast (5–7%).

3 *Perevyshin Yu.N., Trunin P.V.* Monetary policy and inflation in early 2023 // *Monitoring of Russia's Economic Outlook* (URL: <https://www.iepr.ru/ru/monitoring/denezhno-kreditnaya-politika-i-inflyatsiya-v-nachale-2023-goda.html>)

Table 5

**The movement of prices for Russia's main exports, in 2022 relative to 2021**

Goods group	Share of in total exports, p.p.	Price in-crease, %
Crude oil	24,0	+21
Oil products	14,0	+40
Pipeline natural gas	16,0	+156
Metals and products from them	8,8	+11
Food products and agricultural raw materials	7,0	+14
Chemical industry products, rubber	6,8	+43
Coal	5,6	+94
LNG	4,0	+166
Wood and pulp and paper products	2,4	+15

Source: estimations based on data released by the Federal Tax Service; own calculations

The declining imports of goods and services resulted from the shrinkage in the physical volume of deliveries due to the economic sanctions and the increased logistics costs. Thus, in 2022, the value volume of imports decreased by 9% on 2021, amounting to \$345.8 bn. The fall in imports of goods and services was accompanied by a strengthening of the national currency: according to data released by the Bank of Russia, over 2022, the ruble climbed against the US dollar (+15% in real terms) (in spite of having weakened in Q1 by 9.2%).<sup>1</sup>

The balance of primary and secondary income for 2022 amounts to -\$55 bn, which is 15% more in absolute terms than the corresponding value for 2021 (-\$47.8 bn). At the same time, the year 2022 saw a decline both in income receivable (capital gains received from abroad) and income payable (withdrawal of income and repatriation of profits), which happened, among other things, due to restrictions on cross-border movement of capital. However, receivables decreased quite significantly, namely by \$49 bn (to \$48 bn); and revenues payable, by \$42 bn (to \$103 bn).

In 2023, because of the standing restrictions on the movement of capital, difficulties with the repatriation of profits from Russia by foreign investors, and the restrictions imposed by the EU and the USA on the counterparties in these jurisdictions, primary and secondary income payable will continue to decline. As far as the trade balance is concerned, as well as the current account balance, in 2023 they can be expected to contract due to lower prices for basic Russian exports, restrictions on the supply of Russian goods, and a recovery in imports.

Given that the year-end balance of payments for 2022 is released by the Bank of Russia in an aggregated form, the financial account contains aggregated data on net external assets and liabilities across all sectors of the economy and includes changes in reserve assets. The aggregate high-level data make it difficult to analyze the actual status of each individual component of the financial account.

<sup>1</sup> Concerning the impact of the exchange rate movement pattern on trade, see *Knobel A.Yu. Estimation of the demand function for imports in Russia // Applied Econometrics. 2011. No. 4 (24). P. 3–26; Knobel A., Firanchuk A. Russia in world exports in 2017 // Russian Economic Development. 2018. No. 9. P. 17–21.*

In 2022, the financial account of the balance of payments was prepared in the context of growing geopolitical tensions, the tough sanctions imposed on Russia, the partial freeze of Russia's international reserves, as well as the restrictions on the movement of capital introduced by the Bank of Russia. As noted earlier, as the situation on the foreign exchange market stabilized and the ruble strengthened significantly, the RF Central Bank switched over to a gradual easing of some of its forex control measures.

In 2022, the amount of liabilities of all sectors of the Russian economy to non-residents decreased by \$116.1 bn. Throughout the year 2022, the share of non-residents in the OFZ market averaged 17.9%. However, as of December 1, 2022, the share of non-residents in the OFZ market fell to 13.2%, and by January 1, 2023 it stood at 11.1% (at the level of August-September 2012). On the one hand, this happened due to an increase in the volume of the OFZ market by 15.1% to Rb17.9 over November-December 2022 as a result of the active placement of new OFZs by the Ministry of Finance of the Russian Federation. On the other, this can be explained by a shrinkage in the portfolios of non-residents by 27.8% to Rb1.98 trillion as a result of the transfer of accounting for titles to securities of Russian issuers to the Russian accounting infrastructure, including that for OFZ.

The data on Russian external debt as of year-end 2022 point to a debt reduction across all sectors of the economy. Thus, the amount of external debt of other sectors of the economy plunged by 21%, to \$239.4 bn relative to year-beginning 2022. The volume of government bodies' external debt for 2022 decreased by 26.6%, to \$46.5 bn. As of year-end 2022, banks and the Central Bank of the Russian Federation reduced their external liabilities by 16.2%, to \$95.9 bn.

In 2022, the increase in foreign assets across all sectors of the Russian economy amounted to \$107.1 bn (vs \$159.8 bn in 2021). Because of the suspension of operations on the purchase/sale of foreign currency within the framework of the fiscal rule, the demand for foreign assets was displayed in the main by the private sector.

In 2022, the international reserves of the Russian Federation decreased by 7.7% and, as of January 1, 2023, amounted to \$582 bn. This happened for the most part as a result of negative currency and market revaluations. Nevertheless, as noted earlier, in 2022, as a result of the anti-Russian sanctions introduced by the EU and the USA, about 50% of the reserves was frozen (\$300 bn out of \$630 bn available as of February 1, 2022). The freeze of international reserves and the impossibility to implement the fiscal rule mechanism in its previous form translated into a closer correlation between the oil price and the exchange rate, which increased the exposure of the Russian economy to external shocks. It should be noted that, from 2023, the Ministry of Finance of the Russian Federation approved a new fiscal rule and a new structure of the National Welfare Fund (NWF).<sup>1</sup> In accordance with the new fiscal rule, whenever the actual monthly oil and gas revenues exceed their base level calculated monthly by the Ministry of

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1 URL: [https://minfin.gov.ru/ru/press-center/?id\\_4=38331-o\\_provedenii\\_operatsii\\_na\\_vnutrennem\\_valyutnom\\_rynke\\_v\\_svyazi\\_s\\_formirovaniem\\_dopolnitelnykhvypadayushchikh\\_neftegazovykh\\_dokhodov\\_federalnogo\\_byudzhet](https://minfin.gov.ru/ru/press-center/?id_4=38331-o_provedenii_operatsii_na_vnutrennem_valyutnom_rynke_v_svyazi_s_formirovaniem_dopolnitelnykhvypadayushchikh_neftegazovykh_dokhodov_federalnogo_byudzhet)



Finance of the Russian Federation, the Bank of Russia will buy China's yuan for the NWF. In the opposite case, it will sell yuan from the NWF for rubles. Euro, yen and pound sterling were excluded from the NWF structure, and the shares of yuan and gold were increased. The maximum share of yuan is 60%, that of gold, 40%.<sup>1</sup> The new fiscal rule will help smooth out the impact of terms-of-trade shocks on the forex market and the Russian economy as a whole.

In 2022, amid a trade surplus and restrictions on the movement of capital, the ruble climbed against the US dollar by 5.3%, to Rb70.3. In late February and March 2022, as a result of a record-high capital outflow, the ruble depreciated significantly (in March, the ruble's average exchange rate against the US dollar fell by 34% on February, to Rb103.7), and on March 11, 2022 it hit a record low of Rb120.4. After the introduction of restrictions on the movement of capital and the stabilization of the forex market situation over the period from April through December 2022, the ruble's average nominal exchange rate against the US dollar was at Rb60.5, which is 17.2% higher than in April-December 2021, when the average ruble-to-US dollar exchange rate amounted to Rb73.2. In Q4 2022, in face of a significant reduction in the trade surplus as a result of lower oil prices and the introduction, by the EU, of an embargo on crude oil supplies and the price ceiling on Russian oil from December 2022, the ruble lost 22.5% against the US dollar, plunging to Rb70.3 (relative to the end of Q3 2022). Over December 2022, the US dollar climbed against the ruble by 15.2%, from Rb61.1 to Rb70.3.

It should be noted that, overall in 2022, the nominal effective exchange rate of the ruble gained 21.4%, while the effective exchange rates of the national currencies of many other inflation-targeting developing economies, on the contrary, declined (-22.3% in Turkey; -13.5% in Colombia; -1.4% in South Africa; and -0.9% in Poland). This happened in the main due to the tightening monetary policies in major developed countries and the waning investor interest in the currencies of certain developing countries. Nevertheless, in 2022, as a result of the aggressive monetary policies aimed at raising the key rates, the national currencies of Chile (+3.6%), Mexico (+10.8%), and Brazil (+18.3%) strengthened significantly (*Fig. 8*).

At the end of 2022, according to our estimates, the fundamentally justified exchange rate of the ruble against the US dollar stood at about Rb75.<sup>2</sup> In the situation of limited capital mobility, the movement pattern of the ruble exchange rate in 2023 will be shaped primarily by the state of the current account. Geopolitical risks, the restrictions on Russian exports imposed by Western countries, and the recovery of imports are the factors that could possibly weaken the ruble. At the same time, the recovery of the value of Russian exports may be facilitated by the growth of the Chinese economy, as well as the search for alternative routes for export deliveries. The effect of the new fiscal rule from 2023 onwards will also help smooth out fluctuations in the ruble exchange rate.

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1 URL: [https://minfin.gov.ru/ru/press-center?id\\_4=38327](https://minfin.gov.ru/ru/press-center?id_4=38327)

2 For more details, see *Bozhechkova A.V., Sinelnikov-Murylev S.G., Trunin P.V.* Factors of the Russian ruble exchange rate dynamics in the 2000s and 2010s // *Voprosy Ekonomiki*. 2020. No. 8. P. 1–18.



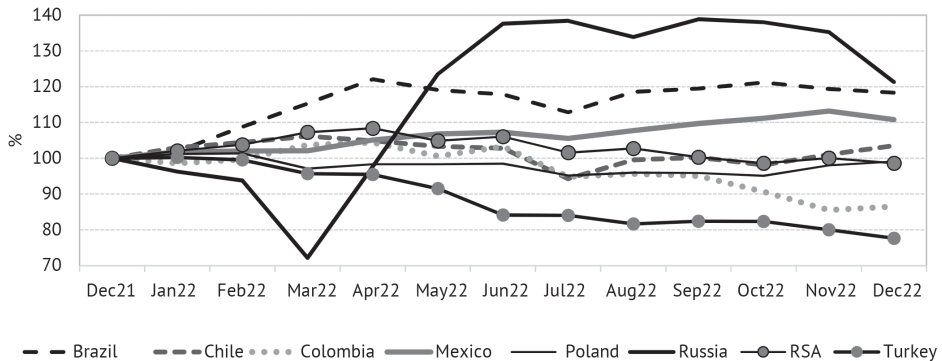


Fig. 8. The movement of nominal effective exchange rates of national currencies in the developing countries targeting inflation (December 2021 = 100%)

## 1.2. Fiscal policy<sup>1</sup>

### 1.2.1. Characteristics of the budgets of the budget system of the Russian Federation

In 2022, the nominal growth of all the main parameters of the enlarged government budget (hereinafter – EGB) led to their dynamics in shares of GDP in relation to the previous year to have a multidirectional nature: revenues decreased by 0.6 p.p. of GDP to its lowest level in recent years of 35.0% of GDP, while expenditures rose by 1.6 p.p. of GDP to 36.4% of GDP (Table 6).

Table 6

### Main parameters of the enlarged government budget of the Russian Federation in 2019–2022

	2019		2020		2021		2022		Change, 2022 to 2021		
	Rb bn	% of GDP	Rb bn	% of GDP	Rb bn	% of GDP	Rb bn	% of GDP	Rb bn	p.p. of GDP	In real terms, %*
<b>Revenue</b>	<b>39 498</b>	<b>36.0</b>	<b>38 206</b>	<b>35.5</b>	<b>48 118</b>	<b>35.6</b>	<b>53 074</b>	<b>35.0</b>	<b>4 956</b>	<b>-0.6</b>	<b>-1.5</b>
Including:											
Oil and gas**	7 924	7.2	5 235	4.9	9 056	6.7	11 586	7.6	2 530	0.9	14.3
Non-oil and gas	31 574	28.8	32 971	30.6	39 062	28.9	41 488	27.4	2 426	-1.5	-5.1
<b>Expenditure</b>	<b>37 382</b>	<b>34.1</b>	<b>42 503</b>	<b>39.5</b>	<b>47 073</b>	<b>34.8</b>	<b>55 182</b>	<b>36.4</b>	<b>8 109</b>	<b>1.6</b>	<b>4.7</b>

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	2019		2020		2021		2022		Change, 2022 to 2021		
	Rb bn	% of GDP	Rb bn	% of GDP	Rb bn	% of GDP	Rb bn	% of GDP	Rb bn	p.p. of GDP	In real terms, %*
<b>Deficit (-)/ Surplus (+)</b>	<b>2 116</b>	<b>1.9</b>	<b>-4 297</b>	<b>-4.0</b>	<b>1 045</b>	<b>0.8</b>	<b>-2 108</b>	<b>-1.4</b>	<b>-3 153</b>	<b>-2.2</b>	<b>-2.8 fold</b>
<i>For reference only: GDP, Rb bn</i>	109 608		107 658		135 295		151 456				

\* Hereinafter the recalculation in real terms (in real prices) is based on the consumer price index, which, according to Rosstat, was 111.94% in 2022 (December 2022 to December 2021). URL: [https://rosstat.gov.ru/storage/mediabank/186\\_09-11-2022.html](https://rosstat.gov.ru/storage/mediabank/186_09-11-2022.html)

\*\* Including excise tax on crude oil sent for refining.

Sources: Ministry of Finance of Russia, Federal Treasury; Rosstat, own calculations.

### **Revenues of the RF budget system**

In 2022, revenues of the EGB dropped by 1.5% in real terms, that is, even a significant increase in oil and gas revenues (by 14.3%) did not compensate fully the decline in the volume of non-oil revenues (by 5.1%). The increase in oil and gas revenues resulted in their share in total revenues to the budget system - up to 21.8% vs. 18.8% in 2021. In 2022, the federal budget revenues' share in total revenues to the EGB remained unchanged vs. 2021 and accounted for 52.4%.

The level of tax burden in the past year was the lowest in recent years, while for some taxes the dynamic of revenues was multidirectional (*Table 7*).

*Table 7*

### **Receipts of main taxes to the RF enlarged government budget in 2019–2022, % of GDP**

	2019	2020	2021	2022	Change, 2022 to 2021	
					p.p. of GDP	In real terms, %
<b>Revenue, total*</b>	<b>35.4</b>	<b>34.9</b>	<b>35.0</b>	<b>34.5</b>	<b>-0.5</b>	<b>-1.4</b>
Corporate profit tax	4.1	3.7	4.5	4.2	-0.3	-6.6
PIT	3.6	4.0	3.6	3.8	0.2	4.8
Insurance contributions*	6.8	7.0	6.1	5.7	-0.4	-6.9
VAT	6.5	6.7	6.8	6.3	-0.5	-7.4
Excises	1.2	1.8	0.6**	-0.6**	-1.2	-197.4
MET	5.6	3.7	5.4	7.0	1.6	29.6
Customs duties and fees	2.1	1.1	1.9	1.9	-0.1	-2.8

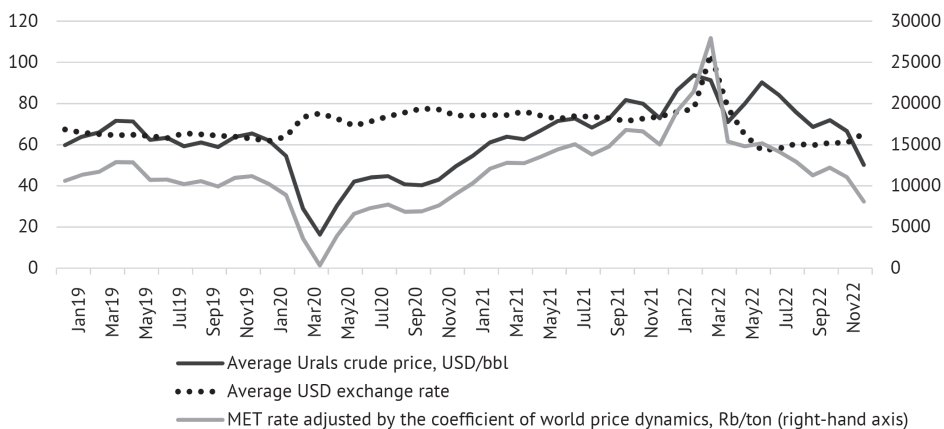
\* Insurance premiums and total income are given without double counting insurance premiums for the non-working population, the values of total revenues differ from the official by the amount of insurance premiums.

\*\* Decrease in the total volume of excise duties is associated with the implementation of the mechanism of refundable excise duty on oil raw materials in the framework of the completion of the tax maneuver in the oil industry.

Sources: Federal Treasury, Rosstat, own calculations.

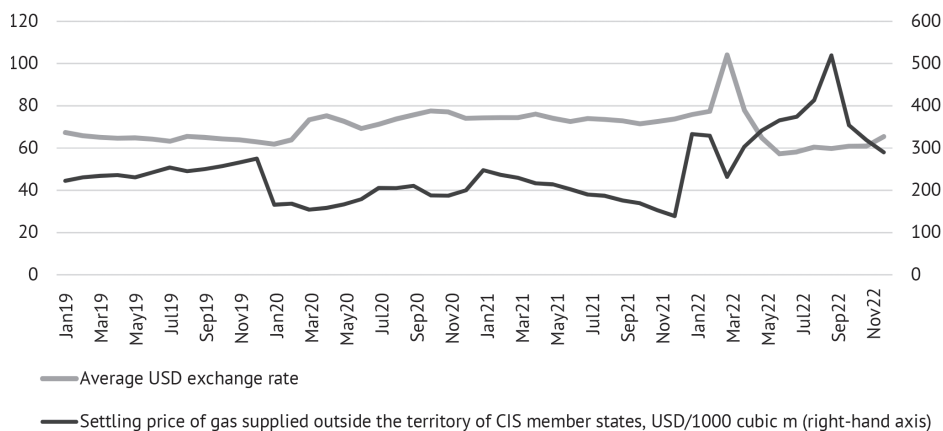
**MET.** MET receipts reached their local maximum for the last few years, amounting to 7.0% of GDP. Given that the prime rate of mineral extraction tax on oil was maintained at the rate of Rb 919 per one ton as in 2018–2021, the main

factors for a significant rise in ruble revenues from mineral extraction tax on oil in 2022 were a significant increase in the exchange rate in Q1, as well as the continued relatively high oil price in H1 of the reporting year (*Fig. 9*)



*Fig. 9. Dynamic of the actual MET tax rate, Urals oil prices and the value of the dollar exchange rate in 2019–2022*

Sources: Ministry of Finance of Russia, Rosstat, RF CB, own calculations.



*Fig. 10. Dynamic of the settling price of natural gas and the value of the dollar exchange rate in 2019–2022*

Sources: Ministry of Finance of Russia, Rosstat, RF CB, own calculations.

However, the ruble strengthened in Q2 amid a decline in foreign trade relations, restrictions on foreign exchange transactions with requirements to convert foreign currency earnings remained until the end of 2022. The oil price also began to fall in H2 2022 against the backdrop of growing sanction pressure, which led to the return of MET revenues on oil to the level of 2019 and still lower by the end of 2022.

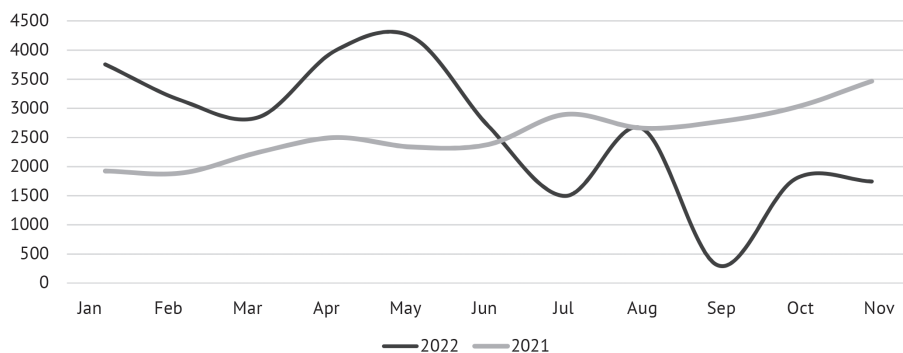
This being said, according to Rosstat, oil production in 2022 went up by only 2.1% compared to 2021, which made an insignificant contribution to the increase in revenues from MET on oil.

A significant contribution to the growth in total MET receipts was made by an increase in MET receipts from natural gas. Against the backdrop of sanction restrictions, the price of natural gas sales rose substantially in H1 2022 (*Fig. 10*). However, as the sanctions took effect by the end of 2022, the price of natural gas fell to the late 2021 values.

**Corporate profit tax.** Contraction of corporate profit tax receipts by 0.3 p.p. of GDP or by 6.6% in real terms at the year-end 2022 was owing to the impact of sanction restrictions on the activities of Russian companies, as well as the termination by a number of foreign companies of their economic activities in the Russian Federation. According to Rosstat, incomes of profitable organizations declined by 8.9% in real terms in 2022 vs. 2021.

The fall was observed in most industries. Among the industries contributing most to the total amount of incomes of profitable organizations, businesses of the wholesale and retail trade sector accounted for 19.3% of income drop, enterprises of the minerals extraction sector accounted for 16.1% of income drop, and processing industries accounted for 4.8% income drop. The biggest increase in profits was observed in such sectors as transportation and storage (by 28%) and construction (by 38%).

The largest drop in incomes of profitable organizations occurred in H2 2022, which diverges significantly from the 2021 intra-annual dynamic (*Fig. 11*).



*Fig. 11. Performance of profitable organizations, Rb bn*

Sources: Rosstat, own calculations.

**Insurance contributions and PIT.** Despite the fact that over the last year the share of the payroll fund in GDP remained virtually unchanged, personal income tax receipts increased by 0.2 p.p. of GDP and insurance premiums, on the contrary, decreased by 0.4 p.p. of GDP compared to 2021. This is mainly owing to the current taxation policy: the growth of personal income tax receipts is explained by the introduction of a progressive tax rate (15% of income above Rb5 mn). The emergence of a progressive taxation scale brought additional Rb149 bn to the budget in 2022. In turn, a 6.9% drop in insurance premiums in real terms is associated with the reduction of the aggregate rate for small and medium-sized enterprises. Besides, 78 industries were entitled to defer insurance contributions in Q2 and Q3 2022, which resulted in the fall of budget revenues of around Rb770 bn, or about 0.5% of GDP. It is expected that this decrease in insurance contributions receipts will be made up by May 2023.

**VAT.** At the year-end 2022, budget revenues from VAT increased by 3.7% in nominal terms, but showed a fall of 7.4% in real terms. This was worse than the result observed at the end of 2020, when the fall of revenues by 6% in real terms was caused by the pandemic. However, while in 2020 the real decline in the base was flat (both import and domestic sales revenues declined), then in 2022, the decline in tax revenues in real terms was mainly due to a drop in receipts from import levy (by 26.7% in real terms compared to 2021), while the VAT increase from taxation of domestic sales of goods and services came to 5.8%.

**Excises.** The total proceeds from excises on additive products amounted to Rb1.2 trillion in 2022. The proceeds from excises on traditional tobacco products at the end of the reporting year decreased by 0.7% in nominal terms, whereas at the beginning of 2022 growth in revenues was projected from 5 to 8% compared to the 2021 results. The reason for this decline is a strong position of illegal products in the market. According to preliminary estimates, in 2022 the share of illegal sales in the cigarette market did not decrease compared to 2021 and still exceeds the level of 12%. At the same time, it is worth noting the increase in excise tax collection from nicotine-containing liquids, which is associated with the introduction of mandatory labeling in March 2022. Revenues from disposable ENDS (electronic nicotine delivery systems) also surged by 77%. As for heated tobacco, revenues did not change significantly, which is due to the following factors: the stabilization of this market, the outflow to the disposable ENDS segment, a more than twofold drop in imports of this product, as well as the suspension of innovation and investment activities of a number of tobacco companies in Russia. It is worth noting that in 2023 there is still a big potential to increase revenues from nicotine-containing liquids and disposable ENDS due to the fact that although collection rate has increased but still remains quite low and does not exceed 50%.

As for the alcoholic beverages market, consumption of spirits increased by almost 6.5% in volume terms, while consumption of wine and wine-based beverages dropped by 5%. At the same time, consumption of beer remained virtually unchanged. At the same time, there was a change in the structure of imports with a shift from European suppliers to Asian and BRICS countries. This is

also partly due to the observed switch to spirits. This dynamic, which continued the 2021 trend, had a corresponding impact on budget revenues: the revenues from excise duties on spirits rose by more than 11%, while the revenues from excise duties on wine continued to decline. Also, the contribution from excises on weak alcoholic beverages increased. In total, the EGB received Rb496 bn from excises on alcoholic beverages.

### ***Expenditures of the RF budget system***

In 2022, the EGB expenditures amounted to 36.4% of GDP, but their volume, despite new challenges to the budget system from unprecedented sanctions and special military operation (SMO), did not exceed the level of 2020 (39.5% of GDP). The increase in expenditures of the budget system in 2022 vs. the previous year amounted to Rb8.1 trillion or 4.7% in 2021 prices. The increase in expenditures occurred mainly at the federal budget level in the amount of Rb6.4 trillion, which was used to finance the government decisions to expand social support to individual categories of citizens, territorial development programs and the expenditures on social security. At the regional level it was generally possible to restrain the growth of expenditures, which allowed to significantly reduce the risks of public finances stability amid the “slowdown” of the budget revenues dynamic. The share of federal budget expenditures in total EGB expenditures in 2022 increased to 56.4% vs. 52.6% in 2021.

Given a general increase in expenditures of the budget system in 2022 by 1.6 p.p. of GDP against the previous year, growth of expenditures as a share of GDP is observed only across five functional sections, while other sections show no significant changes (*Table 8*).

The growth of the enlarged government budget expenditures in 2022 relative to 2021 is fixed in the following sections:

- “National defense” – by 1.1 p.p. or by Rb2.0 trillion in 2021 prices, an increase of 39.1%, which was due to the need to finance the SMO. Mainly the expenditures under this section passed through the federal budget. At the same time, there was an increase in volumes of budget appropriations of the consolidated budgets of the RF Subjects under the item “National defense” from Rb4.6 bn in 2021 to Rb58.1 bn in 2022 for the mobilization and non-military training, as well as other related measures;

- “Housing and community amenities” – by 0.3 p.p. of GDP or Rb0.6 trillion and 15.7% in 2021 prices. An increase in expenditures on the section “Housing and community amenities” by 2022 vs. 2021 is noted both in the federal budget and the consolidated budget of the RF subjects;

- «Nationwide issues” and “Education” – by 0.1 p.p. of GDP mainly due to an increase in federal budget expenditures;

- “National economy” – by 0.1 p.p. of GDP due to an increase in expenditures of the consolidated budgets of RF subjects, primarily in the direction of “Road facilities (road funds)”.

In absolute terms, the EGB expenditures on social policy went up by Rb1.8 trillion in 2022 against the previous year, but in terms of shares of GDP no change

*Table 8*

**Dynamics and structure of expenditures of the enlarged government budget in 2019–2022**

	2019		2020		2021		2022		Change, 2022 to 2021		
	Rb bn	% of GDP	Rb bn	% of GDP	Rb bn	% of GDP	Rb bn	% of GDP	Rb bn	p.p. of GDPΠ	In real terms, %
<b>Expenditure total, including:</b>	<b>37 382</b>	<b>34.1</b>	<b>42 503</b>	<b>39.5</b>	<b>47 073</b>	<b>34.8</b>	<b>55 182</b>	<b>36.4</b>	<b>8109</b>	<b>1.6</b>	<b>4.7</b>
Nationwide issues	2 335	2.1	2 552	2.4	2 852	2.1	3 310	2.2	458	0.1	3.7
National defense	2 999	2.7	3 171	2.9	3 575	2.6	5 567	3.7	1992	1.1	39.1
National security and law enforcement activity	2334	2.1	2 392	2.2	2 504	1.9	2 851	1.9	347	0.0	1.7
National economy	5 172	4.7	6 041	5.6	7 225	5.4	8 369	5.5	1144	0.1	3.5
Housing and community amenities	1 575	1.4	1 590	1.5	2 172	1.6	2 813	1.9	641	0.3	15.7
Environmental protection	250	0.2	304	0.3	438	0.3	393	0.3	-45	0.0	-19.8
Education	4 051	3.7	4 324	4.0	4 691	3.5	5 459	3.6	768	0.1	4.0
Culture, cinematography	588	0.5	610	0.6	652	0.5	798	0.5	146	0.0	9.3
Healthcare	3 790	3.4	4 939	4.6	5 167	3.8	5 553	3.7	386	-0.1	-4.0
Social policies	13 023	11.9	15 122	14.0	16 002	11.8	17 807	11.8	1805	0.0	-0.6
Physical culture and sports	375	0.3	401	0.4	437	0.3	537	0.3	100	0.0	9.8
Mass media	156	0.1	174	0.2	171	0.1	203	0.1	32	0.0	6.1
Government and municipal debt servicing	835	0.8	883	0.8	1 185	0.9	1 409	0.9	224	0.0	6.2

Sources: Federal Treasury, Electronic budget portal, own calculations.

was observed, while in 2021 prices expenditures even dropped by 0.6%. The federal budget funds allocated to the budgets of extrabudgetary funds in the section “Social policy” in 2022 amounted to Rb6.3 trillion against Rb4.5 trillion in 2021. Apart from indexation for higher inflation, such a marked difference is due to the volume of funds which the RF Ministry of Finance compensated to the state extrabudgetary funds as a result of deferral of insurance premiums in Q2 and Q3 2022. In fact, the federal budget financed most of the EGB expenditures on additional social obligations to certain categories of citizens and their family members, as well as the funds under-received by extrabudgetary funds as a result of the deferral granted.

The enlarged government spending structure is characterized by an increase in the share of “law and order” expenditures (defense and law enforcement) in the total volume of spending from 12.9% in 2021 to 15.2% in 2022 against the background of a decline in the proportion of spending that is conditionally productive (investment in human capital – education, culture, health care, physical education) from 23.3% to 22.4%, respectively.

By the end of 2022, the enlarged government budget was executed with a deficit of 1.4% of GDP, or Rb2.1 trillion, which is markedly better than the budget

balance in the crisis year of 2020. The EGB deficit is directly associated with the negative balance of the federal budget, which amounted to 2.2% of GDP, or Rb3.3 trillion. Herewith, the consolidated budget of the RF subjects and the budgets of extra-budgetary funds were executed with a surplus of Rb50.6 bn and Rb1,106.0 bn, respectively.

On the whole, in 2022, the country's budget system was quite successful in coping with external challenges, primarily due to the favorable situation with hydrocarbon prices and the availability of liquid assets in the National Wealth Fund. Separately, we should note the stability of regional finances, which made it possible to free up some funds from the federal budget to address priority tasks. That said, given the trend towards expanding support measures for servicemen – participants of the special military operation and members of their families, one should expect further growth of expenditures on social policy at all levels of the budget system, which can strengthen the substitution, outlined in 2022, of conditionally productive expenditures, ensuring institutional development of the economy, support to the quality of human capital, infrastructure and science, by non-productive directions of financing.

### 1.2.2. Characteristics of the federal budget

#### ***Federal budget revenues***

In 2022, the federal budget revenues amounted to Rb27.8 trillion, which is by Rb2.8 trillion or 11.2% higher than originally approved.<sup>1</sup> In terms of percentage of GDP, the federal budget revenues in 2022 relative to 2021 decreased by 0.4 p.p. of GDP to 18.3% of GDP (*Table 9*) and by 1.7% in real terms.

The share of oil and gas revenues in the total volume of federal budget revenues in 2022 amounted to 41.6% vs. 35.8% in 2021. This being said, the volume of actual oil and gas revenues to the federal budget in 2022 was even higher than indicated in *Table 9* – by Rb3.25 trillion (the amount of refundable excise tax on oil products is an instrument of incentives for Russian oil refiners to supply oil products to the domestic market in a situation when the profitability of oil product exports exceeds the domestic sales margin (by the amount of the refundable excise tax on oil raw materials, which is an instrument of incentives for Russian oil refineries to supply to the domestic market in a situation when the profitability of export of oil products exceeds the marginality of domestic sales).

At year-end 2022, oil-and-gas revenues to the federal budget surpassed both the 2021 level by 0.9 p.p. of GDP, as well as forecast expectations laid down in the law on the budget (in the original version), by Rb2.0 trillion. According to the RF Ministry of Finance, the average price of Urals oil in 2022 was \$76.1/bbl, compared to \$69.0/bbl a year earlier. Given a 10% increase in the average price and a 7.2% strengthening of the ruble against the dollar in 2022 compared to 2021, it can be argued that Russia has managed to partially redirect its crude oil

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1 Federal Law No. 390-FZ of 06.12.2021 "On the Federal Budget for 2022 and for the Planning Period of 2023 and 2024" (original version).



*Table 9*

### Main parameters of the federal budget in 2019–2022

	2019		2020		2021		2022		Change, 2022 to 2021		
	Rb bn	% of GDP	Rb bn	% of GDP	Rb bn	% of GDP	Rb bn	% of GDP	Rb bn	p.p. of GDP	In real terms, %
<b>Revenues</b>	<b>20 189</b>	<b>18.4</b>	<b>18 719</b>	<b>17.4</b>	<b>25 286</b>	<b>18.7</b>	<b>27 824</b>	<b>18.3</b>	<b>2 538</b>	<b>-0.4</b>	<b>-1.7</b>
Oil and gas	7 924	7.2	5 235	4.9	9 056	6.7	11 586	7.6	2 530	0.9	14.3
Including basic	4 967	4.5	5558	5.2	5889	4.4	6509	4.3	620	-0.1	-1.3
Non-oil and gas	12 265	11.2	13 484	12.5	16 230	12.0	16 238	10.7	8.0	-1.3	-10.6
<b>Expenditures</b>	<b>18 214</b>	<b>16.6</b>	<b>22 821</b>	<b>21.2</b>	<b>24 762</b>	<b>18.3</b>	<b>31 119</b>	<b>20.5</b>	<b>6 357</b>	<b>2.2</b>	<b>12.3</b>
<b>Deficit (-) / surplus (+)</b>	<b>1975</b>	<b>1.8</b>	<b>-4 102</b>	<b>-3.8</b>	<b>524</b>	<b>0.4</b>	<b>-3 295</b>	<b>-2.2</b>	<b>-3819</b>	<b>-2.6</b>	<b>-661.7</b>
Non-oil and gas deficit	-5949	-5.4	-9 337	-8.7	-8532	-6.3	-14 881	-9.8	- 6349	-3.5	55.8

Sources: Ministry of Finance of Russia, Federal Treasury, Rosstat, own calculations.

exports to China, India and Turkey; otherwise oil and gas revenues to the federal budget from export duties would have been more modest.

However, since December 2022, Western sanctions on Russian oil supplies, including the establishment of a price ceiling, began to take effect, as a result of which the price of Urals oil fell quite dramatically, making only \$50.5/barrel in December, while the Urals discount to Brent rose to nearly 40%. It can be assumed that if such a significant difference between the prices of Russian Urals oil and international Brent continues throughout 2023, budget revenues will remain under rather strong pressure: the actual oil and gas revenues will hardly exceed the base ones without a significant weakening of the ruble.

In addition to oil companies, Gazprom became an important “donor” to the federal budget in 2022. In addition to increased export duties on pipeline gas, which amounted to more than Rb1.6 trillion (45% more than in 2021), Gazprom transferred to the treasury Rb1.25 trillion of temporarily increased severance tax and paid record dividends (more than Rb0.6 trillion). Taking into account the revenues to the budget system from other taxes, Gazprom is likely to become the largest taxpayer by the year-end 2022 after the completion of settlements with the budget.

The negative dynamics of the federal budget revenues in 2022 relative to 2021 is associated with a decline of non-oil and gas revenues by 1.3 p.p. of GDP to a minimum value for the period under review in *Table 9* (10.7% of GDP). The main factor behind the reduction of non-oil and gas revenues were taxes on imported goods, but even amid sanctions their actual volume amounted on average to about 78% of the planned values, that is, we are talking about less than Rb0.9 trillion of lost revenues. This decrease in tax revenues was compensated by the excess of actual volumes over the planned ones for taxes from domestic production, as a result of which the total volume of non-oil and gas revenues in nominal terms practically remained at the 2021 level, but decreased in real terms and as a share of GDP.

### ***Federal budget expenditures***

The volume of federal budget spending in 2022 amounted to Rb31.1 trillion or 20.5% of GDP, which is by Rb6.3 trillion more than the volume of the previous year. In real terms and as a share of GDP growth was also positive and quite significant (*Table 10*). Actual performance in 2022 exceeded forecast expectations by Rb7 trillion.

The largest deviation of actual federal budget expenditures from initially approved amounts is noted in the sections “Social policy”, “National defense” and “National economy” – by Rb3.0 trillion, Rb1.9 trillion and Rb1.3 trillion, respectively, which is associated with the conduct of the SMO, the expansion of social support measures for certain categories of citizens and business support. For other sections, the actual volume of budget allocations changed less significantly in nominal terms relative to the initially approved amounts.

Funding for the national projects that will ensure the achievement of national development goals until 2030<sup>1</sup> has increased: the actual volume of spending on the implementation of the national projects in 2022 amounted to Rb3.27 trillion. The actual volume of spending on the implementation of the national projects in 2022 amounted to Rb3.27 trillion, against the initially approved amount of Rb2.79 trillion.

In real terms, the “leaders” in terms of increase in spending were “National defense” (37.8%), “Housing and community amenities” (37.0%), “Culture and cinematography” (30.1%), “Social policy” (20.1%). In real terms, only expenditures in two functional sections decreased: “Environmental protection” (-31.9%) and “National economy” (-3.9%).

The volume of expenditures on closed items of the federal budget in 2022 increased to a maximum value for the entire period under consideration amounting to Rb6.0 trillion or 3.9% of GDP. As a consequence, the share of closed spending in the total volume of the federal budget’s expenditure in 2022 increased to 19.2%, vs. 15.1% in 2021. The following changes were noted in the structure of closed federal budget expenditures: “National defense” – Rb3.8 trillion in 2022 against Rb2.4 trillion in 2021, “National security and law enforcement” – Rb0.8 trillion and Rb0.7 trillion, “Nationwide issues” – Rb0.5 trillion and Rb0.4 trillion, “Social policy” – Rb0.3 trillion and Rb0.05 trillion, respectively.

A peculiar feature of cash execution of the federal budget was the unprecedented volume of spending in December 2022, which amounted to nearly Rb7 trillion or 22.5% of annual expenditures (as compared with the average level of 17% in the previous few years). This is partly due to the transfer to 2022 of certain expenditures, which emerged in the course of consideration by the State Duma of the draft law on the federal budget for 2023–2025, i.e. a kind of early funding, which has not been observed in the practice of the federal budget’s cash execution before.

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1 Executive Order of the President of the Russian Federation “On National Development Goals of the Russian Federation for the period until 2030” of 21.07.2020 No. 474.

Table 10

Dynamic and structure of the federal budget expenditures in 2019–2022

	2019 (actual)		2020 (actual)		2021 (actual)		2022 (plan) <sup>1</sup>		2022 (actual)		Change, 2022 to 2021		
	Rb bn	% of GDP	Rb bn	% of GDP	Rb bn	% of GDP	Rb bn	% of GDP	Rb bn	% of GDP	Rb bn	p.p. of GDP	In real terms, %
<b>Expenditure total, including:</b>	<b>18214.5</b>	<b>16.6</b>	<b>22821.5</b>	<b>21.2</b>	<b>24762.0</b>	<b>18.3</b>	<b>24089.9</b>	<b>20.5</b>	<b>31119.0</b>	<b>20.5</b>	<b>6357.0</b>	<b>2.2</b>	<b>12.3</b>
Nationwide issues	1365.5	1.2	1507.7	1.4	1759.5	1.3	2026.4	1.4	2052.4	1.4	292.9	0.1	4.2
National defense	2997.4	2.7	3168.8	3.0	3573.6	2.6	3595.6	3.6	5512.2	3.6	1938.6	1.0	37.8
National security and law enforcement activity	2083.2	1.9	2226.6	2.1	2335.9	1.7	2818.0	1.7	2617.8	1.7	281.9	0.0	0.1
National economy	2827.1	2.6	3483.9	3.3	4356.6	3.2	3353.2	3.1	4685.9	3.1	329.3	-0.1	-3.9
Housing and community amenities	282.2	0.3	371.5	0.3	593.7	0.4	463.9	0.6	910.4	0.6	316.7	0.2	37.0
Environmental protection	197.6	0.2	260.6	0.2	405.1	0.4	482.3	0.2	308.7	0.2	-96.4	-0.2	-31.9
Education	826.5	0.8	956.9	0.9	1064.4	0.8	1268.7	0.9	1312.3	0.9	247.9	0.1	10.1
Culture, cinematography	122.4	0.1	144.5	0.1	146.7	0.1	187.3	0.1	213.6	0.1	66.9	0.0	30.1
Healthcare	713.0	0.6	1334.4	1.2	1473.9	1.1	1302.9	1.1	1728.0	1.1	254.1	0.0	4.7
Social policies	4882.8	4.4	6990.3	6.5	6675.8	4.9	5943.2	5.9	8973.6	5.9	2297.8	1.0	20.1
Physical culture and sports	81.4	0.1	75.3	0.1	70.9	0.1	82.5	0.1	84.9	0.1	14.0	0.0	7.0
Mass media	103.5	0.1	121.1	0.1	114.0	0.1	115.6	0.1	143.8	0.1	29.8	0.0	12.7
Government and municipal debt servicing	730.8	0.7	784.2	0.7	1084.2	0.8	1403.3	0.9	1330.8	0.9	246.6	0.1	9.7
Intergovernmental fiscal transfers	1003.1	0.9	1395.8	1.3	1107.7	0.8	1047.0	0.8	1244.3	0.8	136.6	0.0	0.4
<i>Reference:</i>													
<i>Volume of closed items of FB spending</i>	3018.2	2.7	3580.0	3.3	3752.2	2.9	3732.8	3.9	5961.9	3.9			
<i>Share of closed spending in the total volume of FB spending, %</i>	16.6		15.7		15.1				19.2				

Sources: Federal Treasury, own calculations.

1 Revised consolidated budget quarterly breakdown as of January 2022.

### ***Federal deficit and debt***

In 2022, the federal budget deficit amounted to Rb3.3 trillion or 2.2% of GDP, however, if we do not take into account the funds that were compensated to the state extra-budgetary funds as a result of the deferral of insurance contributions and will be reimbursed to the National Welfare Fund in 2023, the budget deficit was about 1.8% of GDP.

In 2022, the main sources of deficiency payments:

- operations with securities denominated in the currency of the Russian Federation for placement to the tune of Rb3.1 trillion and redemption – Rb1.6 trillion, the initially planned volumes being Rb3.2 trillion and Rb1.1 trillion. However, the suspension of OFZ auctions in the period from February to August inclusive did not prevent the RF Ministry of Finance from meeting the annual plan of placement;

- change in balances in the amount of Rb4.5 trillion as the balanced result of transactions related to receipts and expenditures of the federal budget, including assets of the National Welfare Fund.

The amount of funds allocated to redeem government securities denominated in foreign currency and accounted as external sources of financing of the federal budget deficit in 2022 constituted Rb201.7 bn, the original planned amount being Rb190.9 bn; no borrowings in foreign currency were made in 2022.

As a result, the volume of domestic public debt by the end of 2022 rose from Rb16.5 trillion (12.2% of GDP) to Rb18.8 trillion (12.4% of GDP), while the volume of foreign debt was reduced by \$2.3 bn to \$57.4 bn. According to the Russian Ministry of Finance, the volume of the National Welfare Fund has decreased from Rb13.6 trillion to Rb10.4 trillion over January – December 2022, that is, by almost a quarter.

In general, given the level of public debt, the size of sovereign assets in the NWF and the dynamics of the main parameters of the budget system of the Russian Federation, it can be recognized that the RF Ministry of Finance managed to relatively painlessly buy out budget risks, including through the use of previously created reserves. However, as the oil and gas revenues decline, this strategy can be effective only on the short-term horizon, and therefore to ensure the long-term stability of the federal budget, it will be necessary to use other mechanisms, including budget consolidation.

#### 1.2.3. Interbudgetary relations and subnational finances

##### ***Revenues of the consolidated budgets of the RF subjects***

The dynamics of main revenues to the consolidated budgets of the RF subjects in 2022 vs. 2021 is presented in the *Table 11*.

According to the data released by the Federal Treasury on regional budgets execution, total revenues to the RF subjects' consolidated budgets in 2022 increased in nominal terms by 12.1% on a year-on-year basis to Rb19.7 trillion. In real terms (CPI adjusted), revenues went up by 0.2 p.p. The regions' tax and

*Table 11*

**Revenues of the consolidated budgets of the constituent entities  
of the Russian Federation in 2022 compared to 2021**

Revenues of the consolidated budgets of RF subjects in 2022 against 2021	In current prices			In real prices, change
	Rb bn		increment, %	%
	2022	2021	2022 / 2021	2022 / 2021
<b>Revenues, total</b>	<b>19 676.9</b>	<b>17 546.3</b>	<b>12.1</b>	<b>0.2</b>
Including:				
<b>Tax-generated and non-tax revenues</b>	<b>15 432.8</b>	<b>13 651.8</b>	<b>13.0</b>	<b>1.0</b>
<i>Including tax-generated revenues:</i>	14 173.5	12 675.8	11.8	-0.1
Corporate income tax	4 686.5	4 529.3	3.5	-7.6
PIT	5 580.1	4 793.2	16.4	4.0
Excises	1 116.9	950.1	17.5	5.0
Total income tax	980.6	808.9	21.2	8.3
Property taxes	1 632.2	1 444.5	13.0	0.9
<i>Non-tax revenues</i>	<i>1 259.4</i>	<i>976.0</i>	<i>29.0</i>	<i>15.3</i>
<b>Fiscal transfers from budgets of other levels</b>	<b>3 921.3</b>	<b>3 676.4</b>	<b>6.7</b>	<b>-4.7</b>
<b>Other revenues</b>	<b>322.8</b>	<b>218.1</b>	<b>48.0</b>	<b>32.2</b>

Sources: Federal Treasury, own calculations.

non-tax revenues moved up both in nominal and real terms (by 13.0% and 1.0% respectively). It was personal income tax, whose receipts rose by Rb0.8 trillion (16.4% and 4.0%, respectively), which made the biggest contribution to the growth in tax revenues. One should also note the non-tax revenues hike by 29.0% and 15.3%. Profit tax revenues to regional budgets increased by 3.5% in nominal terms but dropped by 7.6% in real terms, which resulted both from a high base in 2021 and reduced results in some sectors in 2022. Intergovernmental fiscal transfers increased by 6.7%, but decreased by 4.7% in real terms as well. So, generally speaking, the positive dynamics of consolidated budgets revenues of the subjects of the Russian Federation in 2022 was due to growth in their own tax and non-tax revenues.

In 2022, the biggest increase in consolidated budget revenues in nominal terms was shown by the Sakhalin region (+51.0%), Yamal-Nenets autonomous national area (+37.8%), the city of St. Petersburg (+37.7%), the Republic of Crimea (+30.1%) and Kemerovo region – Kuzbass (+29.2%). All of the above regions saw an increase in revenues mainly from corporate income tax. It should be noted that the Republic of Ingushetia, whose budget revenues went up by 22.8% thanks to an almost two-fold rise in personal income tax revenues.

The decline in consolidated budget revenues in nominal terms in 2022 vs. 2021 was noted in 12 subjects of the Russian Federation, including the Lipetsk region (-12.8%), the Belgorod Region (-9.4%), the Murmansk region (-9.2%), the Magadan region (-6.5%), the Chelyabinsk region (-6.2%), the Vologda region (-5.8%), the Krasnoyarsk region (-4.3%), the Jewish autonomous region (-3.0%) and the Kaliningrad region (-2.7%). In a number of cases, the decline in revenues

can be explained by the effect of international sanctions on export products and transit. The maximum reduction in corporate income tax revenues occurred in the Lipetsk region (-53.3%), as well as in bordering Belgorod and Kursk regions (-45.2% and -46.3%, respectively).

Thus, the dynamic of regional budgets' own revenues in 2022 is generally positive. However, in some regions (those bordering Ukraine, export-oriented for non-hydrocarbon supplies, specializing in international transit) there was a greater impact of the geopolitical crisis on budget revenues.

### ***Expenditures of the consolidated budgets of RF subjects***

The movement of the main indicators of the volume and structure of expenditures of the consolidated budgets of the RF subjects in 2022 is presented in the *Table 12*.

*Table 12*

### **Expenses of the consolidated budgets of the constituent entities of the Russian Federation**

	In nominal terms, Rb bn		Nominal growth, %	Real growth (CPI adjusted), %	Spending structure, % to total		Share change in structure, %
	2022	2021	2022 / 2021	2022 / 2021	2022	2021	2022 / 2021
<b>Expenditures, total</b>	<b>19 626.3</b>	<b>16 885.6</b>	<b>16.2</b>	<b>3.8</b>	<b>100</b>	<b>100</b>	<b>–</b>
Nationwide issues	1 117.7	966.7	15.6	3.3	5.7	5.7	0.0
National security and law enforcement activity	245.0	170.0	44.1	28.7	1.2	1.0	0.2
National economy Including:	4 491.4	3 523.1	27.5	13.9	22.9	20.9	2.0
<i>Agriculture and fisheries</i>	<i>308.3</i>	<i>284.8</i>	<i>8.2</i>	<i>-3.3</i>	<i>1.6</i>	<i>1.7</i>	<i>-0.1</i>
<i>Transportation</i>	<i>1 093.5</i>	<i>891.9</i>	<i>22.6</i>	<i>9.5</i>	<i>5.6</i>	<i>5.3</i>	<i>0.3</i>
<i>Motor road system (road funds)</i>	<i>2 047.1</i>	<i>1 571.4</i>	<i>30.3</i>	<i>16.4</i>	<i>10.4</i>	<i>9.3</i>	<i>1.1</i>
<i>Other national economy issues</i>	<i>1 042.6</i>	<i>775.0</i>	<i>34.5</i>	<i>20.2</i>	<i>5.3</i>	<i>4.6</i>	<i>0.7</i>
Housing and community amenities	2 035.7	1 687.6	20.6	7.8	10.4	10.0	0.4
Environmental protection	154.1	71.5	115.5	92.5	0.8	0.4	0.4
Education Including:	4 532.6	3 897.6	16.3	3.9	23.1	23.1	0.0
<i>Preschool education</i>	<i>1 125.9</i>	<i>1 026.8</i>	<i>9.6</i>	<i>-2.0</i>	<i>5.7</i>	<i>6.1</i>	<i>-0.3</i>
<i>General education</i>	<i>2 408.7</i>	<i>1 996.2</i>	<i>20.7</i>	<i>7.8</i>	<i>12.3</i>	<i>11.8</i>	<i>0.5</i>
<i>Additional education of children</i>	<i>300.3</i>	<i>276.4</i>	<i>8.6</i>	<i>-3.0</i>	<i>1.5</i>	<i>1.6</i>	<i>-0.1</i>
<i>Secondary vocational education</i>	<i>310.1</i>	<i>268.7</i>	<i>15.4</i>	<i>3.1</i>	<i>1.6</i>	<i>1.6</i>	<i>0.0</i>
<i>Other education issues</i>	<i>387.7</i>	<i>329.4</i>	<i>17.7</i>	<i>5.1</i>	<i>2.0</i>	<i>2.0</i>	<i>0.0</i>
Culture, cinematography	620.1	531.9	16.6	4.1	3.2	3.2	0.0

	In nominal terms, Rb bn		Nominal growth, %	Real growth (CPI adjusted), %	Spending structure, % to total		Share change in structure, %
	2022	2021	2022 / 2021	2022 / 2021	2022	2021	2022 / 2021
Health care	1 952.1	2 027.3	-3.7	-14.0	9.9	12.0	-2.1
Social policies	3 776.0	445.0	9.6	-2.1	19.2	20.4	-1.2
Physical culture and sports	500.4	398.8	25.5	12.1	2.5	2.4	0.2
Mass media	59.3	57.4	3.2	-7.8	0.3	0.3	0.0
Government and municipal debt servicing	82.9	102.2	-18.9	-27.5	0.4	0.6	-0.2

Sources: Federal Treasury, own calculations.

Expenditures of consolidated budgets of the RF subjects in 2022 increased in nominal terms by 16.2% relative to the level of 2021 (a 3.8% increase with inflation adjusted) and reached Rb19.6 trillion. Thus, expenditures grew faster than revenues.

In nominal terms, there was an increase in spending in all areas, with the exception of health care and debt service. Spending on health care fell in 2022 from the previous year by 3.7% in nominal terms and by 14.0% in real terms. This trend can be attributed to the scaling back of measures aimed at combating coronavirus pandemic. State and municipal debt service costs declined by 18.9%, which was due to the reduction of commercial debt, which in turn was a consequence of substitution of bank loans with cheaper budget loans in terms of service. Expenditures of regions in the field of national security and law enforcement (+44.1%), environmental protection (+115.5%) and national economy (+27.5%) grew the most. Consolidated budgets expenditures of the subjects of the Russian Federation on the national economy increased by Rb1 trillion in 2022 and contributed most to the nominal growth in total expenditures. Meanwhile, expenditures on preschool education (-2.0%), additional education for children (-3.0%) and social policy (-2.1%) were down in real terms.

Major changes in the structure of expenditures in 2022 were associated with an increase in the share of spending on the national economy from 20.9% to 22.9%, as well as a decrease in the share of health care from 12.0% to 9.9% and social policy from 20.4% to 19.2%. Thus, in 2022, there is a slight shift in the structure of expenditures towards measures to support the economy.

Analysis of the dynamics of budget expenditures by region shows that only one region, the Udmurt Republic (-0.3%), saw a decline in nominal expenditures in 2022. Tatarstan (+32.5%), Yamal-Nenets autonomous national area (+31.9%) and St. Petersburg (+30.8%) demonstrated the biggest growth in expenditures. In these regions, the growth in expenditures was possible due to high growth rates of budget revenues. Significant growth in expenditures was also observed in regions hit hardest by the geopolitical crisis (the Belgorod region – by 29.6%, the Kursk region – by 21.4%), which combined with a drop in revenues resulted in significant budget deficits in these regions and resulted in additional financial assistance from the federal center.

***Federal budget financial assistance<sup>1</sup>***

The amount of transfers to the regions in 2022 increased by 8.8% in nominal terms, and decreased by -2.8% in real terms (*Table 13*). Subsidies grew most significantly (+39.8% in nominal terms, or +24.9% in real terms), and the largest reduction was for other intergovernmental fiscal transfers (-19.5% and -28.1%, respectively). Total amount of grants increased in nominal terms (+10.6%) and decreased in real terms (-1.2%), while grants for fiscal capacity increase were down noticeably in real terms (-5.7%) and grants for ensuring balanced growth (+9.3%). Around 35% of subsidies to ensure fiscal balance were allocated to support new regions. As a result, the share of untargeted financial assistance (grants) increased by 0.5 p.p. vs. 2021, constituting only 28.7% of the total amount of fiscal transfers to regions, which is the second lowest value over the period 2000 through 2022.

*Table 13*

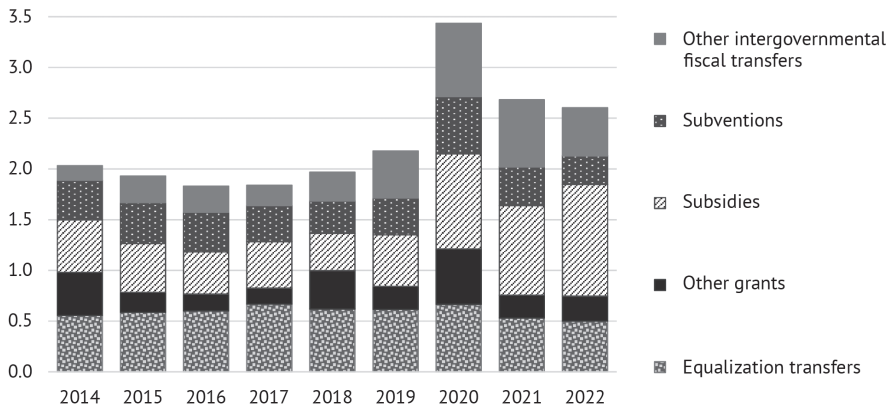
**Federal budget fiscal transfers to the budgets of subjects of the Russian Federation**

	2020		2021		2022		Increment in 2022 on 2021	
	Rb bn	% to total	Rb bn	% to total	Rb bn	% to total	nominal, %	real, %
<b>Transfers to regions, total</b>	<b>3 698.4</b>	<b>100.0</b>	<b>3 627.2</b>	<b>100.0</b>	<b>3 944.9</b>	<b>100.0</b>	<b>8.8</b>	<b>-2.8</b>
<b>Grants</b>	<b>1 303.7</b>	<b>35.2</b>	<b>1 021.9</b>	<b>28.2</b>	<b>1 130.3</b>	<b>28.7</b>	<b>10.6</b>	<b>-1.2</b>
Including:								
Equalization transfers	717.9	19.4	718.3	19.8	758.6	19.2	5.6	-5.7
To support measures designed to ensure fiscal balance	569.6	15.4	257.6	7.1	315.2	8.0	22.4	9.3
<b>Subsidies</b>	<b>1 011.5</b>	<b>27.4</b>	<b>1 193.0</b>	<b>32.9</b>	<b>1 668.3</b>	<b>42.3</b>	<b>39.8</b>	<b>24.9</b>
Including:								
To sustain national economy's development	214.0	5.8	150.6	4.2	327.5	8.3	117.5	94.3
<b>Subventions</b>	<b>606.2</b>	<b>16.4</b>	<b>519.6</b>	<b>14.3</b>	<b>427.5</b>	<b>10.8</b>	<b>-17.7</b>	<b>-26.5</b>
<b>Other interbudgetary fiscal transfers</b>	<b>777.0</b>	<b>21.0</b>	<b>892.8</b>	<b>24.6</b>	<b>718.8</b>	<b>18.2</b>	<b>-19.5</b>	<b>-28.1</b>
Including:								
for development of national economy	329.4	8.9	394.2	10.9	392.0	9.9	-0.6	-11.2

Sources: Federal Treasury, Rosstat, own calculations.

1 According to preliminary data on the execution of the federal budget and consolidated budgets of 85 subjects of the Russian Federation in 2022.





*Fig. 12.* Intergovernmental fiscal transfers to regions from the federal budget, % of GDP

*Sources:* Finance Ministry of Russia, Rosstat, own calculations.

As a share of GDP, the total volume of fiscal transfers from the federal budget to the regions decreased from 2.7% to 2.6%, but remains significant<sup>1</sup> as compared to 2014–2019 (*Fig. 12*). The volume of certain types of intergovernmental fiscal transfers changed markedly over the period 2014–2022. Thus, in 2022, the volume of equalization grants reached its minimum (0.5% of GDP); the volume of other grants in 2022 is significantly lower than in 2020, which is explained by a return to the use of budget loans as an anti-crisis interbudgetary instrument instead of grants for balancing. In addition, there was a substantial increase in subsidies between 2019 and 2022, which peaked at 1.1% of GDP in 2022. In the same years, there was a significant increase in the volume of other intergovernmental fiscal transfers, but there is a noticeable tendency for its gradual reduction. The volume of subventions in 2022 reached the minimum for the period 2014–2022, amounting to 0.28% of GDP.

In 2022, 35 subventions were originated,<sup>2</sup> one less than a year earlier. The volume of subventions also decreased (-17.7% in nominal terms, or -26.5% in real terms).

The nominal increase in subsidies in 2022 came to 39.8%, with subsidies for the national economy increasing by 117.5%. The number of subsidies went up substantially: from 148 in 2021 to 180 in 2022 (140 in 2020). For other intergovernmental fiscal transfers, a 19.5% reduction in their nominal size was accompanied by a 19.5% increase in the number of transfers (from 153 to 161).

<sup>1</sup> However, the base effect should be taken into account, as real GDP declined in 2015, 2020, and 2022, which gives overestimates of the volume of transfers as a share of GDP.

<sup>2</sup> The number of transfers is determined by the number of unique areas of expenditures (the 13th–16th digits of the budget expenditure classification code) provided for in the report on the execution of the federal budget.

In general, subsidies and other intergovernmental fiscal transfers in 2022, compared to 2021, were characterized by a general growth in their real amount (+2.24%), a reorientation towards using subsidies as the main instrument (the share of subsidies in total subsidies and other intergovernmental fiscal transfers moved up from 57 to 70%) and a stronger targeting nature of financial assistance (the number of transfers increased by 40). These changes are caused by the need to provide targeted support to the regions in 2022.

As before, a substantial amount of transfers in 2022 was earmarked for the implementation of national projects at the regional and municipal levels: 45% of the amount of grants (36% in 2021), 38% of subventions (29% in 2021), 32% of other intergovernmental fiscal transfers (31% in 2021), and 29% of the total amount of transfers from the federal budget to the regions (21% in 2021). Thus, targeted financial assistance is tied, to a greater extent, to priorities of socio-economic development. Excluding transfers for national projects, the structure of financial assistance in 2022 is as follows: grants – 40.3%, subsidies – 32.9%, subventions – 9.4%, other intergovernmental fiscal transfers – 17.5%.

Interregional differentiation of average per capita tax revenues estimated through the coefficient of variation, increased in 2022 (*Table 14*). At the same time, equalization transfers in 2022 were slightly less effective than in the previous year: if in 2021, after equalization, differentiation decreased by 21.8%, then in 2022 – by 19.6%. The overall equalizing effect of grants and subsidies also declined insignificantly, from 39.7% in 2022 to 41.0% in 2021.

*Table 14*

**The variance coefficient of the consolidated regional budgets revenues (per capita, with due regard for the budget expenditure index)**

Year	Tax-generated revenue	Tax-generated revenue and equalization transfers	Tax-generated revenue, transfers, grants, subsidies
2014	0.590	0.512	0.499
2015	0.661	0.603	0.560
2016	0.556	0.421	0.373
2017	0.558	0.413	0.377
2018	0.586	0.444	0.387
2019	0.603	0.464	0.390
2020	0.561	0.420	0.308
2021	0.560	0.438	0.330
2022	0.607	0.488	0.366

Sources: Finance Ministry of Russia, Federal Treasury, own calculations.

***Deficit and regional debt***

In 2022, the consolidated budgets of the subjects of the Russian Federation<sup>1</sup> were executed with a surplus of Rb39.5 bn (in 2021 – with a surplus of

<sup>1</sup> According to preliminary data on the execution of the federal budget and consolidated budgets of 85 subjects of the Russian Federation in 2022.

Rb660.6 bn). At the same time, the number of regions with a budget surplus declined from 66 to 35 as compared to 2021 (*Table 15*). In 2022, the deficit of the consolidated budget in 12 regions exceeded 10% of tax and non-tax revenues (in 2021 – in 3 regions). Thus, the balance of consolidated regional budgets over 2022 somewhat worsened.

*Table 15*

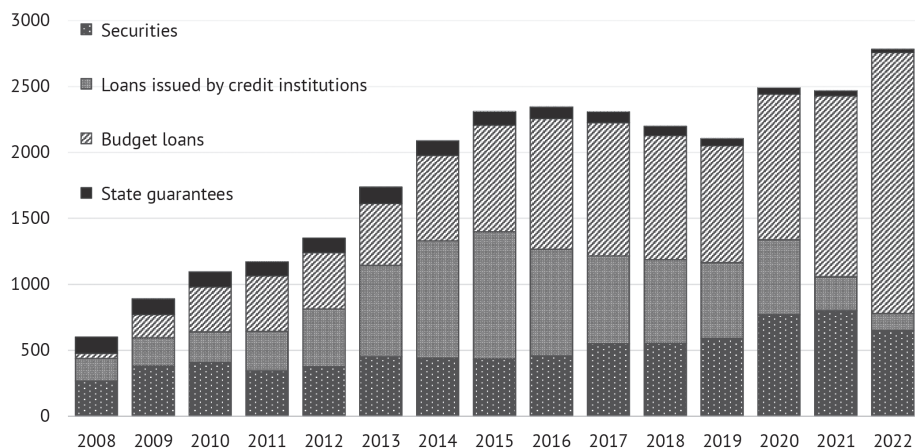
**Execution (deficit/surplus) of the consolidated budgets of the Russian Federation in 2014–2022**

Year	Number of RF subjects that have executed the budget	
	With deficit	With surplus
2014	74	11
2015	76	9
2016	56	29
2017	47	38
2018	15	70
2019	35	50
2020	57	28
2021	19	66
2022	50	35

Sources: Federal Treasury, own calculations.

The amount of government debt of the subjects of the Russian Federation by the year 2022 increased from Rb2.47 trillion to Rb2.79 trillion, but even slightly decreased in relation to the volume of tax and non-tax revenues of the budgets of the subjects of the Russian Federation: from 21.0% to 20.9%. The debt load on the budgets of some regions changed in 2022: the ratio of debt to tax and non-tax revenues decreased in 36 regions during the year, remained unchanged in one region, and increased in 48 regions. Debt load grew by more than 10 p.p. in eight regions. Five regions saw both significant growth in their debt burdens and high deficits of their consolidated budgets. Twenty-five regions had a high debt load (over 50%) (vs. 23 regions in 2021), while one had a super-high debt load (over 100%) (also one region in 2021). A high level of both debt burden and budget deficit was noted in three regions.

The structure of government debt has changed significantly: the share of budget loans in 2022 increased by 15.6 p.p. and accounted for 71.0% (the maximum value over the period of 2008–2022), while the share of loans from credit institutions decreased to 4.5% (the minimal value over the period of 2008–2022) (*Fig. 13*). The increment of budget loans in the structure of regional debt during 2022 amounted to Rb608 bn (+44.4%), and the reduction of loans from credit institutions amounted to Rb131 bn (-51.0%). The debt in the form of securities of the RF subjects also decreased markedly – by Rb148 bn (-18.5%). The changes in the structure of the regional public debt were caused by the implementation of the federal policy of substituting “market” debt of the regions with budget loans



*Fig. 13.* Nominal volume (Rb bn) and structure (%) of public debt of RF subjects in 2008–2022

Sources: Finance Ministry of Russia, own calculations.

at 0.1% annual interest rate (Rb386.4 bn were allocated from the federal budget for that purpose), which significantly reduced the debt service costs and thereby improved the balance of regional budgets. Moreover, federal budget loans in the amount of Rb250 bn were allocated to finance infrastructure projects, i.e. the growth in the volume of debt and the share of budget loans was conditioned not only by implementation of measures aimed at budget balancing, but also by investment support to regional economies.

Thus, by the end of 2022, the surplus of consolidated regional budgets declined and the volume of regional public debt increased. meanwhile, the growth of tax revenues and federal inter-budget policy, including the replacement of regional “market” debt with budget loans, allowed to reduce the debt burden on regional budgets.

## Section 2. Financial markets and financial institutions

### 2.1. Russian financial market<sup>1</sup>

#### 2.1.1. Trends in the global financial market

The year 2022 was one of the most difficult periods for the global financial market in many years. Due to a unique combination of adverse economic and geopolitical factors, investments in almost all assets, with few exceptions, had negative returns in 2022. Even investment assets such as government securities, precious metals, real estate and cryptocurrency failed to perform their functions of hedging investor returns against losses. In January-February 2023, many financial assets began to show positive returns again, however, this trend gradually slowed down under the influence of the same factors that negatively affected the financial market in 2022.

Rapid growth of interest rates offered by central banks of developed countries amid high inflation, slowdown of the Chinese economy due to specifics of its strategy to combat COVID-2019 and financial crisis in the real estate market, introduction of restrictions in trade relations between the United States and China resulted in significant changes in the structure of global value chains and growth of prices for certain commodities were the reasons for the simultaneous decline of investment asset markets in 2022 and their volatility in early 2023.

The unprecedented rise in U.S. inflation in the last 40 years between 2021 and 2022<sup>2</sup> has resulted in the FRS being forced to sharply raise federal funds interest rates in 2022 at a pace comparable only to the early 1980s. The U.S. inflation,

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2 The Economist (2022). Five financial trends that 2022 killed. December, 21 on-line.

according to the Consumer Price Index (CPI),<sup>1</sup> accounting for 1.4% in December 2020, peaked at 9.1% in June 2022. The FRS federal funds rate rose from 0–0.25% at the beginning of 2022 to 4.50–4.75% per annum in February 2023, allowing to slowdown inflation to 6.5% at the yearend 2022 and 6.4 in January 2023. In the EU, the inflation rate (CPI) rose from -0.3% in December 2020 to 10.6% in October 2022 with a further decline to 9.2% in December 2022 and 8.5% in February 2023. The European Central Bank raised deposit and refinancing interest rates in 2022 from -0.50–0% in early 2022 to 2.5–3.00% in February 2023, respectively.

Rapid growth of interest rates in developed countries caused fears of their economies sliding into recession and global falling demand for commodities. Moreover, the accelerated growth of the FRS rates in the U.S. in 2022 caused the dollar to strengthen against other currencies, which resulted in an outflow of foreign investment from emerging markets accompanied by a respective reduction in the value of companies' shares in these markets. One of the most severe risks of a rapid rate hike is the growth of systemic and liquidity risks in the financial system due to the depreciation of bonds in the portfolios of banks and institutional investors. Indeed, this was the risk that has materialized from March 10, 2023 in the insolvent major Silicon Valley Bank, which failed to cope with a massive outflow of deposits due to insufficient liquid assets and loss of value of government bonds in its portfolio.<sup>2</sup> The suspension of this bank led to a chain of insolvency of several smaller banks and a massive sale of shares of bank issuers.

In H2 2022, there was a slowdown in inflation in the U.S. and the EC, and the growth of interest rates by FRS and ECB also slowed down. This gave rise to optimism in the behavior of global investors in the market and hope that in 2023 inflation will continue to decline, interest rates will stop growing, and economies of developed countries will not fall into recession.

Opening of the Chinese economy amid lifting of restrictions of the zero-tolerance policy for COVID-2019 also inspired optimism. This caused growth of stock indices and bond prices not only in the U.S. and EU countries, but also in other regions of the world. However, in February 2023 it became clear that China's economic recovery is not going fast, in the U.S. the rate of inflation is slowing, developed economies continue to increase employment, household demand in the market remains high.<sup>3</sup> The U.S. FRS officials assumed that interest rates will continue to rise in 2023.<sup>4</sup> Hence, growth of the stock market in February slowed down significantly, but did not stop completely.

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1 Hereinafter, the CPI data calculated as the ratio of the value of a fixed list of goods and services in the prices of the reporting month vs its value in the prices of the same month of the previous year

2 *Eisen B., Ackerman A.* (2023). Where Were the Regulators as SVB Crashed? // The Wall Street Journal on-line. 11 March. URL: <https://www.wsj.com/articles/where-were-the-regulators-as-svb-crashed-35827e1a>

3 *William Watts W.* (2023). The 2023 stock market rally looks wobbly. What's next as investors prepare for longer inflation fight // MarketWatch on-line. 26 February. URL: <https://www.marketwatch.com/story/the-2023-stock-market-rally-looks-wobbly-whats-next-as-investors-come-to-grips-with-a-further-rise-in-interest-rates-bdb3e1a3?mod=home-page>

4 By *Nick Timiraos N.* (2023). Jerome Powell Says Fed Is Prepared to Speed Up Interest-Rate Rises // The Wall Street Journal on-line. 7 March 7. URL: [https://www.wsj.com/articles/jerome-powell-to-testify-to-congress-on-outlook-for-rates-inflation-e4e7f1e3?mod=hp\\_lead\\_pos5](https://www.wsj.com/articles/jerome-powell-to-testify-to-congress-on-outlook-for-rates-inflation-e4e7f1e3?mod=hp_lead_pos5)

Over a 10-year time horizon from 2013–2022, of the 35 types of financial strategies in equity and alternative asset markets in developed world, the highest average annual returns came from the speculative strategy of playing up the NASDAQ-100 index at 32.1% annually, investing in broad index technology stocks (17.2%), NASDAQ-100 index stocks (16.2%), medical and health care stocks (14.8%) and broad portfolio dividend stocks of American companies (13.7%) (*Table 1, Fig. 1*). Investments in speculative strategies with a bet on the VIX index change at -77.7% per annum and a play on the decline of the NASDAQ-100 index -50.6% showed the worst returns on the same time horizon, as well as investments in the S&P commodities index at -4.3% per annum, the gold exchange fund (DLD) – 0.46% and bitcoin – 2.8%.<sup>1</sup>

In 2022, only 4 portfolios out of 38 assets yielded positive returns (*Table 1, Fig. 2*). This means that in the global market of developed-country stocks and alternative assets last year there were virtually no assets capable of protecting investors from the risks of central bank rate hikes, recession and growing geopolitical tension.

*Table 1*

**Dollar yield on popular equity and alternative asset portfolios in the global marketplace from 2013–2022 (% p.a.) and from early 2023 to February 28, 2023 (%)**

	Investment strategies	Benchmarks: Morningstar indices and exchange-traded funds (ETFs)	Returns %		
			2013–2022	2022	Since the beginning of the year on February 28, 2023
<b>Global market</b>					
1	Broad U.S. stock market	Morningstar Global Markets	8.47	-17.91	4.26
2	Stocks of companies of developed countries	Morningstar Developed Markets	9.33	-17.9	4.72
3	Stocks of companies of developed countries except U.S.	Morningstar Developed Markets ex-US	5.25	-14.79	5.40
4	Stocks of fintech companies	Morningstar Global Fintech Innovation		-43.15	5.84
5	Dividend stocks – broad diversification	Schwab U.S. Dividend Equity ETF (SCHD)	13.73	-3.23	-1.31
<b>U.S.</b>					
6	Broad U.S. stock market	Morningstar US Market	12.17	-19.49	4.37
7	S&P 500 stocks	Vanguard S&P 500 ETF (VOO)	12.52	-18.19	3.63
8	NASDAQ-100 stocks	Invesco <u>QQQ</u> Trust (QQQ)	16.20	-32.58	10.24
9	Value stocks	Morningstar US Value	10.64	-0.72	1.21

<sup>1</sup> The average annual return on bitcoins is calculated for 5 years – from 2018 to 2022.

**RUSSIAN ECONOMY IN 2022**  
trends and outlooks

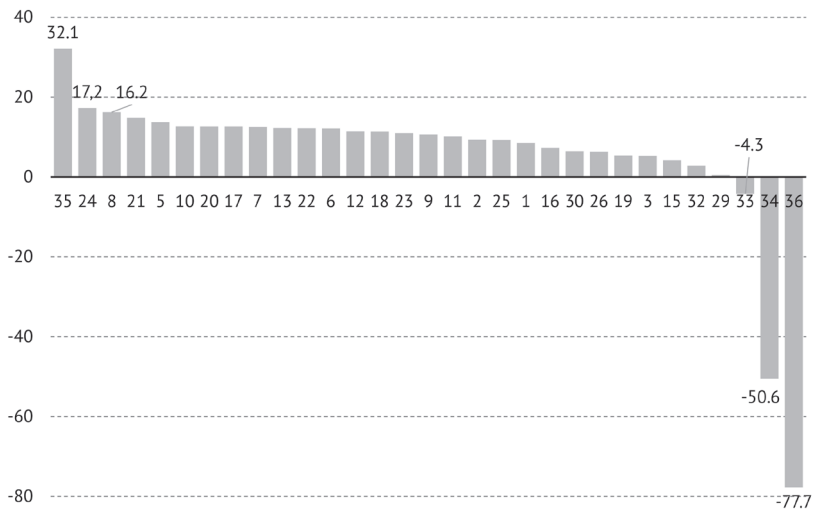
	Investment strategies	Benchmarks: Morningstar indices and exchange-traded funds (ETFs)	Returns %		
			2013–2022	2022	Since the beginning of the year on February 28, 2023
10	Growth stocks	Morningstar US Growth	12.65	-36.7	9.91
11	Small companies stocks	Vanguard Small-Cap ETF (VB)	10.11	-17.50	7.62
12	Dividend stocks	Morningstar US High Dividend Yield	11.39	-1.00	-0.78
13	ESG-companies stocks	Morningstar US Sustainability	12.26	-18.9	4.11
14	Portfolios compiled using AI	QRAFT AI-Enhanced US Large Cap Mmntm ETF (AMOM)		-26.3	4.45
15	Portfolios compiled using AI	AI Powered Equity ETF (AIEQ)	4.19*	-31.9	7.21
<b>U.S. economic sectors</b>					
16	TV and communications	Morningstar US Communication Services	7.27	-40.94	8.91
17	Cyclic sector of consumer goods	Morningstar US Consumer Cyclical Sector	12.62	-35.52	13.14
18	Countercyclical sector of consumer goods	Morningstar US Consumer Defensive Sector	11.34	-2.61	-2.08
19	Energy	Morningstar US Energy	5,33	62,5	-4,23
20	Financial services	Morningstar US Financial Services Sector	12.63	-12.34	5.1
21	Medicine and healthcare	Morningstar US Healthcare Sector	14.76	-5.18	-5.73
22	Manufacturing industry	Morningstar US Industrials Sector	12.21	-8.08	4.19
23	Utilities	Morningstar US Utilities Sector	10.97	1.65	-7.28
24	Technological sector	Morningstar US Technology Sector	17.23	-31.55	11.33
25	Basic materials sector	Morningstar US Basic Materials Sector	9.27	-11.41	6.96
26	Real estate transactions	Morningstar US Real Estate Sector	6.29	-25.55	3.42
27	Stock investments in AI companies	Global X Robotics & Artificial Intelligence ETF (BOTZ)		-42.69	14.55
28	Stock investments in AI companies	Robo Global Artificial Intelligence ETF (THNQ)		-39.84	16.77
<b>Alternative assets</b>					
29	Gold	SPDR® Gold Shares (GLD)	0.46	-0.77	0.08
30	Real estate	Vanguard Real Estate ETF (VNQ)	6.41	-26.24	3.93
31	Cryptocurrency	ProShares Bitcoin Strategy ETF (BITO)		-63.91	39.94



	Investment strategies	Benchmarks: Morningstar indices and exchange-traded funds (ETFs)	Returns %		
			2013–2022	2022	Since the beginning of the year on February 28, 2023
32	Cryptocurrency	S&P Bitcoin Index	2.83*	-63.89	40.54
33	S&P Commodity Index	iShares S&P GSCI Commodity-Indexed Trust (GSG)	-4.25	24.08	-4.33
<b>Popular speculative strategies</b>					
34	Down play of NASDAQ-100 stocks	ProShares UltraPro Short QQQ ETF (SQQQ)	-50.57	82.36	-27.55
35	Playing for the rise of NASDAQ-100 stocks	ProShares UltraPro QQQ ETF (TQQQ)	32.09	-79.08	27.92
36	Betting on changes in the VIX index	ProShares Ultra VIX (UVXY)	-77.3	-44.81	-27.26
37	Stocks popular in social media	VanEck Social Sentiment ETF (BUZZ)		-47.67	16.83
38	Fund with covered options (hedging by selling call options)	JPMorgan Equity Premium Income ETF (JEPI)		-3.52	-0.49

\* on the average for 2018–2022.

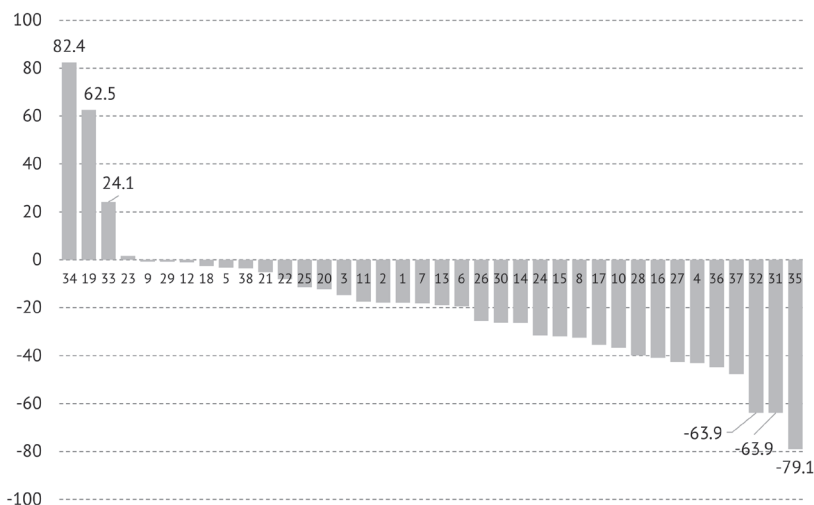
Sources: own calculations based on statistics of the Morningstar information resource and The Wall Street Journal statistics.



**Note.** Name of the investment strategy marked on the graph as a number, is shown in *Table 1* with the corresponding sequence number in column 1.

*Fig. 1.* Average annual nominal return on global equity market strategies in 2013–2022, % p.a.

Sources: own calculations based on statistics of the Morningstar information resource and The Wall Street Journal statistics.



**Note.** Name of the investment strategy marked on the graph as a number, is shown in *Table 1* with the corresponding sequence number in column 1.

*Fig. 2. Nominal profitability of global market strategies shares in 2022, % per annum*

*Sources:* own calculations based on statistics of the Morningstar information resource and The Wall Street Journal statistics.

The portfolio with the speculative downside strategy of the NASDAQ-100 index had the highest return of 82.4% annually, followed by investments in energy stocks (62.5%), a portfolio of commodity assets from the S&P index (24.1%) and shares of companies in the utility sector of the economy (1.6%). Minimal losses were attributed to value stock investments (-0.7%) and the gold exchange-traded fund (-0.8%). As can be noted, many of the strategies that showed the worst average annual returns from 2013-2022 were the top performers in 2022.

The worst returns in 2022 showed a speculative strategy of playing for the rise of the index NASDAQ-100 (-79.1%), investing in a cryptocurrency exchange fund ProShares Bitcoin Strategy ETF (BITO) and in bitcoin index S&P (-63.9% each), in shares of companies popular in social media, exchange-traded fund VanEck Social Sentiment ETF (BUZZ) (-47.7%), a speculative strategy of betting on changes VIX (-44.8%) and in portfolio of shares of those companies working in the field of artificial intelligence (-42.7%).

As of February 28, 2023, investments in cryptocurrency (40.5%), upside strategy in the NASDAQ-100 index (27.9%), popular social media stocks (16.8%), artificial intelligence stocks (14.6%), cyclical consumer goods stocks (13.1%) and technology stocks (11.3%) showed the highest returns for the two months of 2023.

Most of these strategies were the most unprofitable in 2022, thus there was a more rapid recovery of these stocks in early 2023.

The year 2022 was the most challenging for the global bond market, as the rapid growth of rates by central banks of developed countries caused an increase in the yields of bond issues, entailing a reduction in the market value in investors' portfolios. However, when interest rates rise, the yields of bonds with longer duration drop most significantly. According to J.P. Morgan Asset Management experts estimates, as of September 30, 2022, 1% p.p. growth in the interest rate results in a 4.2 p.p. decline in the value of 10-year U.S. government bonds.<sup>1</sup> According to the Bank of America estimates, the year 2022 was the worst for the bonds market given the returns of the bond portfolios in the history of this market after 1788<sup>2</sup>, caused first of all by rapid growth of the FRS interest rates this year. Due to a rare simultaneous decline in stock and bond prices in 2022, the 60% stock/40% bond strategy, popular with the largest conservative institutional investors in the U.S., suffered significant losses. The economist Jason Zweig of the WSJ estimates that the 60/40 strategy's 2022 return in the U.S. market was the worst since 1974.<sup>3</sup>

As *Table 2* and *Fig. 3* show, in 2013–2022, only 11 portfolios or only 30% out of 37 strategies popular in the global bond market, delivered negative average annual returns. The most profitable investments over the 10-year time horizon were in high-yield U.S. bonds at 4.0% per annum, investments in “Fallen Angels” bonds<sup>4</sup> (3.1%), emerging market infrastructure bonds (2.3%), U.S. corporate bonds with 5–10 year duration, emerging market corporate bonds (2.0%) and U.S. municipal bonds (1.9%). The following strategies yielded the lowest returns in the bond market: Japanese government bonds (3.4% per annum), UK government bonds (2.6%), the broad bond portfolio of UK issuers (-2.3%), Eurozone government bonds (-1.2%) and Eurozone corporate bonds (-1.5%).

In 2022, when interest rates of central banks of developed countries dropped, all 37 bond strategies recorded investors' losses (*Table 1, Fig. 4*). The following strategies had the smallest losses: U.S. broad market bonds with a duration of 1–3 years (-3.9% per annum), U.S. mortgage bonds (-4.4%), U.S. government bonds with a duration of 1–5 years (-5.4%), U.S. corporate bonds with a duration of 1–5 years (-6.2%), and U.S. municipal bonds (-7.3%).

In contrast, holders of government bonds, broad bond portfolios and corporate bonds in the UK suffered the biggest losses (at -33.4%, -32.0%, and -29.5% p.a., respectively). This was followed by investments in government and broad bond portfolios in the eurozone (-23.2% and -22.4%) and investments in inflation-indexed US government bonds (-23.0%).

1 J.P. Morgan. Asset Management. Guide to the Markets. 4Q 2022. 30 September 2022. URL: <https://am.jpmorgan.com/us/en/asset-management/adv/insights/market-insights/guide-to-the-markets/>

2 Kollmeyer B. (2022). 250 years of history is telling investors to bet on Treasury bonds in 2023, Bank of America says // MarketWatch on-line. 29 October. URL: <https://www.marketwatch.com/story/250-years-of-history-is-telling-investors-to-bet-on-treasury-bonds-in-2023-bank-of-america-says-11666958942?mod=home-page>

3 Zweig J. (2022). How to Make Peace With Your Stock Market Losses // The Wall Street Journal on-line. 7 October. URL: [https://www.wsj.com/articles/selling-stock-in-down-market-11665153733?mod=wsjhp\\_columnists\\_pos1](https://www.wsj.com/articles/selling-stock-in-down-market-11665153733?mod=wsjhp_columnists_pos1)

4 Companies with the lowest investment credit ranking. Their average yield embraces 2018–2022.

Investments in high-yield bonds in the United States and eurozone countries (at 2.6% and 2.4%, respectively), fallen angel bonds in the United States (2.0%), broad market bonds of Chinese issuers (1.6%) and high-yield bonds of emerging stock market companies (1.0%) demonstrated the highest returns in the first two months of 2023.

*Table 2*

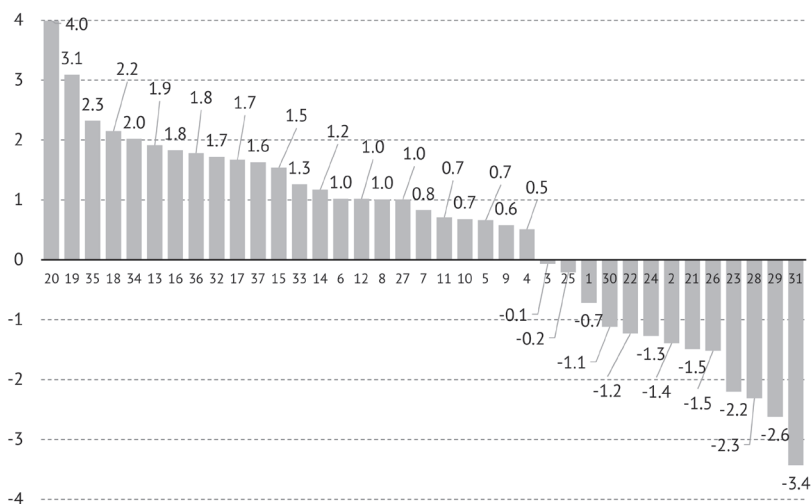
**Dollar yields of popular bond portfolios in the global market from 2013–2022 (% p.a.) and from the beginning of 2023 to February 28, 2023 (%)**

	Investment strategies	Benchmarks: Morningstar indices and exchange-traded funds (ETFs)	Returns, %		
			2013–2022	2022	Since the beginning of the year on February 28, 2023
<b>Global market</b>					
1	Broad bonds market	Morningstar Global Core Bond	-0.72	-17.31	-0.32
2	Government bonds	Morningstar Global Treasury Bond	-1.39	-18.64	-0.75
3	Government bonds indexed for inflation	Morningstar Global Treasury Inflation-Linked Securities	-0.07	-23.03	-0.10
4	Corporate bonds	Morningstar Global Corporate Bond	0.51	-17.34	0.44
5	Infrastructure bonds	Morningstar Global Bond Infrastructure	0.66	-19.51	0.76
<b>U.S.</b>					
6	Broad bonds market	Morningstar US Core Bond	1.02	-12.96	0.35
7	Broad bonds market with duration of 1–3 years	Morningstar US 1–3 Yr Core Bond	0.83	-3.87	0.06
8	Broad bonds market with duration of 5–10 years	Morningstar US 5–10 Yr Core Bond	1.01	-12.90	0.33
9	Government bonds	Morningstar US Treasury Bond	0.58	-12.44	0.09
10	Government bonds with duration of 1–5 years	Morningstar US 1–5 Yr Treasury Bond	0.68	-5.43	-0.17
11	Government bonds with duration of 5–10 years	Morningstar US 5–10 Yr Treasury Bond	0.71	-12.56	-0.21
12	Government bonds indexed for inflation	Morningstar US Treasury Inflation-Protected Securities	1.02	-11.86	0.46
13	ETF municipal bonds	iShares National Muni Bond ETF (MUB)	1.91	-7.35	0.14
14	Mortgage bonds	Morningstar US Asset-Backed Securities	1.17	-4.43	0.98
15	Mortgage bonds secured by commercial real estate	Morningstar US Commercial Mortgage-Backed Securities	1.54	-9.85	0.50
16	Corporate bonds	Morningstar US Corporate Bond	1.83	-15.71	0.64

	Investment strategies	Benchmarks: Morningstar indices and exchange-traded funds (ETFs)	Returns, %		
			2013–2022	2022	Since the beginning of the year on February 28, 2023
17	Corporate bonds with duration of 1–5 years	Morningstar US 1–5 Yr Corporate Bond	1.67	-6.16	0.29
18	Corporate bonds with duration of 5–10 years	Morningstar US 5–10 Yr Corporate Bond	2.15	-13.73	0.47
19	ETF fallen angels bonds	VanEck Fallen Angel High Yield Bond (FALN)	3.09*	-13.55	1.99
20	High-yield bonds	Morningstar US High-Yield Bond	3.99	-11.09	2.58
	Eurozone, UK, Japan				
21	Broad bonds market	Morningstar Eurozone Core Bond	-1.49	-22.37	-0.92
22	Government bonds	Morningstar Eurozone Treasury Bond	-1.23	-23.25	-0.95
23	Government bonds with duration of 1–3 years	Morningstar Eurozone 1–3 Yr Treasury Bond	-2.20	-10.66	-0.89
24	Government bonds with duration with duration of 5–7 years	Morningstar Eurozone 5–7 Yr Treasury Bond	-1.27	-19.44	-0.87
25	Government bonds indexed for inflation	Morningstar Eurozone Treasury Inflation-Linked Securities	-0.21	-14.74	0.53
26	Corporate bonds	Morningstar Eurozone Corporate Bond	-1.52	-19.61	-0.19
27	High-yield bonds	Morningstar Eurozone High-Yield Bond	1.01	-16.29	2.37
28	Broad bonds market	Morningstar UK Core Bond	-2.31	-31.97	0.33
29	Government bonds	Morningstar UK Gilt Bond	-2.62	-33.45	-0.12
30	Corporate bonds	Morningstar UK Corporate Bond	-1.12	-29.53	2.01
31	Government bonds	Morningstar Japan Treasury Bond	-3.43	-17.61	-2.22
<b>Emerging markets</b>					
32	Broad bonds market	Morningstar Emerging Markets Composite Bond	1.72	-15.66	0.67
33	Government bonds	Morningstar Emerging Markets Sovereign Bond	1.26	-16.33	0.47
34	Corporate bonds	Morningstar Emerging Markets Corporate Bond	2.02	-15.18	0.82
35	Infrastructure bonds	Morningstar Emerging Markets Infrastructure Bond	2.32	-14.00	0.9
36	High-yield bonds	Morningstar Emerging Markets High-Yield Bond	1.78	-14.69	1.04
37	Broad bonds market of Chinese issuers	Morningstar China USD Broad Market Bond	1.63	-13.57	1.57

\* on the average for 2018–2022.

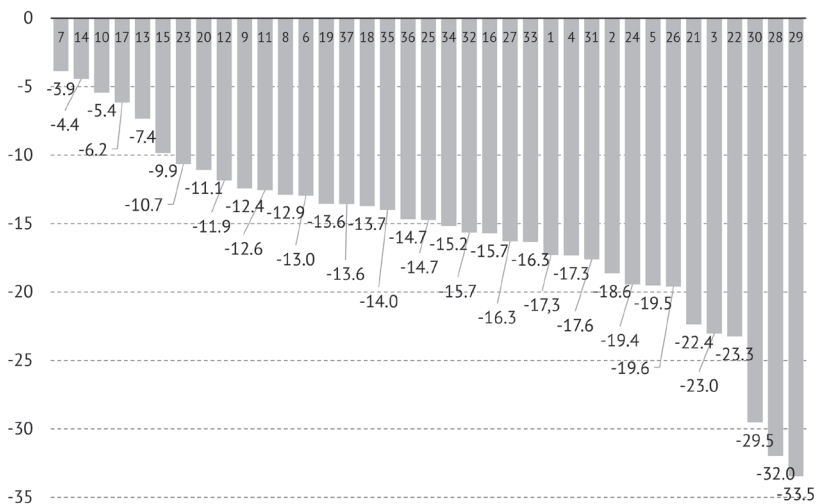
Sources: own calculations based on statistics of the Morningstar information resource and The Wall Street Journal statistics.



**Note.** Name of the investment strategy marked on the graph as a number, is shown in *Table 2* with the corresponding sequence number in column 1.

*Fig. 3.* Average annual nominal yield of bond portfolios in 2013–2022, % p.a.

*Sources:* own calculations based on statistics of the Morningstar information resource and The Wall Street Journal statistics.



**Note.** Name of the investment strategy marked on the graph as a number, is shown in *Table 2* with the corresponding sequence number in column 1.

*Fig. 4.* Nominal yield of bonds portfolio in 2022, % p.a.

*Sources:* own calculations based on statistics of the Morningstar information resource and The Wall Street Journal statistics.

Summarizing the changes in the global financial markets in 2022, The Economist highlights 5 main trends of the year: the end of the era of cheap money; the end of long-term growth trend of the stock market from 2009 to 2021; limited capital raising opportunities in stock markets; reduced attractiveness of investing in growth stock strategies in favor of value stocks; crisis of confidence in the unregulated cryptocurrency market.<sup>1</sup>

### 2.1.2. Sanctions and responses in the Russian financial market

In 2022, in addition to difficulties experienced by the global market, the Russian economy and financial market faced unprecedented sanctions from 49 unfriendly countries. According to Castellum.AI<sup>2</sup>, information resource, as of February 24, 2023, about 11.500 sanctions were imposed on Russia after February 24, 2022, in addition to 2.700 other measures taken since 2014. The total number of these sanctions was 3.3 times higher than those imposed on Iran, which has been the main target of such restrictions for many years. Sanctions by unfriendly countries against Russia in the financial sphere were aimed at restricting the access of Russian organizations and individuals to the financial and banking and international payment systems of these countries and reducing foreign exchange earnings coming into Russia.

#### ***Assessment of the blocked assets of the parties to the conflict***

First of all, sanctions imposed after February 24, 2022 provided for blocking the financial assets of the gold and foreign exchange reserve of the Russian Federation, as well as of individuals and organizations under respective sanctions. There is still no accurate data on the value of the assets frozen in this manner. The Wall Street Journal, citing officials' estimates, evaluates that Western authorities have frozen more than \$330 bn worth of Russian assets, including about \$300 bn of the Russian gold and foreign exchange reserve.<sup>3</sup>

The information about the value of blocked assets abroad belonging to Russian companies and individuals is less transparent. Anders Åslund, cited by The Economist, estimates the value of foreign assets of Russian individuals under sanctions at about \$400 bn, of which only \$50 bn has been frozen.<sup>4</sup> According to more updated estimates for the beginning of 2023, cited by the resource POLITICO, referring to the European Commission, the value of Russian assets frozen in the EU is 68.0 bn euros (about \$65 bn), of which Belgium, the center of

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1 The Economist. Five financial trends that 2022 killed. 21 December 2022. URL: [https://www.economist.com/finance-and-economics/2022/12/21/five-financial-trends-that-2022-killed?utm\\_content=article-link-1&etear=nl\\_today\\_1&utm\\_campaign=a.the-economist-today&utm\\_medium=email.internal-newsletter.np&utm\\_source=salesforce-marketing-cloud&utm\\_term=12/22/2022&utm\\_id=1429525](https://www.economist.com/finance-and-economics/2022/12/21/five-financial-trends-that-2022-killed?utm_content=article-link-1&etear=nl_today_1&utm_campaign=a.the-economist-today&utm_medium=email.internal-newsletter.np&utm_source=salesforce-marketing-cloud&utm_term=12/22/2022&utm_id=1429525)

2 URL: <https://www.castellum.ai/russia-sanctions-dashboard>

3 Talley J. (2022). U.S. Prosecutors Target Russian Assets, but Legal Hurdles Loom // The Wall Street Journal online. 24 November. URL: <https://www.wsj.com/articles/u-s-prosecutors-target-russian-assets-but-legal-hurdles-loom-11669233820>

4 Could seizing Russian assets help rebuild Ukraine? // The Economist. 2022. URL: <https://www.economist.com/finance-and-economics/2022/06/06/could-seizing-russian-assets-help-rebuild-ukraine>

the international clearing and settlement system Euroclear, accounts for 50.0 bn euros and Luxembourg with Clearstream for 5.5 bn euros.<sup>1</sup>

According to estimates of official representatives of the Bank of Russia, referred to by RBC<sup>2</sup>, as of November 30, 2022, the total value of blocked assets of Russian investors amounted to Rb5.7 trillion, or \$93.3bn. However, approximately 20% (\$18.7bn) of the above asset value accounted for funds belonging to retail investors. It can be assumed that among these private investors prevail individuals who are not included in any sanctions lists, and that is why the formal application of any restrictions by foreign financial institutions is unreasonable.

Taking into account the mentioned data it can be assumed that the total value of the assets blocked in foreign jurisdictions belonging to Russian residents (government, business and individuals), accounted for about \$393 bn in 2022.

According to responses of the Russian Federation, assets of non-residents invested in shares and corporate bonds of Russian companies as well as federal loan bonds (OFZ) and Russian Eurobonds were blocked in Russian financial institutions.

According to our estimates, the total value of blocked assets belonging to non-residents in February 2022 amounted to approximately \$192bn, including \$86bn invested in equity financial instruments of Russian companies, \$50bn in corporate Eurobonds, \$37bn in OFZ and \$19bn in government Eurobonds of the Russian Federation.<sup>3</sup> This was more than three times higher than the scale of restrictions on transactions with the assets of non-residents after the default of the government short-term obligations (GKO) in 1998, when about \$60 bn were blocked for non-residents' investment in the securities of Russian issuers.<sup>4</sup>

### ***Basic sanctions by unfriendly countries***

After February 24, 2022, basic sanctions by unfriendly states imposed in the sphere of financial markets included the following measures:

1. *Blocking and foreclosure of Russian assets.* Freezing of the Bank of Russia's foreign currency reserves in the banks of G7 countries to the amount of about \$300 bn. Later, the practice of seizing assets was extended to the assets of individuals on the sanctions lists. A permanent working group "Russian Elites, Proxies and Oligarchs" (REPO) was set up from representatives of G7 countries to monitor and seize assets of sanctioned organizations and individuals.

In February 2023, it was announced that the EU Committee of Permanent Representatives (Coreper) would establish a special task force on the use of frozen assets in the EU to rebuild Ukraine<sup>5</sup>, which can spread not only to the

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1 URL: <https://www.castellum.ai/russia-sanctions-dashboard>

2 URL: <https://quote.ru/news/article/63d8c5db9a79475d8f7a1497>

3 As of February 2023, the value of blocked investments of non-residents dropped significantly due to revaluation of their value by their owners and use of various opportunities to get out of these assets.

4 *Smith E.* (2022). Russia thinks it has found a way around Washington's dollar bond payment blockade // CNBC on-line. URL: <https://www.cnbc.com/2022/06/06/russia-thinks-its-found-a-way-around-us-dollar-bond-payment-blockade.html>

5 URL: <https://www.reuters.com/world/europe/eu-seeks-use-frozen-russian-funds-rebuild-ukraine-2023-02-14/>



frozen assets of the foreign exchange reserve of Russia, but also to the assets of sanctioned companies and individuals. In the U.S. the courts began to make decisions on the recovery of seized property of individuals under sanctions in favor of Ukraine based on lawsuits by authorized executive bodies.<sup>1</sup>

The U.S. ban on transactions with the Bank of Russia, the Ministry of Finance of Russia and the National Welfare Fund, introduction of sanctions against the Russian Direct Investment Fund (RDIF) and its CEO.

2. *Sanctions against key Russian financial institutions.* The list of major Russian banks by US Treasury Department's Office of Foreign Assets Control (OFAC) SDN (VTB, Otkritie Financial Corporation, Sovcombank, Promsvyazbank, Novikombank, Sber, Alfa Bank, Rossiya Bank, SMP Bank, Transcapitalbank, Investtorgbank, Moscow Industrial Bank, Far East Bank, Rosbank, etc.) implies blocking of banks' assets in US jurisdictions and prohibits any dollar transactions and any transactions with US banking counterparties.

As of February 24, 2023, the U.S. added a number of Russian second-tier banks to its SDN sanctions list, including Saint Petersburg Bank, Zenit Bank, Uralsib Bank, and MTS Bank, MKB, Lanta Bank, Metallinvestbank, Levoberezhny Bank, Primorye Bank, SDM Bank, Urals Bank for Reconstruction and Development.<sup>2</sup>

The European Union also imposed restrictive sanctions on Russian banks similar to the U.S. sanctions. Their application resulted in exclusion of 10 major Russian banks from SWIFT, including VTB, Rossiya, Otkrytie, Novikombank, Promsvyazbank, Sovcombank, Sberbank, Rosselkhozbank and MKB. On February 25, 2023, Alfa Bank, Rosbank and Tinkoff Bank were added to this list of banks subject to EC sanctions. Thus, by early March 2023, virtually all Russian systemically important banks, except subsidiaries of two European banks, Raiffeisen and UniCredit Bank, were under strict restrictive sanctions of the United States and the EC, as well as a number of other developed countries. In this respect, these two banks are increasingly coming under pressure from foreign financial regulators aimed at reducing business and leaving Russia.<sup>3</sup>

3. *Ban on cash payments and investments from Russia.* In March 2022, Visa and Mastercard suspended their activities in Russia, and card transactions of these payment systems are no longer available outside Russia. However, Visa and Mastercard cards previously issued by Russian banks are still serviced by the National Payment Card System in Russia without interruption.

EU banks are not allowed to take deposits from Russian citizens and companies exceeding Euro100,000, sell securities denominated in euros to clients from Russia, provide services for the sale of securities issued after April 12, 2022, and conduct listing of shares of any Russian state companies (with more than 50% government stake) on European stock exchanges.

1 L.Uvarchev. (2023). For the first time, the U.S. announced the transfer of assets confiscated from Russians to Ukraine. // Kommersant, February 4. URL:<https://www.kommersant.ru/doc/5810341>

2 N.Zarutskaya. (2023). Why 11 Russian banks are under sanctions // Vedomosti. February 24. URL: <https://www.vedomosti.ru/finance/articles/2023/02/25/964270-11-bankov?from=newsline>

3 A.Stolyarov. (2023). UniCredit and Raiffeisen become deadlocked //Expert. No.9. February 27 – March 5. URL: <https://expert.ru/expert/2023/09/unicredit-i-raiffeisen-zashli-v-tupik/>

4. *Restrictions on borrowing by Russian organizations on global markets.* The imposition of sectoral sanctions implying restrictions for foreign investors on all transactions, including financing and other transactions involving new debt with a maturity of more than 14 days and new shares for major Russian companies, including Gazprombank, Rosselkhozbank, Gazprom, Gazprom Neft, Transneft, Rostelecom, Russian Railways, etc. The U.S. nationals were prohibited from making new investments in Russia's energy sector and from financing foreign companies making such investments.

A ban on borrowing in the U.S. and European markets for the largest Russian companies with state participation, restrictions on Russian companies to settle in dollars, euros, pounds and yen, and a ban on the supply of dollar and euro banknotes to Russia.

A ban imposed by the EC on financial evaluation of Russia and Russian companies by European rating agencies resulted in withdrawal of credit ratings of Russia and many Russian companies by major international rating agencies Fitch, Moody's and S&P, making it impossible for global institutional investors to invest in the securities of these issuers. At the same time, Russian securities were excluded from leading international indices of such stock index administrators as MSCI, S&P, Dow Jones Indices, FTSE Russell, etc., as well as bond indices supported by JPMorgan, Bloomberg and others.

On 3 June 2022, the European Union imposed sanctions against the National Settlement Depository (NSD), the largest securities depository in Russia. The above sanctions implied a complete freezing of NSD's assets in the EU countries and a ban on transactions and operations with NSD by residents of those countries. This meant that NSD's clients, even if they were not on any of the sanctions lists, were unable to conduct transactions with the securities that NSD held with Euroclear and Clearstream or receive any income or payments on those securities.

The de facto restriction was imposed even earlier, in March 2022, when the European securities depositories Euroclear and Clearstream on their own initiative have suspended transactions in NSD's accounts with those international settlement and clearing organizations.<sup>1</sup>

Blocking of some funds from the foreign currency reserve of the Bank of Russia and the ban on Russian companies making settlements in dollars and euros on May 25, 2022 resulted in a situation where the Russian Ministry of Finance, having foreign currency resources at its disposal, was not able to transfer them through NSD to Euroclear to pay for the government Eurobonds maturing in 2027 and 2047 in the amount of \$100 mn. This issue could not be resolved within a month resulting in a formal declaration of default on Russia's foreign debt by international rating

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1 At the end of December 2022, the governments of Luxembourg and Belgium decided to temporarily unblock NSD's accounts with Euroclear and Clearstream until January 7, 2023, so that eligible NDC clients not subject to sanctions could sell their foreign securities. However, in reality the inaccuracy in the interpretation of these legal norms and unrealistically tight deadlines for their implementation prevented Russian market participants from returning at least some of these assets to their possession. At the beginning of March 2023, a number of major Russian brokers sent the documents necessary to unblock client assets to the financial authorities of Belgium and Luxembourg, but these measures have not yet brought any significant positive results for Russian private investors.

agencies.<sup>1</sup> Even though the Russian Federation did not officially recognize these events as defaults, and foreign bondholders refrained from applying any formal legal procedures to enforce these obligations, this resulted in the termination of the credit default swaps (CDS) market for bonds of Russian issuers in June 2022 and became the basis for significant discounting of the value of bonds and shares of Russian issuers in portfolios of international institutional investors.

Russia's participation in the Financial Action Task Force (FATF) was suspended as of February 24, 2023.

*5. Restrictions on the receipt of foreign currency proceeds in the Russian Federation.* The U.S., EU, UK, Japan and a number of other countries, imposed restrictions on gold transactions involving sanctioned Russian government agencies and financial institutions. In addition, the EU imposed a ban on European companies to service cryptocurrencies of Russians, as well as restrictions on the provision of financial services, information technology consulting and some other business services to Russia.

At the end of 2022 and in Q1 2023, the G7 countries introduced measures to establish a price ceiling on oil, gas and petroleum products exported by Russia, aimed at reducing foreign exchange earnings flowing into the country. Among other things, these measures posed significant risks to the stability of the ruble exchange rate and the operating environment for financial institutions.

### ***Russia's response***

Despite the severity, the mentioned sanctions did not result in a crisis of the Russian financial system due to expedient response taken by the government of the Russian Federation and the Bank of Russia. The principal measures to stabilize the financial system were as follows.<sup>2</sup>

*1. Maintaining domestic financial stability.* With a view to prevent an outflow of funds from bank deposits and maintain their price stability, on February 28, 2022 the Bank of Russia decided to temporarily raise its key rate from 9.5% to 20%. As risks to financial stability and inflationary expectations decreased during the year, the key rate decreased and reached 7.5% at the end of the year.

To prevent a liquidity crisis in the banking system after February 24, 2022, the Bank of Russia increased the volume of refinancing of banks, strengthened the flexibility of instruments for bank borrowing and reduced the collateral requirements for centralized loans. During the acute phase of low liquidity, the daily volume of bank refinancing reached Rb 9.6 trillion. Additional cash was released from banks as a result of a temporary reduction of the mandatory reserve requirements for all types of reserve liabilities to 2% and growth in the averaging ratio for banks having universal and basic licenses to 0.9.

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1 The current situation related to a number of obligations under Eurobonds not fulfilled for technical reasons beyond the control of the Russian Federation can be called a "quasi-default" when in terms of domestic law, obligations to non-residents have been fulfilled (see more about this later in this section), while owners of these bonds refrain from bringing any claims against the issuer of these bonds.

2 Detailed list of measures taken by the Bank of Russia, ref.: URL: [https://www.cbr.ru/Content/Document/File/134865/plan\\_limit.pdf](https://www.cbr.ru/Content/Document/File/134865/plan_limit.pdf)

After February 24, 2022 trading in shares and bonds was temporarily suspended and short sales prohibited. On March 21, trading in OFZ was resumed with trading in shares from March 24 and in corporate bonds on March 26. As of the end of 2022, all the sections of the stock market at Moscow Exchange were functioning as usual.

To ensure balanced liquidity on the securities market and to prevent excessive volatility, the Bank of Russia decided to buy individual issues of OFZs from March 21, 2022 in the amounts required to limit the risks to financial stability.

To maintain the stability of the ruble exchange rate, mandatory sale and repatriation of foreign exchange earnings by exporters were introduced, followed by relaxing of these requirements as the ruble rate stabilized.<sup>1</sup> Since May 24, 2022, for residents - participants of foreign economic activity the size of compulsory sale of foreign currency was reduced from 80 to 50% of the proceeds due to residents under all foreign trade contracts.

At the same time, restrictions were imposed on transactions using foreign currency: on money transfers abroad, on withdrawals of cash currency from foreign currency deposits and on sale of cash currency by banks. As the situation was stabilizing, some relaxations were introduced, for example, limits on money transfers were increased and banks received more options to sell foreign currency.<sup>2</sup>

*2. Measures to unblock assets of Russian residents.* A key focus of the struggle against sanctions was the efforts of financial regulators and their supervised financial organizations to unfreeze the financial assets of Russian residents blocked in foreign jurisdictions, as well as to create legal and organizational conditions for Russian issuers to fulfill their obligations under securities issued in foreign jurisdictions, primarily Eurobonds and depositary receipts.

However, the Bank of Russia stated from the very beginning that it would not buy back blocked foreign assets from Russian companies and individuals.<sup>3</sup> In the context of high geopolitical risks, this measure was justified, but in the future, it will probably be necessary to introduce mechanisms of insurance of client assets, especially investments of unqualified investors, against operational risks of financial intermediaries, including risks of asset blocking in superior depositories.

*3. Freezing assets of non-residents.* First of all, in response to the blocking of Russian investors' assets, the government and the Bank of Russia promptly imposed restrictions on non-residents' investments in the securities of Russian issuers. To prevent the outflow of foreign portfolio investments, transactions with residents of unfriendly countries were restricted by prohibiting brokers to execute instructions from non-residents to sell securities of Russian issuers. Starting from September 2022, these restrictions were abolished for non-residents from friendly countries.

*4. Measures to ensure fulfillment of obligations on securities of Russian issuers and protect the rights of Russian investors.* In April 2022, a decision was made to delist

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1 Executive Order of the President of the Russian Federation of 28.02.2022 No.79 "On application of special economic measures due to unfriendly actions by U.S. and adjoined foreign countries and international organizations.

2 URL: <http://www.cbr.ru/press/event/?id=14059>

3 Main trends of RF financial market development for 2023 and for 2024 and 2025 // Bank of Russia. P. 39, 2022. URL: [https://www.cbr.ru/Content/Document/File/143773/onfr\\_2023-2025.pdf](https://www.cbr.ru/Content/Document/File/143773/onfr_2023-2025.pdf)

depository receipts of Russian companies from foreign stock exchanges with subsequent conversion into domestic securities, as well as a ban on placement and circulation of securities of Russian issuers in terms of depository receipts on foreign stock exchanges.<sup>1</sup> Later, the procedure of automatic conversion of the mentioned receipts was introduced to overcome difficulties for investors in conversion of depository receipts into shares of the corresponding companies. It envisaged that holders of receipts, whose rights were accounted for by foreign depositories, could submit an application until October 11, 2022 for conversion to the Russian depository, a depo for shares on which receipts were issued. During automatic conversion, all Russian depositories, which accounted for the receipts, debited them from the accounts of holders and instead credited the shares of Russian issuers. No action was required from holders of receipts, regardless of whether they were residents or non-residents.

Amid the risk of defaults on Eurobonds of the Russian Federation and a number of corporate issuers for reasons beyond their control due to sanctions restrictions on transfers of funds in favor of owners of these bonds through foreign banks, comprehensive legislative measures were taken to ensure the performance of these obligations through Russian financial institutions.

The Executive Order of the President of the Russian Federation No. 303 of 23 May 2022 provided for introduction of a temporary procedure for Eurobond payments, whereby obligations under Eurobonds of the Russian Federation are considered discharged if they are discharged in rubles in an amount equivalent to the value of obligations in foreign currency at the exchange rate on the date of their transfer to the National Settlement Depository (NSD), through which they will be communicated to creditors. These requirements were timely fulfilled by the Ministry of Finance of Russia.

To protect the rights of private investors in the context of asset blocking, countermeasures have been taken to ensure reducing dependence of the Russian market on foreign infrastructure.

In particular, it was envisaged to make payments of income on securities of Russian companies issued in foreign jurisdictions through the Russian infrastructure, as well as the performance of obligations on Eurobonds of Russian issuers.<sup>2</sup> Finally, Russian holders of Eurobonds were able to receive coupon and other payments from the issuers of these bonds in rubles through Russian financial institutions.

A special procedure provides for the performance of obligations by Russian issuers to non-residents using “C”-type accounts with crediting and storing funds in rubles.<sup>3</sup> These accounts could be opened in the name of non-residents,

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1 Federal law of 16.04.2022 No.114-FZ “On amendments to Federal law “On Joint Stock Companies and certain legislative acts of the Russian Federation.”

2 Executive Order of the President of the Russian Federation of 22.06.2022 No.394 “On temporary procedure of fulfillment of government debt obligations of the Russian Federation to residents and foreign creditors, expressed in government securities with their nominal value specified in foreign currency.”

3 Executive Order of the President of the Russian Federation of 05.03.2022 No.95 “On temporary procedure for fulfilling obligations to some foreign investors.”

recipients of payments on securities based on applications of their issuers without consent of these non-residents. Conversion of these funds into foreign currency can be done only with the permission of the Russian authorities.

Initially, the C-type accounts were opened with NSD's settlement depository to settle securities obligations. However, the Board of Directors of the Bank of Russia on December 29, 2022<sup>1</sup> decided on the centralized transfer of all the "C"-type bank accounts where non-residents' frozen funds were stored, to the Deposit Insurance Agency (DIA), fully controlled by the Bank of Russia. This measure could be related to the ideas of creating a special compensation fund on the basis of DIA intended for payments to Russian investors whose assets have been blocked because of the sanctions imposed on NSD. It was assumed that the source of setting up of this fund could be the income received from the investment of the non-residents' funds, blocked in bank accounts of type "C".

However, according to the Bank of Russia Governor, so far work on creation of such a fund has been suspended until clarity comes with the EU decision to block funds of Russian residents in the NSD.<sup>2</sup>

On a regular basis, the amount of funds held in these accounts is not disclosed by DIA, but according to the most current data of the Bank of Russia as of November 11, 2022, it was Rb280 bn or \$4.5 bn.<sup>3</sup>

To restructure Eurobond debts, Russian issuers received the option of issuing so-called substitute bonds, representing bonds issued under Russian law and traded within the Russian infrastructure, which the investor can receive in exchange for the issuer's Eurobonds.<sup>4</sup> The parameters of the replacing bonds should have corresponded to parameters of the replaced issue of Eurobonds in terms of maturity, the amount of income, the calendar of coupon payments and face value. At the same time, all payments on these bonds are made in rubles at the current exchange rate. The issuer can maintain or adjust other terms of the issue at his sole discretion. Substituting bonds not demanded in the process of exchange for Eurobonds can be sold to other investors. The information letter of the Bank of Russia No. IN-018-34/154 of 30.12.2022 recommended the participants of the financial market to use the mechanism of substituting bonds to fulfill their obligations under Eurobonds.<sup>5</sup> Later, Elvira Nabiullina, Bank of Russia Governor, spoke on the results of the Bank Board of Directors meeting held on February 10, 2023, and declared compulsory specified exchange for all issuers of corporate Eurobonds.<sup>6</sup> The main challenge hindering the issuance of replacement

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1 URL: [http://www.cbr.ru/about\\_br/dir/rsd\\_2022-12-29\\_31\\_02/](http://www.cbr.ru/about_br/dir/rsd_2022-12-29_31_02/)

2 Debates on creation of a compensation fund for investors suspended on February 10 // Frank Media. 2023. URL: <https://frankrg.com/112079>

3 URL: <https://www.interfax.ru/business/872120>

4 The issue of replacement bonds is based on the Federal law of 14.07.2022 No. 292-FZ "On Amending Certain Legislative Acts of the Russian Federation, repealing para 6, Part 1 of Article 7 of the RF Law "On State Secrets", suspending certain provisions of legislative acts of the Russian Federation and on establishment of specific regulations on corporate relations in 2022 and 2023" and Executive Order of the President of the Russian Federation of 5 July 2022 No.430 "On repatriation of foreign currency and currency of the Russian Federation by residents-participants of foreign economic activity."

5 URL: <https://www.cbr.ru/Crosscut/LawActs/File/6114>

6 URL: <https://frankrg.com/112060>

bonds is that issuers and holders of Eurobonds have different estimates of their current value, whereby they should be exchanged for new obligations of issuers.

To prevent the expansion of blocked assets of retail investors amid realized depository risks, transactions in foreign financial instruments were temporarily included in the list available only to qualified investors.<sup>1</sup> Thus, starting from October 1, 2022, sale of securities of issuers from unfriendly states to unqualified investors was restricted, and from January 1, 2023 it was completely suspended.

*5. Measures to support sustainability of banks and institutional investors.* A wide range of regulatory relaxations for credit institutions was introduced to preserve the potential of lending to the economy in the changed conditions. In particular, an option was provided preventing worsening the assessment of the borrower's financial position, debt service quality, quality category of collateral, quality category of loans, other assets and contingent credit liabilities, as well as an option of applying lower risk ratios on credit claims to certain types of borrowers.

To maintain financial stability of financial organizations under increased volatility in the value of financial instruments, the Bank of Russia widely used the practice of temporary relaxation of prudential supervision requirements.

For example, NGPF and professional participants of the securities market were allowed to use fair value of financial instruments and foreign exchange rates as of February 18, 2022, and, the cost of acquiring if financial instruments were acquired between February 18 and December 31, 2022.<sup>2</sup>

To minimize the impacts of sanctions, it was decided to ban credit institutions from disclosing certain information. NFEs received the respective right. Issuers of securities were allowed to independently decide on the amount of information to be closed, up to and including refusal to disclose documents and statements.<sup>3</sup>

This resulted in a suspension of publication of their statements by a large number of issuers on their own websites and on the site of Interfax - Corporate Information Disclosure Center<sup>4</sup>, where issuers of securities are required to disclose their financial statements and other information.

For example, PJSC Sberbank has not only suspended the publication of statements, but also removed old financial statements from its website<sup>5</sup>, and the Corporate Information Disclosure Center portal has completely disappeared from the database containing statements.<sup>6</sup> PJSC Gazprom limited the publication of statements for Q4 2021 and kept the history of financial statements.<sup>7</sup> A search of

1 URL: <http://www.cbr.ru/press/event/?id=14135>

2 The Bank of Russia information letter of 25.02.2022 No.IN-018-53/16: URL: <http://www.cbr.ru/Crosscut/LawActs/File/5801>

3 RF Government Decree of 12.03.2022 No.351 " On specifics of disclosure and provision in 2022 of information to be disclosed and provided in accordance with the requirements of the Federal Law "On Joint-Stock Companies" and the Federal Law "On the Securities Market" and specifics of disclosure of insider information in accordance with the requirements of the Federal Law "On Counteraction of Illegal Use of Insider Information and Market Manipulation and on Amendments to Some Legislative Acts of the Russian Federation."

4 URL: <https://www.e-disclosure.ru/#>

5 URL: [https://www.sberbank.com/ru/investor-relations/t\\_disclosure](https://www.sberbank.com/ru/investor-relations/t_disclosure)

6 URL: <https://www.e-disclosure.ru/portal/company.aspx?id=3043>

7 URL: <https://www.e-disclosure.ru/portal/files.aspx?id=934&type=4>



reports on the official disclosure portal<sup>1</sup>, where all issuers are required to publish reports for investors, shows that there were 7,316 news of any annual report for 2021 (of which 7,276 for January-November 2021), and only 3,455 for 2022. It is worth specifying that these include the publication of not only consolidated statements, but also according to RAS standards. However, issuers of securities, as a rule, issue reports according to IFRS standards. The number of reports on the publication of annual or quarterly consolidated statements fell from 960 in 2021 (957 as of January-November) to 82 in 2022, which more clearly illustrates the reporting situation of securities issuers.

According to our estimates based on information disclosed by Cbonds resource, in the real sector only 284 companies out of 337 that disclosed their annual accounts according to IFRS for 2020, provided data for 2021 (a 16% drop), and for H1 2022 only 201 companies (a further 29% drop). Thus, 40.3% companies of the real sector have exercised their right to refuse disclosing reporting. It is worth noting that this list includes companies that are foreign issuers doing business in Russia: X5 Retail Group N.V., Yandex N.V., VK Company Ltd and others (a total of 21 companies out of 201 that disclosed statements for H1 2022).

A sharper decline in information transparency is observed in the financial sector. Only 91 out of 288 financial institutions (the sample includes banks, insurance companies, non-state pension funds and other financial companies), known for their reporting data for 2020, disclosed information by the end of 2021 (a 68% drop) and 22 by the end of 2022 (another 76% drop). Thus, 92.4% of financial organizations took advantage of their right to refuse disclosing information compared to 2020.

### 2.1.3. Yield and risks of Russian securities

Due to professional response to the unprecedented financial sanctions by the Russian Government and the Bank of Russia, the domestic financial and currency markets have held up and maintained their financial stability. Nevertheless, in 2022, the Russian financial market was influenced by two strong negative factors: the cyclical decline of the global financial market (see above) and the sanctions pressure, causing a review of the attitudes of major foreign investors from unfriendly countries to invest in the securities of Russian issuers.

According to Bank of Russia estimates<sup>2</sup>, main channels of the global economy and financial markets impact on the domestic financial market are current account transactions related to the receipt of foreign exchange earnings, potential contamination effects of the friendly countries markets, imbalance in banking and other financial intermediaries' currency positions and shortage of foreign exchange liquidity, as well as risks of settlements and payments. The stock-market channel of global risks implies a negative impact on the domestic market lacking demand for securities from non-residents and the disappointment in the market by domestic private investors.

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1 URL: <https://www.e-disclosure.ru/poisk-po-soobshheniyam>

2 Financial stability survey. Q2-3 2022. M.: Bank of Russia, 2022. URL: [https://www.cbr.ru/analytics/finstab/ofs/2\\_3\\_q\\_2022/](https://www.cbr.ru/analytics/finstab/ofs/2_3_q_2022/)



In the context of termination of the circulation of equity and debt securities of Russian issuers on global markets and restrictions on the receipt of income and other payments, the introduction of a ban by the authorities on transactions with entities and sanctioned individuals and the isolation of domestic Russian financial market for non-residents from unfriendly countries, the value of shares and bonds of Russian issuers in the eyes of global investors became significantly more conservative compared with the cost of similar financial instruments in the territory of the Russian Federation.

According to analysts at MSCI dealing with management of the international stock indices, from the perspective of the credit default swaps (CDS) market, shares of major Russian issuers, i.e. Gazprom, Sberbank, Rosneft and Lukoil, have zero value due to high probability of default on their debt obligations<sup>1, 2</sup>, no matter what the companies are conducting real activities, and their shares are still listed in rubles on the Moscow Stock Exchange.

As *Table 3* and *Fig. 5* show, portfolios of Russian companies showed the worst returns among all given investment strategies in emerging stock markets during the adverse 2022 for the whole global market. At the same time, the return on portfolios of globally branded exchange-traded funds (ETFs) for shares of Russian companies was significantly lower than the return on the RTS Index portfolio for shares on the Moscow Exchange.

By the end of 2022, exchange-traded funds iShares MSCI Russia ETF, VanEck Russia ETF and VanEck Russia Small-Cap ETF showed record losses of -81.1%, -78.8% and -66.3% p.a., respectively.<sup>3</sup> Thus, the return on the RTS and RTS domestic indices for the same year was only -39.2% and -32.9% p.a. At the same time, the exchange-traded fund for a broad portfolio of emerging market companies, iShares Core MSCI Emerging Markets ETF, in the same year showed a negative return of only -20.0% p.a., i.e. the value of the same Russian PJSC shares was almost twice lower in portfolios of global exchange-traded funds as compared with the RTS index portfolio.<sup>4</sup> A specified discount in the value of shares of Russian companies

1 Hanis T., Sass Z. (2022). Are Russian Stocks Worthless? // MSCI Research. 26 May. URL: <https://www.msci.com/www/blog-posts/are-russian-stocks-worthless-/03202146429>

2 In contrast to the Ministry of Finance, Russian companies have greater opportunities to repay debts on Eurobonds at the expense of foreign currency proceeds left in foreign banks, which perform functions of paying agents. However, the repayment of debt on Eurobonds under the above scheme results in a situation that due to sanctions, Russian owners of corporate Eurobonds cannot receive payments owed to them in foreign currency on account of coupon payments and repayment of the cost of bonds.

3 In 2022, a number of ETFs specialized in investing in Russian stocks have been liquidated (for example, Direxion Daily Russia Bull 2X Shares RUSL) or are in the process of liquidation (iShares MSCI Russia ETF ERUS).

4 Similarly, the value of Russian shares in the portfolios of the largest pension global funds in 2022 declined significantly more than the value of the RTS index portfolio – the total return. For example, value of the Calpers pension fund's investments in Russian assets declined from \$765 mn at the end of 2021 to \$194 mn as of June 2022, however, the decline was not due to the sale of some assets, but only because their market value fell by 74.6%. Ref.: CNBC (2022). Russia divestment promises by U.S. states go largely unfulfilled // CNBC on-line. 27 August. URL: <https://www.cnbc.com/2022/08/27/russia-divestment-promises-by-us-states-go-largely-unfulfilled-.html>. Similarly, value of Russian shares in the Norwegian State Pension Fund's portfolio, according to the Norges bank investment management annual report, dropped due to their revaluation as illiquid assets from \$3.4 bn in 2021 to \$0.4 bn at the end of June 2022, or by 87.9%. Ref.: Norges

in the future may act as a deterrent to investment in these shares in the domestic financial market as well.

*Table 3*

**Returns in dollars of equity indices and exchange-traded funds (ETFs) investing in emerging market equities from 2013–2022 (% p.a.) and from the beginning of 2023 as per February 28, 2023 (%)**

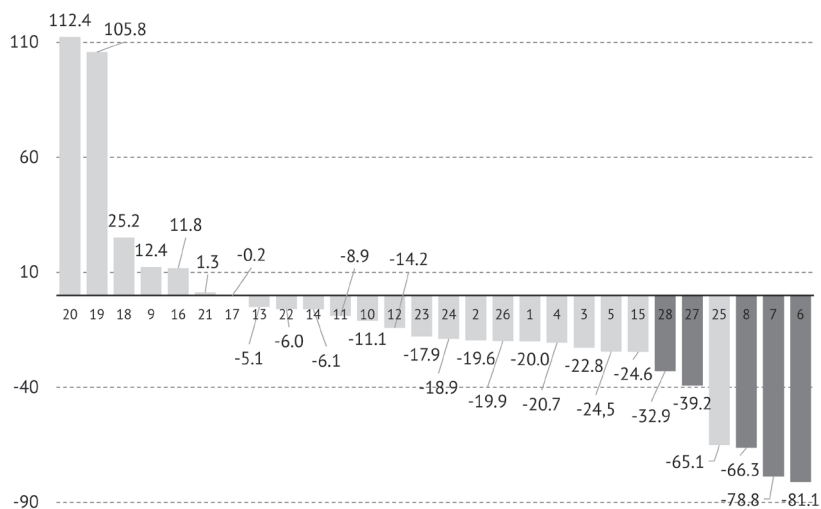
	Investment strategies	Benchmarks: Morningstar and exchange-traded funds (ETFs)	Ticker	Returns, % p.a.		
				2013–2022	2022	Since the beginning of the year on February 28, 2023
1	ETFbroad market	iShares Core MSCI Emerging Markets ETF	IEMG	1.36	-19.97	1.39
2	Developing countries except China	iShares MSCI Emerging Mkts ex China ETF	EMXC	-0.16*	-19.56	1.20
3	China	iShares MSCI China ETF	MCHI	1.61	-22.76	0.76
4	China – major companies	iShares China Large-Cap ETF	FXI	-1.05	-20.66	-1.20
5	China – small companies	iShares MSCI China Small-Cap ETF	ECNS	2.13	-24.5	2.84
6	Russia	iShares MSCI Russia ETF	ERUS	-12.72	-81.11	0.00
7	Russia	VanEck Russia ETF	RSX	-12.28	-78.81	0.00
8	Russia – small companies	VanEck Russia Small-Cap ETF	RSXJ	-10.25	-66.28	0.00
9	Brazil	iShares MSCI Brazil ETF	EWZ	-2.70	12.35	-2.50
10	Brazil – small companies	iShares MSCI Brazil Small-Cap	EWZS	-5.34	-11.13	-2.78
11	India	iShares MSCI India ETF	INDA	6.14	-8.94	-7.04
12	India – small companies	iShares MSCI India Small-Cap ETF	SMIN	8.52	-14.23	-3.30
13	South Africa	iShares MSCI South Africa ETF	EZA	-1.18	-5.12	-3.37
14	Saudi Arabia	iShares MSCI Saudi Arabia	KSA	9.74*	-6.07	-3.82
15	Poland	iShares MSCI Poland ETF	EPOL	-4.18	-24.62	2.01
16	Argentina	Global X MSCI Argentina ETF	ARGT	8.10	11.81	16.93
17	Indonesia	iShares MSCI Indonesia ETF	EIDO	-1.37	-0.15	2.32
18	Chile	iShares MSCI Chile ETF	ECH	-5.68	25.17	3.77
19	Turkey	iShares MSCI Turkey ETF	TUR	-3.27	105.81	-4.11

bank Investment management. Government Pension Fund Global. Half-year report 2022. URL: [https://www.nbim.no/contentassets/e49be8b7b9764b929bcdd21f4176f2bb/gpfg-half-year-report\\_2022.pdf](https://www.nbim.no/contentassets/e49be8b7b9764b929bcdd21f4176f2bb/gpfg-half-year-report_2022.pdf)

	Investment strategies	Benchmarks: Morningstar and exchange-traded funds (ETFs)	Ticker	Returns, % p.a.		
				2013–2022	2022	Since the beginning of the year on February 28, 2023
20	Turkey	iShares MSCI Turkey ETF USD Dist	ITKY	-2.45	112.39	-4.70
21	Mexico	iShares MSCI Mexico ETF	EWX	-1.38	1.26	16.56
22	Malaysia	iShares MSCI Malaysia ETF	EWM	-2.85	-5.98	-4.82
23	Broad market index	Morningstar Emerging Markets	Index 1	2.53	-17.93	0.84
24	BRICS	Morningstar BRIC	Index 2	2.35	-18.92	-2.07
25	Developing countries in Europe	Morningstar Emerging Markets Europe	Index 3	-8.02	-65.06	3.68
26	Dividend shares	Morningstar Emerging Markets Dividend Yield Focus	Index 4	1.05	-19.88	2.14
27	Russia	RTS index	Index 5	-4.4	-39.2	-2.51
28	Russia	RTS index – total return	Index 6	1.4	-32.9	-2.24

\* on the average for 2018–2022.

Source: own calculations based on statistics of the Morningstar information resource and The Wall Street Journal statistics.



**Note.** Name of the investment strategy marked on the graph as a number, is shown in Table 3 with the corresponding sequence number in column 1.

*Fig. 5.* Nominal return of popular exchange-traded funds (ETFs) investing in emerging market stocks in 2022, % p.a.

Sources: own calculations based on statistics of the Morningstar information resource and The Wall Street Journal statistics.

Interestingly, in 2022, the stock indices of some countries with a less stable financial system than in Russia in terms of exchange rate volatility, interest rates and inflation, showed the highest returns among the developing countries. The highest returns for the year were earned by exchange-traded funds investing in Turkish stocks: iShares MSCI Turkey ETF USD Dist and iShares MSCI Turkey ETF at 112.4% and 105.8% p.a., respectively. They were followed by Chilean exchange-traded funds (iShares MSCI Chile ETF), major Brazilian (iShares MSCI Brazil ETF) and Argentine companies (Global X MSCI Argentina ETF) with returns 25.2%, 12.4% and 11.8% p.a. The phenomenon of high returns in the Turkish stock market can be explained by the specific monetary policy of the Turkish authorities, when amid 80% inflation, the central bank regularly reduced centralized interest rates encouraging domestic investors to buy shares of local companies as a tool to protect their savings from inflation. Growth of the equity bubble through the cheap money strategy poses high risks to financial stability in the said financial market. High returns on equities in Argentina are also due to these assets used by domestic investors as a hedge against high inflation of 98.4% in 2022.

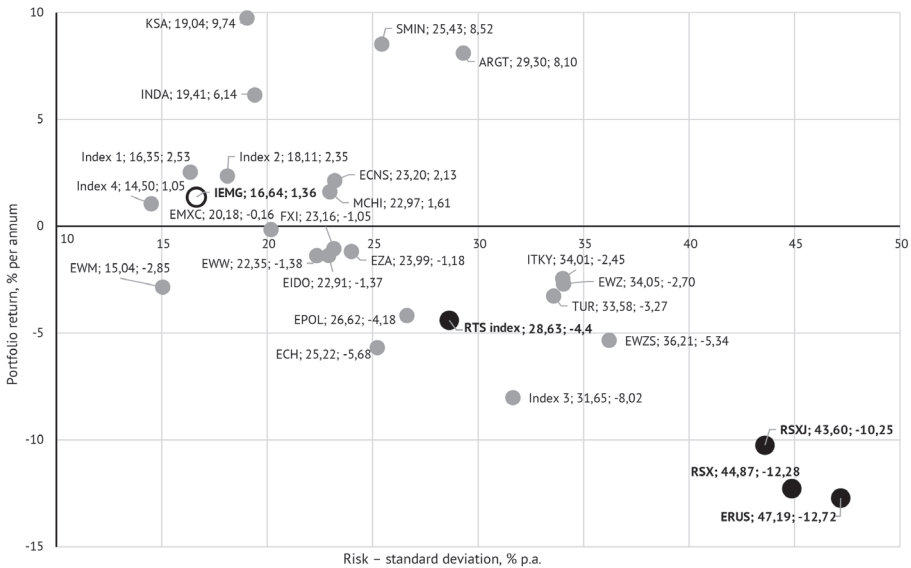
However, unlike Turkey, Argentina's current central bank rate is high at 75% per year, aimed at curbing inflation. The most attractive market for investors in 2022 under consideration was Brazil's equity market, where a moderate inflation rate of 5.8% per year in December 2022 was accompanied by a high central bank interest rate of 13.75%. Positive returns on Brazilian company stock indices in local currency and in dollars are largely due to the confidence of local and global investors in the macroeconomic stability of this country.

In January-February 2023, the RTS Index - Total Return with a year-to-date return of -2.24% declined less than the value of stock portfolios from Malaysia, Turkey, India, Poland, Saudi Arabia and Brazil, but lost to the broader iShares Core MSCI Emerging Markets ETF portfolio, which gained 1.4% in value.

All three exchange-traded equity funds of Russian companies stopped disclosing their returns in 2023 preparing to terminate their activities.

On the 10-year time horizon from 2013 to 2022, portfolios of exchange-traded equity funds of Russian companies were the lowest-yielding and the riskiest according to the standard deviation of their returns (*Table 3, Fig. 6*). The average annual return and risk values of those portfolios were -12.7% and 47.2% for the iShares MSCI Russia ETF, -12.3% and 44.9% for the VanEck Russia ETF, and -10.2% and 43.6% for the VanEck Russia Small-Cap ETF. The average annual return on the RTS Index was -4.4% and the risk indicator was 28.6%. Consequently, over long time horizons the value of the most popular shares of Russian issuers among investors of global investment funds was significantly lower and the volatility risks higher as compared with the parameters of value and volatility of the above shares on the domestic stock market.

At the same time, broad market index of the developing countries iShares Core MSCI Emerging Markets ETF, in contrast to all Russian PJSC portfolios under review, posted a positive average annual return of 1.4% over the same time period, while its average annual risk parameter of 16.4% was 41.9% lower than that of



**Note.** Name of exchange-traded funds corresponding to tickers on a chart, ref. Table 3.

*Fig. 6.* Average annual nominal returns and risks of popular exchange-traded funds (ETFs) investing in emerging market equities, 2013–2022, % p.a.

Source: own calculations based on statistics of Morningstar information resource.

the RTS Index portfolio and 62.9% lower than that of VanEck Russia ETF, once the largest stock fund of Russian companies in the global market.

It was possible to maintain financial stability and prevent the devaluation of the ruble exchange rate on the domestic stock and bond market, thanks largely to the efforts of the RF Government and the Bank of Russia. The exchange rate stability in 2022 was also facilitated by a favorable combination of external conditions, namely relatively high prices and the ongoing, despite sanctions, demand for oil, gas, coal, grain, chemical fertilizers and some other goods exported by Russian companies, with moderate demand for imported goods and services.

Financial regulators managed to maintain confidence of domestic investors in deposits in the banking system and investments in stocks and bonds. All segments of the domestic financial market continued to function in full. With a relatively stable ruble exchange rate and maintaining its moderate convertibility, the ruble yield on bank deposits, issues of government bonds and bonds of major corporate issuers remains acceptable for different categories of domestic investors.

Restrictions and geopolitical risks of 2022 impacted most significantly on the liquidity of the domestic exchange market of financial instruments due to the withdrawal of foreign investors from unfriendly countries and growth of conservatism of private investors with regard to investments in risky assets. In 2022, the average volume of secondary trading in shares, depositary receipts and

units of funds at the Moscow Exchange (ME) dropped by 41.3% compared to 2021 on OFZ and non-government bonds, respectively, by 41.5% and 20.4% (Table 4). The volume of trading in foreign stocks at the St. Petersburg Stock Exchange (SPE) in 2022 reduced by 68.5% compared to the same indicator in 2021. The decline in the foreign stock market at the SPE was largely caused by regulatory restrictions on the purchase of foreign securities by unqualified investors. The reduction in exchange liquidity at the Moscow Exchange (ME) futures and options market reached 50.2% and 66.4%, and 16.8% at the foreign exchange market.

Only the volume of exchange REPO transactions, primarily due to increased liquidity from banks and refinancing of the Bank of Russia, in 2022 exceeded the volume of pre-crisis 2021 by 28.8%.

In January-February 2023, approximately the same trends of reduced exchange liquidity operated as compared to January-February 2022, i.e., the period when the 2022 sanctions were not yet in effect. The exception is the market of non-government bonds with liquidity in the first two months of 2023 increasing by as much as 97.2% compared to the same period of 2022. This can be explained by the inflow of high liquidity in large banks in early 2023 directed in a single manner to purchasing corporate bonds.

*Table 4*

**Trading volumes at the Moscow Exchange (ME) and the St. Petersburg Exchange (SPE) in 2017–2022 and for the period from January to February 2022 and 2023, trillion rubles.**

	2021	2022.	Average for 2017–2021	Change (%) in 2022 vs:		January–February		
				2021	2017–2021	2022	2023	Change, %
1. Volume of secondary trades:								
Bonds, receipts, investment units	30.0	17.6	17.3	-41.3	1.9	8.8	1.8	-79.1
OFZ	7.2	4.2	7.1	-41.5	-40.9	1.2	0.5	-61.9
Non- government bonds	2.9	2.3	3.5	-20.4	-33.7	0.3	0.6	97.2
2. REPO transactions	420.8	541.9	365.8	28.8	48.2	74.5	74.4	-0.1
Including with central counteragent (CC)	271.0	301.8	230.9	11.4	30.7	43.9	39.6	-9.8
3. Fx market	322.0	267.8	331.4	-16.8	-19.2	62.3	36.3	-41.8
4. Futures	151.8	75.6	102.8	-50.2	-26.4	33.2	7.8	-76.4
5. Options	6.8	2.3	6.2	-66.4	-63.2	1.1	0.3	-74.3
6. SPE, foreign bonds, billions of dollars	388.5	122.2		-68.5		55.2	9.4	-83.0

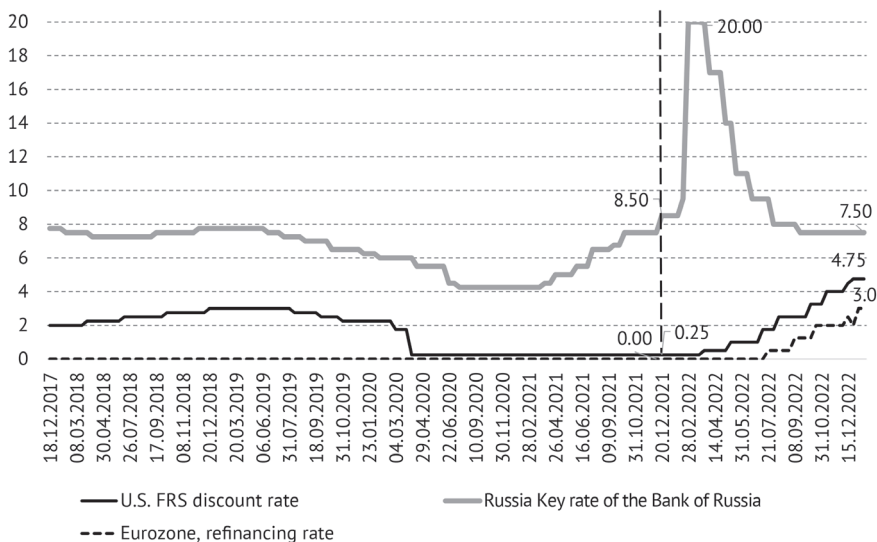
Source: own calculations based on ME and SPE.

However, negative trends in the market associated with a reduction in exchange liquidity due to the withdrawal of non-residents, the risk of outflow of domestic savings from financial assets and a sharp simultaneous decline in

the value of investments in stocks and ruble bonds, were offset by a number of monetary policy measures (MP).

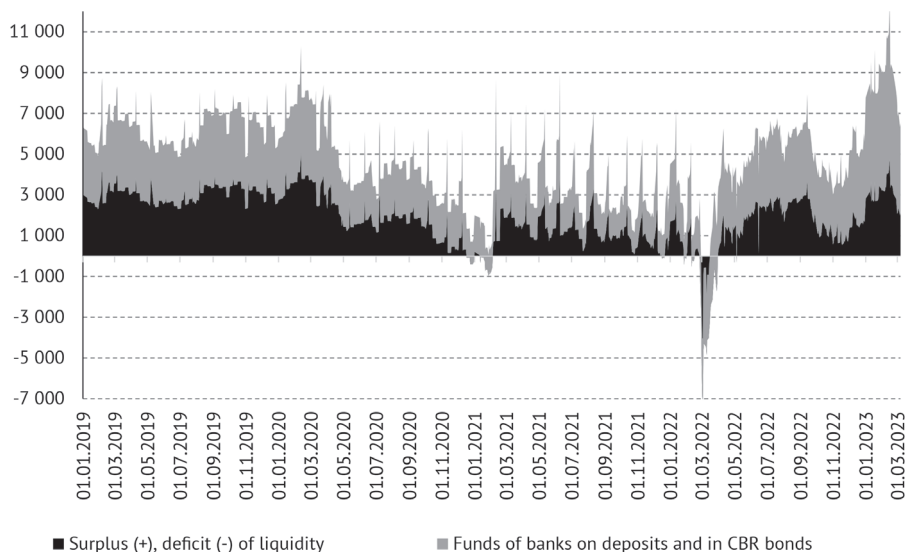
First of all, it concerns professional maneuvering of the key interest rate of the Bank of Russia. As shown in *Fig. 7*, during the acute phase of the conflict, on February 28, 2022 the Bank of Russia raised its key rate from 8.50% to 20.0% on time, preventing outflow of funds from banks and their spillover to the foreign exchange market, and then, from April 11 to September 21, as the exchange rate stabilized and inflation decreased, it started to reduce the rate down to 7.50%, thus supporting the market of ruble bonds, because when their yield is falling, the market value of bonds in portfolios of investors is growing. Thus, unlike the markets of developed countries, where a sharp growth in centralized interest rates resulted in a sharp decline in bond yields, while investments in bonds of local issuers in the Russian financial market, as a rule, brought positive returns.

Another factor of the bond market and the banking system stability in 2022 was the maintenance of a relatively high level of liquidity surplus of the banking system, which we estimate as the sum of surplus (+) - deficit (-) liquidity of banks “plus” the value of funds placed on deposits with the Bank of Russia and in its bonds (*Fig. 8*). This was partly due to the easing of the Bank of Russia’s monetary policy and the fiscal policy of the Ministry of Finance during the year. The surplus of bank liquidity in terms of funds in correspondent accounts and deposits with the Bank of Russia reached Rb12.4 trillion on February 15, 2023. The average daily values of this indicator rose from Rb5.4 trillion in December 2022 to Rb 8.5 trillion



*Fig. 7.* The FRS discount rate, the European Central Bank’s refinancing rate and the Bank of Russia’s key rate, % p.a., from December 2017 to February 28, 2023

Source: Own calculations based on Cbonds.



*Fig. 8. Total amount of bank liquidity from January 2019 to March 7, 2023, billion rubles*

Source: own calculations based on the Bank of Russia.

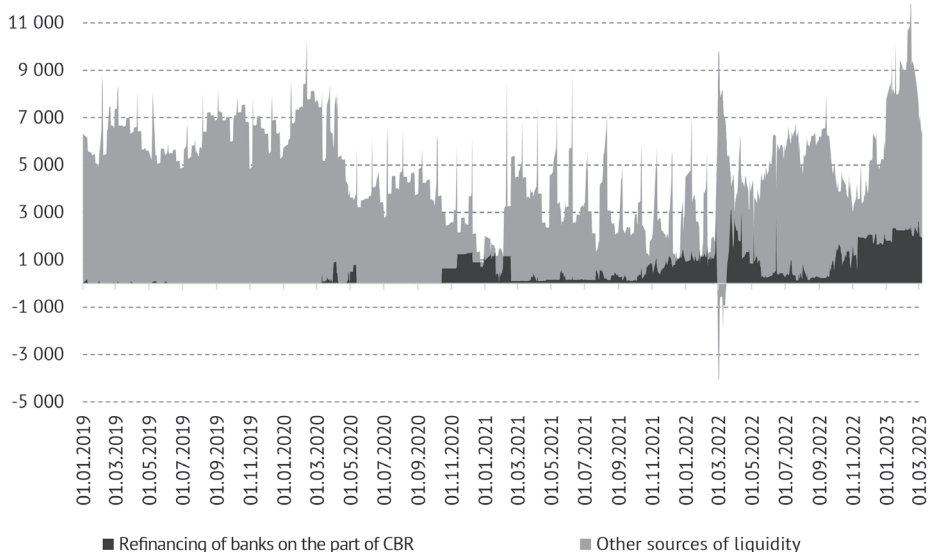
in January and Rb 9.6 trillion in February 2023. A year earlier, the respective values were Rb2.3 trillion in December 2021, Rb3.2 trillion in January and Rb2.2 trillion in February 2022.

Growth of bank liquidity in late 2022 – early 2023 was an important factor that contributed to the sustained demand for OFZ and corporate bonds of major issuers, as banks remained the key investors in the market for ruble-denominated bonds. With the departure of non-residents from the OFZ market, the role of banks as investors in the government bond market increased significantly in 2022–2023.

The internal activities of banks given the growing inflows of funds into the banking system due to growth of budget expenditures were the main sources of formation of the aggregate bank liquidity surplus, as well as an increase in the volume of refinancing of banks at the expense of the resources of the Bank of Russia (*Fig. 9*). The average daily volume of banks' own sources of liquidity rose from Rb1.3 trillion in December 2021 to Rb3.5 trillion in December 2022 and Rb 7.3 trillion in February 2023. The average daily volume of refinancing of banks by the Bank of Russia rose to a smaller extent from Rb1.0 trillion in December 2021 to Rb 1.8 trillion in December 2022 and Rb 2.2 trillion in February 2023.

In 2022, the majority of investments in Russian companies' stock portfolios showed a significant negative return (*Table 5, Fig. 10*). The Ruble index of the Moscow Exchange, the total return, declined by 37.3%, which, however, was much less than the losses of stock exchange funds of the Russian companies on foreign stock exchanges (*Table 3*). In difficult conditions, the Moscow Exchange





**Fig. 9. Sources of total banking liquidity from January 2019 to March 7, 2023, billion rubles**

Source: own calculations based on the Bank of Russia.

stock index was supported by funds of domestic private investors and restrictions imposed on the withdrawal of portfolio investments in Russian shares by non-residents from unfriendly countries. Only three portfolios out of all 29 strategies under consideration on the domestic stock market had positive yield in 2022, i.e. shares of chemical and petrochemical companies at the rate of 17.5%, shares of small capitalization companies (5.7%) and low-liquidity shares (2.8%).

*Table 5*

**Yield in rubles of investments in shares and bonds on the domestic market in 2018–2022 (% p.a.) and for the period from the beginning of 2023 to February 28, 2023 (%)**

	Investment strategies	Benchmarks: index, portfolio of an open-end or exchange-traded UIF	2018–2022	2022	Since the beginning of the year on February 28, 2023
<b>Russia PJSC stocks</b>					
1	Moscow Exchange index – total return	MCFTR Index	7.7	-37.3	4.9
2	Broad stock index	Wide_Market_TR	14.9	-22.4	6.0
3	Stocks of large capitalization companies	Big_TR	15.1	-21.3	5.6

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	Investment strategies	Benchmarks: index, portfolio of an open-end or exchange-traded UIF	2018–2022	2022	Since the beginning of the year on February 28, 2023
4	Stocks of small capitalization companies	Small_TR	22.6	5.7	35.3
5	Growth stocks	Growth_L_TR	17.8	-18.7	13.5
6	Value stocks	Value_H_TR	10.1	-29.9	5.7
7	Stocks with low accumulated yield	Low_Return_TR	-0.1	-28.8	2.7
8	Stocks with high accumulated yield	High_Return_TR	17.3	-21.7	9.5
9	Low liquidity stocks	Low_Liq_TR	13.9	2.8	3.1
10	High liquidity stocks	High_Liq_TR	14.5	-27.3	8.0
11	Stocks with low dividend yield	Low_DY_TR	14.1	-27.2	4.7
12	Stocks with high dividend yield	High_DY_TR	16.7	-15.2	-1.6
13	Stocks without dividend payment	No_Div_TR	2.9	-18.4	15.2
14	Stocks with dividend payment	Was_Div_TR	15.6	-22.8	1.3
15	Private companies' stocks	Private_TR	17.7	-20.9	5.8
16	State-owned companies' stocks	SOE_TR	11.0	-24.1	5.5
17	Stocks with low market value	Low_PE_TR	11.5	-23.2	2.6
18	Stocks with high market value	High_PE_TR	18.7	-21.3	6.3
19	Financial ecosystems bonds	RusEco Index		-41.5	11.5
<b>Moscow Exchange industry indices – total return</b>					
20	Oil & gas companies	MEOGTR		-29.4	0.9
21	Electric power industry	MEEUTR		-22.4	5.0
22	TV communication	METLTR		-15.8	9.6
23	Metallurgy and mining	MEMMTR		-45.4	9.9
24	Financial sector	MEFNTR		-48.0	11.7
25	Consumer sector	MECNTR		-36.3	4.5
26	Chemistry and petrochemicals	MECHTR		17.5	9.8
27	Transport	METNTR		-44.7	17.2
28	Information technologies	MEITTR		-58.3	12.4
29	Construction	MERETR		-43.3	4.5
<b>OFZ</b>					
30	Broad OFZ portfolio	RGBITR – Moscow Exchange index	5.6	3.7	0.04

	Investment strategies	Benchmarks: index, portfolio of an open-end or exchange-traded UIF	2018–2022	2022	Since the beginning of the year on February 28, 2023
31	Index of the most liquid state bond issues	Cbonds-GBI RU	6.3	7.5	-0.02
32	Government bonds with maturity of 1 to 3 years	Cbonds-GBI RU 1–3Y	7.3	11.8	0.8
33	Government bonds with maturity of 3 to 5 years	Cbonds-GBI RU 3–5Y	7.0	10.7	0.9
34	Government bonds with maturity of 5 years and more	Cbonds-GBI RU 5Y	5.9	5.2	-0.6
<b>Corporate bonds</b>					
35	Broad index of corporate bonds	IFX-Cbonds	8.6	11.9	1.2
36	Bonds with medium and above average credit rating	Cbonds-CBI RU BBB/ruAA-	7.9	10.8	0.6
37	Bonds with moderately low credit rating	Cbonds-CBI RU BB/ruBBB	8.9	12.4	1.4
38	Bonds with low credit rating	Cbonds-CBI RU B/ruB-	10.2	15.9	2.5
39	High yield bonds	Cbonds-CBI RU High Yield		7,9	2,5
40	Bonds with maturity of 1 to 3 years	Cbonds-CBI RU 1-3Y	8.4	11.8	1.0
41	Bonds with maturity of 3 to 5 years	Cbonds-CBI RU 3-5Y	8.3	11.1	1.0
42	Bonds with maturity of 5 years and more	Cbonds-CBI RU 5Y		5.5	-1.9

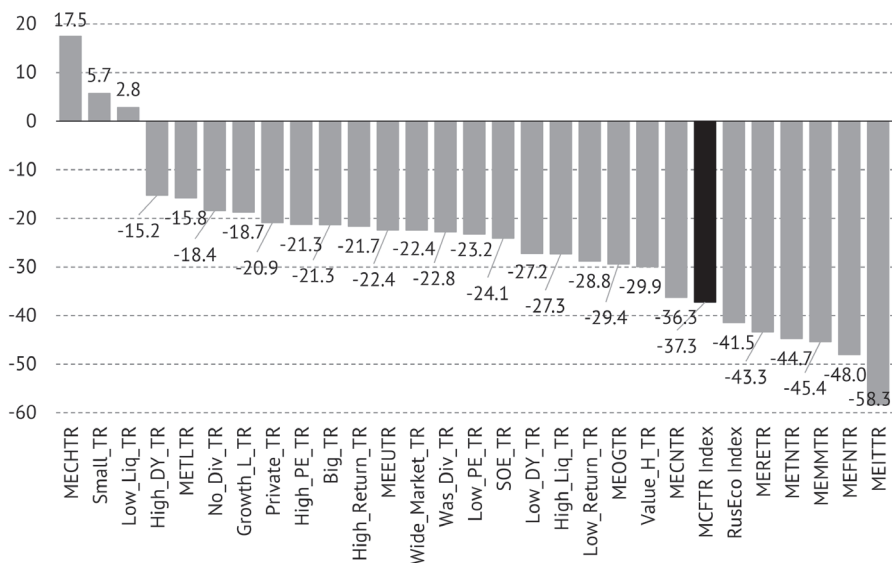
**Note.** The return of the factor investment strategies (lines 2–18) was calculated based on IAES RANEPА resource “Constructor CAPM-ru». URL: <https://ipei.ranepa.ru/ru/capm-ru>; Index of the financial ecosystems bonds RusEco (line 19) was calculated and published by IAES RANEPА. URL: <https://ipei.ranepa.ru/ru/capm-ru/ruseco-index>

Sources: Own calculations based on resources of Moscow Exchange, Cbonds and “Constructor CAPM-ru” IAES RANEPА.

It was an interesting pattern of 2022 that all 17 factor investment strategies listed in *Table 5* (lines 2–18), and half of the 10 sectoral strategies in the shares of Russian companies showed a higher return than the index portfolio of Moscow Exchange, that is, the total return.

This result is due to factor portfolios of shares that are as a rule much more diversified by the number of issuers than the Moscow Exchange index, and in the industry strategies the weights of certain issuers do not coincide with the structure of the Moscow Exchange index, which is dominated by a limited set of shares.

Over the 5-year time horizon 2018–2022, 15 of the 17 factor strategies outperformed the Moscow Exchange Index portfolio with its average annual return of 7.7% per annum, which indicates the stability of the pattern of higher



*Fig. 10. Yield of the factor and industry investment strategies in the domestic stock market compared to the Moscow Exchange index – total return in 2022, % p.a.*

Sources: Own calculations based on resources of Moscow Exchange, Cbonds and “Constructor CAPM-ru” IAES RANEPА.

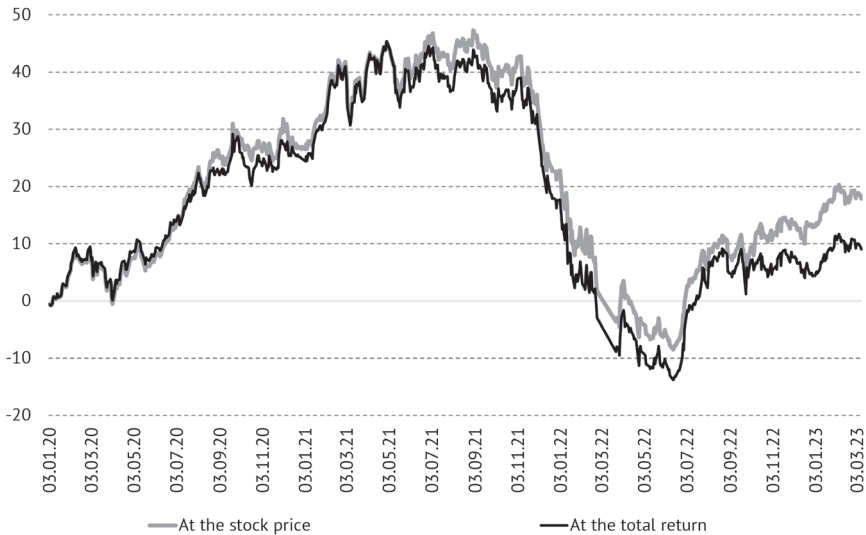
returns of factor strategies compared to the most popular index of the Russian stock market. All this shows that even in the current difficult conditions investors in Russian equities can noticeably improve the returns of their individual portfolios by investing in a wider range of issuers with a higher risk of volatility of these investments. This factor should be taken into account when improving financial regulation and the strategies of financial structures to expand the range of financial instruments available to domestic investors.

Unlike the global market of 2022, the yield of all OFZ and corporate bond portfolios on the domestic bond market was positive, which can be explained by the fact that, unlike the interest rates of the FRS and the ECB, the key rate of the Bank of Russia actually dropped during the year (Table 5). The cumulative yield of the broad index OFZ portfolio (RGBITR) amounted to 3.7% and the index of corporate bonds (IFX-Cbonds) reached 11.9% per annum. Portfolios of both OFZs and corporate bonds presented a somewhat unexpected pattern showing a lower total yield of bonds with a longer duration compared to bonds with a shorter duration amid a downward trend in the key rate of the Bank of Russia.<sup>1</sup> This may be due to the narrow range of bonds included in a particular index or to the challenge in determining the market value of illiquid bonds. One can also note the

<sup>1</sup> Generally, when centralized interest rates decline, the total return of bond portfolios with longer duration should be higher than the total return of portfolios with shorter duration.

low aggregate yield in 2022 of the government bonds portfolios with maturity of 5 years and more at the rate of 5.2%, as well as portfolios of high-liquid corporate bonds at 7.9%, which stems that these categories of bonds were not in sufficient demand among investors in the market. This means that they were traded on the exchange at a significant discount from the face value. The lower yield of long-term bonds compared to short-term bonds could mean that investors in the bond market are expecting the Bank of Russia key rate to increase, which would mean a more active decline in the value of long-term bonds compared to short-term ones.

Financial ecosystems set up by major banks and technology companies play an increasingly important role in the Russian market. For investors, investing in ecosystem shares may be a way to obtain an additional premium to the return on their investment portfolio. In 2022, both total (including dividends) and exchange rate returns of the RusEco<sup>1</sup> financial ecosystems portfolio decreased more significantly compared to the total and exchange rate returns of the Moscow Exchange index (*Fig. 11*). In 2022, the size of the cumulative premium on the full return of the RusEco index compared to the return of the Moscow Exchange index was 4.4 p.p., and the premium on the exchange rate return was 12.9 p.p.



*Fig. 11.* The rate of return premium of the RusEco index of IAES RANEPА to the Moscow Exchange index from January 2020 to March 9, 2023, cumulative total, p.p. (January 1, 2020 = 0 p.p.)

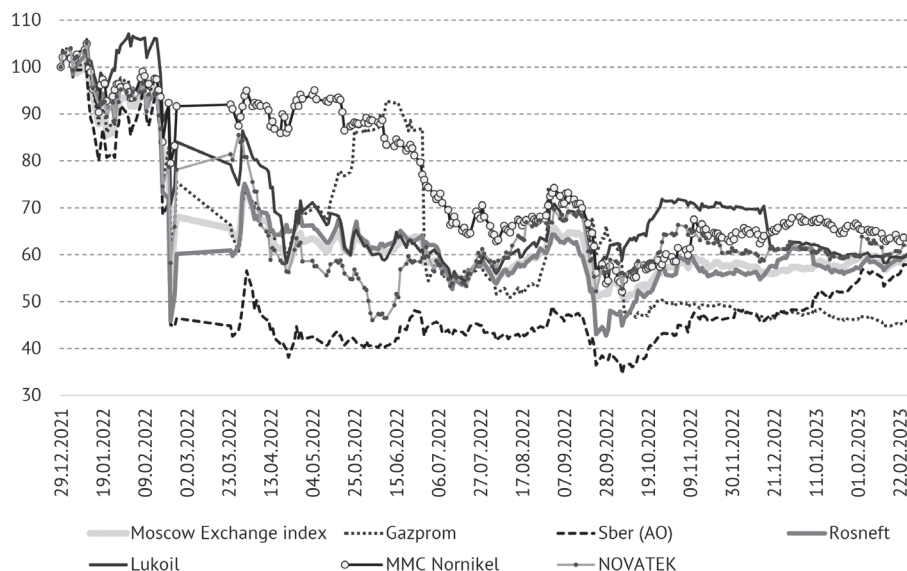
*Source:* Own calculations based on “Constructor CAPM-ru” information database.

<sup>1</sup> IAES RANEPА calculates monthly the index of Russian financial ecosystems portfolio value dynamics (RusEco). It reflects the exchange and total return (TR) of the bonds of 9 companies claiming to be financial ecosystems, i.e. Moscow Exchange, MTS, Ozon, Rostelecom, Sber, TCS Group, VK, VTB and Yandex. The RusEco Index allows us to evaluate whether the “ecosystem” of financial and technology companies brings an additional return premium for investors. For a detailed description of the index, ref.: URL: <https://ipei.ranepa.ru/ru/capm-ru/ruseco-index>

from January 1, 2020. At the end of the first two months of 2023, the value of the financial ecosystem portfolio was recovering faster than the RusEco Index. As of February 28, 2023, the accumulated premium on the full return of the RusEco index since January 1, 2020 rose to 10.7 p.p. and the exchange rate return to 19.3 p.p. Thus, the outpacing growth of the financial ecosystems' portfolio value compared to the Moscow Exchange index was restored in 2023.

#### 2.1.4. Financial crises in the Russian stock market

As of March 1, 2023, the index of the Moscow Exchange fell by 39.8% from its level of December 30, 2021. Over the same period, the stock price of "Gazprom" fell by 52.0%, MMC "Norilsk Nickel" by 35.7%, "Rosneft" and "Lukoil" stocks by 39.7% and 38.3% respectively, "Novatek" stocks by 37.6% and "Uber" by 41.9% (Fig. 12). Stocks of Lukoil, Novatek and MMC Norilsk Nickel, which, unlike the other three most liquid shares were issued by private rather than state-owned companies, showed relatively higher yield compared with the Moscow Exchange. Owing to sanctions, the key risk for stocks of major Russian companies is that due to lacking new demand from global investors, their market value may remain significantly below pre-crisis levels for several years. In this segment of the domestic financial market there is the greatest risk of disappointment in investments in risky assets for private investors.



*Fig. 12. Change in the value of the Moscow Exchange index and the value of stocks of "Gazprom", MMC "Norilsk Nickel", "Novatek", "Lukoil", "Rosneft" and "Sberbank" as of March 1, 2023, % (the values of the Moscow Exchange index and the stocks prices of the issuers on 30.12.2021 = 100%)*

Source: Authors' calculations based on Moscow Exchange data.

The significance of stocks for long-term private investors and NPFs means that without investing a sufficiently high share of the portfolio, especially taking into account the challenge of using global diversification strategies, it is almost impossible to achieve that long-term investments of pension savings could have a significant impact on the increase in the replacement rate of lost earnings of their owners. In this sense, if the stagnant growth trend of the domestic stock market continues for the next few years, the current measures taken to stimulate long-term savings may be ineffective. The financial regulator needs to develop an effective growth strategy for the Russian equity market.

Investors frequently perceive risks to financial asset prices as a rare and sudden event called a “black swan.”<sup>1</sup> However, in our opinion, on the long horizons, starting from 1997, the dynamics of the market of the Russian issuers stocks is more precisely marked by the alternative hypothesis of “black turkeys” of Lawrence Siegel<sup>2</sup> and Paul Kaplan.<sup>3</sup> According to this theory, financial crises are viewed as events that last over time from the moment stock prices fall to their full recovery to the pre-crisis level. In this sense, financial crises are not such rare and sudden events; many capital markets permanently live under such crises throughout their existence.

During the entire 27-year history of the Russian stock market from September 1995 to February 2023 the Russian stock market has faced five waves of financial crises that took place in 1997, 2008, 2014, 2020, and 2021 (*Table 6*). The first crisis happened in August 1997 and lasted until August 2003. After that, one crisis was soon replaced by another, and often before the recovery of another crisis was completed, a new one began. For example, after the fall of the stock market in June 2008, the value of the RTS index has not yet recovered, amounting on February 28, 2023 to only 38.5% of its pre-crisis level of May 2008. However, there were three new financial crises from March 2014 to December 2019, from January 2020 to May 2021, and from November 2022 until present. Thus, as of February 28, 2023, the last (fifth in the history of the domestic stock market) financial crisis, where the value of the RTS index fell by 49.2% in February 2022 vs its peak in October 2021, has not yet ended and has already lasted for 16 months. Thus, according to L. Siegel’s theory, as of February 2023, there were two “black turkeys” in the stock market at the same time in terms of the 2008 stock market downturn not yet over and a new crisis since November 2021.

From September 1995 to February 2023, there was only one 5-year period, from August 2003 to May 2008, when the stock market of Russian companies was not in a state of financial crisis, i.e., there was no “black turkey” event.

Crises on the Russian stock market are usually accompanied by significant declines on the global oil market, which is one of the key drivers of foreign exchange earnings in the country (*Table 6*). After Brent oil prices fell in August

1 *N. Taleb* (2015). *Black swan. Under the Sign of Unpredictability*. 2-nd edition, add. Translated from English. M.: Kolibri, Azbuka-Atticus.

2 *Siegel Laurence B.* (2010). *Black Swan or Black Turkey? The State of Economic Knowledge and the Crash of 2007–2009*. // *Financial Analysts Journal*. Vol. 66. Iss. 4. July/August. P. 6–10.

3 *Kaplan Paul D.* (2020). *What Prior Market Crashes Taught Us in 2020* // Morningstar on-line. 23 July. URL: <https://www.morningstar.com/features/what-prior-market-crashes-can-teach-us-in-2020>

2008 by 67.7%, their recovery to the pre-crisis level has not been completed until now after 175 months, which also does not allow the RTS index to recover to the peak value of 2008. The specifics of the current stock market crisis, which began in November 2021, is that for the first time such a crisis occurs at relatively high oil prices. The brief slump in oil prices at the end of 2021 ended in just three months, while the decline in the stock market has lasted 16 months and the value of the RTS Index in February 2023 was only 51.3% of its October 2021 peak. In this case, the main reason for the decline in the stock market is the lack of demand for shares from non-residents in the context of sanctions and cautious attitude of domestic investors to the stocks of Russian companies.

Table 6

**Parameters of financial crises in Russia from July 1997  
to February 28, 2023**

Index, date of peak value	Depth of the index decline	Period of the index decline and recovery		Index as of February 28, 2023 r. (peak = 100%)
		Period	Months	
<b>RTS index</b>				
July 1997	-91.3	August 1997 – August 2003	73	
May 2008	-78.2	Recovery has not been completed	177	38.5
February 2014	-48.9	March 2014 – December 2019	72	
December 2019	-34.5	January 2020 – May 2021	17	
October 2021	-49.2	Recovery has not been completed	16	51.3
<b>Moscow Exchange index</b>				
August 1997	-79.1	September 1997 – May 1999	21	
May 2008	-68.2	June 2008 – April 2016	95	
December 2013	-13.2	January 2014 – January 2015	13	
December 2019	-17.6	January – November 2020	11	
October 2021	-52.8	Recovery has not been completed	16	54.3
<b>Brent oil price</b>				
December 1996	-58.3	January 1997 – November 1999	35	
July 2008	-67.7	Recovery has not been completed	175	61.7
June 2014	-72.6	July 2014 – March 2022	93	
December 2019	-72.7	January 2020 – May 2021	17	
October 2021	-11.2	November 2021 – January 2022	3	

Sources: own calculations based on Moscow Exchange, Bank of Russia and resource: URL: <http://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=p&s=rbrte&f=m>

The recovery from two downturns out of five financial crises for the RTS index that began in June 2008 and November 2021 has not been completed as of the end of February (Fig. 13).



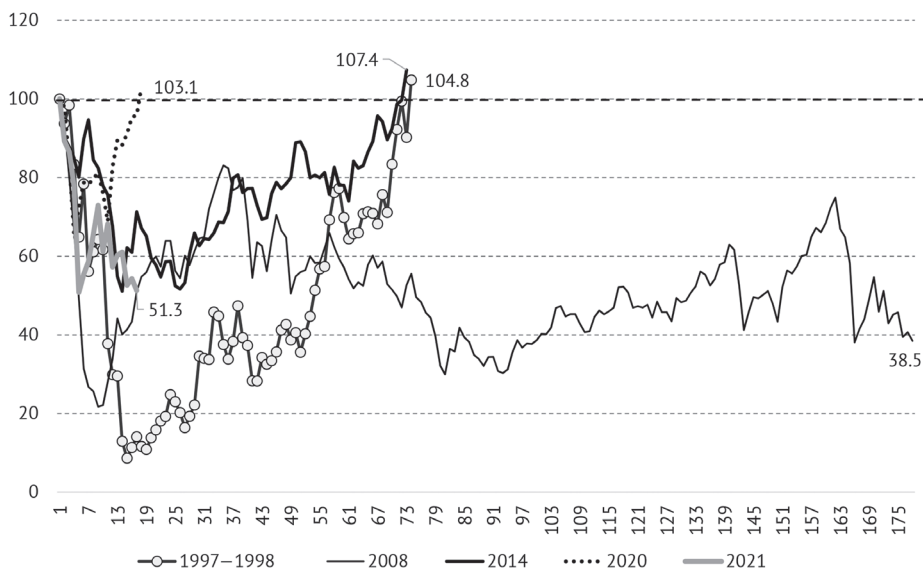


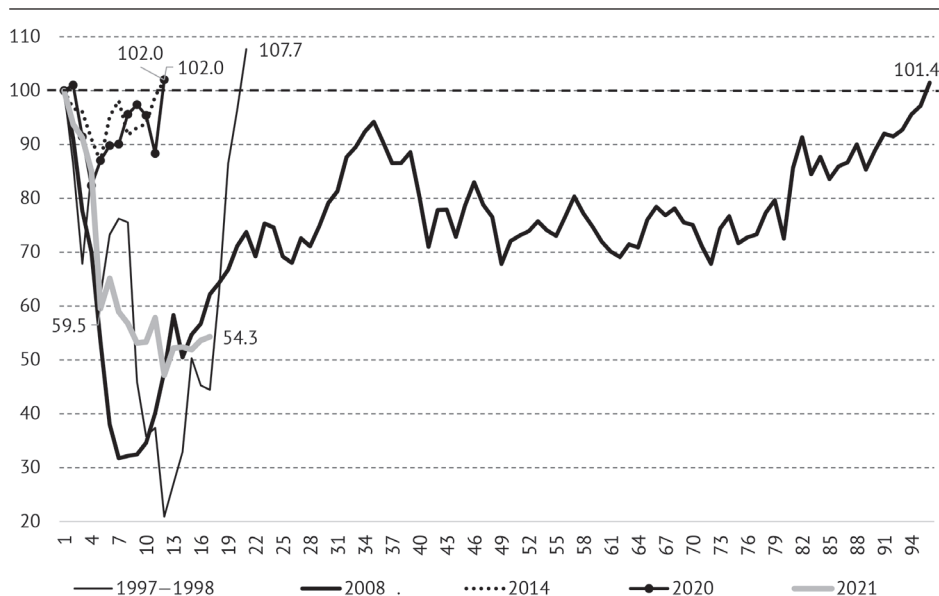
Fig. 13. Changes of the RTS index relative to its peak values in July 1997, May 2008, February 2014, December 2019 and October 2021 on a time horizon measured in number of months, as of February 28, 2023, in % (peak = 100%)

Source: own calculations based on Moscow Exchange

The recovery of the RTS index since June 2008 until present took 177 months or 14.7 years, and its value on February 28, 2023 was only 38.5% of its peak in May 2008. The decline of the RTS index since November 2021 was 49.2% of October 2021 and lasts for already 16 months. The current decline of the RTS index is somehow lower due to strengthening tendency of a ruble vs dollar in 2022.

Only the recovery from shock of November 2021, which lasted for 16 months, had not been completed out of the five financial crises for the ruble index of the Moscow Exchange as of February 2023 (Fig. 14). Compared to other four previous crises, the current level of 54.3% decline of the Moscow Exchange index is inferior to the depth of the stock market decline during the recessions of 1997 by 79.1% and 2008 by 68.2%. In terms of the recovery period of the Moscow Exchange index, the current decline, which lasts 16 months, is the third in the history of financial crises in Russia and in the next six months may exceed the recovery time of the MICEX index during the financial crisis of 1997–1998, which lasted 21 months.

Over long historical horizons, equity markets sometimes recover very slowly, and in some cases, they never recover for decades to the levels reached in the past. The most long-term crises in the history of stock markets count as recessions of the U.S. stock market during the Great Depression of 1929–1933, as well as the stock market of Japanese companies after 1989. The recovery of



*Fig. 14. Changes in the Moscow Exchange index vs its peak values in August 1997, May 2008, December 2013, December 2019 and October 2021 on the time horizon measured in number of months, as of February 28, 2023, in % (peak = 100%)*

Source: own calculations based on Moscow Exchange

the Dow Jones Industrial Average (DJIA) stock index in the United States after the Great Depression lasted 303 months or 25.3 years (*Fig. 15, Table 7*). In 2015, this anti-record was broken by the Japanese NIKKEI-225 index, which as of February 28, 2023, could not recover for 398 months or more than 33 years. Its value in February 2023 was only 70.5% of its 1989 peak.

The recovery period after the 2008 crisis of the Russian currency index RTS and the MSCI Brazil Index reached 177 months, i.e., the milestone typical for relatively rare in the global history of medium-term financial crises. After the dot.com crash in the U.S. in 2000, the NASDAQ index returned to its pre-crisis values for the same 177 months, and the recovery of the South Korean stock index KOSPI after the severe financial crisis in South Korea in 1989 lasted 183 months. Such lengthy periods of the stock indices recovery as a rule indicate serious structural problems in the economy, preventing the restoration of capitalization of the national companies' stocks. As of February 28, 2023, the current values of the RTS and MSCI Brazil indices were only 38.5% and 32.8% respectively of their 2008 pre-crisis peaks, which can put these indicators in 2023 on the path of recovery from long-term rather than medium-term crises, similar to the recovery of the American DJIA index after the Great Depression of 1929.

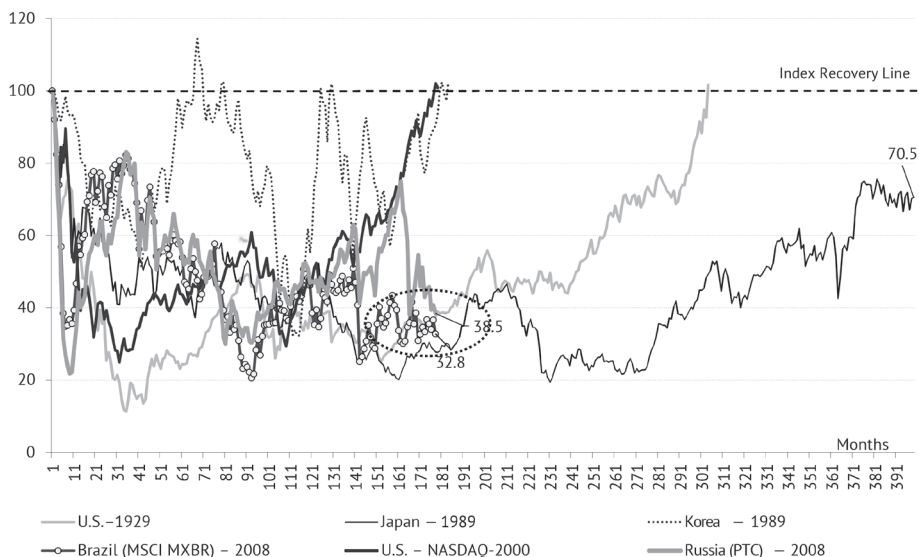


Fig. 15. Depth and duration of the longest periods of stock index recovery as of February 28, 2023 (pre-crisis peak = 100%)

Sources: own calculations based on Moscow Exchange and Bloomberg.

Table 7

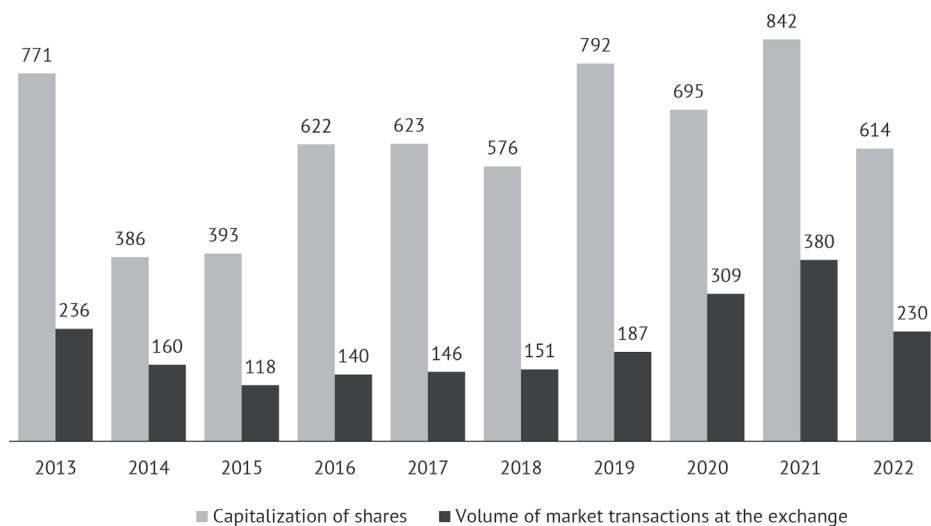
### The lengthy recovery periods for country stock indices as of February 28, 2023

Country (index – the crisis start year)	Period of the index recovery vs peak, months	Completing recovery	Current value of the unrecovered index, % (peak = 100%)
Japan (Nikkei – 1989)	398	No	70.5
U.S. (DJIA – 1929)	303	Yes	
South Korea (KOSPI – 1989)	183	Yes	
U.S. (NASDAQ – 2000)	177	Yes	
Russia (PTC dollars – 2008)	177	No	38.5
Brazil (MSCI dollars – 2008)	177	No	32.8
China (MSCI – Shanghai dollars – 1997)	122	Yes	
China (MSCI – Shanghai dollars – 2008)	82	Yes	

Sources: own calculations based on Moscow Exchange and Bloomberg.

#### 2.1.5. Institutional features of the stock market

In 2022, compared to 2011, capitalization of Russian equities dropped from \$842bn to \$614bn or by 23.4% (Fig. 16). The liquidity of the stock market as measured by the volume of market transactions in shares on the Moscow Exchange, decreased to a greater extent. Over the same period, the volume of these transactions has reduced from \$380 bn to \$230 bn or by 39.5%.



\* Market transactions are defined as transactions made during an anonymous auction at the Moscow Exchange.

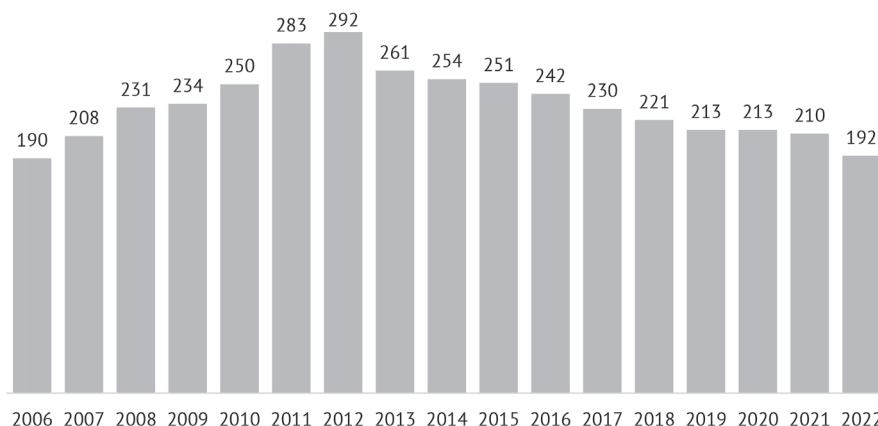
*Fig. 16. Capitalization and volume of market transactions in shares\* on the Moscow Exchange from 2013 to 2022, billion dollars*

Source: own calculations based on World Federation of Exchanges.

For 10 years, starting in 2013, there has been a continuing downward trend in the number of Russian issuers listed on the Moscow Exchange (*Fig. 17*), and the number of Russian issuers in the listing of shares on the Moscow Exchange has been tending to decrease (*Fig. 17*). In 2022, the number of issuers in the stock exchange listing dropped by another 18 companies compared to 2021 and amounted to 192 issuers. The main challenge in replenishing the listing is the weak inflow of new Russian companies to the exchange.

A serious issue of the Russian stock market is the lack of proper statistical records of public offering transactions on stock exchanges. This is manifested in discrepancies in the IPO-SPO statistics of Russian companies and data of the Moscow Stock Exchange, the World Federation of Exchanges, Preqveca.ru and other information providers. This review, using the example of transactions in 2020–2022, provides our own classification of public offering transactions on Russian and foreign stock exchanges of companies registered in Russia and conducting their main activities in Russia (Russian companies).<sup>1</sup>

<sup>1</sup> Based on the classification of transactions of the World Federation of Exchanges, we identified 8 varieties of public offering transactions on stock exchanges. The first group includes 4 types of transactions conducted on the Russian stock exchanges, involving an IPO or SPO shares with the attraction of new capital into the company or with the simple resale of shares by their previous owners (i.e. without attracting new capital in the company). The second group includes similar four types of transactions in IPO and SPO, but only on foreign stock exchanges with the shares of companies that conduct their core business primarily in Russia. Taking into account the



\* For the period 2006–2011, the data provided for the MICEX listing, and for 2012–2022 for the listing of PJSC Moscow Exchange.

*Fig. 17. The number of Russian companies listed on the Moscow Exchange from 2006 to 2022\**

Sources: own calculations based on NAUFOR collection “Russian stock market in 2015. Events and facts” (for 2006–2008), as well as on World Federation of Exchanges for 2009–2022.

After a certain revival of the market of public offerings of Russian companies in 2020–2021, in 2022 there was only one IPO deal of VUSH Holding PJSC (ticker – WUSH) and one SPO deal of Positive Group PJSC (ticker – POSI). As *Table 8* shows, the total volume of IPO-SPO transactions with participation of Russian companies on all exchanges in 2022 was the equivalent of \$48.6 mn or just 1.0% of the volume of transactions in 2021. In this case, out of the total volume of two transactions in the amount of \$48.6 mn, \$31.0 mn was aimed to attract new capital into the company and \$17.6 mn represented the resale of shares by their former owners.

Stock markets contribute to structural changes in the economy through mergers and acquisitions (M&A). In 2022, there was globally observed a decline in M&As from \$5.4 trillion in 2021 to \$3.4 trillion in 2022, or 37.2% (*Fig. 18*). In Russia, the total value of committed public M&A transactions dropped from \$38 bn in 2021 to \$27 bn in 2022, or 28.9%, that is, lesser than globally. Besides, the actual volume of mergers and acquisitions in Russia in 2022 could exceed the aforementioned value of transactions, because many M&A deals for the acquisition by Russian structures of assets of subsidiaries of foreign manufacturers that left the Russian market were conducted on terms that were not publicly announced. According to calculations of the AK&M<sup>1</sup> information agency, in 2022, foreign business sold their assets for a total amount of \$16.3 bn and respectively the total amount

restrictions on transactions with the shares of Russian companies abroad introduced in 2022, the IPO-SPO transactions of the second group will probably not be conducted in the near future.  
1 M.Mordovina. (2023). Analysts estimated the value of sold Russian assets by foreigners // RBC online. February 15 URL: <https://www.rbc.ru/finances/15/02/2023/63eca9869a79477016f25667>

**Classification of IPO-SPO transactions by Russian companies  
in 2020–2022, million dollars**

	2020	2021	2022	Change relative to 2021, %
1. Transactions on Russian stock exchanges, total	1625,8	2148,1	48.6	-97.7
Including:				
IPO with new capital raising	550,0	807,9	31.0	-96.2
IPO with resale of shares of the current owners	1075,8	1100,1	3.0	-99.7
SPO with new capital raising	0.0	0.0		
SPO with resale of shares of the current owners	0.0	240.0	14.6	-93.9
2. Transactions on foreign exchanges, total	1311.1	2766.4	0.0	
Including:				
IPO with new capital raising	1311,1	2204,7	0.0	
IPO with resale of shares of the current owners	0.0	561,7	0.0	
SPO with new capital raising	0.0	0,0	0.0	
SPO with resale of shares of the current owners	0.0	0,0	0.0	
3. Transactions on Russian and foreign exchanges, total	2936,9	4914,5	48.6	-99.0
Including:				
IPO with new capital raising	1861,1	3012,6	31.0	-99.0
IPO with resale of shares of the current owners	1075,8	1661,9	3.0	-99.8
SPO with new capital raising	0.0	0.0	0.0	
SPO with resale of shares of the current owners	0.0	240,0	14.6	-93.9

Sources: own calculations based on official issuers' information and the Moscow Exchange.

of M&A deals in Russia constituted \$42.9 bn according to their data, which is 1.6 times higher than the cost of M&A deals published by Merger.ru.

As a result, according to our calculations based on Merger.ru, Russia's share in the global volume of M&A deals has even increased slightly over the year, from 0.7% in 2021 to 0.8% in 2022.

In terms of key indicators that describe the capacity of the stock market, Russian stock exchanges are noticeably inferior to many foreign competitors. Amid the decline in the global financial market and sanctions pressure in 2022, the Moscow Exchange's performance against the criteria of capitalization and liquidity of the stock market noticeably deteriorated compared to other organized markets, but by the number of listed shares, even despite the absolute reduction of this indicator on the Moscow Exchange, its performance against other countries has somewhat improved (*Fig. 19a, b, c*). In other words, the reduction in the number of issuers in

stock exchange listings in 2022 has again become a global trend, and this process was even faster globally than in the Russian domestic market.

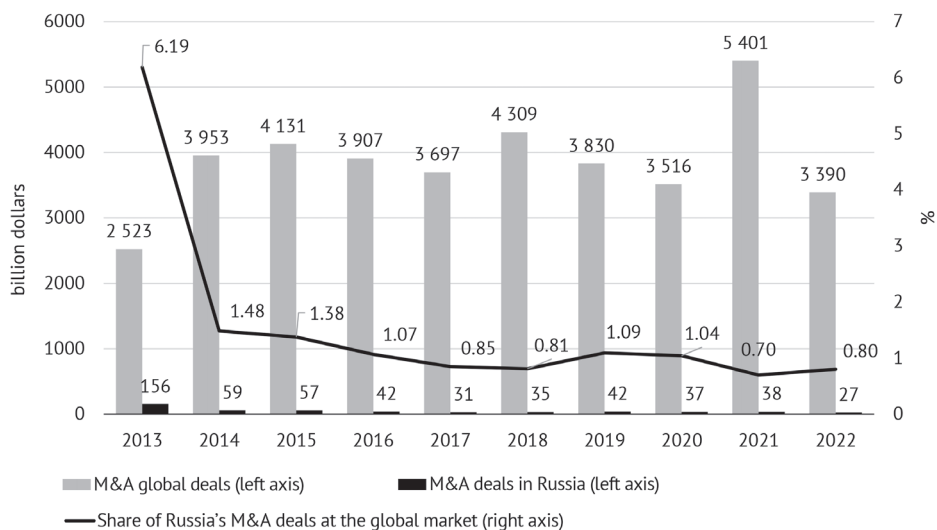
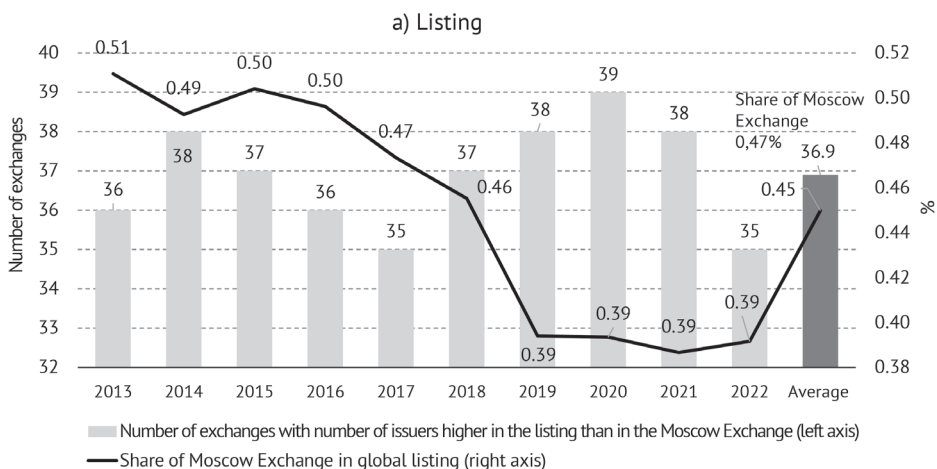
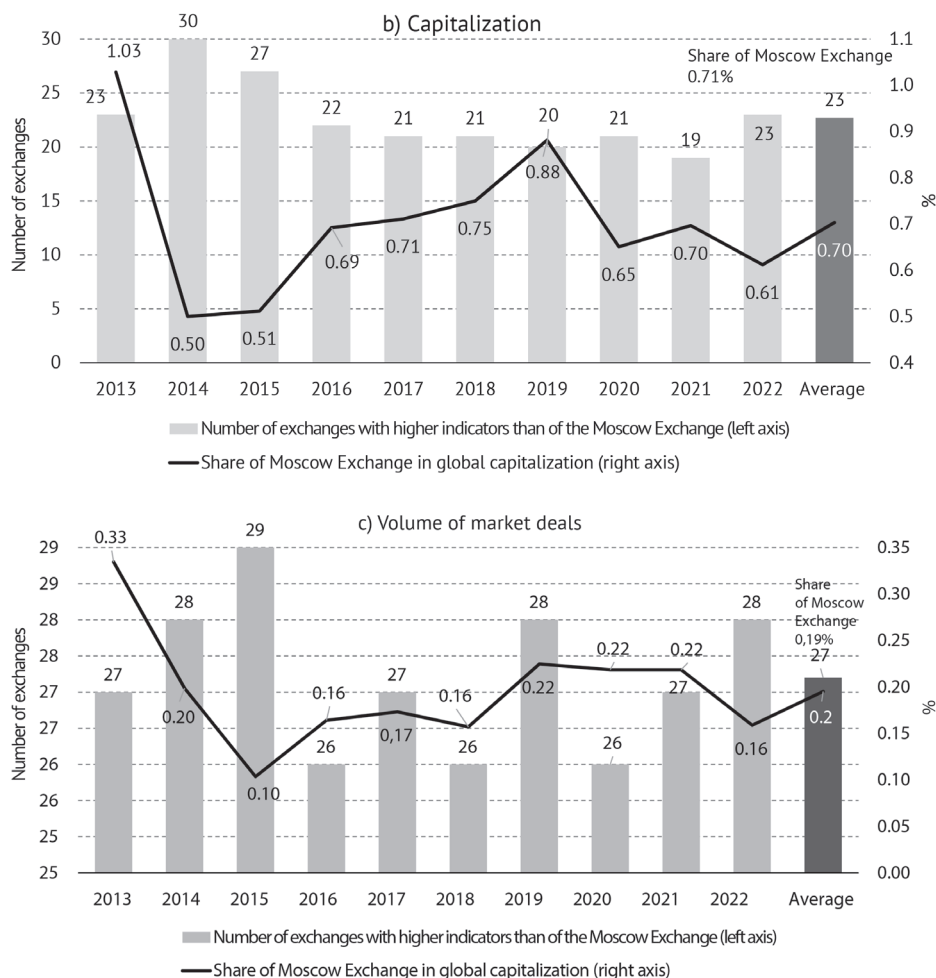


Fig. 18. The value of mergers and acquisitions (M&A) globally and in Russia (billion dollars) and share of M&A deals in Russia in the total value of similar deals in the world (%), 2013–2022

Sources: own calculations based on Merger.ru information resources of the Cbonds agency and Institute of Mergers, Acquisitions and Alliances (IMAA) and PwC.





**Fig. 19.** Indicators of competitiveness of the Russian stock market in 2013–2022:

a) number of foreign exchanges with a greater number of listed issuers than the Moscow Exchange and the share of Moscow Exchange in the sample of listed companies on the global stock market, %;  
 b) number of exchanges with higher capitalization of issuers in the listing than the Moscow Exchange, and the share of Moscow Exchange in the global capitalization, %;  
 c) number of exchanges surpassing the Moscow Exchange by volume of market transactions and the share of Moscow Exchange in the total value of market shares transactions in shares globally, %

Sources: own calculations based on WFE and Moscow Exchange.

In terms of the number of national listed companies in 2022, the Moscow Exchange was behind 35 other global exchanges compared to 38 as in the previous year (Fig. 19a). Its share in the total number of publicly traded global companies remains stable at 0.39% over the four years from 2019 to 2022.



By value of capitalization of issuers in 2022, the Moscow Exchange was inferior to 23 exchanges in the world as compared to 19 in the previous year, and its share in global capitalization of companies decreased from 0.70% in 2021 to 0.61% in 2022 (*Fig. 19b*).

In terms of the volume of market equity transactions in 2022, the Moscow Exchange was behind 28 exchanges globally compared to 27 in 2021, and its proportion in the total volume of exchange transactions with shares fell from 0.22% in 2021 to 0.16% in 2022 (*Fig. 19c*).

Thus, in 2022, a particularly difficult year for the Russian financial market, there was no collapse of its competitive positions against other global markets. However, the data in *Fig. 19a, b, c* show that the downward trend in the competitive positions of the Russian stock market has been observed for a long time: by the criterion of the number of listed companies steadily since 2013; by capitalization and stock liquidity since 2019. This indicates the presence of long-term factors, which appeared even before the geopolitical events of 2022, which can be associated not only with external sanctions, but also with slowing economic growth, excessive levels of regulatory burden, weakness of domestic institutional investors and lack of confidence in the market on the part of private investors.

The Russian stock market is characterized by a high level of issuers' concentration by capitalization, however, starting from 2020, there is a tendency of its decline (*Fig. 20, Table 9*). The share of top 10 PJSCs in total capitalization of issuers dropped from 70.1% in 2019 to 62.6% in 2022, the share of top 20 issuers dropped from 82.9% to 78.2%, respectively. This reflects on the whole positive changes in the structure of the exchange listing, consisting in the outstripping growth of the market value and investment attractiveness of the less liquid "second-tier" shares as compared with the traditional "blue chips". It was noted above (*Table 5, Fig. 10*) that in 2022 and in the previous years, many factor portfolios, where the largest "blue chips" have a more modest weight relative to the Moscow Exchange index portfolio, showed a higher return relative to the above stock index. The increased demand of domestic investors for "second-tier" shares not only makes it possible to diversify portfolios, but can also become a driver of recovery of the domestic stock market in the medium term. It should be taken into account that investments in these shares present a higher risk compared to blue chips, primarily in terms of liquidity of these shares and objectivity of assessment of their market value.

Nevertheless, for several years now, six companies, Gazprom, Rosneft, NOVATEK, Sberbank, Lukoil and MMC Norilsk Nickel, have held a stable lead in terms of capitalization value, accounting for exactly 50.0% of that value in 2022. Among the top 10 companies in the Russian market, 8 represent the fuel and energy complex and basic materials industries. Only two companies, Yandex and partly Sber (as a financial ecosystem) represent high-tech sector.

**RUSSIAN ECONOMY IN 2022**  
trends and outlooks

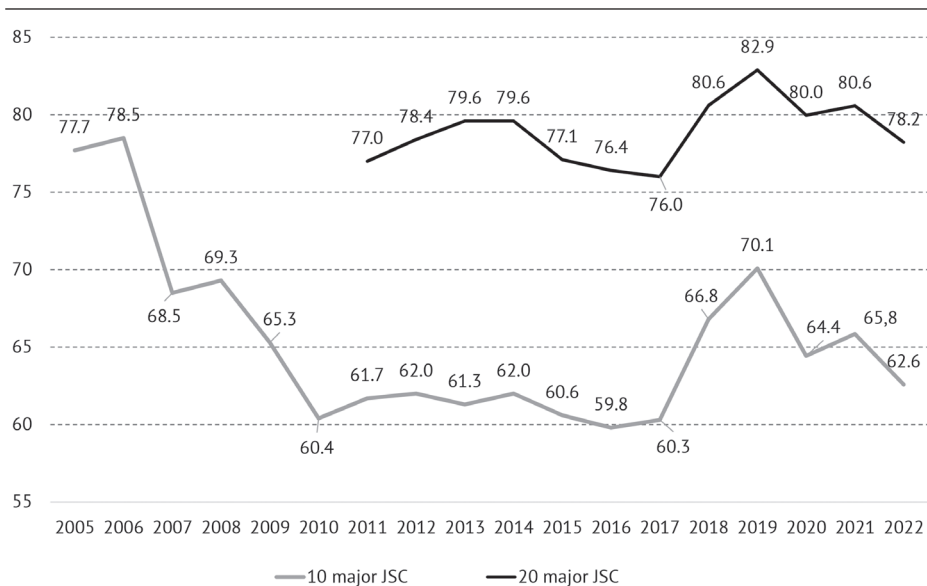


Fig. 20. Share of major PJSC in capitalization of domestic stock market, %

Source: own calculations based on Moscow Exchange

Table 9

**Capitalization of 10 major Russian public joint stock companies (PJSC) in 2020–2022**

	Issuer	2020		Issuer	2021		Issuer	2022	
		Capitalization, billion rubles	Percentage, %		Capitalization, billion rubles	Percentage, %		Capitalization, billion rubles	Percentage, %
1	PJSC Sberbank	5 873	11.4	PJSC Gazprom	8 078	12.9	PJSC Gazprom	3 852	10.1
2	PJSC Gazprom	5 024	9.8	PJSC Rosneft	6 336	10.1	PJSC Rosneft	3 834	10.0
3	PJSC Rosneft	4 620	9	PJSC Sberbank	6 329	10.1	PJSC NOVATEK	3 242	8.5
4	PJSC NOVATEK	3 814	7.4	PJSC NOVATEK	5 248	8.4	PJSC Sberbank	3 040	7.9
5	PJSC MMC Norilsk Nickel	3 738	7.3	PJSC Lukoil	4 539	7.2	PJSC Lukoil	2 811	7.4
6	PJSC Lukoil	3 590	7	PJSC MMC Norilsk Nickel	3 496	5.6	PJSC MMC Norilsk Nickel	2 339	6.1
7	PJSC Polyus	2 049	4	PJSC Gazpromneft	2 568	4.1	PJSC Gazpromneft	2 169	5.7
8	YANDEX N.B.	1 634	3.2	PJSC Polyus	1 761	2.8	PJSC Polyus	1 044	2.7
9	PJSC Gazpromneft	1 507	2.9	YANDEX N.B.	1 447	2.3	PJSC FosAgro	828	2.2
10	PJSC Surgutneftegaz	1 286	2.5	PJSC Surgutneftegaz	1 423	2.3	PJSC Surgutneftegaz	774	2.0

Issuer	2020		Issuer	2021		Issuer	2022	
	Capitalization, billion rubles	Percentage, %		Capitalization, billion rubles	Percentage, %		Capitalization, billion rubles	Percentage, %
Capitalization of all issuers on Moscow Exchange	51 428	100	Capitalization of all issuers on Moscow Exchange	62 604	100	Capitalization of all issuers on Moscow Exchange	38 238	100
Capitalization of top 5 issuers	23 070	44.9	Capitalization of top 5 issuers	30 528	48.8	Capitalization of top 5 issuers	16 778	43.9
Capitalization of top 10 issuers	33 137	64.5	Capitalization of top 10 issuers	41 224	65.8	Capitalization of top 10 issuers	23 931	62.6

Source: own calculations based on Moscow Exchange

In 2022, the share of state-owned companies (SOCs)<sup>1</sup> declined in capitalization to 48.9% from 50.5% in 2021 (Fig. 21). Given that the most capitalized SOCs operate in industries such as fuel and energy, energy, transportation, and banking, SOCs' share of capitalization typically increased during periods of rising oil prices (2010–2012, 2016–2018, 2021) and declined during periods of falling oil prices (2013–2014, 2020). The unusual reduction in the share of SOCs in capitalization in 2022, despite the noticeable growth in oil prices in 2022, may be due to the fact that large state-owned companies experienced the greatest pressure resulted from international sanctions from unfriendly countries.

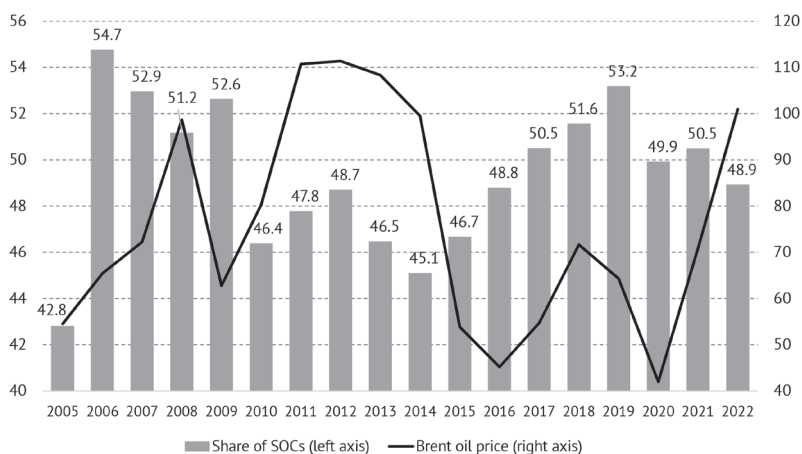


Fig. 21. Share of state-owned companies in capitalization of domestic stock market and price for Brent oil barrel in 2005–2022

Source: own calculations.

1 A state-owned company (SOC) is an organization controlled by the state, which acts as the sole owner, the owner of a majority or significant minority stake (share in the authorized capital) of at least 10%.

### 2.1.6. The bond market

#### ***The bond market situation***

As shown above, despite unprecedented sanctions the domestic bond market remained stable in 2022. Further, unlike substantial losses of bond portfolio holders on global markets the ruble yield on Russian issuers' bonds remained generally positive owing mostly to measures aimed at reducing the RF Central Bank's key rate, maintaining an acceptable level of liquidity in the banking sector and facilitating a stable exchange rate of the Russian ruble.

However, a number of challenges on the bond market holds back its further development. Amid uncertainty, investors still expect a rise in interest rates and higher credit risks. According to the opinion of the Chairman of the RF Central Bank, risks in the economy have shifted towards proinflationary risks.<sup>1</sup> For this reason, the RF Central Bank still believes that the key rate is more likely to increase, rather than decrease. Expectations of growth in centralized interest rates lead to a situation where investors prefer making investments in shorter-term bonds and require an additional premium when investing in long-term securities. Amid a lack of transparent financial information on issuers and credit risks, only large companies have an access to the primary market.

As shown in *Fig. 22*, owing to the effective policy of maintaining a financial stability the regulators succeeded in neutralizing the implications of sudden growth in corporate bonds' G-spreads after the developments of February 2022 and facilitating later a stable decrease thereof to acceptable levels. Corporate bonds' effective G-spreads are still above the pre-crisis level, however, they do not hinder the full functioning of the market of these financial instruments.

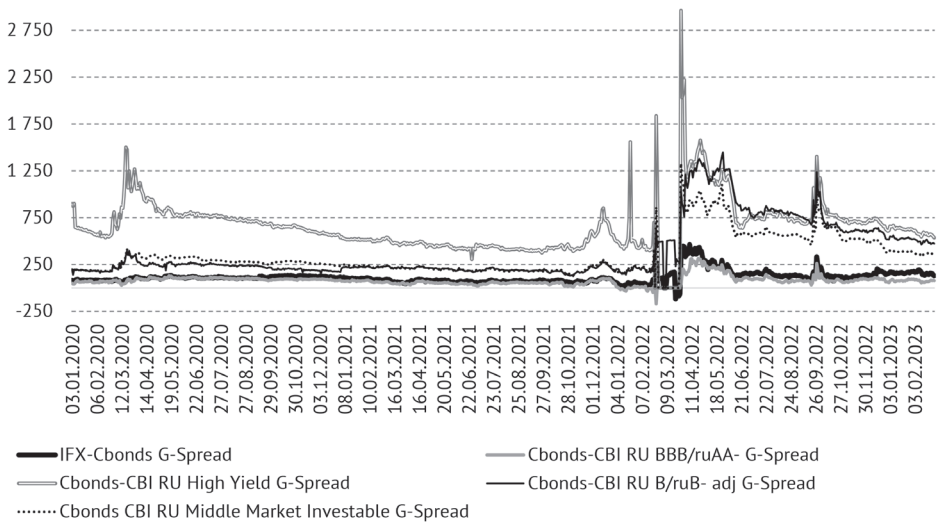
So, on December 30, 2021 the average G-spread of bonds of the portfolio of the most liquid and reliable IFX-Cbonds issuers was equal to 62.3 p.p. Shortly after the resumption of trading on the corporate bond market it amounted to 439.1 p.p. as of March 31, 2022 and fell to 156.4 p.p. by February 28, 2023. So, its current value is 2.5 times the 2021 level and in the current situation this does not prevent the full functioning of the primary and secondary markets of corporate bonds with a high credit quality. However, in terms of lower quality bonds of a broader spectrum, even though the current values of their G-spreads increased to a lesser extent relative to 2021 than the spreads of high-grade bonds, these excessive spreads along with investors' low propensity to credit risks limit these bonds' growth.

In 2021, high-yield bond spreads increased from 508.2 p.p. to 563.3 p.p. as of February 28, 2023 or by 10.8% on bonds with a medium investment grade rating (Cbonds CBI RU Middle Market Investable) from 186.1 p.p. to 368.0 p.p. or by 97.7%.

In 2022, the stability of the domestic market of ruble corporate bonds was facilitated by this market's traditionally weak reliance on non-residents'

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<sup>1</sup> The statement by Elvira Nabiullina, Chairman of the RF Central Bank on the results of the meeting of the Board of Directors of the RF Central Bank on March 17, 2023. URL: <https://www.cbr.ru/press/event/?id=14629>



\* G-spread is the indicator of a credit risk of corporate bond issues, representing the difference between yield to maturity of corporate bonds and yield to maturity of government bonds with the same duration.

Fig. 22. Average sizes of G-spreads\* of ruble corporate bonds with various credit ratings in 2020–2022 as of March 2, 2023, p.p.

Source: own calculations based on the data of Cbonds.

investments, while banks, the main investors on the bond market, succeeded in maintaining a sufficient level of excess liquidity.

Another problem of corporate bonds consists in their low duration, that is, the period of circulation (Fig. 23). The average annual duration of the portfolio of reliable IFX-Cbonds bonds fell from 675 days in 2021 to 494 days in 2022 or by 26. 8% and that of high-yield bonds (HYB) from 511 days to 454 days or by 11.3%. A decrease in bond duration takes place amid an economic uncertainty and expectations of a pickup in interest rates. Low duration bonds are more difficult to use as a source of long-term investments, so in the present situation they are mostly used as an instrument of refinancing issuers' current activities and redemption of debt on bank loans.<sup>1</sup>

<sup>1</sup> See, for example: M. Kolomietz, E. Kulieva, G. Galieva (2023). The Corporate Sector on the Bond Market: Refinance for All, SMB Debuts; 40% of the Companies Wait for the Spring Opening // The "Expert RA" Review. March 1. URL: [https://www.raexpert.ru/researches/ua/debt\\_market\\_2023/](https://www.raexpert.ru/researches/ua/debt_market_2023/)

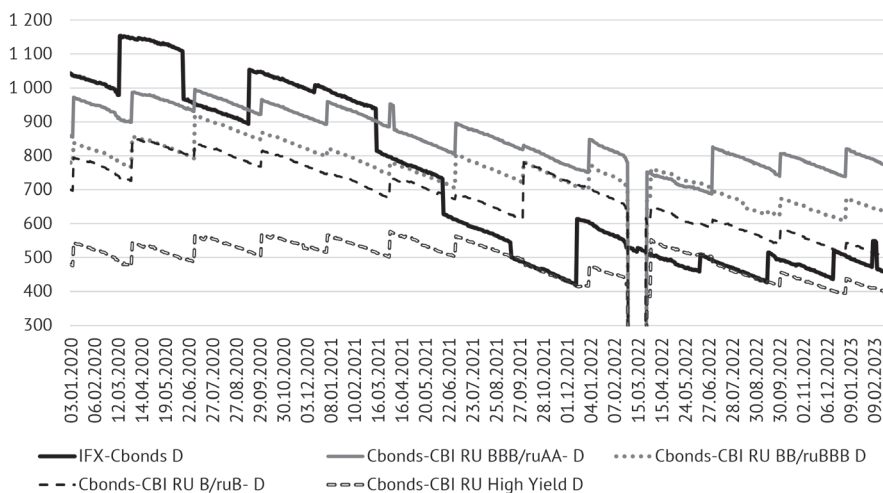


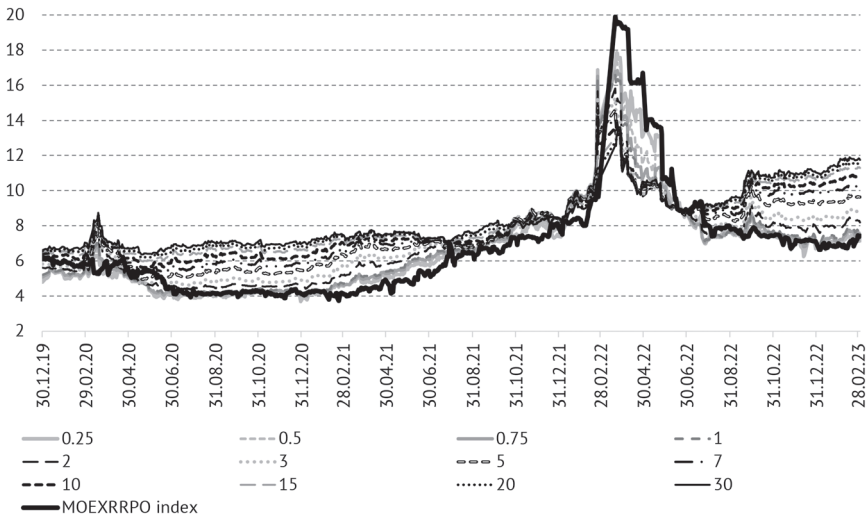
Fig. 23. Corporate bonds duration (days), January 1, 2020 – March 2, 2023

Source: own calculations based on the data of Cbonds.

In 2022, the market of government bonds (OFZ) remained stable and its role in funding the budget has been growing since November 2022. As of February 28, 2023, yield to maturity of short-term and mid-term OFZ with a duration of up to two years was also somewhat lower than that as of December 30, 2021 owing mostly to a decrease in the Central Bank of Russia’s key interest rate which had an effect to a great extent on financial market participants’ short-term expectations. However, the market of long-term OFZ issues with a duration of 10 years and more has seen the trend of growing yield to maturity of OFZ issues since the end of July 2022, which is the evidence of investors’ pro-inflationary expectations on the bond market. Further, the main buyers of long-term expectations used to be large foreign portfolio investors. Replacement of their demand with that on the part of large backbone Russian banks is also a factor of growing yield of long-term OFZ. According to the opinion of the Central Bank of Russia, growth in yield of long-term bonds on the government debt market is substantiated by the fact that market participants believe that the RF Ministry of Finance’s annual plan of borrowings may be increased in order to cover the budget deficit.<sup>1</sup> At the same time, higher yield of long-term OFZ issues complicates the placement of new OFZ issues and leads to the appreciation of the cost of borrowed funds for financing budget expenditures.

As shown in Fig. 24, the popular rate of the MOEXREPO money market is close in terms of its values to the Central Bank of Russia’s key rate; at first, it increased sharply from 7.93% per annum as of December 30, 2021 to 19.34% as of March 31, 2022, while later it was falling gradually to 8.05% and 7.46% on July 29, 2022

<sup>1</sup> URL: [https://www.cbr.ru/Collection/Collection/File/43767/DKU\\_2301-07.pdf](https://www.cbr.ru/Collection/Collection/File/43767/DKU_2301-07.pdf)



**Note.** MOEXREPO is the interest rate of the REPO exchange money market with the central counterparty (REPO with CC) at the Moscow Exchange.

*Fig. 24.* The values of zero-coupon yield curve of OFZ with maturity of 0.25–30 years and MOEXREPO money market rates, December 30, 2019 – March 3, 2023, % per annum

*Source:* own calculations based on the data of the Central Bank of Russia and the Moscow Exchange.

and February 28, 2023, respectively. The yield behavior of the OFZ portfolio with various durations was following the behavior of the money market interest rate till the end of July 2022. But after that, yields on OFZ with a duration of up to two years stopped falling, or increased insignificantly, while yields on long-term bonds with a duration of 10 years and more started to grow at a higher rate. Accordingly, yield spreads of long-term bonds increased considerably relative to money market interest rates.

For example, as compared with the MOEXREPO rate, the yield spreads of 2-year OFZ amounted to 0.42 p.p., -0.54 p.p. and 0.85 p.p. as of December 30, 2021, July 29, 2022 and February 28, 2023, respectively. As of the same dates, the yield spreads of 10-year OFZ were equal to 0.51 p.p., 0.84 p.p. and 3.38 p.p., respectively. In other words, as of February 28, 2023, the spreads of long-term OFZ issues surpassed 4-fold the spreads of intermediate bonds.

However, the Central Bank of Russia believes that with taking into account a relatively low volume of the government debt and the RF Ministry of Finance's options to place OFZ with insignificant premiums relative to the secondary market the agency will still be able to keep in check the interest rate risk.<sup>1</sup>

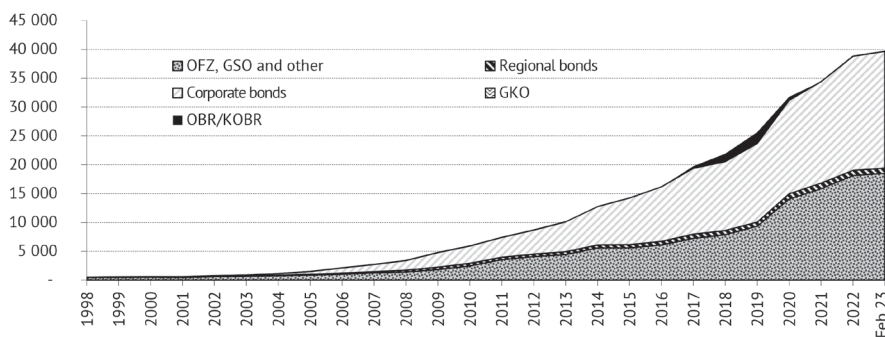
<sup>1</sup> The Review of Financial Market Risks. November–December 2022. The Analytical Report. Moscow: The Central Bank of Russia. C. 3. URL: [https://www.cbr.ru/Collection/Collection/File/43666/ORFR\\_2022-11.pdf](https://www.cbr.ru/Collection/Collection/File/43666/ORFR_2022-11.pdf)

By contrast with the equity market, the domestic bond market continued its growth in value terms in 2022. The year 2022 saw the appreciation of government securities in circulation in Russia from Rb15.8 trillion in 2021 to Rb18.1 trillion, an increase of 14.6% (a 12.6% growth of this indicator in 2021). Over the same period, the value of domestic corporate bonds picked up from Rb17.6 trillion to Rb20.3 trillion, an increase of 12.6% as compared with 8.3% in 2021 (*Fig. 25*). The value of government and corporate bonds in circulation kept growing in January–February 2023.

After February 24, 2022, a recovery of the domestic bond market was facilitated by financial regulators’ effective measures aimed at eliminating temporary financial shocks in February–March and reducing subsequently the Central Bank of Russia’s key rate.

By contrast with 2021, when the Russian Central Bank switched over from the policy of cutting the key rate to the policy of increasing it, in 2022 amid the renewed process of key rate cuts and easing of the monetary policy despite serious sanctions the volumes of initial offerings of government, regional and corporate bonds increased considerably. The volumes of new corporate bond issues grew from Rb3.4 trillion in 2021 to Rb4.1 trillion in 2022, an increase of 19.5%, and those of federal loan bonds (OFZ), from Rb2.6 trillion to Rb3.3 trillion, an increase of 24.5% (*Fig. 26*). In 2022, the primary market of regional bonds virtually nullified: the volumes of its new issues were equal to the mere Rb1.1 bn as compared with Rb157.6 bn in 2021 on the back of changes in the sources of regional budgets funding in 2022. There were no new issues of Central Bank of Russia bonds in 2022.

In the period of a pickup in the Central Bank of Russia’s key rate in 2021, the volumes of new corporate bond issues fell from Rb4.2 trillion in 2020 to Rb3.4 trillion in 2021, a decrease of 18.3%. Over the same period, the volumes of new offerings of government bonds decreased from Rb6.6 trillion to Rb2.6 trillion, a decrease of 60.0% and those of new regional bond issues, from Rb265 bn to Rb158 bn, a decrease of 40.5%.



*Fig. 25.* The volumes of ruble bonds in circulation, 1998–February 2023, billion rubles

Source: own calculations based on the data of the RF Ministry of Finance and Cbonds.



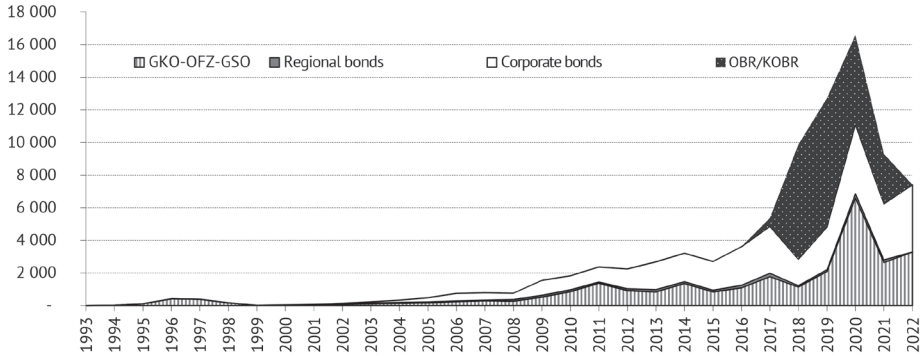
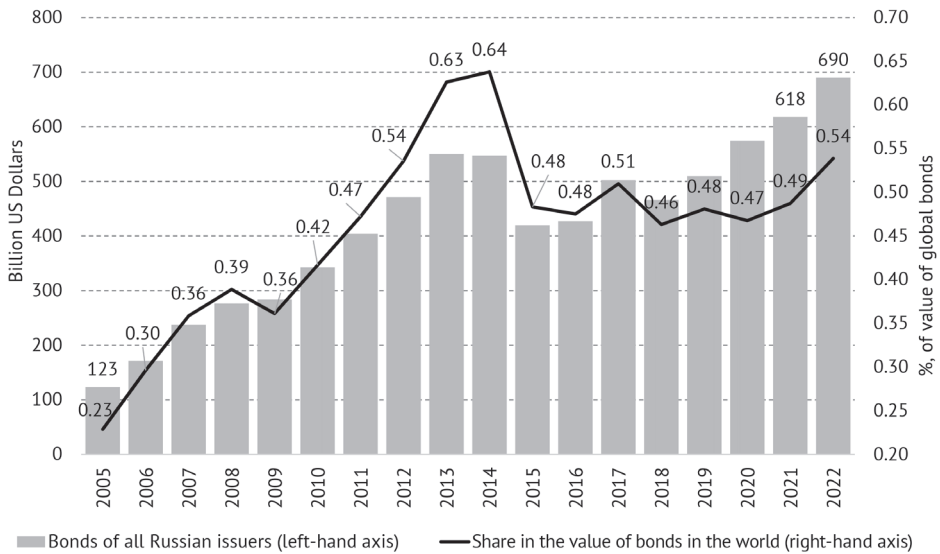


Fig. 26. The volumes of ruble bond offerings, 1993–2022, billion rubles

Source: own calculations based on the data of Cbonds.

It is noteworthy that all types of Russian bonds account for the mere 0.5% of the value of the global bonds circulation (Fig. 27). Dynamic growth in Russian bonds from \$123 bn in 2005 to \$690 bn in 2022 was accompanied by an increase



**Note.** In 2022, in calculating the share of Russia the value of global bonds is given on the basis of estimates of SIFMA (USA). Russian issuers' bonds include corporate, government and municipal domestic bonds and Eurobonds.

Fig. 27. The value of Russian issuers' bonds in circulation (billion US Dollars) and their share in the value of global bonds (%), 2005–2022

Source: own calculations based on the data of Cbonds and SIFMA.

in the share of Russian bonds in the value of global bonds from 0.23% to 0.64% because the growth rates of the Russian bond market outpaced those of the global bond market.

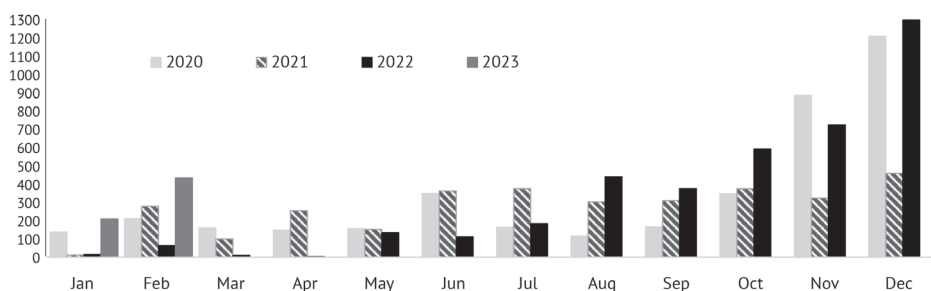
In 2022, despite sanctions and termination of the influx of new investments by global investors, the overall volume of the Russian bond market was growing faster than the global bond market. The overall value of various types of bonds in all Russian issuers' circulation, including Eurobonds, increased from \$618 bn in 2021 to \$690 bn in 2022, an increase of 11.6%. The share of Russian bonds in the overall value of global bond issues picked up from 0.49% to 0.54%. With a relatively stable exchange rate of the Russian ruble in 2022 amid cuts in the key rate, the value of Russian bonds was growing while in developed countries central banks were raising interest rates and it affected the value of issued bonds.

### ***The corporate bond market***

After foreign sanctions were imposed on the domestic corporate bond market in 2022, the issuing of bonds continued every month; for Russian issuers it became the only source of refinancing the bond debt. Starting from August 2022, the value of new corporate bond issues has surpassed considerably the monthly volumes of placed corporate bonds in 2020-2021 (*Fig. 28*). In August-December 2022, the overall value of new corporate bond issues was equal to Rb3.6 trillion as compared with Rb2.8 trillion and Rb1.8 trillion in the relevant period of 2020 and 2021, respectively.

In January-February 2023, the value of new corporate bond issues amounted to Rb670.4 bn as compared with Rb362.6 bn, Rb302.9 bn and Rb82.4 bn in the relevant period of 2020, 2021 and 2022, respectively.

In 2022 and early in 2023, several Russian companies issued domestic bonds denominated in foreign currency (foreign currency corporate bonds (CB)). According to our calculations based on the data of Cbonds, in 2022 the volume of new foreign currency CB offerings was equal to the equivalent of \$27.8 bn or Rb1533.2 bn; in 2023 the volume of new issues of specified bonds amounted



*Fig. 28.* The volume of corporate bond offering in 2020–2022 and January–February 2023, billion rubles

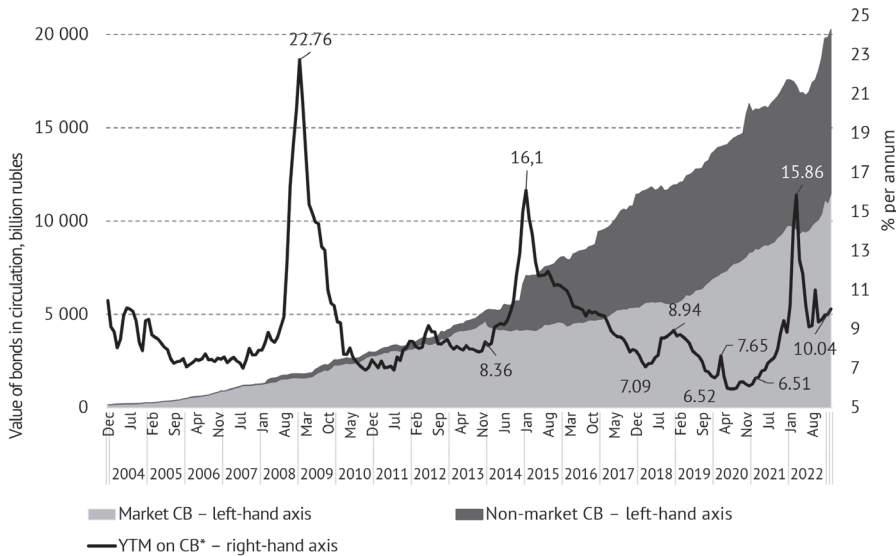
Source: own calculations based on the data of Cbonds.

to \$7.0 bn or Rb525.4 bn as of March 15. Thus, in 2022 and January-March 2023 the new foreign currency corporate bond issues were equal to 37.2% and 77.1%, respectively, of the overall sum of new corporate bond issues on the domestic market, including non-market placing.

In the pattern of new issues of foreign currency corporate bonds, bonds denominated in US Dollars prevailed in 2022; they accounted for 52.3% of all foreign currency corporate bond issues. Bonds denominated in yuan, euro and other currencies accounted for 39.1%, 6.8% and 1.8% of new issues, respectively. As of March 15, 2023, US Dollars accounted for the whole volume of new foreign currency corporate bond issues.

In 2022, in the pattern of foreign currency corporate bond issuers six entities, including Siti Invest, a specialized financial entity (21.5%), Gazprom Kapital (19.7%), Rusal (15.2%), Rosneft (10.0%) and Lukoil (7.7%) accounted for 80.1% of all issuers. In January-March 15, 2023, Gazprom Kapital accounted for 100.0% of new foreign currency corporate bond issues.

After the 2008 crisis, the ruble yield of the IFXCND index grew occasionally on the back of depreciation of prices for oil and investors' concerns amid geopolitical risks and international sanctions (*Fig. 29*). In 2014 and February 2022, the peaks of yield to maturity of the index portfolio coincided with the highest values of



\* Yield to Maturity (YTM) of the IFXCND portfolio.

*Fig. 29.* The value of ruble corporate bonds in circulation and yield to maturity of the IFXCND corporate bond portfolio, December 2003 – February 2023

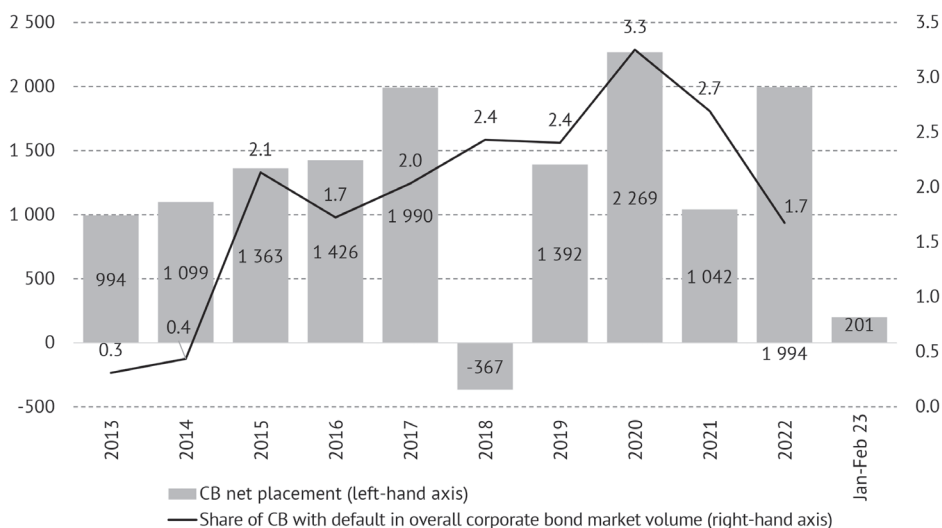
Source: own calculations based on the data of Cbonds.

the Central Bank of Russia's key rates. Corporate bond market growth has largely been facilitated by means of an increase in non-market issues since 2014.<sup>1</sup>

As of February 2023, out of the overall value of Rb20.3 trillion of ruble corporate bonds in circulation market bond issues and non-market bonds accounted for Rb11.5 trillion (or 56.6%) and Rb8.8 trillion (43.4%), respectively.

In March 2021 - March 2022, with the key rate picking up from 4.25% to 20.0%, the average yield to maturity of the index portfolio of IFXCBND bonds increased from 6.56% to 15.86% per annum over the same period. Later, as the financial market stabilized and the key rate decreased the yield to maturity of corporate bonds fell to 10.04% as of February 28, 2023.

In the difficult year of 2022, investors' cautious approach to investments in corporate bonds with high credit and interest risks amid cuts in the key rate and a relatively stable exchange rate of the Russian ruble facilitated domestic corporate bond market issuers to raise a much higher net volume of funds as compared with the pre-crisis 2021, with default statistics improved simultaneously. The share of ruble corporate bonds with some form of default fell from 3.3% in 2020 to 2.7% and 1.7% in 2021 and 2022, respectively (*Fig. 30*). At the same time, the volume



*Fig. 30.* The value of CB net placement (billion rubles) and the share of CB with default in the overall volume of their market (%), January 2013 – February 2023

Source: own calculations based on the data of Cbonds.

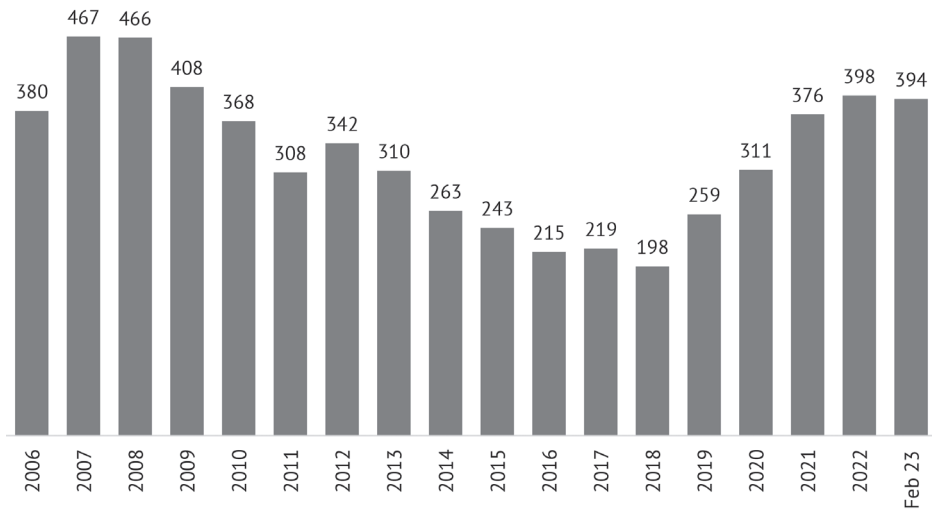
<sup>1</sup> According to the definition of the Central Bank of Russia, a non-market issue means a situation where the whole offering or a larger portion thereof is purchased by the managing bank or companies which are close to the issuer. See: The review of the Russian Financial Sector and Financial Instruments. 2019. The Analytical Report. Moscow: The Central Bank of Russia. p. 37.

of net funds raised by issuers increased 2-fold from Rb1,0 trillion in 2021 to Rb2.0 trillion in 2022.

However, the main credit risks on the Russian bond market are currently concentrated in the market segment of corporate Eurobonds because of sanctions.

The number of issuers on the Moscow Exchange corporate bond market exceeds considerably the number of companies in the stock listing. In this sense, the corporate bond market is used more actively than the equity market for attracting new funds and refinancing the development of companies from various economic sectors.

On the exchange, over a long period of time the number of corporate bond issuers decreased from 467 in the pre-crisis 2007 to 198 in 2018 (*Fig. 31*). It happened not only because of changes in borrowing schemes when for issuing corporate bonds large issuers often used a subsidiary, while at present bonds are issued by companies directly, but also because large bond issues had an advantage in terms of issuers' costs and listing requirements. In 2018, amendments were introduced in the securities market legislation to simplify corporate bond issuing as regards decision-making on issuing bonds, reduction of time-limits for registration, simplification of reporting on the bond issue outputs and lifting of limitations regarding the deadlines for placement of securities. In 2022, the number corporate bond issuers on the Moscow Exchange increased from 376 to 398, growth of 5.8% (*Fig. 31*). As of February 28, 2023, the number of issuers was equal to 394 companies.



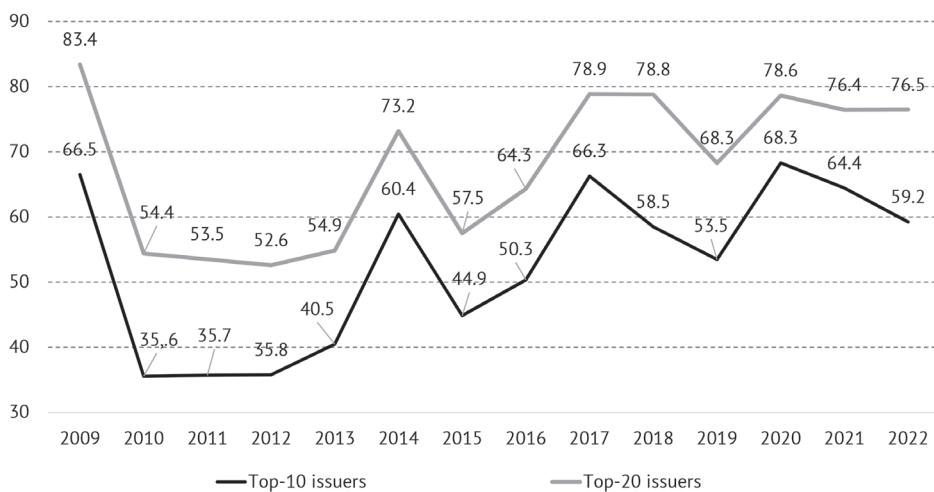
*Fig. 31.* The number of issuers of market corporate bonds at the Moscow Exchange, 2006 – February 2023

Source: The data of Cbonds.

By contrast with the previous years, in 2022 the distinctive feature of the domestic corporate bond market consisted in the fact that mostly high-quality issuers with a high credit rating were the main drivers of new corporate bond issues.

In 2022, the share of bonds of the “first echelon” issuers<sup>1</sup> in the overall value of new corporate bond issues amounted to 65%, while that of the “second echelon” fell by 0.2%. By estimates of experts of the *Expert RA* rating agency published by the *Expert* magazine, “the primary bond market has become virtually inaccessible for issuers with a rating below BBB.”<sup>2</sup>

Despite advanced growth in new bond issues of the “first echelon” issuers, in 2022 the number of corporate bond issuers increased and brought about a decline in the level of concentration in the financial market segment under review. The share of top-20 issuers in the overall volume of new bond issues remained virtually at the same level as in 2021: 76.4%–76.5% of the overall value of placements, while the share of top-10 issuers declined from 68.3% in 2020 and 64.4% in 2021 to 59.2% in 2022 (*Fig. 32*).



**Fig. 32.** The share of top-10 and top-20 issuers in new issues of ruble corporate bonds, 2009–2022, %

Source: own calculations based on the data of Cbonds.

1 The “first echelon” bonds include bonds with “BBB-” and higher ratings assigned by Russian rating agencies AKRA and Expert RA. In this case, the credit rating “BBB-” is the lower limit of investment ratings of Russian corporate bond issuers. At the same time, in the Russian legislation there is no universal understanding of the “investment credit rating” which is common for different institutional investors. The “second echelon” bonds include bonds with “BB-” – “BB+” ratings assigned by Russian rating agencies AKRA and Expert RA.

2 E. Obukhova. No Chance for Bonds // The Expert magazine. Issue No, 1–3. December 26, 2022 – January 22, 2023

The year 2022 saw a new trend when out of 10 large issuers on the ruble corporate bond market four issuers represented the so-called special financial institutions (SFI), that is, new and not quite transparent entities with a zero-balance established for securitization of financial flows from some assets (*Table 10*). In 2022, only these four SFI – *Idei i Investitsii, Aurum-1, MIP-1* and *Mediinye Aktivny* – carried out placements of Rb398 bn worth of bonds or 14.3% of the overall value of ruble corporate bond issues.

*Table 10*

**Top 10 corporate bond issuers and their share in the overall value of ruble corporate bond issues**

	Issuers	2020		Issuers	2021		Issuers	2022	
		Billion Rb	%		Billion Rb	%		Billion Rb	%
1	Rosneft	815	17.7	DOM.RF Ipotechny Agent	418	13.3	DOM.RF and DOM. RF Ipotechny Agent	519	18.6
2	Sberbank of Russia	550	12.0	VEB.RF	411	13.1	Avtodor	277	10.0
3	VTB. including Demtra Holding	489	10.6	Sberbank of Russia	366	11.7	SFI Idei i Investitsii	156	5.6
4	DOM.RF	386	8.4	VTB. including Demetra Holding	273	8.7	VEB. RF	156	5.6
5	RZhd	353	7.7	Veresayeva, 6	130	4.1	Sberbank of Russia and Sberbank KIB	149	5.3
6	GSP-Finans	243	5.3	Gazprom Kapital	120	3.8	SFI Aurum-1	101	3.6
7	VEB	90	2.0	OTEKO-Portservis	96	3.1	SFI MIP-1	83	3.0
8	Azot (Kemerovo)	88	1.9	Alfa-Lizing	76	2.4	Rosseti	80	2.9
9	GTLK	66	1.4	RZhd	69	2.2	MTS	72	2.6
10	Gazprombank	59	1.3	AFK Sistema	63	2.0	SFI Mediinye Aktivny	58	2.1
	<b>Capitalization of all ruble corporate bond issues</b>	<b>4595</b>	<b>100</b>	<b>Capitalization of all ruble corporate bond issues</b>	<b>3 137</b>	<b>100</b>	<b>Capitalization of all ruble corporate bond issues</b>	<b>2 787</b>	<b>100</b>
	<b>Capitalization of issues of top-10 corporate bond issuers</b>	<b>3138</b>	<b>68.3</b>	<b>Capitalization of issues of top-10 corporate bond issuers</b>	<b>2022</b>	<b>64.4</b>	<b>Capitalization of issues of top-10 corporate bond issuers</b>	<b>1651</b>	<b>59.2</b>

Source: own calculations based on the data of Cbonds.

In 2022, the corporate bond market's insufficient orientation to issuers from the real sector of the economy is an important challenge. According to our calculations based on the data of the Central Bank of Russia,<sup>1</sup> the share of new corporate bond issues of banks and other financial institutions was equal to 68.3% in 2021 and 69.0% in 2022, while in January 2023 it increased to 93.9%.

In the overall value of corporate bonds in circulation, the share of bond issues of financial institutions grew from 40.3% in 2018 to 43.9% in 2022 and 43.1% in February 2023 (*Table 11*). As of February, the share of the financial sector together with extraction, transportation, power industry and building was equal to 85.3% of the value of corporate bonds in circulation. It means that companies from such modern sectors of the economy as the manufacturing, the chemical and petrochemical industries, IT, telecommunications and communication, education and other use to a lesser extent market mechanisms of funding by means of bonds than the above specified five sectors of the economy.

*Table 11*

**The sectorial pattern of the ruble corporate bond market, 2018 – February 2023, %**

	2018	2019	2020	2021	2022	February 2023
Financial institutions	40.3	41.8	40.2	42.9	43.9	43.1
Production of oil, gas and coal	30.2	27.9	28.3	25.5	25.4	27.0
Transportation	9.5	8.9	9.3	9.7	7.6	6.7
Power industry	4.6	3.9	3.2	2.8	3.1	3.2
Building	4.1	4.4	4.4	4.3	5.4	5.3
Other sectors	11.3	13.1	14.6	14.8	14.6	14.7

*Source:* Own calculations based on the data of Cbonds.

Despite higher sanctions risks, the volume of the market of Eurobonds of Russian companies remains considerable in US Dollar terms in February 2023 and is shrinking slowly (*Fig. 33*). Notably, its size fell from \$107 bn in 2021 to \$71 bn as of February 2023, a decrease of 33.6%. With taking into account higher risks of payments on such bonds in favor of Russian residents with foreign banks and depositaries being frozen and formal defaults declared on these bonds owing to a failure of issuers under sanctions to transfer in a timely manner available funds to foreign holders of Eurobonds, issuers of these bonds have to take efforts to make early redemption of the debt.

As stated above, in order to prevent mass defaults of Russian companies on the Eurobond market because of sanctions restricting a transfer of funds by issuers to foreign financial institutions for debt servicing the Russian legislation provided for the procedure for voluntary issuing of the so-called “substitution bonds.” On December 30, 2022, the Central Bank of Russia advised companies to carry out a mandatory issue of such bonds for restructuring their debt obligations. According

<sup>1</sup> URL: [https://www.cbr.ru/statistics/macro\\_itm/sec\\_st/issue/](https://www.cbr.ru/statistics/macro_itm/sec_st/issue/)



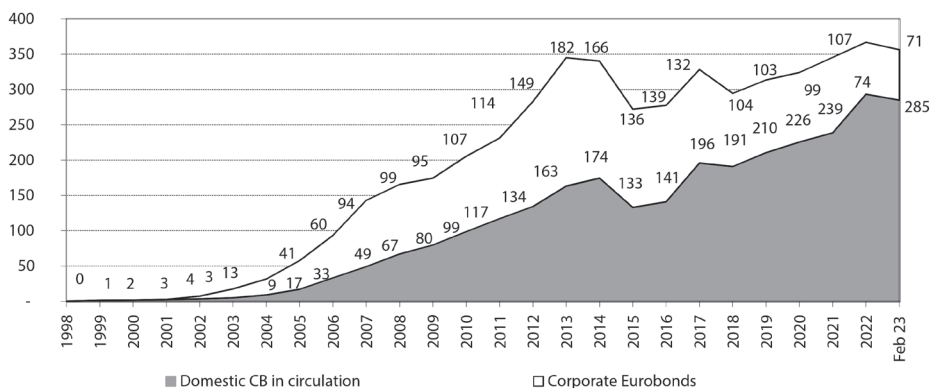


Fig. 33. The volumes of Russian issuers' corporate bonds in circulation, 1998 – February 2023, billion US Dollars

Source: own calculations based on the data of Cbonds and the Moscow Exchange.

to the mass media reports,<sup>1</sup> late in February 2022 the Ministry of Finance and the Central Bank of Russia prepared the draft of the Executive Order of the RF President requiring Russian issuers of Eurobonds to issue substitution domestic securities on a mandatory basis.

With introduction of sanctions in 2022 and until now, Eurobond issuers have adopted various debt servicing strategies which do not imply the issuing of substitution bonds. A large portion of issuers, both those under sanctions and non-sanctioned ones, chose the strategy of separate payments in rubles to resident-holders through the National Settlement Depository (NSD) and foreign bondholders through foreign depositories. NOVATEK, EVRAZ, Global Ports, ABH Financial, Ozon, Yandex and VK bought back their bonds, while Evrokhim and SUEK postponed their coupon payments. As of March 15, 2023, only six companies – Gazprom Kapital, Lukoil, Sovkomflot, Borets Kapital, Metalloinvest and MMK – used the option of placement of substitution bonds.

According to our calculations based on the data of Cbonds, in 2022 the volume of placement of substitution bonds amounted to the equivalent of \$7.58 bn or Rb526.5 bn; in 2023 the volume of new issues of such bonds was equal to \$7.0 bn or Rb525.4 bn as of March 15. Substitution bond issues have not become the main mechanism of restructuring of Russian companies' foreign debts so far. As of March 15, 2023, the overall volume of substitution bonds was equal to \$14.4 bn, that is, 18.2% of the overall value of Russian companies' Eurobond issues in October 2022 when the first placement of substitution bonds took place.

In 2022, bonds denominated in US Dollars dominated in the pattern of new issues of substitution bonds and accounted for 74.9% of all new issues of such

1 S. Sheludchenko (2023). The RF Ministry of Finance and the Central Bank of Russia will require issuers to substitute Eurobonds // The Vedomosti daily, February 22. URL: <https://www.vedomosti.ru/finance/articles/2023/02/22/963952-minfin-i-tsb-obyazhut-emitentov-zameschat-evrobondi>

bonds; bonds denominated in euro and other currencies accounted for 19.9% and 5.3% of the new issues of substitution bonds, respectively. Early in 2023, 66.8% and 33.2% of the new issues of substitution bonds were denominated in US Dollars and euro, respectively.

As of March 15, 2023, the pattern of issuers of new substitution bond issues was as follows: Gazprom Kapital (77.9%), Lukoil (11.6%), Sovcomflot (4.8%), MMK (2.1%), Metalloinvest Holding (2.0%) and Borets Kapital (1.5%).

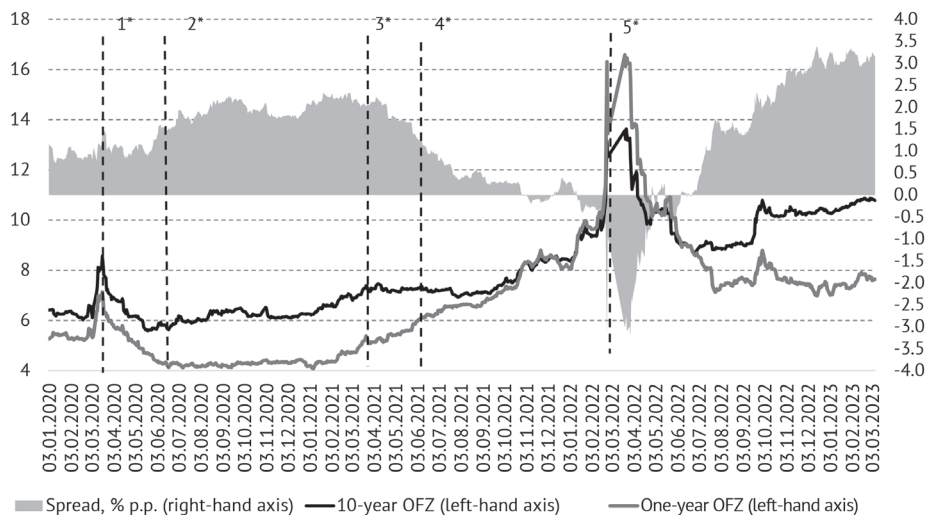
The calculations based on the Cbonds data (with coupon income and the market value of investments taken into account) of the comparative cumulative yield on substitution bonds and various corporate bond portfolios show that the specified yield on substitution bonds surpasses considerably the relevant indicator of ruble corporate bonds, but is lower than that of Eurobonds issued by companies. From December 1, 2022 till February 28, 2023, the cumulative total yield in rubles was as follows: index portfolios of substitution bonds (23.81%), corporate Eurobonds (36.4%) and ruble corporate bonds (2.11%) with the exchange rate of the Russian ruble (in US Dollars) appreciating by 22.98%.

It means that amid the weakening of the ruble from December 1, 2022 till February 2023, investors saw the advantage of substitution bonds as compared with the respective ruble fixed income instruments in the principal and coupon payments on substitution bonds being linked to the US Dollar and euro. However, the cumulative yield on substitution bonds was lower than that on respective corporate Eurobonds because of the factor of lower risks of recoverability of investments serviced through the domestic infrastructure and regulation thereof within the jurisdiction of the Russian Federation.

### ***The market of RF government bonds***

Owing to high rates of borrowing in March-August 2022, the RF Ministry of Finance did not hold auctions on OFZ placement. A decrease in domestic investors' demand for OFZ during this period was driven by banks' high deposit rates. However, on the back of cuts in the Central Bank of Russia's key rate in H2 2022 and a relatively high liquidity surplus in the banking sector (see *Fig. 7* and *9*), the RF Ministry of Finance resumed large-scale borrowings on the domestic market to finance advanced growth in budget expenditures in Q4 2022 and Q1 2023.

Stability of the government bond market is measured by the indicator of the spread between yield to maturity of 10-year and one-year government bonds. From October 2021, this spread turned occasionally negative and reached its minimum of -3.15 p.p. on February 24, 2022 (*Fig. 34*). Spread negative values suggesting an inversion of the yield curve of bonds with various durations is the evidence of growing instability of the financial system when interest rates on short-term bonds grow because of a lack of short-term financial flows and problems related with liquidity of financial instruments, while interest rates on long-term bonds decrease on the contrary because of market participants' expectations of imminent cuts in the Central Bank of Russia's interest rates for the sake of economic growth and financial support of the business. Not accidentally, a negative spread of the yield curve of long-term and short-term government



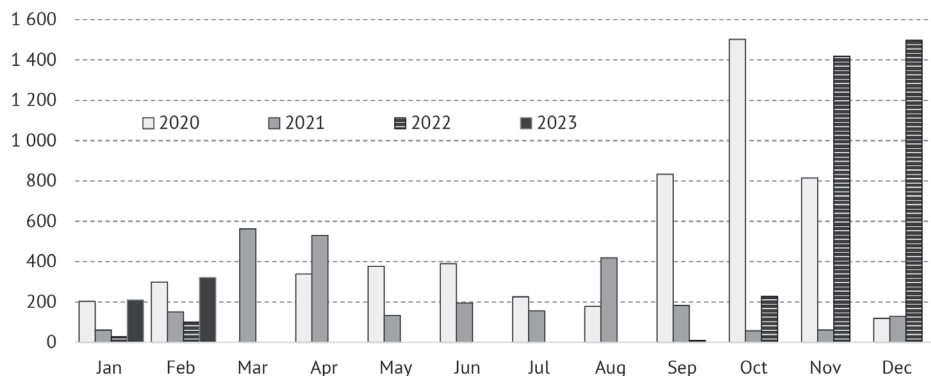
**Note.** 1\* – the financial shock related with the beginning of the COVID-19 pandemic and the liquidity shock on global financial markets; 2\* – growth of the program of government borrowings with a focus on domestic investors; 3\* – the beginning of the period of a rise in the key rate of the Central Bank of Russia: from March 23, 2021 till February 28, 2022 the key rate increased from 4.25% per annum to 20.0% per annum; 4\* – introduction of US sanctions banning US investors to buy RF government bonds on the primary market; 5\* – The Central Bank of Russia sets the key rate of 20% per annum.

*Fig. 34.* The yield to maturity of 1-year and 10-year OFZ (% per annum) and the spread between their yields (p.p.), January 3, 2020 – March 7, 2023

*Source:* Own calculations based on the data of the Central Bank of Russia and the Moscow Exchange.

bonds is regarded in different countries as a strong predictor of recession and a financial crisis.

After February 24, 2022, the Central Bank of Russia's professional actions aimed at raising sharply the key rate, refinancing banks and maintaining a stable exchange rate of the Russian ruble helped avoid a cash liquidity deficit in the banking sector and reduce later the yield on short-term and long-term obligations. From June 24, 2022, the spread of yields on OFZ entered the zone of positive values and started to grow. As of February 28, 2023, the yield to maturity of 1-year government bonds fell to 7.73% per annum, that is below its value as of December 30, 2021 (8.35%), which is the evidence of the banking sector's high liquidity. The yield on 10-year OFZ was falling as the Central Bank of Russia's key rate decreased, while from the end of September 2022 this decline stopped. As of February 28, 2023, the yield was equal to 10.87% per annum as compared with 8.43% as of December 30, 2021. It means that bond market participants expect in short-term a rise in the key rate. Consequently, the yield spread was equal to



*Fig. 35.* The volumes of OFZ auction placements in 2020–2022 and January-February 2023, billion Rb

Source: own calculations based on the data of Cbonds.

3.14 p.p. as of February 28, 2023. However, it does not mean this value of the spread is optimal, but most importantly, it is not negative.

In October-December 2022, the overall value of new OFZ issues was equal to Rb3.1 trillion as compared with Rb2.4 trillion in the same period of 2020 and Rb0.2 trillion in 2021 (*Fig. 35*). In January-February 2023, the value of new issues of government bonds amounted to Rb550.3 bn as compared with Rb501.3 bn, Rb211.8 bn and Rb128.1 bn in 2020, 2021 and 2022, respectively.

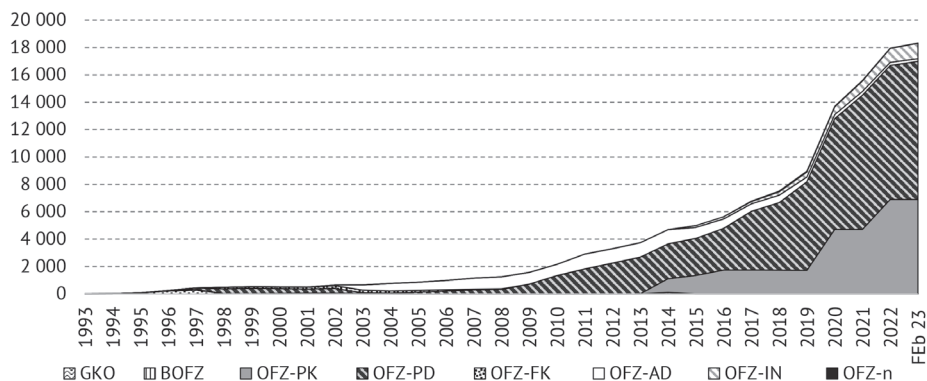
Amid prevailing uncertainties about future key rate trends, the record-high volumes of borrowings by the RF Ministry of Finance over the past three years late in 2022 and early in 2023 led to relatively high borrowing rates, particularly, on bond issues with a duration of over 5 years.

In November-December 2022, securities with a floating coupon (OFZ-PK) accounted for 80.6% of the volume of OFZ placements. At auctions, these securities were in high demand with large systemically important banks which bought 90.7% of all OFZ placed in November-December.

A trend of growing interest rates on placed OFZ has been explicit since the beginning of 2023. By seeking to limit the cost of expenditures of the state debt servicing at auctions in 2023, the RF Ministry of Finance offered mainly fixed income OFZ (OFZ-PD) to market participants. Market participants took increased interest in inflation indexed OFZ (OFZ-IN). According to the data of the Central Bank of Russia, the most active buyers of classical OFZ-PD were systemically important credit institutions, while OFZ-IN were purchased mainly by collective investors, including pension funds.<sup>1</sup>

Private investors started to invest more actively in government securities because of their disappointment with yields and risks related with investments in subordinated issues of bonds and structural bonds. According to the data of the

<sup>1</sup> URL: [https://www.cbr.ru/Collection/Collection/File/43767/DKU\\_2301-07.pdf](https://www.cbr.ru/Collection/Collection/File/43767/DKU_2301-07.pdf)



**Note.** Hereinafter, the following acronyms are used:  
*BOFZ* is zero-coupon federal loan bonds;  
*GKO* is short-term zero-coupon government bonds;  
*OFZ* is federal loan bonds;  
*OFZ-AD* is federal loan bonds with debt amortization;  
*OFZ-IN* is federal loan bonds with an inflation-indexed nominal value;  
*OFZ-PD* is federal loan bonds with a fixed coupon income;  
*OFZ-PK* is federal loan bonds with a floating coupon income linked to RUONIA rate;  
*OFZ-n* is federal loan bonds for individuals ("popular bonds").

*Fig. 36.* The volume of GKO-OFZ issues in circulation, 1993 – February 2023, billion rubles

*Source:* own calculations based on the data of RF Ministry of Finance and Cbonds.

Central Bank of Russia, the value of individuals' investments in government, sub-federal and municipal bonds increased from Rb492.4 bn in 2021 to Rb741.3 bn in 2022, growth of 50.5%.<sup>1</sup>

At the same time, new OFZ issues growth drivers which existed late in 2022 and early in 2023 can largely be exhausted. The maintaining of excessive liquidity in the banking sector and easing of the monetary policy are pro-inflationary factors and can hardly be used on the same scale. Private investors' interest in OFZ will probably remain in future, but it is unlikely to replace investments of foreign portfolio investors and Russian financial institutions. In such a situation, in 2023 the volumes of government borrowings on the domestic financial market may become smaller.

As of February 2023, the overall OFZ volume amounted to Rb18.3 trillion, an increase of 17.3% as compared with Rb15.6 trillion in 2021 (*Fig. 36*).

The largest segment of the OFZ market is OFZ-PD with a fixed coupon yield. The size of the coupon yield on such bonds is known in advance for the whole period of their circulation and this makes it feasible for the RF Ministry of Finance to manage effectively expenditures related with the state debt servicing. For

<sup>1</sup> Statistical data to the review of key indicators of professional securities market participants. The Central Bank of Russia, 2023. URL: [https://www.cbr.ru/securities\\_market/statistic/](https://www.cbr.ru/securities_market/statistic/)

a long time, the main investors in OFZ-PD, particularly those with a long duration, were foreign portfolio investors. In a new situation of 2022 and early in 2023, with increased interest rate risks banks and other financial institutions approach cautiously such bonds and this leads to constant growth in yields on auctions for their placement. The value of OFZ-PD increased from Rb9.8 trillion in 2021 to Rb10.1 trillion in February 2023, growth of 3.1%. The share of OFZ-PD in the value of OFZ decreased from 62.9% in 2021 to 55.1% in February 2023.

In 2022 and the first two months of 2023, OFZ with a floating coupon (OFZ-PK) providing their holders more flexibility in managing liquidity and interest rate risks were more attractive to domestic financial institutions. In case of OFZ-PK, the size of a coupon is linked to RUONIA money market rate which follows normally the key rate of the Central Bank of Russia. The overall value of OFZ-PK bonds in circulation increased from Rb4.7 trillion in 2021 to Rb6.9 trillion in February 2023, an increase of 46.8%. The share of OFZ-PK in the value of OFZ increased from 30.2% in 2021 to 37.6% in February 2022. In January-February 2023, despite increased yield of new OFZ issues on auctions, the RF Ministry of Finance did not issue new OFZ-PK.

OFZ-AD bonds with amortization of the principal debt are a convenient instrument for investing pension savings amid market volatility, but create difficulties for the RF Ministry of Finance in managing the state debt. As growth of the pension savings system slows down, demand for this instrument declines. The value of OFZ-AD fell from Rb271 bn in 2021 to Rb192 bn in February 2023, a decrease of 29.1%; the share of OFZ-AD in the overall value of OFZ declined from 1.7% to 1.0%.

With inflation risks taken into account, OFZ-IN bonds envisaging indexation of their par value depending on the level of inflation measured in accordance with the consumer price index are a popular instrument of the government securities market. By virtue of their protective properties, OFZ-IN bonds are in high demand with domestic institutional and private investors. The value of OFZ-IN increased from Rb764 bn in 2021 to Rb1130 bn in February 2022, growth of 47.9%; the share of OFZ-In in the overall value of OFZ increased from 4.9% to 6.2%.

OFZ-n bonds, which are sometimes called “popular bonds” because they are meant for private investments and positioned by the RF Ministry of Finance as an off-exchange instrument for promoting financial literacy of the population, account for an insignificant share of the OFZ market (0.1%). With OFZ-n bonds being sold via large retail banks, they have to compete aggressively with these banks’ own financial products for their customers. The value of OFZ-n decreased from Rb43 bn in 2021 to Rb19 bn in February 2022, a decline of 55.8%. With banks lacking open architecture standards for sales of financial products of various providers, a rise in popularity of bonds of large and reliable issuers, such as the RF Ministry of Finance, is complicated among private investors.

In 2022, on the back of sanctions imposed by unfriendly countries and RF retaliatory measures foreign portfolio investors’ OFZ investments were frozen and payments on them transferred to the “S”-type bank account for non-residents with banks and the DIA. In November 2022, in accordance with Federal

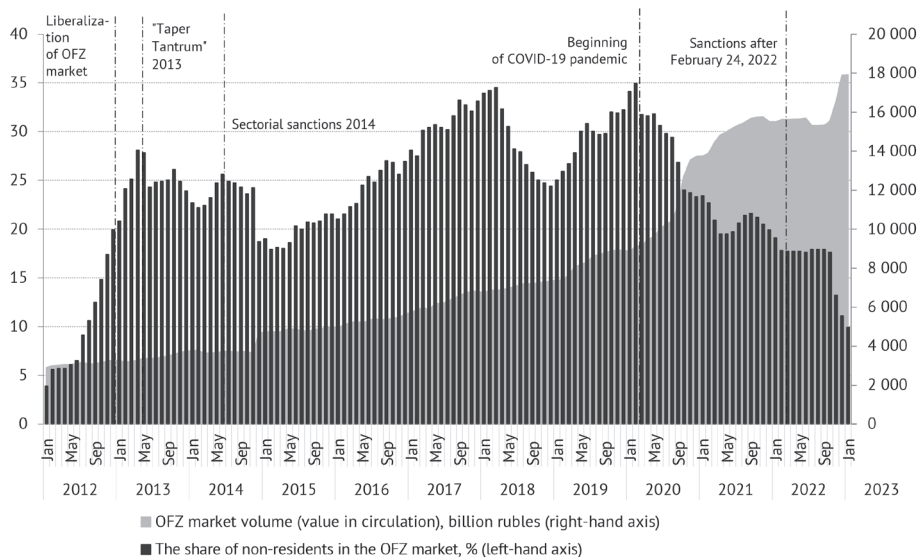


Fig. 37. The share of non-residents on the OFZ market (%) and the value of OFZ in circulation (billion Rb), February 2012 – January 2023

Source: own calculations based on the data of the Central Bank of Russia and Cbonds.

Law No.319-FZ of July 14, 2022 “On Amendment of Individual Statutory Acts of the Russian Federation” an involuntary transfer of OFZ recorded in accounts of nominal holders from unfriendly countries to Russian depositaries was carried out.

Over 10 years, that is, in the period from February 2013 when nominee accounts were opened by foreign clearing companies Euroclear and Clearstream with the Russian central depository (NSD) till February 2023, the share of non-residents’ investments in OFZ was very volatile (Fig. 37). Occasionally, it fell dramatically owing to some developments leading to the outflow of foreign portfolio investors’ capital from OFZ, for example, Taper Tantrum<sup>1</sup> in May 2013, the introduction of sectorial sanctions against Russia in July 2014, growing concerns over the expansion of sanctions against the RF public debt in April 2018, the beginning of the financial crisis related with the coronavirus pandemic in March 2020 and the escalation of geopolitical risks after February 24, 2022. The maximum share of non-residents’ investments in OFZ was registered in February 2020 (34.9% of the volume of OFZ in circulation), while the minimum one, in January 2023 (9.9%).

In February 2022, when sanctions were introduced, the value of OFZ owned by non-residents, mostly large pension and investment funds, was equal to

1 For example, as a result of the US Federal Reserve’s declaration of its intension to raise centralized interest rates, a sudden large-scale exit of global portfolio investors from emerging financial markets took place.



Rb2.9 trillion or 17.9%. The analysis of subsequent developments suggests that despite restrictions imposed on non-residents' operations with OFZ, non-residents actually had various options of exit from these assts. In compliance with Federal Law No.319-FZ of July 14, 2022, holders of Russian securities (including OFZ) were granted the right of an involuntary transfer of these securities from foreign depositaries to custody accounts with the Russian depositary.<sup>1</sup> According to the data of the Central Bank of Russia<sup>2</sup>, out of the overall volume of securities debited from nominal accounts with foreign depositaries (Rb1.36 trillion), the share of OFZ was equal to 94.4%. It turned out quite unexpectedly that nearly a half of the volume of bonds transferred to the Russian accounting infrastructure (about Rb640 bn) was owned by residents, despite the fact that they were early accounted for in foreign depositaries. As a result, the share of non-resident holders of OFZ decreased from 17.6% as of November 1, 2022 to 13.2% as of December 1, 2022. In economic terms, the scheme of OFZ ownership by Russian residents via offshores could hardly be popular. Most likely, it was operations on purchasing by Russian residents of OFZ from non-residents in foreign jurisdictions with a subsequent re-registration thereof to the specified residents' custody accounts with Russian depositaries. According to the Russian media, these operations with OFZ did not stop after November 2022.<sup>3</sup> As a result, the value of OFZ with non-residents fell from Rb2.2 trillion in November 2022 to Rb1.8 trillion in January 2023, a decrease of 18.9%.

In 2022, the share and absolute value of non-residents' investments on the market of RF government Eurobonds were declining slower as compared with ruble OFZ (*Fig. 38*). However, according to some business media, the activity was high on the off-exchange market with operations on purchasing Eurobonds from non-residents from unfriendly countries via brokers from friendly countries and Russian financial institutions' offshore subsidiaries.<sup>4</sup> The value of non-residents' investments in government Eurobonds fell from \$20.0 bn in 2021 to \$16.3 bn in 2022, a decrease of 18.5%, while the value of non-residents' investments in OFZ over the same period declined from Rb3.1 trillion to Rb2.0 trillion, a decrease of 35.5%. The share of non-residents in Russian Eurobonds fell from 51.1% in 2021 to 45.0% in 2022, a decline of 6.1 p.p., while the share of non-residents in OFZ (owing among other things to advanced growth in new investments in bonds on the part of Russian residents) decreased from 19.9% to 11.1%, a fall of 8.8 p.p.

Perhaps, in future the share of non-residents in government Eurobonds may decrease if the RF Ministry of Finance issues substitution bonds, but it has not happened yet. Late in November 2022, the issue of a possible exchange of Russian

1 Subsequent amendments to the legislation provided for new additional cases where an application could be submitted for an involuntary transfer of the accounting of titles to Russian securities after November 24, 2022.

2 The review of financial market risks. November – December 2022. The Information and Analytical Report. Moscow: The Central Bank of Russia, 2023. p. 11. URL: [https://www.cbr.ru/Collection/Collection/File/43666/ORFR\\_2022-11.pdf](https://www.cbr.ru/Collection/Collection/File/43666/ORFR_2022-11.pdf)

3 Non-residents keep selling OFZ with a 40% discount in 2023, as well // Frank Media. January 27, 2023. URL: <https://frankrg.com/110155>

4 A. Stolyarov (2023). Russian investors have started a dangerous game // The Expert magazine. Issue No.8. February 20–26.



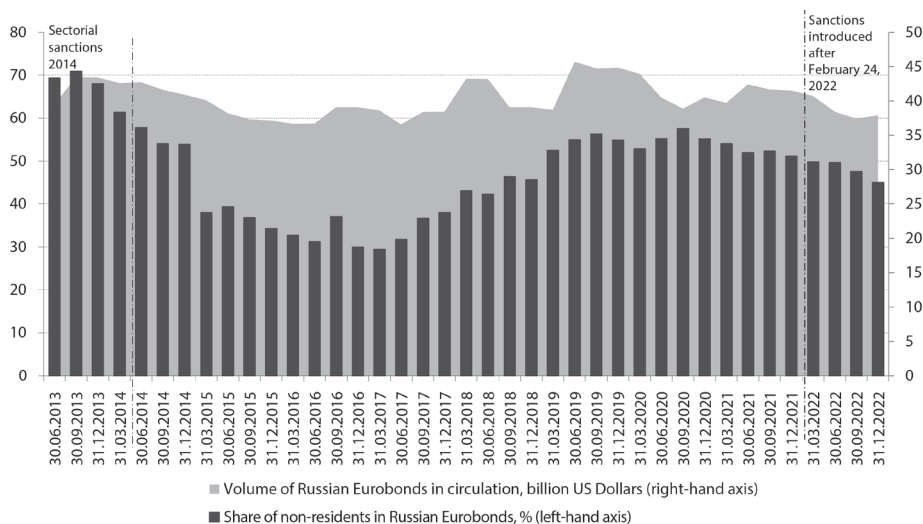


Fig. 38. The share of non-residents on the market of Russian government Eurobonds (%) and the value of Russian government Eurobonds in circulation (billion US Dollars), July 2013 – December 2022

Source: own calculations based on the data of the Russian Central Bank and Cbonds.

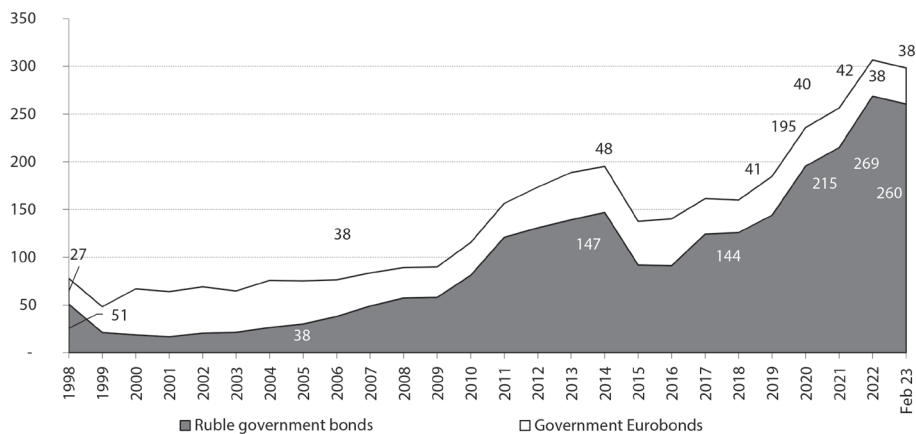
Eurobonds for federal loan bonds was on the agenda, however, according to the mass media reports the RF Ministry of Finance and large banks failed to negotiate the quantitative parameters of the deal.<sup>1</sup>

During a long period of time after the financial crisis, starting from the mid-2000s, the Russian Federation pursued the policy of advanced growth in borrowings in rubles on the domestic market as compared with accumulation of debts in foreign currency (Fig. 39). In 2006, the values of the RF domestic and foreign debts became equal and amounted to \$38 bn, each. After that, the value of ruble bonds (OFZ and GSO) started to grow faster as compared to foreign borrowings.

The overall value of Russian government bonds increased from \$256 bn in 2021 to \$298 bn in February 2023, growth of 16.4%. The value of ruble government bonds increased from \$215 bn to \$260 bn, growth of 20.9%, while the value of Eurobond issues declined from \$42 bn to \$38 bn, a decrease of 9.5%. As a result, the overall share of Russian bonds in the overall value of RF domestic and foreign debts increased from 83.8% in 2021 to 87.3% in February 2023.

Taking into account the sanctions-related actual refusal of foreign financial institutions to receive funds from the Russian Federation in performance of obligations on the earlier issued government Eurobonds, it is necessary to find

<sup>1</sup> Siluanov: The Ministry of Finance and banks failed to reach an agreement on the price of exchange of Russian Eurobonds for OFZ // Frank Media. November 25, 2022. URL: <https://frankrg.com/102778>



*Fig. 39.* The volumes of domestic government bonds and Russian Eurobonds in circulation, 1998 – February 2023, billion US Dollars

*Source:* own calculations based on the data of Cbonds and the Moscow Exchange.

a solution regarding the conversion of the specified Eurobond issues in other financial instruments regulated by the RF legislation.

So, in 2022 despite sanctions and the outflow of foreign capital, the domestic market of government bonds remained stable owing to liquidity surplus in the banking sector and private investors' increased interest in OFZ investments. The authorities' flexible measures aimed at reducing the OFZ market's reliance on non-residents and settlements with them in future may facilitate non-residents' return to the domestic market in case of mitigation of the current geopolitical risks. A higher uncertainty prevailed on the market of Russian government Eurobonds where risks of quasi-defaults may potentially increase because of artificial difficulties in transferring of funds to bondholders. Further to the measures taken to protect the interests of Russian investors in the specified Eurobonds, it is necessary to take other measures as well to reduce the Russian Federation's obligations on the specified securities.

### 2.1.7. The derivatives and FX markets

The derivatives market's economic purpose consists in facilitation of investment assets pricing, as well as provision of hedging to market participants from sudden changes in prices for assets in future. However, the derivatives market where private investors prevail is often used for speculative transactions with a use of a higher credit leverage as compared with the spot market, rather than for managing risks.

Contrary to expectations, in 2022 and the first two months of 2023 high volatility of the FX and financial markets did not lead to a pickup in the value of operations on the derivatives exchange market (*Fig. 40*). This shows that private investors which dominate on this market use it to a greater extent for short-term

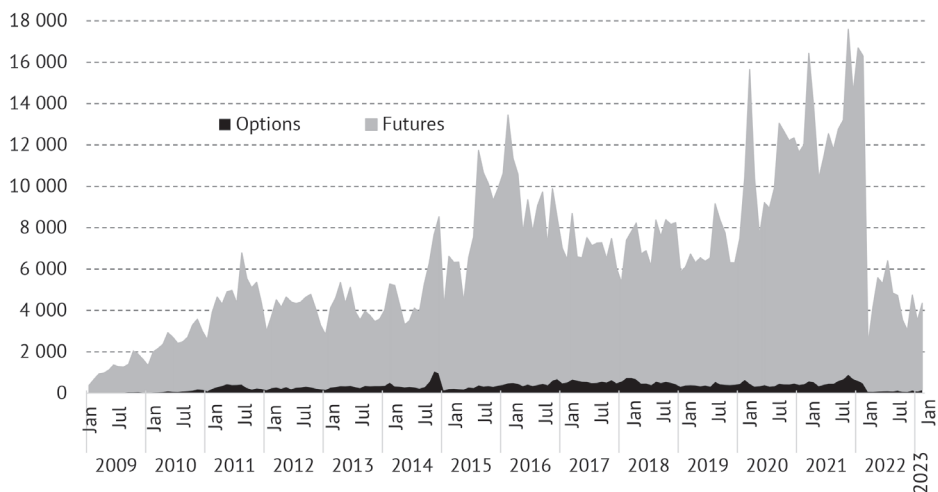


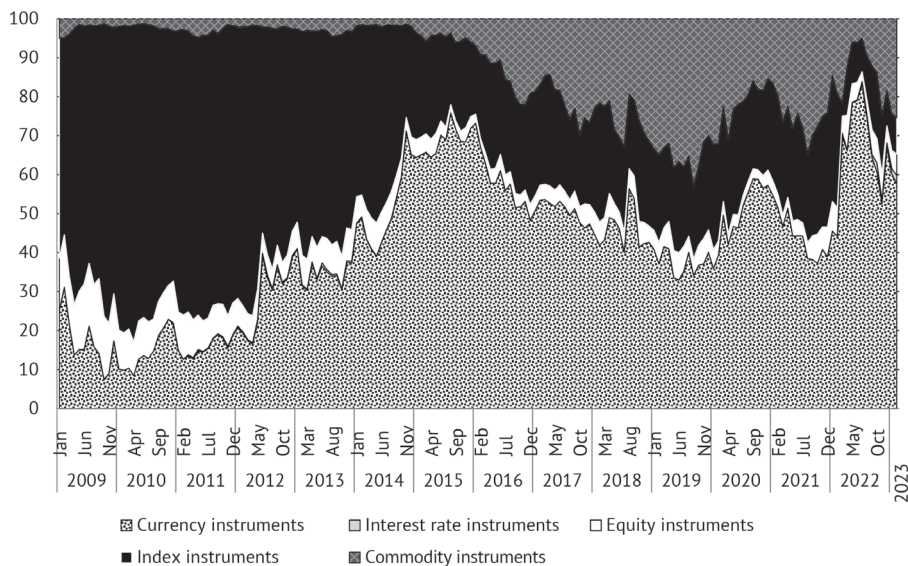
Fig. 40. The value of futures and options trades on the Moscow Exchange, January 2009 – February 2023, billion Rb

Source: own calculations based on the data of the Moscow Exchange.

deals, rather than for hedging. The trading volume on the futures market of the Moscow Exchange shrank from Rb151.8 trillion in 2021 to Rb75.6 trillion in 2022, a decrease of 50.2%; the volume of options trades decreased from Rb6.8 trillion to Rb2.3 trillion, a decrease of 66.4%. In January-February 2023, the volume of futures and options trades decreased by 76.4% and 74.3%, respectively, as compared with the relevant period of 2022.

This situation was driven not only by depreciation of assets' base value, but also by the exit of non-residents from the derivatives market (they accounted for 48% of the trading volume in 2021) and private investors' declining interest in deals with US Dollar and euro derivatives. According to the data of the Moscow Exchange, the share of individuals in trading volumes on the derivatives market increased from 43% in 2021 to 65.5% in February 2023.

In 2022, traditional exchange contracts accounted for the main volumes of trades on the futures market (Fig. 41). Currency futures, primarily on the US currency and the euro played a major role on the Moscow Exchange's futures market with fast growth in trades with alternative currencies, primarily the yuan. With demand for the US Dollar and the euro falling in 2022, the volume of trades in currency futures decreased from Rb66.7 trillion in 2021 to Rb45.3 trillion in 2022, a decline of 32.1%. However, this decline was smaller than a fall in the overall volume of the futures market; as a result, the share of currency futures increased from 38.9% in 2021 to 66.9% in 2022. In February 2023, the share of currency futures fell to 57.8%.



*Fig. 41. The pattern of the Moscow Exchange futures market, January 2009 – February 2023, % of the value of deals*

*Source:* own calculations based on the data of the Moscow Exchange.

The second most important futures market segment is represented by index futures contracts, primarily on the RTS and Moscow Exchange stock indices. Notably, their volumes of trades fell from Rb38.9 trillion in 2021 to Rb14.8 trillion in 2022, a decrease of 62.0%. The share of index futures declined from 29.4% in 2021 to 8.9% in 2022; it increased somewhat to 9.3% as of February 2023.

Over the past two years, commodity futures on various commodity assets (Brent oil, natural gas, silver, gold, wheat, copper, nickel and other) were one of the most actively developing sectors of the Moscow Exchange futures market. With the exit of non-residents in 2022, the volume of commodity futures trades decreased from Rb38.6 trillion in 2021 to Rb10.4 trillion in 2022, a decline of 73.1%; as a result, the share of commodity futures fell from 24.0% in 2021 to 18.5% in 2022. However, early in 2023 commodity futures became more popular with private investors and their share on the exchange futures market picked up to 25.4%.

As the options market is very risky one for individuals' short-term deals, it is probably characterized by relatively modest volumes of such transactions on the exchange. In 2022, the most active segment of the options market was contracts on index instruments. Their volumes fell sharply from Rb4.4 trillion in 2021 to Rb1.1 trillion in 2022, a decrease of 775.1%; their share in the overall volume of exchange-traded options fell from 63.8% in 2021 to 31.0% in 2022 and 27.4% in February 2023 (*Fig. 42*). The volume of currency options decreased from Rb2.0 trillion in 2021 to Rb1.1 trillion in 2022; their share in the overall volume of options

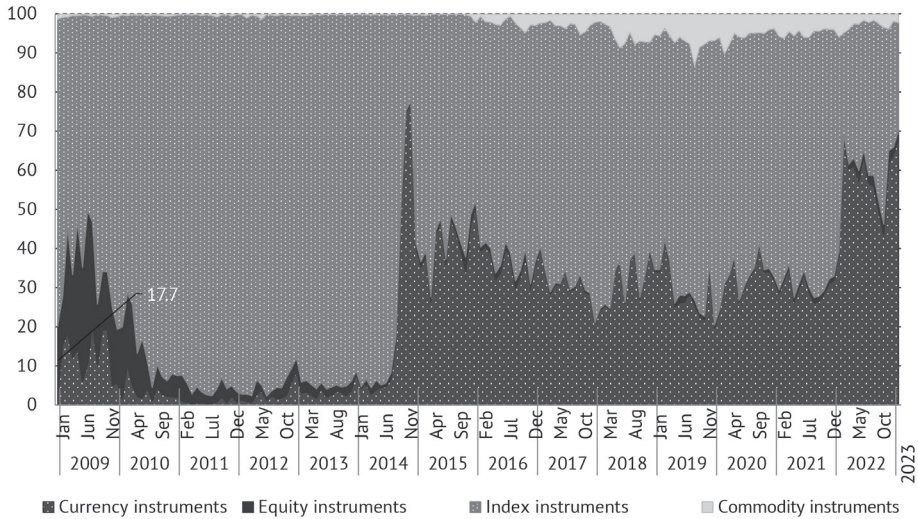


Fig. 42. The pattern of the Moscow Exchange options market, January 2009 – February 2023, % of the value of deals

Source: own calculations based on the data of the Moscow Exchange

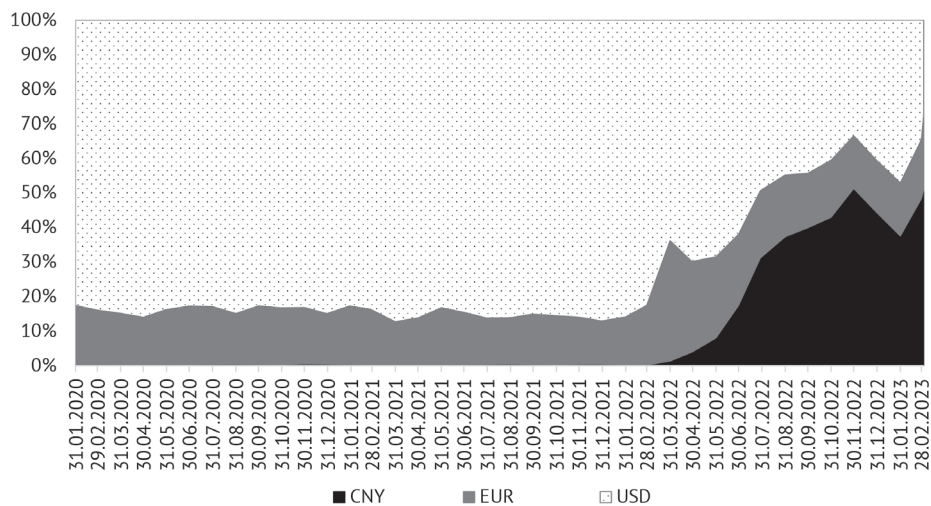
transactions increased over the same period from 30.8% to 61.7% and 68.4% in February 2023. Other segments of the options market are quite insignificant.

In 2022, a decline in interest in transactions with the US currency and the euro on the Moscow Exchange FX and derivatives markets was accompanied by exchange trades participants' increased interest in friendly countries' alternative currencies, notably, the Chinese yuan. On the spot market, the share of the yuan in the volume of currency trades increased from 0.4% in 2021 to 41.0% and 45.5% in 2022 and February 2023, respectively (Fig. 43). Over the same period, the share of the US currency fell respectively from 82.6% to 37.3% and 32.5%. The share of the euro in settlements increased somewhat from 11.8% in 2021 to 13.8% and 16.0% in 2022 and February 2023, respectively.

Apart from utilization of the yuan in foreign trade operations, a pickup in investors' demand for the Chinese currency was heated primarily on the back of emergence of new financial products, such as yuan bank deposits, as well as yuan-denominated bonds which were placed by some large Russian companies.

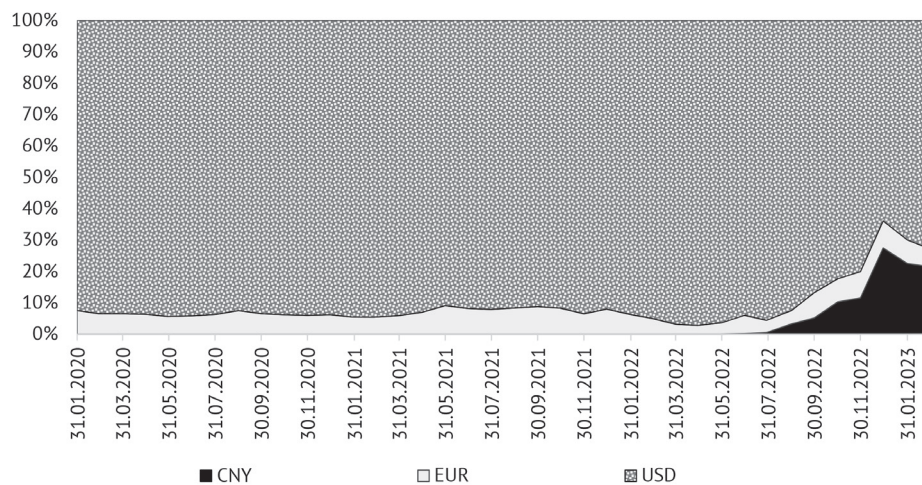
In 2022, the volume of transactions with the Chinese currency on the futures market was more moderate (Fig. 44). However, during 2022 the share of transactions with the yuan increased from 0% in 2021 to 27.5% with a subsequent decline to 21.5% in February 2023. Over the same period, the share of transactions with the US Dollar fell from 92.0% to 63.9% with a subsequent rise to 72.7% in February 2023. The share of transactions in euros increased from 8.0% in 2021 to 8.6% in 2022 and then fell to 5.8% in February 2023.





*Fig. 43. The pattern of the Moscow Exchange FX spot market, 2020 – March 3 2023, % of the value of transactions*

Source: own calculations based on the data of the Moscow Exchange.



*Fig. 44. The pattern of the Moscow Exchange futures FX market, 2020 – March 3, 2023, % of the value of deals*

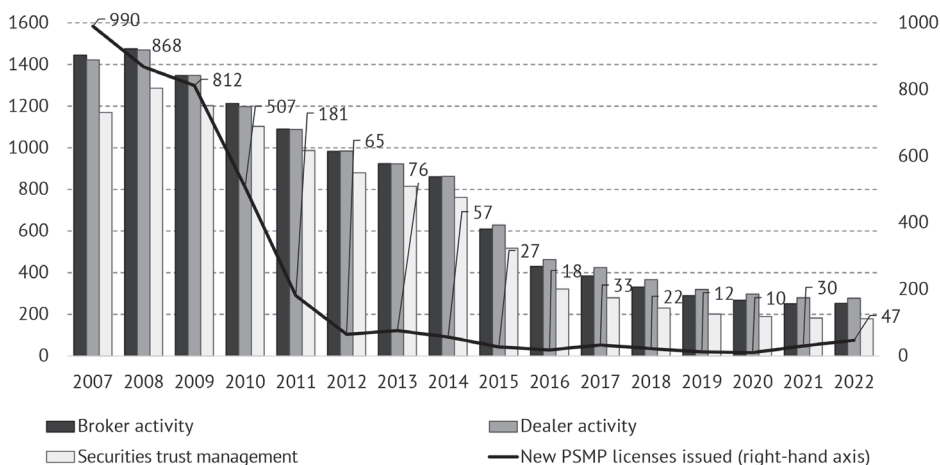
Source: own calculations based on the data of the Moscow Exchange.

### 2.1.8. Financial intermediaries and exchanges

On the back of tough sanctions imposed on a number of large financial institutions (the Sberbank, the VTB, the Otkrytie Bank, the Sovcombank and other), many of them had to spin off one or another business into a separate entity. However, the number of licenses for dealer activities decreased from 279 licenses in 2021 to 277 licenses in 2022 and that of licenses for trust management of securities, from 182 licenses to 179 licenses; there was only an increase in the number of brokerage licenses from 251 licenses to 253 licenses (*Fig. 45*).

The number of licenses of professional securities market participants over the long-term horizon has been decreasing since the beginning of the 2008 crisis, thus reflecting the overall trend towards higher stability of the domestic financial market coupled with the decline of the role of the stock market in the economy.<sup>1</sup> The establishment of the financial mega-regulator in September 2013 sped up somewhat the process of reducing the number of effective licenses of professional securities market participants (PSMP), however, the main reasons for cancellation of licenses as in cases before the establishment of the mega-regulator, were licensees' declarations of their exit from the business.

A more serious challenge in the development of the Russian stock market is an insignificant number of new professional securities market participants whose emergence on the stock market is meant to promote competition. A slowdown in



*Fig. 45.* The number of brokerage, dealing and securities trust management licenses (left-hand axis) and the number of issued PSMP licenses (right-hand axis), 2007–2022

Source: own calculations based on the data of NAUFOR and the Central Bank of Russia's registers.

<sup>1</sup> For more details on the decline in the stock market's role in the economy, see: A.E. Abramov, A.D. Radygin, M.I. Chernova (2021). The Russian stock market: trends, challenges and the guidelines for development // The Voprosy Ekonomiki. Issue No.11. pp. 5–32.

the number of new players started from 2012. The year 2021 saw some growth in the number of new licenses of professional securities market participants: from 10 licenses in 2020 to 30 licenses in 2021. In 2022, the number of new licenses increased to 47 licenses on the back of a forced restructuring of large companies because of sanctions introduced by unfriendly countries.

The concentration of financial intermediaries and utilization of economies of scale are a reasonable strategy of upgrading their efficiency; such things take place to a varying extent in many countries. However, the specifics of the Russian domestic market of financial services consists in the existence of considerable administrative barriers on the way of growth of independent fintech and competition between financial platforms based on the open architecture for sales of investment and financial products; domination of several large financial ecosystems primarily on the basis of government structures, as well as the Central Bank of Russia's project activity in the fields which compete directly with private financial institutions.<sup>1</sup> In the field of fintech, they postpone repeatedly the introduction of the standard of "open banking" and open API addresses – similar to the EU's Second Payment Services Directive of 2015 (PSD2) – binding to large financial institutions. The review of the best foreign practices used by regulators for facilitating the development of fintech in order to promote competition on financial markets is presented, for example, in Restoy's study.<sup>2</sup> The adoption of the legislation on the activities of fintech and platform (marketplace) operators has led to the introduction of artificially excessive capital requirements to operators of such platforms and restrictions on such operations by commercial banks, brokers and asset management companies.

The situation on the Russian financial market after February 24, 2022 has revealed high risks of the strategy of development of the Russian financial market based on the priority development of the limited number of financial ecosystems established on the basis of large state-owned banks and companies. Promotion of the competition on the financial market can be facilitated by legislative measures stimulating competition between investment platforms; creation of the environment for implementation of fintech private projects; reduction of administrative barriers for new companies' entry to the market; introduction of fiduciary standards of sales of investment and financial products;<sup>3</sup> more comprehensive orientation of important infrastructure development projects to the needs of financial intermediaries and their customers.<sup>4</sup>

The year 2011 saw the deal on the merger of the MICEX with the RTS; it sped up the development of stock exchange trading technologies and concentrated

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1 In "the Main Guidelines for the Development of the Financial Market of the Russian Federation in 2022 and the 2023-2024 Period" approved by the Central Bank of Russia in 2021, we counted mentions of the Central Bank of Russia's 14 projects competing to some extent with financial services of private financial institutions.

2 *Restoy Fernando* (2021). Fintech regulation: how to achieve a level playing field. Financial Stability Institute, BIS // Occasional Paper No.17. February.

3 These standards suggest restrictions in respect of financial intermediaries' conflict of interests when selling financial products to customers.

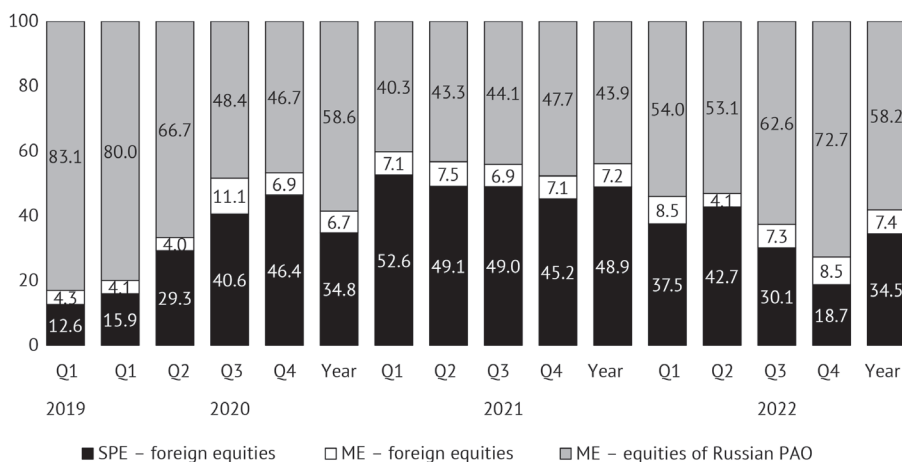
4 On the development of investment platforms and fintech, see: *A. Abramov* (2019). To Stake Out a Platform // *The Expert* magazine. Issue No.44. October 28 – November 3. pp. 64–68.



the liquidity on auction participants' accounts with the single clearing system. However, along with positive changes, the merger of the MICEX with the RTS led to the disappearance of competition between the exchanges which used to stimulate the development of exchange activities and promote its efficiency. In 2020–2021, the accelerated development of the St. Petersburg Exchange (SPE) which organized trades with equities of foreign issuers helped restore the competition between the exchanges on the equity market. However, in 2022 the SPE business was hit hard owing to the regulator's gradual introduction of requirements limiting non-qualified investors' access to transactions with foreign issuers' securities.

The share of SPE on the domestic spot market of equities of Russian and foreign issuers decreased from 48.9% in 2021 to 34.5% based on the results of 2022, including to 18.7% in Q4 2022 (Fig. 46). A decrease in the SPE's volume of trading was mainly driven by sanctions which led to the blocking of some customers' assets with foreign depositaries, as well as the Central Bank of Russia's decision on a gradual introduction of restrictions on transactions with foreign securities for non-qualified investors. Despite sanctions and restrictions for non-qualified investors, the SPE continues to provide access to trades in companies' equities on US exchanges and the Hong Kong Stock Exchange.

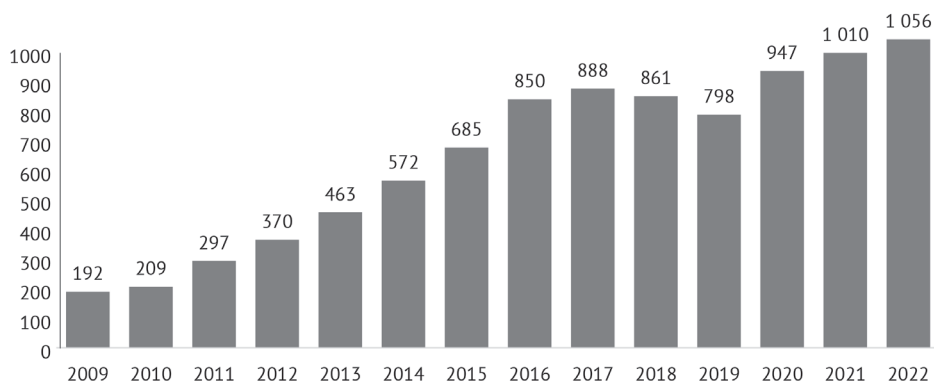
The Moscow Exchange sought to realize its advantages on the market as a comprehensive organizer of auctions with various investment and financial assets. The overall volumes of exchange trades increased from Rb1010 trillion in 2021 to Rb1056 trillion in 2022, an increase of 4.5% (Fig. 47).



**Note.** Exchange-traded equity volumes include market deals and deals in negotiated trading.

*Fig. 46.* The share of the Moscow Exchange (ME) and the St. Petersburg Exchange (SPE) in the overall volume of stock exchange transactions with equities, %

Source: own calculations based on the data of the World Federation of Exchanges and the SPE.



*Fig. 47.* The volume of trading with all instruments on the Moscow Exchange, 2009 – 2022, trillion rubles

Source: own calculations based on the data of the Moscow Exchange.

The model of a universal exchange forms some risks of reduced market motivation to develop some business segments which do not yield high exchange fees. At present, this is evident in the decline in the importance of the stock market and the derivatives market in overall volumes of exchange trades. In 2010–2018, the share of the stock exchange market in the overall volume of stock exchange transactions decreased from 13.2% to 4.4%, but then it started to pick up slowly. However, in 2022 the specified share fell again to 3.5% as compared with 5.2% in 2021 (*Table 12*).

*Table 12*

**The pattern of the market of the Moscow Exchange, 2010 – January 2023, %**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Jan.22	Jan.23
<b>Stock market</b>	<b>13.2</b>	<b>10.3</b>	<b>6.5</b>	<b>5.2</b>	<b>3.6</b>	<b>3.0</b>	<b>2.8</b>	<b>4.0</b>	<b>4.7</b>	<b>5.1</b>	<b>5.8</b>	<b>5.2</b>	<b>3.5</b>	<b>6.1</b>	<b>3.1</b>
including:															
Equities, RDR and units	8.0	6.6	3.1	1.9	1.8	1.4	1.1	1.0	1.3	1.6	2.5	3.0	1.7	4.8	1.0
Bonds	5.2	3.7	3.4	3.3	1.9	1.6	1.7	3.0	3.5	3.5	3.2	2.2	1.9	1.2	2.1
Secondary trading	3.4	2.9	2.8	2.7	1.5	1.2	1.1	1.2	1.2	1.3	1.2	1.0	0.6	0.8	0.5
Market of placements	1.8	0.8	0.6	0.6	0.3	0.4	0.6	1.7	2.3	2.2	2.1	1.2	1.2	0.4	1.7
<b>FX and money market</b>	<b>72.0</b>	<b>70.6</b>	<b>80.0</b>	<b>84.3</b>	<b>85.6</b>	<b>83.3</b>	<b>83.6</b>	<b>86.5</b>	<b>86.8</b>	<b>87.0</b>	<b>80.5</b>	<b>78.9</b>	<b>89.1</b>	<b>74.7</b>	<b>92.6</b>
including:															
Money market	33.9	41.3	48.3	50.7	45.7	38.0	44.8	47.3	46.4	48.4	45.7	47.2	63.7	43.3	72.1
REPO operations	31.5	38.3	45.8	47.9	42.0	33.2	40.4	43.1	38.0	39.2	40.7	41.7	51.3	38.3	45.6
Credit market	2.4	3.1	2.5	2.8	3.7	4.8	4.4	4.2	6.3	6.7	5.0	5.5	12.4	5.0	26.5
FX market	38.1	29.3	31.6	33.7	39.9	45.4	38.8	39.2	40.5	38.6	34.7	31.7	25.4	31.4	20.5

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Jan.22	Jan.23
Spot deals	18.0	15.8	16.6	12.4	13.6	15.1	12.6	8.8	10.1	8.4	10.2	9.4	9.5	11.5	6.7
Swap deals	20.1	13.4	15.0	21.3	26.3	30.3	26.2	30.3	30.4	30.2	24.5	22.2	15.9	19.9	13.9
<b>Derivatives market</b>	<b>14.8</b>	<b>19.1</b>	<b>13.5</b>	<b>10.5</b>	<b>10.7</b>	<b>13.7</b>	<b>13.6</b>	<b>9.5</b>	<b>10.4</b>	<b>10.3</b>	<b>13.7</b>	<b>15.7</b>	<b>7.4</b>	<b>19.2</b>	<b>4.3</b>
DFIs	0.0	0.0	0.0	0.0003	0.0002	0.001	0.002	0.01	0.1	0.1	0.1	0.3	0.0	0.0	0.0
Commodity market	0.001	0.003	0.006	0.005	0.005	0.02	0.02	0.01	0.02	0.01	0.01	0.02	0.02	0.01	0.02
<b>Overall</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>102</b>	<b>103</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Source: own calculations based on the data of the Moscow Exchange.

The FX and money market segment accounts for the major volumes of trades on the Moscow Exchange; its share increased from 78.9% in 2021 to 89.1% in 2022. Over the same period, out of this segment the share of the money market increased from 47.2% to 63.7% and the share of FX market decreased from 31.7% to 25.4%.

Over the subsequent four years (2018-2021), the derivatives market was growing at advanced rates, primarily owing to the market of derivatives on foreign currency assets. However, in 2022 its share fell sharply from 15.7% in 2021 to 7.4% in 2022.

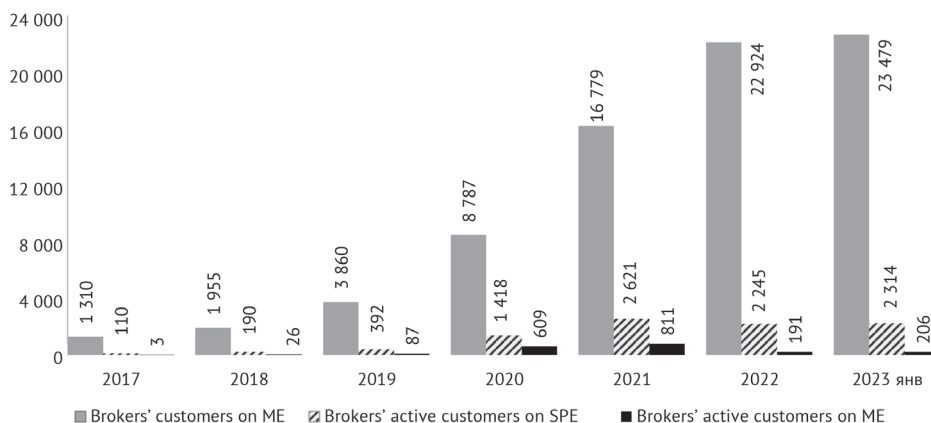
#### 2.1.9. Investors on the domestic financial market

Despite a high volatility of the stock market, the overall number of unique customer accounts with brokers at the Moscow Exchange increased from 16.8 mn in 2021 to 23.6 mn in January 2023, an increase of 40.5%. However, since most of such accounts do not have assets, the more objective indicator of private investors' trading activity is the number of active customer accounts which are involved at least in one stock exchange transaction a month. The number of such accounts decreased from 2.6 mn in 2021 to 2.3 mn in January 2023 on the Moscow Exchange, a decline of 11.5%, and from 0.8 mn to 0.2 mn on the St. Petersburg Exchange, a decline of 75.0% (Fig. 48).

In 2022 – January 2023, growth in the number of individual investment accounts (IIA) slowed down considerably. The number of such accounts increased from 4.8 mn in December 2021 to 5.2 mn in January 2023, growth of 8.3%. However, in 2022 growth in the number of IIA was much lower than in 2021 (37.1%). This slowdown was driven by a higher level of legal uncertainty about the existing IIA of level 1 and level 2. According to the draft Federal Law “On Amendment of Article 10.2-1 of the Federal Law “On the Securities Market” developed by the RF Ministry of Finance and published for public discussion,<sup>1</sup> it is planned to introduce a new type of individual investment accounts, that is, IIA of the 3<sup>rd</sup> type which is expected to replace the existing IIAs.

The data on the number of brokerage accounts registered by the exchanges do not reflect the actual extent of households' involvement in stock market operations. In the bulk of individuals' brokerage accounts there are either zero balances or assets which are insufficient for safe investing.

1 URL: <https://regulation.gov.ru/projects#npa=136735>



*Fig. 48.* The number of registered accounts and brokers' active customers on the Russian exchanges, 2017 – January 2023, thousand accounts

Sources: own calculations based on the data of ME and SPE.

According to the data of the Central Bank of Russia<sup>1</sup>, the value of assets on private investors' brokerage accounts decreased from Rb8.3 trillion in 2021 to Rb6.0 trillion in 2022, while the number of brokers' unique customers made public by the Moscow Exchange increased over the same period from 16.8 mn to 22.9 mn (*Table 13*).

In 2021, out of the overall number of brokerage account holders 10.6 mn individuals (63.3%) did not have any assets on their accounts, while in 2022 their number increased to 15.1 mn customers (65.7%). By our estimates, for the creation of a very simple diversified portfolio private investors need to have at least Rb100,000 on their accounts.<sup>2</sup> In 2021, the number of private investors with investment potential (the assets value of at least Rb100,000 on the account) was equal to the mere 1.7 mn individuals or 9.9% of the overall number of brokerage account holders. In 2022, the number of such investors fell to 1.6 mn individuals and their share, to 6.9%.

The number of private investors without a potential for full diversification of investments (with assets value of up to Rb100,000 in accounts) and destined most likely to receive income on individual portfolios below the market level amounted to 4.5 mn and 6.3 mn individuals in 2021 and 2022, respectively, that is, their number increased by 40.0% over the year. The regulators' insufficient attention

1 URL: [https://www.cbr.ru/securities\\_market/analytics/](https://www.cbr.ru/securities_market/analytics/)

2 According to the study of the Central Bank of Russia (2022), owing to a failure to ensure a full diversification of portfolios of brokers' customers with assets value of Rb10,000 to Rb100,000, this group of investors saw the worst negative income on their portfolios among various groups of investors in H1 2022. See: *The Portrait of a Broker's Customer. H1 2022*. Moscow: The Central Bank of Russia. p.14. URL: [https://cbr.ru/Content/Document/File/143859/Portrait\\_client\\_brok.PDF](https://cbr.ru/Content/Document/File/143859/Portrait_client_brok.PDF)

*Table 13*

**The data on the distribution of the number of private investors  
and the value of customers' assets depending on the value of assets  
on brokerage accounts, 2021–2022**

	Number of customers				Portfolio volume			
	2021		2022		2021		2022	
	mn persons*	%	mn persons*	%	trillion Rb	%	trillion Rb	%
1. from Rb1 mn and more	0.5	3.0	0.4	1.8	7.6	91.1	5.3	87.6
2. from Rb100,000 and more	1.7	9.9	1.6	6.9	8.2	99.1	5.9	98.5
3. below Rb100,000	4.5	26.8	6.3	27.4	0.1	0.9	0.1	1.5
4. empty accounts	10.6	63.3	15.1	65.7	0	0	0	0
<b>5. Overall (total of lines 2–4)</b>	<b>16.8</b>	<b>100.0</b>	<b>22.9</b>	<b>100.0</b>	<b>8.3</b>	<b>100.0</b>	<b>6.0</b>	<b>100.0</b>

\* The number of unique customer accounts with brokers on the Moscow Exchange.

Source: The Central Bank of Russia.

to this risk may lead in the long run to private investors' substantial losses on the stock market and a decrease in their trust in investments in risk assets.

In terms of the pattern of financial assets, in 2022 the behavior of households was rational and predictable in advance; during the period of high volatility on financial markets and uncertainty households directed a bulk of their financial assets into cash and bank deposits.<sup>1</sup> As seen from *Table 14*, individuals' cash savings on hands increased from Rb19.1 trillion in 2021 to Rb22.1 trillion in January 2023; the value of bank deposits grew from Rb41.3 trillion to Rb 45.8 trillion. The share of investments in cash and bank deposits, including funds on escrow accounts in the value of households' financial assets increased from 76.8% in 2021 to 78.9% in January 2023.

In absolute terms, in 2021 – January 2023 households' investments remained at the level of Rb5.3 trillion, however, their share in financial assets decreased from 6.8% to 6.2%. The value of bonds owned by households shrank from Rb3.1 trillion in 2021 to Rb2.8 trillion in January 2023; their share in assets also fell from 4.0% to 3.2%. In the period under review, the value of savings in collective investments (investment funds, pension funds and insurance reserves) increased, while the share of financial assets fell from 4.1% to 3.9% in investment funds and from 8.3% to 7.8% in pension funds and insurance companies.

So, both before and after 2022 households' consolidated portfolio of financial assets remained markedly conservative and aimed, to a greater extent, at preserving the value, rather than receiving an additional income from investments in risk assets. This points to individuals' increasingly insufficient confidence in the stock market, particularly in 2022 and early in 2023.

<sup>1</sup> Households' reorientation in favor of short-term investments after February 24, 2022 is explicitly evident in the statistics on ruble bank deposits after February 24, 2022. According to the data of the Central Bank of Russia, in the overall value of households' ruble bank deposits, the share of deposits for the term of 91–181 days increased from 8.7% in December 2021 to 29.4% in January 2023, while that of deposits for the term of over a year decreased from 26.9% to 13.6%.

Table 14

**The pattern of households' financial assets, 2017–2022, %**

	2017	2018	2019	2020	2021	2022	January 2023
Cash	24.8	25.5	23.5	26.3	24.3	25.4	25.7
Deposits and escrow account balances	57.9	56.4	56.4	52.9	52.5	53.8	53.2
Equities	3.8	3.6	4.4	5.3	6.8	6.0	6.2
Bonds	1.5	2.4	3.0	3.3	4.0	3.3	3.2
Investment funds	2.4	2.8	3.0	3.4	4.1	3.8	3.9
Pension savings and insurance reserves	9.6	9.4	9.7	8.8	8.3	7.7	7.8
<b>Financial assets, overall</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: own calculations based on the data of the Central Bank of Russia.

With non-residents' investments in Russian issuers' securities frozen in 2022 and the level of development of domestic institutional investors being insufficient enough, private investors became the main driving force which maintained liquidity of equities and bonds on the exchange. The share of non-residents in market transactions with equities on the Moscow Exchange fell from 48.5% in 2021 to zero in 2022 and, on the contrary, the share of private investors increased over the same period from 38.5% to 76.0% (Fig. 49). Also, the share of resident organizations, notably non-bank financial institutions, increased (from 13.0% in 2021 to 24.0% in 2022). In February 2023, the share of private investors was equal to 81.0%.

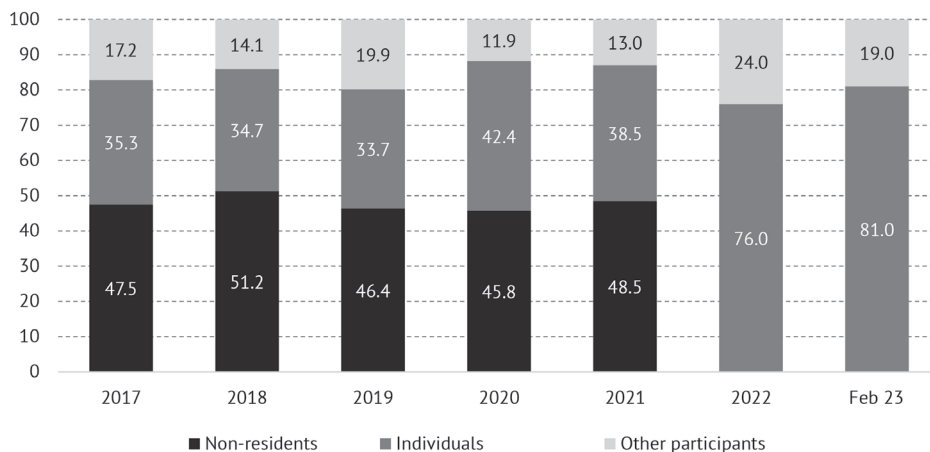
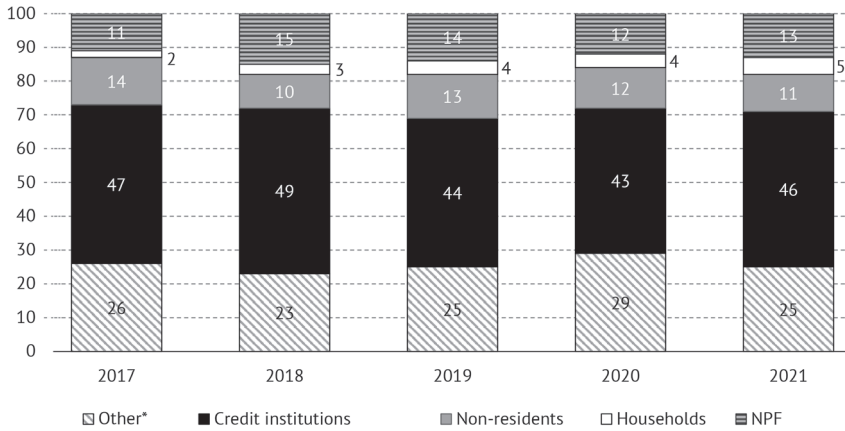


Fig. 49. The pattern of investors in the secondary equity trading regime on the Moscow Exchange, 2017 – February 2023, %

Source: compiled on the basis of the statistical data to the Financial Stability Review of the Central Bank of Russia and the Moscow Exchange.



\* The public sector, non-banking financial institutions, insurers, investment funds and other resident-institutions.

Fig. 50. The pattern of corporate bond holders, 2017–2021, %

Source: own calculations based on the data of the Review of the Russian Financial Sector and Financial Instruments in 2021. The Central Bank of Russia.

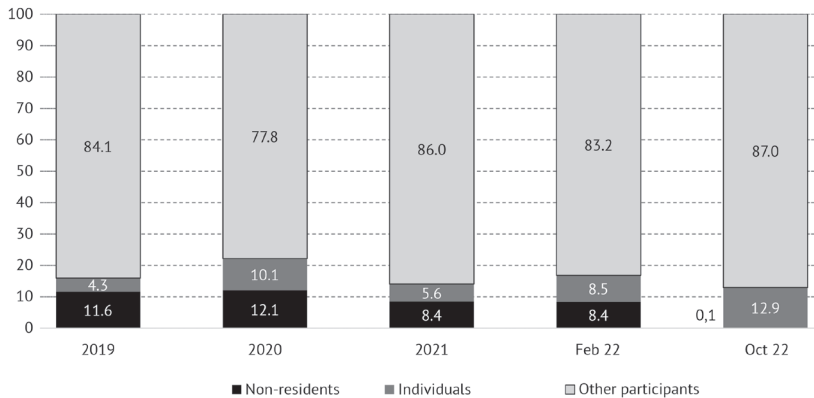


Fig. 51. The pattern of investors in the secondary OFZ trading regime on the Moscow Exchange, 2019 – October 2022, %

Source: own compilation based on the statistical data to the Financial Stability Review of the Central Bank of Russia and the Moscow Exchange.

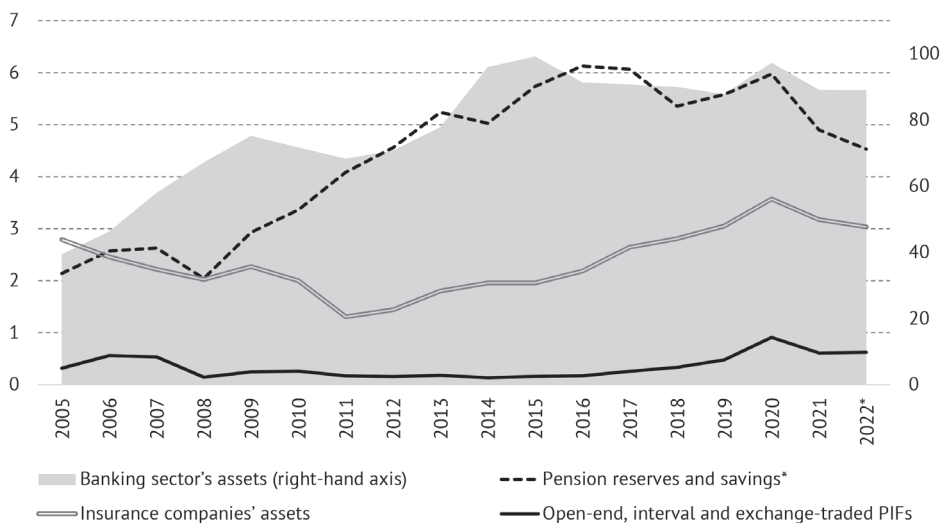
The Central Bank of Russia has not published yet the statistic on the corporate bond market in 2022. In 2021, the share of private investors in the pattern of main holders of corporate bonds was equal to the mere 5% (Fig. 50).

In the pattern of volumes of stock exchange transactions with OFZ on the Moscow Exchange, the share of private investors is small, however, it increased markedly from 5.6% in 2021 to 12.9% in October 2022 (Fig. 51). Individuals

increasingly regard investments in government securities as the most attractive alternative as compared with deposits and equities. In the period under review, the share of non-residents in stock exchange transactions with OFZ fell from 8.4% to 0.1% and that of other participants, primarily banks and other financial institutions increased somewhat from 86.0% to 87.0%.

Despite sanctions and the global financial crisis, in 2022 the value of financial institutions' assets relative to GDP turned out to be virtually unchanged at the level of 97.2% relative to 97.8% in 2021 (*Fig. 52*). Apart from market factors, this was facilitated by the Central Bank of Russia's easing of the regulation of financial organizations; such a measure made it feasible to preserve the estimate of some financial assets on their balances on conditions prevailing before February 24, 2022 (*See Section 2.1.2*).

Over the year, the relative value of assets of opened-end, interval and stock mutual funds (PIFs) remained virtually unchanged in the amount of 0.6% of GDP in 2021 and 2022 and that of bank assets stood at the level of 89.1% and 89.0% of GDP in 2021 and 2022, respectively. The value of pension savings and pension reserves fell from 4.9% of GDP in 2021 to 4.5% of GDP in September 2022 owing mainly to the continued moratorium on mandatory pension savings. Insurance companies' assets decreased from 3.2% to 3.0%.



\* The data on pension reserves and savings are presented as of October 1, 2022.

*Fig. 52.* The share of bank assets, pension reserves and savings, assets of insurance companies and the value of net assets of open-end, interval and exchange-traded PIFs in Russia, 2005–2022, % GDP

*Source:* own calculations based on the data of the Central Bank of Russia, the RF Pension Fund and Rosstat.

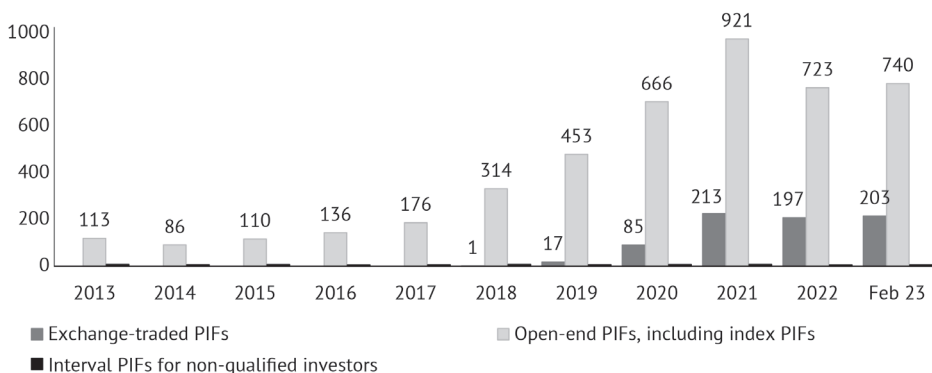


started the development of a new system of pension savings which is expected to replace the existing system of mandatory pension savings.

In 2022, the main achievement of the collective investment segment was its ability to remain financially sustainable and retain trust of several million private investors despite the fact that a portion of financial assets of open-end and exchange-traded PIFs happened to be frozen in foreign jurisdictions.

In 2022, the overall value of net assets of open-end and exchange-traded PIFs without taking into account the data on funds with frozen assets amounted, by estimates of the Central Bank of Russia,<sup>1</sup> to Rb722.7 bn, while Investfunds.ru revealed the overall value of net assets of these funds, including funds which suspended its operation, being equal to Rb919.4 bn (*Fig. 53*). So, according to the data of Investfunds.ru,<sup>2</sup> the difference between these two estimates corresponds to the value of assets of open-end and exchange-traded investment funds which suspended their operations because of sanctions; it is equal to Rb196.7 bn or 21.4% of the value of assets of open-end and exchange-traded PIFs.

The year 2022 saw the halt of the seven-year period which began in 2015 when amid growth in yield on securities of Russian issuers and the declining return on bank deposits private investors made actively investments in open-end PIFs (*Fig. 54*). If in 2021 these funds received Rb330 bn worth of new private investments, in 2022 their outflow amounted to Rb36 bn. In January-February 2023, the net outflow of funds from open-end PIFs decreased to Rb3 bn.

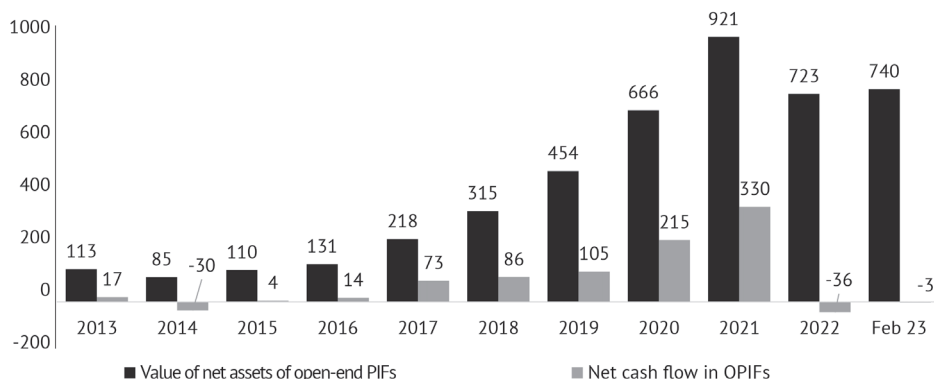


*Fig. 53.* The value of net assets of open-end and stock exchange PIFs, 2013 – February 2023, billion Rb

*Source:* own calculations based on the data of Investfunds.ru, including the value of funds with frozen assets

<sup>1</sup> URL: [https://www.cbr.ru/statistics/RSCI/activity\\_uk\\_if/stat\\_pif\\_aif/](https://www.cbr.ru/statistics/RSCI/activity_uk_if/stat_pif_aif/)

<sup>2</sup> These calculations do not take into account the value of assets of foreign ETFs under management of FinEx in the sum of Rb100 bn as of 2021; Russian investments in these securities were frozen in accounts with Euroclear.



**Note.** The value of net assets of OPIFs in January–November 2022 includes the value of PIFs with frozen assets. NAV of OPIFs without frozen assets amounts to Rb515.2 bn.

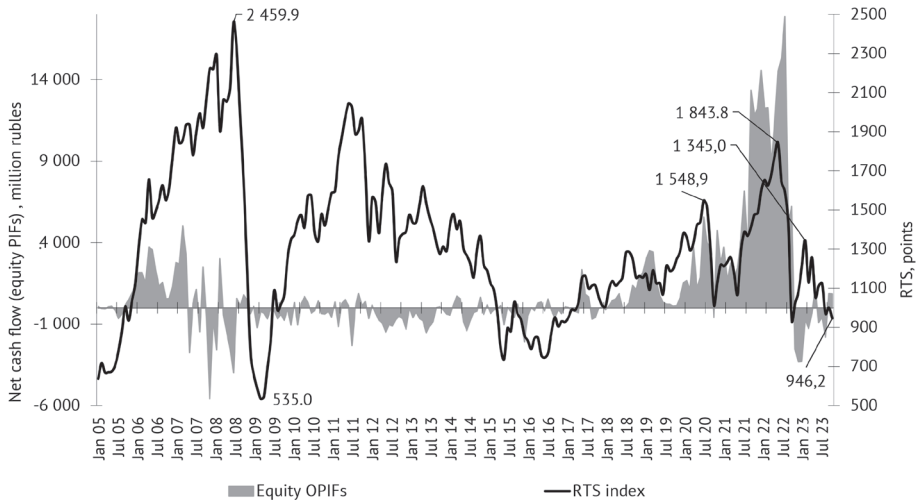
*Fig. 54.* The value of net assets of open-end PIFs and investors' net cash flow in these funds, 2013 – February 2023, billion Rb

*Source:* own calculations based on the data of Investfunds.ru.

Private investors' behavior in PIFs is often of a pro-cyclical pattern: a fall in underlying stock indices brings about sales of PIF units, while growth attracts new investments in PIFs. Thus, private investors intensify volatility of prices for equities and bonds. Vigorous growth in the RTS index during the recovery from the coronavirus pandemic from April 2020 till October 2021 generated a considerable inflow of private investments in open-end equity PIFs (*Fig. 55*). A sudden fall in the index in January–February 2022 amid heightened geopolitical risks and a rise in the key rate led eventually to the capital outflow from equity PIFs. In 2022, PIF unit holders' behavior ceased to be pro-cyclical; temporary stock market index growth did not stop the outflow of capital from equity PIFs.

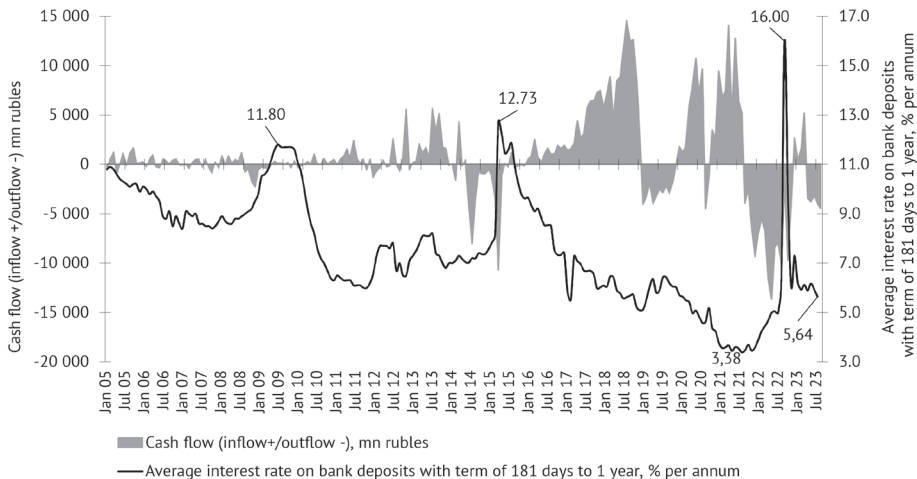
Medium-term interest rates on bank deposits have a considerable effect on cash flows of investors in open-end bond PIFs. A decrease in bank deposit interest rates stimulated the influx of capital in bond PIFs and, on the contrary, a rise in such interest rates provokes the outflow of investors' funds (*Fig. 56*). In H2 2022, this specifics of the behavior of investors in bond PIFs was broken; a decrease in bank deposit rates in that period of time was accompanied by a substantial outflow of capital from bond PIFs. Probably, this was caused by private investors' disappointment with the performance of these PIFs.

In 2022, the market of collective investments saw an interesting anomaly in private investors' behavior. Normally, this category of investors is not good at choosing the right time for entry to and exit from mutual funds, that is, they buy PIF units when prices for assets are high and redeem units when the value of their mutual fund portfolio declines. This leads, as a rule, to a situation where returns on PIFs surpasses those on investments in mutual fund units. For example,



*Fig. 55.* Monthly net cash flows of investors' funds in open-end equity PIFs (OPIF) (billion Rb) (left-hand axis) and the RTS index (points) (right-hand axis), January 2005 – February 2023

Source: own calculations based on the data of Investfunds.ru and the Moscow Exchange.



*Puc. 56.* Investors' monthly net cashflows in open-end bond PIFs (OPIFs) and the interest rate on bank deposits with the term of 181 days to 1 year, January 2005 – February 2023

Source: own calculations based on the data of Investfunds.ru and the Moscow Exchange.

according to our calculations based on the data of Investfunds.ru, in 2020–2022 the average annual returns on open-end PIFs and exchange-traded PIFs were equal to -0.1% per annum and 3.9% per annum, respectively. Over the same period of time, average return on private investments in open-end PIF units was equal to the mere -1.38%. The year 2022 saw quite the opposite trend: average return on open-end PIFs amounted to -15.67%, while unit holders' investments in the same funds demonstrated a smaller negative return of -14,84%; returns on portfolios of exchange-traded PIFs and private investments in their units were equal to -13.04% and -9.85%, respectively. This trend was particularly explicit in exchange-traded and open-end precious metal PIFs: with an average return of 7.08% on exchange-traded PIFs of this category, return on unit holders' investments amounted to 39.78% per annum, while open-end precious metal PIFs' respective values were equal to 0.98% and 16.59%, respectively.

This pattern reveals that owing to a difficult situation caused by sanctions and slumps on global financial markets in 2022 private investors in open-end and exchange-traded PIFs exercised caution in choosing the right moment for entry to and exit from mutual funds and this helped them reduce substantially losses from investments as compared with returns of mutual funds themselves and in a number of cases even earn a high income. This example shows the importance of transparent information on mutual funds' performance, professional analytics and competent investment advice.

According to the data of the Central Bank of Russia's surveys of private investors,<sup>1</sup> this category of investors, in which insufficiently diversified individual portfolios prevail, does not actively take an advantage of collective investments. According to the review of the portrait of the broker's customer, in H1 2022 70% of men and 64% of women do not invest in mutual investment funds (PIFs) and foreign exchange-traded funds (ETFs). The main obstacles for a more active use of investment funds on the domestic market are high costs of funds for investors, an outdated practice of sales of PIF units implying large banks' sale of only funds of their own production to their customers and an insufficient level of transparency on PIFs for the general public, as well as the analytics for private investors. In 2022, substantial damage to private investors' confidence in investment funds was caused by the freezing of foreign assets in portfolios of PIFs and ETFs; as a result, some investment funds' operations stopped and investments of their investors were frozen.

For example, in 2012–2022 investors' average relative costs in open-end PIFs even increased as follows: equity PIFs: from 4.6% in 2012 to 4.7% of the average annual value of net assets of these investment funds; bond and money market PIFs: from 2.6% to 3.0%; funds of hybrid investments: 4.5% to 5.1% (*Table 15*). In 2022, the costs of exchange-traded index PIFs of similar categories were several times lower, however, they surpass considerably the costs of similar investment funds on the global financial market.

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1 URL: [https://www.cbr.ru/analytics/rcb/cl\\_broker/](https://www.cbr.ru/analytics/rcb/cl_broker/)

*Table 15*

**The average size of general costs on management of open-end and exchange-traded unit investment funds relative to the average annual value of their net assets, 2012–2022, %**

	2012	2022	Change, %
<b>Open-end PIFs:</b>			
equity	4.6	4.7	2.2
Bonds and money market	2.6	3.0	15.4
Hybrid investments	4.5	5.1	13.3
<b>Exchange-traded PIFs:</b>			
equity		1.1	
Bonds and money market		0.9	
Hybrid investments		1.3	

Source: own calculations

\* \* \*

In 2022, despite high volatility of investment assets and isolation from developed countries' financial markets because of sanctions the financial market proved its sustainability and retained the trust of domestic investors and this can be regarded as its major achievement. All financial instruments on the exchange market circulate in normal mode and there were no serious bankruptcies of corporate and regional bond issuers. The number of private investors entering the market keeps growing. The attraction to the stock market of large volumes of households' savings in cash currency and deposits amounting nearly to 80% of the overall value of financial assets may become a driver of recovery and subsequent growth of the domestic equity and bond markets.

The main challenges of the domestic financial market are as following.

The freezing of the substantial financial assets of the government, business and private investors with foreign financial institutions; the need of more active reorientation of Russian financial market participants to financial markets of friendly countries.

One year after the sharp decline in stock market indices on February 24, 2022, prices for equities of large companies did not virtually demonstrate any upward trends. Amid non-residents' exit from the market, private investors who accounted for over 80% of the volume of transactions on the equity market of the Moscow Exchange in February 2023 rendered some support to the equity market. However, private investors' funds alone may be insufficient for the recovery of the domestic equity market. For the search for new drivers of growth in the value of equities of Russian issuers by attracting funds of banks, institutes of development, domestic institutional investors and non-residents from friendly countries, it is necessary to adopt a clear state strategy of recovery of the domestic capital market.

The attractiveness of the domestic equity market can be promoted by a large-scale public offering of equities of new companies from the technology sector, former foreign companies which passed into hands of Russian owners in 2022 and issuers from other economic sectors. However, this requires measures of state support of the stock market, accelerated development of alternative investment funds and creation of a favorable environment and motivation for attraction of investments funded by individuals' long-term savings.

With reduced transparency of the information on the state of the economy, budget and activities of securities issuers because of sanctions, investors experience serious difficulties in making informed decisions. In this situation, it is necessary to adopt a more thorough approach to the scope of limitations regarding the disclosure by issuers of the financial reporting and substantive information on corporate developments and support Russian information resources and platforms rendering services in the field of disclosure of information.

On the bond market, the most serious challenge consists in bonds' low liquidity and high yield to maturity on government bonds and partially corporate bonds. Proinflationary expectations of market participants still prevail. Small and mid-sized companies and issuers with a moderately low credit rating have limited capabilities to place bonds.

There is still an insufficient level of competition between financial institutions. This is evident in high tariffs and fees on financial services and interbank transfers, a slow influx of new companies to the financial market and a weak role of fintech, which is independent of banks, in providing financial services to households.

The stock market received a substantial support from private investors. However, private investors encounter risks of low diversification of individual portfolios, a lack of transparency of securities issuers, high costs of intermediaries' services and a lack of opportunities to buy different providers' financial products on the basis of the open architecture for sales.

The diversification of private investors' individual portfolios can be upgraded by means of higher availability and investment attractiveness of collective investment instruments, such as open-end and exchange-traded PIFs. Returns on such investments may increase on the back of more active application of the strategy of factor and sectoral investing, as well as reduction in funds management costs. Despite a number of proposals announced by financial regulators for the future, some issues associated with future mechanisms of long-term savings by individuals and corporate and individual pension schemes remain uncertain.

In 2022, the Central Bank of Russia approved "The Main Guidelines for the Development of the Financial Market of the Russian Federation in 2023 and the 2024–2025 Period" and the RF Ministry of Finance continued its work on the draft of "The Strategy for the Development of the Financial Market of the Russian Federation till 2030". These documents determine five main lines of the development of the financial market, including: the creation of an environment for consolidating the role of the financial market in financing the transformation of the Russian economy; protection of the rights of consumers of financial services and investors, as well as promotion of availability of financial services for individuals

and the business; transformation of foreign economic payments and settlements; digitalization of the financial market and the development of the payment infrastructure; facilitation of financial stability. As seen from the discussion of these documents, they need further elaboration, particularly regarding the issues related with facilitation of competition on the market of financial services, maintaining of the required level of transparency of the information on issuers and securities for investments, as well as adoption of system measures aimed at creating an environment for individuals' long-term savings.

## **2.2. Municipal and sub-federal debt market<sup>1</sup>**

According to data released by the RF Ministry of Finance, against the backdrop of deteriorating economic dynamic, the consolidated debt of the subjects and municipalities of the Russian Federation amounted to Rb3.16 trillion, or 2.09% of GDP, as of January 1, 2023. Despite an increase by Rb 312.1 bn in nominal terms, it declined in real terms by 3.4%, or 0.9% of GDP. As of January 1, 2022, its size was Rb2.85 trillion, or 2.18% of GDP.

The volume of accumulated debt of the subjects of the Russian Federation stood at Rb2.79 trillion as of early 2023, with the share of budget loans in the total volume of accumulated debt grew at an outpacing rate from 55.4% to 71.0%.

Accordingly, the share of market borrowings declined: the share of accumulated debt in the form of debt securities in the total amount of accumulated debt contracted from 32.3% to 23.4%, in the form of bank loans – from 10.4% to 4.5%.

The volume of municipalities' accumulated debt having dropped in nominal terms by Rb2.1 bn amounted to Rb374.6 bn (*Table 16*). The share of municipalities' debt to superior budgets in the total volume of debt surged nearly twice, from 35.1% to 65.0%, the share of bank loans nosedived almost twice - from 58.4% to 30.2%, and the share of securities went down from 5.3% to 3.7%.

The subjects of the Russian Federation got an opportunity to replace more expensive market borrowings with inter-budget loans as part of the implementation of anti-crisis measures. According to Clause 1.7 of the Plan of priority actions to ensure development of the Russian economy under the external sanctions, approved at the meeting of the Presidium of the Government Commission on Enhancing the Stability of the Russian Economy under Sanctions of March 15, 2022 Federal Law No. 128 FZ of May 1, 2022 "On Amending Articles 9 and 10 of the Federal Law "On Amending the Budget Code of the Russian Federation and Certain Legislative Acts of the Russian Federation and Setting Specifics of Budget Implementation" was adopted.

The above Federal Law stipulated that in 2022 the Ministry of Finance of the Russian Federation had a right to extend budget loans from the federal budget in the amount of up to Rb390.7 bn to the subjects of the Russian Federation whose estimated fiscal capacity index did not exceed 1.5 in 2022, in order to repay commercial debts of the subjects of the Russian Federation (municipal entities). Later on, by Federal Law No. 146-FZ, of 28.05.2022, the above limit was increased up to Rb420.0 bn.

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1 Author: *Shadrin A.E.*, Director of Socio-Economic Development Institute NRU HSE.

Table 16

**Volume and structure of the state debt of the RF subjects and municipal debt as of January 1, 2022 and 2023**

Types of debt securities	Amount of state debt of RF subjects, Rb bn					Amount of municipal debt, Rb bn				
	2022	Share in total debt, %	2023	Share in total debt, %	Increase/decrease, y-o-y, %	2022	Share in total debt, %	2023	Share in total debt, %	Increase/decrease, y-o-y, %
Government (municipal) securities	799.9	32.33	651.8	23.37	8.95	19.9	5.3	13.9	3.7	-30.2
Loans issued by credit institutions, foreign banks and international financial institutions	257.6	10.41	126.2	4.53	5.88	220.0	58.4	113.3	30.2	-48.5
Public budget loans from other budgets of the budgetary system of the Russian Federation	1371.5	55.43	1979.9	71.00	-15.57	132.4	35.1	243.6	65.0	84.0
Government (municipalities) guarantees	39.3	1.59	24.9	0.89	0.70	4.5	1.2	3.8	1.0	-15.6
Other debt liabilities	6.3	0.25	5.9	0.21	0.04	0.005	0.0	0.005	0.0	0.0
<b>Total: amount of state (municipal) debt</b>	<b>2 474.5</b>	<b>100.0</b>	<b>2 788.7</b>	<b>100.0</b>	<b>13.9</b>	<b>376.7</b>	<b>100.0</b>	<b>374.6</b>	<b>100.0</b>	<b>-0.6</b>

Source: Own calculations on data released by the Finance Ministry of Russia.

In addition, in accordance with this Federal Law, the subjects of the Russian Federation in 2022 were exempt from repayment of debt to the Russian Federation on budget loans.

Another source for borrowing of the RF subjects from the federal budget was the provision of budget loans for financial support of infrastructure projects, provided in accordance with the Government of the Russian Federation of 14.07.2021 No. 1190.<sup>1</sup>

<sup>1</sup> See in detail: Operational report on the execution of the consolidated budgets of the subjects of the Russian Federation for January-June 2022. Accounting Chamber of the Russian Federation.



As a result, 27 subjects of the Russian Federation accumulated 100% of their debt by the beginning of 2023, which accounted for interbudgetary loans (Table 17).

In this context, in 2022, the number of RF subjects registered the emission of debt securities decreased four-fold, from 24 in 2021 to 6. The following subjects had their prospectuses registered: the Sakha Republic (Yakutia), the Republic of Karelia, the Kaliningrad, Ulyanovsk, Sverdlovsk and Magadan regions. The only municipality that registered the bond issue was the city of Tomsk (in 2021, two municipalities issued bonds).

The largest share of borrowings related to bond issues was taken by St. Petersburg (89.1% of the total structure of accumulated debt), the Sakha Republic (Yakutia) (58.7%), the Krasnoyarsk Krai (56.7%), the Republic of Bashkortostan (39.0%), the Belgorod region (40.8%) and the Moscow region (36.2%).

*Table 17*

### Structure of state debt of the RF subjects as of January 1, 2023

RF Subject	Government (municipal) securities		Loans issued by credit institutions, foreign banks and international financial institutions		Public budget loans from other budgets of the budgetary system of the Russian Federation		Total debt amount*
	Rb bn	Share in total amount, %	Rb bn	Share in total amount, %	Rb bn	Share in total amount, %	Rb bn
<b>Central Federal district</b>	<b>254,00</b>	<b>32,7</b>	<b>13,19</b>	<b>1,7</b>	<b>508,83</b>	<b>65,4</b>	<b>777,48</b>
Belgorod region	12,67	40,8	0,00	0,0	17,32	55,7	31,09
Briansk region	0,00	0,0	0,00	0,0	11,06	100,0	11,06
Vladimir region	0,00	0,0	0,00	0,0	6,71	100,0	6,71
Voronezh region	0,00	0,0	0,00	0,0	20,88	100,0	20,88
Ivanovo region	0,00	0,0	0,00	0,0	11,28	100,0	11,28
Kaluga region	0,00	0,0	0,00	0,0	29,55	100,0	29,55
Kostroma region	0,00	0,0	0,00	0,0	23,69	100,0	23,69
Kursk region	0,59	5,7	0,00	0,0	9,57	93,4	10,25
Lipetsk region	3,70	27,9	0,00	0,0	9,49	71,6	13,25
Moscow region	105,05	36,2	10,36	3,6	174,51	60,2	289,92
Orel region	0,00	0,0	0,00	0,0	22,04	100,0	22,04
Ryazan region	0,00	0,0	0,00	0,0	24,34	100,0	24,34
Smolensk region	0,00	0,0	1,33	5,8	21,75	94,2	23,08
Tambov region	4,55	22,2	0,00	0,0	15,96	77,8	20,51
Tver region	0,00	0,0	0,00	0,0	15,51	100,0	15,51
Tula region	0,00	0,0	1,50	7,5	18,25	91,5	19,94

Moscow. 2022. Pp. 43–44. URL: <https://ach.gov.ru/upload/iblock/877/4voa484h3u2yxeki3y08r7mqfpwl9od7.pdf>; Bukharsky V., Tirsky T., Galieva G. Consolidated budgets of the regions: Sustainability in spite of sanctions. Moscow. 2022. URL: [https://raexpert.ru/researches/regions/regional\\_budgets\\_2022/](https://raexpert.ru/researches/regions/regional_budgets_2022/)

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RF Subject	Government (municipal) securities		Loans issued by credit institutions, foreign banks and international financial institutions		Public budget loans from other budgets of the budgetary system of the Russian Federation		Total debt amount*
	Rb bn	Share in total amount, %	Rb bn	Share in total amount, %	Rb bn	Share in total amount, %	Rb bn
Yaroslavl region	12,01	24,8	0,00	0,0	36,39	75,2	48,41
City of Moscow	115,43	74,0	0,00	0,0	40,53	26,0	155,96
<b>North-Western Federal district</b>	<b>93,45</b>	<b>30,7</b>	<b>23,81</b>	<b>7,8</b>	<b>183,84</b>	<b>60,4</b>	<b>304,28</b>
Republic of Karelia	0,80	2,9	6,61	24,2	19,96	72,9	27,37
Republic of Komi	10,00	30,7	0,00	0,0	22,62	69,3	32,62
Arkhangelsk region	0,00	0,0	8,00	17,2	38,58	82,8	46,58
Vologda region	0,00	0,0	0,00	0,0	16,69	99,7	16,75
Kaliningrad region	3,50	12,9	3,00	11,0	19,14	70,5	27,17
Leningrad region	0,00	0,0	0,00	0,0	6,52	100,0	6,52
Murmansk region	0,00	0,0	6,20	30,6	12,48	61,5	20,28
Novgorod region	0,00	0,0	0,00	0,0	18,72	100,0	18,72
Pskov region	0,00	0,0	0,00	0,0	18,99	100,0	18,99
City of St. Petersburg	78,76	89,1	0,00	0,0	9,67	10,9	88,43
Nenets autonomous okrug	0,40	46,2	0,00	0,0	0,47	53,8	0,87
<b>Sothern Federal district</b>	<b>31,00</b>	<b>12,7</b>	<b>35,61</b>	<b>14,6</b>	<b>177,86</b>	<b>72,8</b>	<b>244,47</b>
Republic of Adygea (Adygea)	0,00	0,0	0,74	19,9	2,99	80,1	3,74
Republic of Kalmykia	0,00	0,0	0,60	7,0	7,93	93,0	8,53
Republic of Crimea	0,00	0,0	0,00	0,0	5,68	100,0	5,68
Krasnodar krai	24,50	21,8	0,00	0,0	88,06	78,2	112,56
Astrakhan region	0,00	0,0	0,00	0,0	16,11	100,0	16,11
Volgograd region	6,50	10,9	10,10	16,9	43,14	72,2	59,74
Rostov region	0,00	0,0	24,17	63,4	13,95	36,6	38,11
City of Sevastopol	0,00	0	0,00	0	0,00	0	0,00
<b>North-Caucasus Federal district</b>	<b>9,95</b>	<b>13,9</b>	<b>0,00</b>	<b>0,0</b>	<b>61,32</b>	<b>85,7</b>	<b>71,51</b>
Republic of Dagestan	0,00	0,0	0,00	0,0	11,56	100,0	11,56
Republic of Ingushetia	0,00	0,0	0,00	0,0	2,39	100,0	2,39
Kabardino-Balkar Republic	0,00	0,0	0,00	0,0	7,03	100,0	7,03
Karachaevo-Cherkassia Republic	1,75	30,2	0,00	0,0	4,05	69,8	5,79
Republic of North Osetia-Alania	0,00	0,0	0,00	0,0	8,67	100,0	8,67
Chechen Republic	0,00	0,0	0,00	0,0	6,35	100,0	6,35
Stavropol krai	8,20	27,6	0,00	0,0	21,26	71,6	29,71

RF Subject	Government (municipal) securities		Loans issued by credit institutions, foreign banks and international financial institutions		Public budget loans from other budgets of the budgetary system of the Russian Federation		Total debt amount*
	Rb bn	Share in total amount, %	Rb bn	Share in total amount, %	Rb bn	Share in total amount, %	Rb bn
<b>Volga Federal district</b>	<b>102,84</b>	<b>15,7</b>	<b>18,15</b>	<b>2,8</b>	<b>530,23</b>	<b>80,8</b>	<b>656,45</b>
Republic of Bashkortostan	15,00	39,0	2,70	7,0	20,71	53,9	38,41
Republic of Mariy El	1,00	9,9	0,00	0,0	9,09	90,1	10,09
Republic of Mordovia	0,00	0,0	3,18	9,4	30,63	90,6	33,80
Republic of Tatarstan (Tatarstan)	0,00	0,0	0,00	0,0	98,52	95,2	103,53
Udmurt Republic	5,00	7,3	0,00	0,0	63,75	92,7	68,75
Chuvash Republic – Chuvashia	0,00	0,0	0,00	0,0	10,61	100,0	10,61
Perm krai	0,00	0,0	1,00	4,9	19,46	95,1	20,46
Kirov region	0,00	0,0	0,00	0,0	24,20	100,0	24,20
Nizhniy Novgorod region	41,50	31,2	0,00	0,0	91,23	68,6	132,95
Orenburg region	3,61	19,8	0,00	0,0	14,65	80,2	18,26
Penza region	0,00	0,0	4,93	19,6	20,24	80,4	25,17
Samara region	18,30	28,7	0,00	0,0	45,45	71,3	63,75
Saratov region	3,50	5,9	0,00	0,0	55,79	94,1	59,29
Ulyanovsk region	14,93	31,6	6,35	13,5	25,90	54,9	47,18
<b>Urals Federal region</b>	<b>60,58</b>	<b>34,2</b>	<b>0,00</b>	<b>0,0</b>	<b>114,38</b>	<b>64,6</b>	<b>177,03</b>
Kurgan region	0,00	0,0	0,00	0,0	17,49	100,0	17,49
Sverdlovsk region	49,18	46,2	0,00	0,0	57,24	53,8	106,42
Tyumen region	0,00	0,0	0,00	0,0	5,18	81,9	6,33
Chelyabinsk region	7,00	18,1	0,00	0,0	30,80	79,6	38,70
Khanty-Mansi autonomous okrug – Yugra	3,40	48,1	0,00	0,0	3,67	51,9	7,07
Yamal-Nenets autonomous okrug	1,00	97,6	0,00	0,0	0,00	0,0	1,02
<b>Siberian Federal district</b>	<b>66,50</b>	<b>20,9</b>	<b>10,60</b>	<b>3,3</b>	<b>234,59</b>	<b>73,9</b>	<b>317,56</b>
Republic of Altai	0,00	0,0	0,00	0,0	2,52	100,0	2,52
Republic of Tyva	0,00	0,0	1,30	32,5	2,70	67,5	4,00
Republic of Khakassia	2,00	8,5	0,00	0,0	21,58	91,5	23,58
Altai krai	0,00	0,0	0,00	0,0	5,30	100,0	5,30
Krasnoyarsk krai	28,71	56,7	0,00	0,0	21,92	43,3	50,63
Irkutsk region	0,00	0,0	0,00	0,0	19,21	100,0	19,21
Kemerovo region – Kuzbass	4,50	7,8	0,00	0,0	47,52	82,1	57,88
Novosibirsk region	13,00	27,2	0,00	0,0	34,88	72,8	47,88
Omsk region	5,00	8,7	9,30	16,2	43,01	75,0	57,31

RF Subject	Government (municipal) securities		Loans issued by credit institutions, foreign banks and international financial institutions		Public budget loans from other budgets of the budgetary system of the Russian Federation		Total debt amount*
	Rb bn	Share in total amount, %	Rb bn	Share in total amount, %	Rb bn	Share in total amount, %	Rb bn
Tomsk region	13,30	27,0	0,00	0,0	35,93	73,0	49,23
<b>Far East Federal district</b>	<b>33,46</b>	<b>13,9</b>	<b>24,84</b>	<b>10,4</b>	<b>168,87</b>	<b>70,4</b>	<b>239,90</b>
Republic of Buryatia	0,00	0,0	3,92	16,7	19,45	83,0	23,43
Republic of Sakha (Yakutia)	28,50	58,7	0,00	0,0	8,76	18,0	48,59
Zabaikalsky krai	0,00	0,0	2,70	8,5	29,05	91,5	31,75
Kamchatka krai	0,70	7,5	5,17	55,5	3,45	37,0	9,32
Primorsky krai	0,00	0,0	0,00	0,0	7,98	94,8	8,42
Khabarovsk krai	3,26	6,4	0,00	0,0	47,53	93,2	51,00
Amur region	0,00	0,0	9,94	30,7	22,45	69,3	32,39
Magadan region	1,00	5,6	3,11	17,3	13,87	77,1	17,98
Sakhalin region	0,00	0,0	0,00	0,0	2,54	100,0	2,54
Jewish autonomous region	0,00	0,0	0,00	0,0	5,60	100,0	5,60
Chukotka autonomous okrug	0,00	0,0	0,00	0,0	8,20	92,3	8,88
<b>Total</b>	<b>651,79</b>	<b>23,4</b>	<b>126,21</b>	<b>4,5</b>	<b>1 979,92</b>	<b>71,0</b>	<b>2 788,69</b>

\* In addition to the categories of accumulated debt highlighted in the table, the Russian Ministry of Finance also includes state (municipal) guarantees and "other debt obligations".

Source: Own calculations on data released by the RF Finance Ministry.

## 2.3. The banking sector<sup>1</sup>

### 2.3.1. Key indicators and financial performance of the banking sector

At the end of 2022, there were 361 credit institutions in the Russian banking system. A year earlier their number amounted to 370 units (a decrease by 9 units during the year, in 2021 – by 37 units). There were 3 revocations of licenses (in 2021 – 26), the number of voluntary revocation of licenses came to 9 (in 2021 – 11). There were 225 banks with universal license as of the end of the year (232 banks as of the beginning of the year) and 101 banks with the basic license (103 banks as of the beginning of the year). The number of non-bank credit institutions was 35, the same as in the previous year (*Fig. 57*).

1 Author: Zubov S.A., Candidate of Economic Sciences, Docent, Senior Researcher, Structural Studies Department, IAES RANEPa.

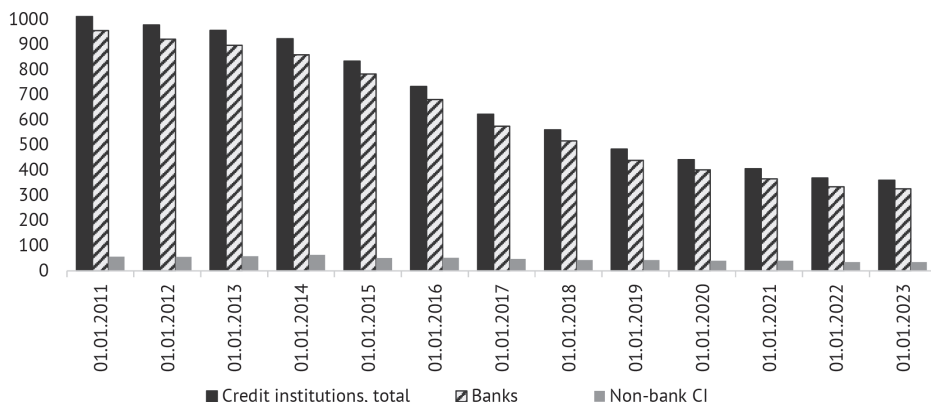


Fig. 57. Dynamics of the number of credit institutions over the last 12 years

Source: Bank of Russia. URL: [https://cbr.ru/statistics/bank\\_sector/lic/](https://cbr.ru/statistics/bank_sector/lic/)

A slight reduction in the total number of banking credit institutions was accompanied by consolidation of the banking sector. 2022 saw an increase in assets, (information on equity and profit is not published). Due to the rapid recovery of the economy, total assets of credit institutions last year increased by 14.7% (in 2021 the increase amounted to 15.9%). Thus, the growth rate of assets remained approximately at the level of the previous year.

Over January-June, the losses of the banking sector exceeded Rb1.5 trillion, the negative financial result is largely due to the Western sanctions against the largest Russian credit institutions, revaluation of currency positions due to a sharp change in the exchange rate of the ruble, as well as the outrunning growth of funding costs over the return on assets due to the growth of the key rate. In H2 2022, as the economic situation stabilized, the aggregate loss gradually decreased, and at the end of the year the banking sector recorded a profit at the level of Rb203 bn, the share of profitable credit institutions stood at 78%.

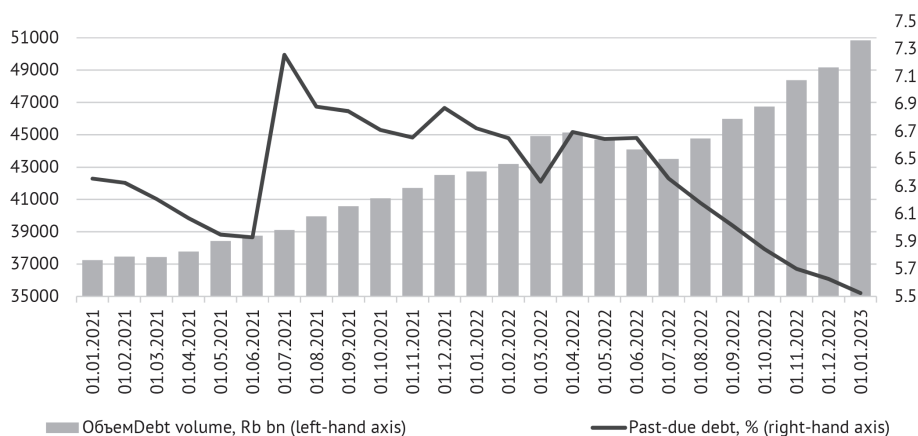
### 2.3.2. Corporate lending

The aggregate credit indebtedness of corporate borrowers to Russian banks as of January 1, 2023 reached Rb50.8 trillion. The increment of the corporate credit portfolio in 2022 reached Rb8,110.3 bn, or 19.0%. A year earlier, the corporate credit portfolio of Russian banks increased by Rb5,492.2 bn, or 14.7%. The record growth of the corporate credit portfolio was largely ensured by the replacement of external borrowings by the corporate sector. A significant role was also played by the provision of state subsidies, which were allocated to support systemic enterprises affected by sanctions. During the past year, banks provided loans under this program in an amount exceeding Rb1.5 trillion. Businesses were given loans at 10–11% of the amount up to Rb10 bn, up to Rb30 bn – for holding structures.

Another factor was the support of project financing of developers with targeted loans of Rb2.2 trillion at concessional interest rates (4–5% per annum), secured by the balance of the buyers of housing on escrow accounts.

However, the volume of loans provided last year amounted to Rb 65.9 trillion, which is 23.1% less than in 2021 (Rb85.6 trillion), the decrease in the volume of loans in rubles (Rb58.2 trillion against Rb77.1 trillion in the previous year), the issue of foreign currency loans has decreased by 10.7% (Rb7.6 trillion against Rb8.6 trillion in 2021). Thus, we can conclude that the growth of the total loan portfolio of legal entities with a decrease in the volume of granted loans is due to the restructuring of debt (provision of vacations, credit extensions) in the context of the financial crisis associated with the geopolitical conflict. The total volume of restructuring, according to the Central Bank of Russia, amounted to Rb13.4 trillion, or 23% of the corporate loan portfolio.<sup>1</sup> Banks were actively restructuring loans to large businesses, SMEs and individual entrepreneurs<sup>2</sup> as part of the plan of priority actions to ensure the development of the Russian economy under external sanction pressure, both under the state and their own programs.

The level of overdue debt declined by 2.2% compared to the beginning of the year (the previous year growth was 21.4%) and reached Rb2.8 trillion, which is 5.5% of the total credit portfolio (a year ago – 6.7%) (Fig. 58). These figures indicate some improvement in the quality of the loan portfolio, which, however, is largely due to the indulgence of the Central Bank, in particular, the permission not to reflect the deterioration of the quality of loans, if the borrower has problems



*Fig. 58. Corporate lending dynamic and past-due debt in 2021–2022*

Sources: Bank of Russia, own calculations.

1 URL: [https://www.cbr.ru/Collection/Collection/File/43816/analytical\\_review\\_bs-2022.pdf](https://www.cbr.ru/Collection/Collection/File/43816/analytical_review_bs-2022.pdf)

2 Called up for military service by mobilization in the Armed Forces of the Russian Federation or contracted on a voluntary basis to perform the tasks assigned to the Armed Forces of the Russian Federation.

due to restrictions associated with sanctions imposed by Western countries. Another factor in improving the quality of the loan portfolio was an increase in the volume of transactions for the sale of bad debts on the securities market, as well as some large write-offs of bad debts.

The sectoral structure of corporate loans did not undergo significant changes compared to the previous year. The leaders in terms of debt as of January 1, 2023 are manufacturing companies (Rb12.6 trillion, or 24.8% of the total corporate debt), financial and insurance companies (Rb8.3 trillion, or 16.2%), and wholesale and retail trade companies (Rb5.4 trillion, or 10.7%).

At year-end 2022, companies engaged in financial and insurance activities are leading by volume of attracted loans (Rb20.7 trillion, or 31.4% of the total amount of loans), the wholesale and retail trade (Rb14.4 trillion, or 21.9%) and manufacturing businesses (Rb11.9 trillion, or 18.1%).

The rise of market rates after the increase of the key rate to 20% at the end of February, as well as more cautious approach of banks to the selection of borrowers against the backdrop of growing uncertainty about the financial stability of enterprises led to a decrease in the volume of corporate credit debt during March-May 2022. This decline was especially noticeable in foreign currency loans. Further, some support to corporate borrowers was provided by the state programs of concessional lending to systemic enterprises (industry, trade and agro-industrial complex), adopted by the RF Government, which provided for the origination of loans worth about Rb1.4 trillion.<sup>1</sup>

Since June there has been a gradual adaptation of enterprises in a wide range of industries to structural changes in the economy, which led to a revival of economic activity and a partial recovery in the volume of corporate lending. Despite the fact that the volume of lending never returned to the 2021 level, in general, we can conclude that the crisis is over and, in the absence of new shocks, about the growth of corporate lending in 2023. In particular, the market stabilization is indicated by the fact that some changes were recorded in the term structure of corporate lending – while the overall lending grew the volume of short-term lending contracted (up to 6 months) and went up the share of long-term loans (over 1 year – to 70.5% against 68.9% by the end of 2021).

The changes taking place (aggravation of the geopolitical conflict and international situation, “partial mobilization”) increase the rate of uncertainty in the sphere of corporate business. Despite the fact that, in general, the banking sector has managed to adapt to the ongoing changes and maintain the volume of lending in the context of aggravating credit risks, the potential threat in the form of accumulation of bad debts is still relevant. It cannot be ruled out that the banking sector may face a delayed effect of sanction pressure on Russian business, which, in turn, will lead to veiled accumulation of bad loans in bank balance sheets. In this regard, the government and the Central Bank need to develop additional macroprudential regulation measures and, possibly, new programs to support enterprises through concessional lending.

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<sup>1</sup> RF Government Decrees of 16.03.2022 No. 375 and of 17.03.2022 No. 393, RF Government Edict of 18.03.2022 No. 532-p.

In recent months, the Russian government and the Central Bank have managed to neutralize banking risks and maintain the level of lending to the corporate sector. However, the high concentration of corporate liabilities is still a potential source of systemic risk for the domestic banking sector. In the near term, measures will be needed to encourage diversification of the corporate loan portfolio of banks, which, in turn, will largely depend on the development of small and medium-sized enterprises, as well as on the implementation of the country's competition and antitrust strategy.

### 2.3.3. Retail lending

As of January 1, 2023, the total volume of retail bank loans hit Rb26.9 trillion. Over the past year, the volume of lending increased by Rb2.4 trillion, or 9.7%, which is significantly lower than the increase in 2021 (Rb4.6 bn, or 22.9%).

The increase in the total retail loan portfolio is ensured primarily by mortgage lending (increase – 17.5%), while the volume of debt on consumer loans has grown merely by 2.7%, and the debt on car loans has decreased by 3.8%.

The growth in the volume of retail debt is entirely in the ruble segment – the volatility of the ruble, high currency risks and a significant reduction of payments in dollars and euros have led to a virtually complete rejection of foreign currency loans, which during the year dipped by 53.5% (in 2021 the downturn was 22.5%) and amounted to only Rb22.0 bn.

During the past year, the dynamics of interest rates on loans was unstable and was determined by political events and administrative decisions of the Central Bank. The record burst of interest rates was recorded in late February – early March, when the Bank of Russia decided to hike its key rate to 20%. Subsequently, as the monetary policy was softening and the key rate was reduced, banks were cutting interest rates on retail loans. However, in September, after the decision to start “partial mobilization”, there was a growth of interest rates on retail loans again, which was reflected in short-term lending rates (*Fig. 59*)

Since the beginning of 2022, the increment in past-due debt amounted to 14.7%, its total volume hitting Rb1,083.7 bn (*Fig. 60*). The share of past-due debt in the credit portfolio has grown insignificantly and as of January 01, 2023 comes to 4.0%, while a year ago this figure was 3.8%. The NPL90+ is also relatively low at 8.8%, which is less than in the crisis year of 2020 on the back of epidemiological factors. However, despite the relatively high quality of the loan portfolio, the Central Bank in Q3 2022 recorded alarming signals:<sup>1</sup> the growth of the volume of lending to borrowers with high non-performing loans (NPL)<sup>2</sup> (such level is considered the NPL above 80%) by 4 p.p. to 32%, as well as the growth of Payment-to-Income Index<sup>3</sup> (PTI) by 14 p.p. to 42%. These indicators may show the hidden nature of the issues in the field of credit policy of banks and the potential growth of arrears in the future.

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1 URL: [https://www.cbr.ru/Collection/Collection/File/43512/2q\\_3q\\_2022.pdf](https://www.cbr.ru/Collection/Collection/File/43512/2q_3q_2022.pdf)

2 Debt load ratio is calculated as the ratio of the average monthly payments of the borrower on all credits and loans (including the requested credit) to the average monthly income of the borrower.

3 Payment-to-income index calculated by credit institutions according to their own methods.



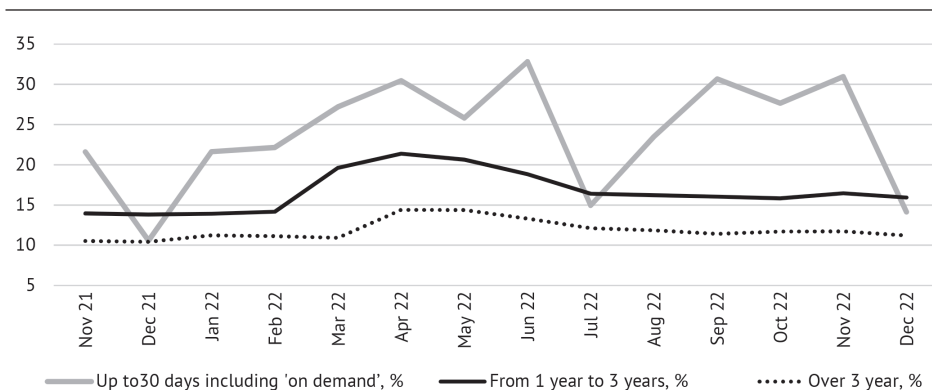


Fig. 59. Weighted average interest rates on loans provided by credit institutions to individuals in rubles, %

Source: Bank of Russia.

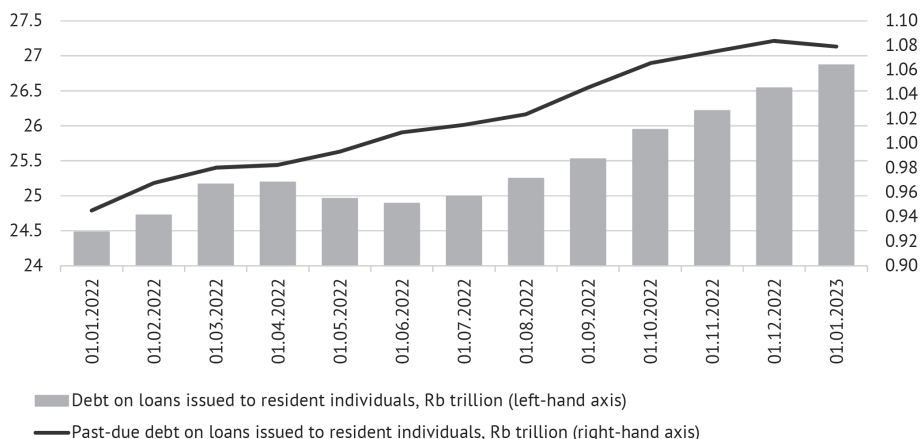


Fig. 60. Total debt and overdue debt on loans to resident individuals, Rb trillion

Source: Bank of Russia.

Last year banks approved credit applications from citizens less frequently: according to the National Bureau of Credit Histories (NBKI),<sup>1</sup> during the analyzed period, banks approved only 26% of citizens' applications for a loan, which is 7 p.p. lower than the corresponding index of 2021. Decreased level of approval of credit applications indicates a more cautious credit policy of banks in terms of political and financial instability. The main reasons for refusal: bad credit history (or lack thereof), low personal credit rating (PCR) and high debt burden of borrowers relative to disposable income.

1 URL: <https://nbki.ru/company/news/?id=1567769>

Given that by the end of 2022, the average number of retail loans per borrower in Russia amounted to 2.3 loans (an increase of 0.1 unit as compared with the end of 2021),<sup>1</sup> we can conclude that the banks' customer base currently does not have prospects for growth and in a tightening of bank lending standards even with a high demand for credit, the number of borrowers will stagnate, this, in turn, may lead to over credit borrowers with a relatively high personal credit rating and acceptable level of debt.

Due to the fact that the growth of debt overburden in the context of financial and economic instability can create additional macroeconomic risks and in the future affect the sustainability of the banking sector, the Board of Directors of the Central Bank decided to establish quantitative limits on issuing unsecured consumer loans in Q1 2023.<sup>2</sup>

In accordance with the decision of the Bank of Russia, the limit for loans with a DLR of more than 80% will be 25% of the total volume of consumer loans. At the same time, the volume of consumer loans originated with 5-year maturity should not exceed 10%.

The introduction of macroprudential limits will restrict the growth of consumer indebtedness by discouraging lending to borrowers with a high debt load and artificially lengthening the term of loans, which will make the structure of consumer lending more balanced, while not creating additional requirements to the capital of banks.

This limitation is set only for banks with a universal license. For banks with a basic license the introduction of such limits is inexpedient due to their insignificant contribution to the debt load of the population.

The decision on the possible extension of this limitation for Q2 2023 will be considered by the Central Bank in February 2023, taking into account the dynamics of the debt load of the population and lending standards.

In the meantime, the Central Bank prepared draft amendments to Directive 5782-U, aimed at expanding the ability of banks to use the model approach to assess the income of the borrower for the purposes of calculating the DLR.<sup>3</sup> This decision can be regarded as a loosening, which would allow banks to vary their own methods and in some cases make credit more accessible to borrowers with ambiguous financial situation. It is assumed that banks will be able to calculate the NPL for consumer loans using internal models for assessing income after the validation of these models in the Central Bank.

In general, the aggregate retail loan portfolio increased in 2022 despite the crisis. This is largely due to the stable development of the banking system in the previous crisis years, as well as the fact that in the context of stagnating incomes of the households faced a shortage of funds to cover expenses and have a need for borrowed funds to maintain the previous level of consumption. Besides, in the periods of crisis aggravation and growth of inflationary expectations, there is an increased demand for consumer goods and, accordingly, a demand for bank loans.

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1 URL: <https://nbki.ru/company/news/?id=1597722>

2 URL: <https://www.cbr.ru/press/pr/?file=638046460634914087FINSTAB.htm>

3 URL: <https://www.garant.ru/products/ipo/prime/doc/405654369/#review>

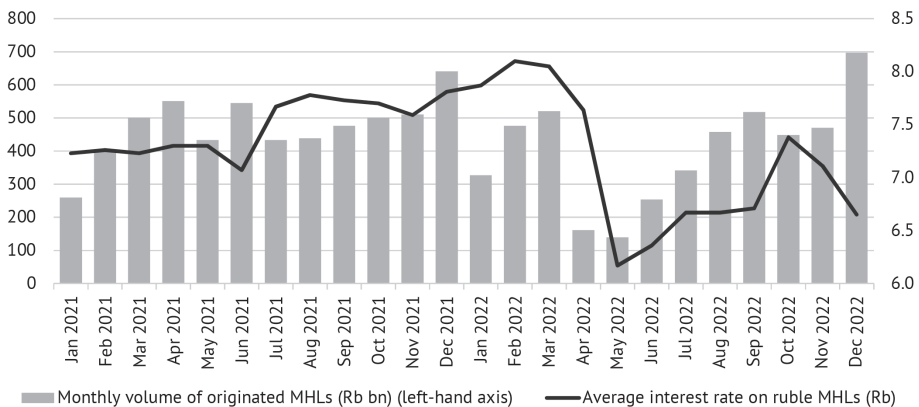
Taking into account the aggressive lending policy of some banks in the context of rather high competition and at the same time low potential for expansion of the client base, this fact may negatively affect the quality of credit servicing in the nearest future. In general, the Central Bank's decisions to cool the consumer lending market in early 2023 look timely and will allow banks to maintain the quality of their loan portfolios at the required level.

### 2.3.4. Mortgage lending

As of January 1, 2023, the aggregate portfolio of mortgage housing loans (MHL) amounted to Rb13.8 trillion. The increase in the aggregate portfolio for the year amounted to Rb2.0 trillion, or 17.5%, which is somewhat lower than the respective index for 2021 (at that time the mortgage loan portfolio increased by Rb2.5 trillion, or 26.6%). Despite the decrease in the market growth rate, the share of the debt on mortgage housing loans in the total debt on retail loans increased throughout the year and reached 51.5% (47.5% by the end of 2021).

During the past year 1.5 million mortgages worth of Rb4.8 trillion were originated, the respective figure for the previous year was 1.9 million loans worth of Rb5.7 trillion; the reduction amounted to 15.6% (Fig. 61). The structure of originations has undergone some changes: under the effect of the extension of state programs with lower interest rates, the volume of mortgage loans on the primary market (MHL under co-investment contract) amounted to 42.9% of the total volume of originations (in 2021 the figure came to 33.1%).

Almost all transactions were concluded in the ruble segment; the total volume of mortgage loans extended in foreign currency in 2022 amounted to Rb77 mn. During the year, the debt on MHL in foreign currency decreased by Rb8.8 bn to Rb6.7 bn (less than 0.1% of the total MHL portfolio). Foreign currency loans will



*Fig. 61.* Dynamics of monthly lending volumes and interest rates in the housing mortgage lending market in 2021–2022

Source: Mortgage housing lending. URL: <https://www.cbr.ru/statistics/pdko/Mortgage/ML/>

remain unprofitable due to the barrier add-on to the risk ratios (from 200% and higher depending on the total cost of credit).

The average size of mortgage loan for the year went up by 18.6% to Rb3.95 mn (at the end of 2021 – Rb3.33 mn), which also contributed to the growth in housing prices at the primary (for the year increased by 37.3%) and the secondary market (the annual increase – 23.1%).

The weighted average loan term has increased, in December it was 311.3 months, and a year earlier – 262.8 months (an increase of 18.5%). The increase in the term of the loan allows to reduce the monthly debt burden on borrowers, thereby reducing the risk of loan defaults.

A positive 2022 trend is the growth in the volume of securitization transactions. This type of operations allows banks to unload their balance sheets and obtain additional liquidity for lending. In 2023, the volume of securitization may increase due to securities with privileged mortgages as the underlying asset. However, the rapid growth in securitization of mortgage assets leads to an expansion of the market and the hyperactivity of banks in mortgage lending, which in turn will lead to an increase in the volume of the portfolio at the expense of loans of dubious quality. Moreover, the secondary mortgage market may become a source of crisis, as it was in the U.S. in 2006–2007.

The quality of the loan portfolio remains at an acceptable level – overdue debt over the past year shrank by 8.4% and as of January 1, 2023 amounted to only 0.4% of the total debt on MHL (0.6% as of the beginning of 2022), which is much lower than in other types of bank loans (from 4 to 7%). The share of non-performing loans (NPL 90+) also remained at a minimum level – about 0.7%.

The average weighted interest rate on mortgage loans in the primary market fell to 4.3%, which is generally lower than in 2021 and was ensured by the softening of the monetary policy of the Central Bank of Russia (a decrease in the key rate), implementation of partnership programs of major developers and banks at rates from 0.01 to 2% (the rate is subsidized by the developer through selling the apartment at a higher price) and renewal of preferential mortgage programs for the population with relatively low interest rates.

On the secondary market, the opposite rate dynamic was observed. However, no significant growth was recorded; the increase in rates during the sharp aggravation of the geopolitical conflict and the imposition of anti-Russian sanctions on loans offered led to a drop in the volume of loans. In general, by the end of the year the rate rose to 9.3%, which is higher than in 2021 by 1 p.p.

During the year, in order to stimulate mortgage lending, the government took a number of measures concerning the reformatting of the state preferential programs. As a result, plans for curtailing preferential mortgage lending were revised, and at the end of 2022, the preferential mortgage on new buildings was extended until July 1, 2024. Under the new conditions, the rate on loans increased from 7 to 8%, the loan amount went up to Rb12 mn for Moscow and St. Petersburg, in other regions – up to Rb6 mn (the loan amount may be increased to Rb30 mn and Rb15 mn respectively, using other mortgage programs), the amount of down payment – 15%. Since 2023, family mortgages became available to parents with

two children or more under the age of 18 years on the date of the contract. The annual rate under the program – 6%.

One of the main innovations was the launch of a preferential mortgage program for the construction of private houses by private housing construction, without a contract with professional developers. Despite the mortgage market slowdown, the volume of mortgages on private housing projects and ready-made houses in 2022 increased by 8% to the level of 2021.

Another stimulus for the development of the mortgage market was the introduction of a mortgage program for IT specialists at the rate of 5% with a down payment of at least 15%. However, this program is not yet in demand due to complicated loan conditions and the availability of IT corporations' own mortgage programs. In total, at the end of 2022 in Russia under the program 5 thousand loans were originated worth of Rb44.79 bn.<sup>1</sup> In December 2022, the Russian Government reduced the plan for granting preferential mortgages for IT specialists.

In the process of fighting for clients, banks develop new marketing solutions, while taking on additional risks. In the past year, the “mortgage with a passport” program was especially popular. The essence of the program is that the borrower does not need to confirm employment or income. As a rule, it is applied to transactions with ready-made real estate. Such practice is fraught with risks, since a full analysis of client's creditworthiness is not carried out, which can lead to inadequate assessment of the borrower and possible issues with loan repayment.

Another area that banks are exploring is digital mortgages. The introduction of digital services in the mortgage process makes it possible to reduce the time for its implementation, simplify the procedure of evaluation, registration and insurance of real estate and to obtain a loan without visiting the office (with electronic signature and biometric characteristics of the client). However, in this connection the operational risks are actualized – the digital transformation can be accompanied by a violation of communication between software developers, front-office specialists and decision-makers. In the near future, the Central Bank will have to take measures to curb the possible negative consequences of a hasty and unsystematic digitalization of the banking sector.

Another trend of the past year was the growing influence of ESG<sup>2</sup> on the Russian banking sector. At the initiative of the Central Bank, it is proposed to launch a new type of housing loan – a “green” mortgage, which is a subsidy for the purchase of housing in houses that meet green building standards. The program may be tested in the Far East as part of the existing state mortgage subsidy program.

At the suggestion of the President of the Russian Federation, the government is launching a new tool to support industrial enterprises – industrial mortgages. Russian organizations will be able to obtain long-term preferential loans for the purchase of industrial real estate. It is planned that loans will be issued for up to 7 years at a preferential rate of 5% per annum, while for innovative technology

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1 URL: [https://www.kommersant.ru/doc/5864435?from=top\\_main\\_1](https://www.kommersant.ru/doc/5864435?from=top_main_1)

2 ESG – Environmental, Social, and Corporate Governance.

companies the rate will be even lower – 3%, the upper limit of industrial mortgages is proposed to be set at Rb500 mn.

The full potential of the Russian mortgage market will be unlocked by introducing a wide range of financial instruments, which are now being actively developed by leading players: mortgage bonds, development of mortgage marketplaces, introduction of blockchain technology and other products and processes. The introduction of these tools will optimize banking business processes, simplify and accelerate the processing of loan transactions, which will translate into lower rates and increase the affordability of mortgage loans for a wide range of borrowers.

At present, in the context of such negative phenomena as GDP decline, high inflation, reduction of real incomes of the population, the government and the regulator should promote the development of the mortgage market not only to stimulate its further growth, but also to increase the affordability of housing. In general, mortgages improve the welfare of the population by improving housing conditions, motivate citizens to maintain high incomes by entering into long-term credit relations, and facilitate labor migration. However, forcing the growth of lending through low interest rates, abolishing the initial payment, simplifying the procedure of issuing credit and reducing monthly payments is dangerous, because of the high credit risks, the accumulation of imbalances that can lead to a mortgage bubble. In this regard, in the near future, the Central Bank will continue to build a comprehensive system of regulation of the mortgage market. As the political and macroeconomic situation stabilizes, the gradual reduction of state subsidized programs and the transition of mortgage lending to market principles is possible.

#### 2.3.5. Bank resources

The main resource of credit institutions still remains the funds of clients (individuals and legal entities) in bank accounts and deposits. At the end of the year, the total amount of customer funds amounted to Rb97.1 trillion, having increased since the beginning of the year by 13.0%. This is slightly lower than the same indicator for 2021, which recorded an increase of 16.5%.

The total volume of retail funds (excluding funds in escrow accounts) as of January 1, 2023 hit Rb36.8 trillion, an increase of Rb1.9 trillion, or 5.5% in absolute terms, which corresponds to the data for 2021 (an increase of Rb1.9 trillion, or 5.7%). The total annual growth is almost entirely provided by the December increase when the households' funds moved up by Rb2.5 trillion. This growth is due to the advance payment of pensions and social benefits. Seasonal inflow of funds to deposits in December 2022 was more intense compared to December of the previous year.

The total amount of funds in deposits of legal entities (excluding the funds of government agencies and individual entrepreneurs) during the past year has grown more significantly – by Rb5.1 trillion, or 20.9%, to the level of 29.3 trillion rubles, which also corresponds to the rate of 2021 (an increase of Rb4.2 trillion, or 20.9%).

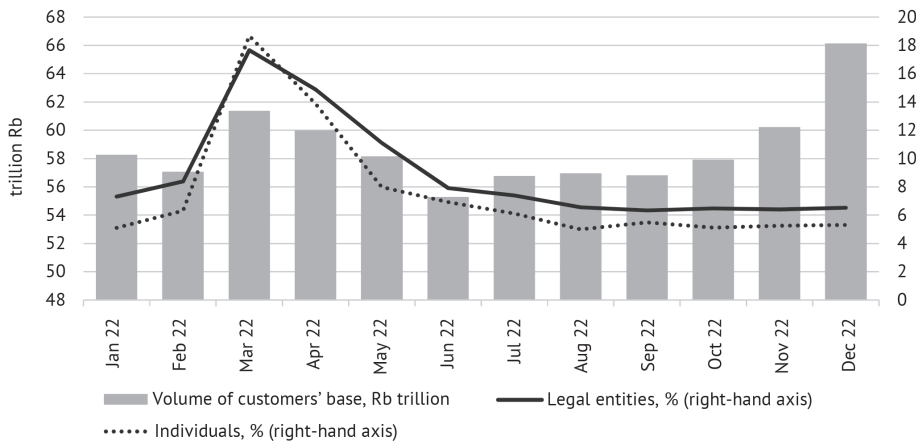
Against the backdrop of record high rates of money emission, balances in settlement and current accounts of corporate clients continued to grow in 2022. Over the year, they rose by Rb3.0 trillion (by 19.2%), reaching Rb18.5 trillion, which repeats the growth dynamic in 2021 (by Rb2.5 trillion, or 18.9%).

During 2022, the term structure of client funds changed in favor of short-term deposits. Individual customers have significantly (by 30.4%) reduced investments in medium- and long-term deposits (over 1 year) to the level of Rb7.9 trillion, which, as of January 1, 2023 amounted to only 21.6% of the total volume of individuals' deposits (a year ago, the volume of deposits with the term of 1 year or more amounted to Rb11.4 trillion, or 32.8% of the total volume). The maximum increase in short-term deposits was recorded on the terms of 3 to 6 months.

The structure of corporate deposits changed in a similar way. The reduction of deposits over 1 year amounted to 14.6%, and their value in the total volume declined to 23.3% (32.0% at the beginning of the year). The greatest demand was for short-term deposits of 1 to 3 months (an increase of 85.5%).

Funds in escrow accounts continued to grow last year and hit Rb4.0 trillion. However, the growth rate nosedived markedly (32.7%) compared to the previous year (157.9%), which is due to the mortgage market slowdown.

A sharp increase in the key rate to 20% at the end of February 2022 contributed to the growth of interest rates (the maximum yield on some proposals reached 24% per annum, *Fig. 62*). The interest of bank customers in fixed-income instruments



\* For December – own estimates.

*Fig. 62.* Dynamics of interest rates on short-term (up to 1 year, including “on demand”) deposits of individuals and legal entities\* and the total volume of banks' debt on deposits of individuals and legal entities at the end of the month in 2022

Source: Bank of Russia. URL: [https://cbr.ru/vfs/statistics/BankSector/Borrowings/02\\_01\\_Funds\\_all.xlsx](https://cbr.ru/vfs/statistics/BankSector/Borrowings/02_01_Funds_all.xlsx) и URL: <http://www.cbr.ru/Collection/Collection/File/43719/Bbs2301r.pdf>

increased significantly, as well. Also, the abolition of personal income tax on bank deposits income and accounts received in 2021 and 2022 (the tax on bond coupons was retained) contributed to a shift in interest in favor of retail deposits. The decline in the Russian securities market, as well as sanctions against National settlement depository (NSD)<sup>1</sup> and major brokers largely undermined confidence in the stock market, which contributed to the outflow of funds from brokerage and trust management accounts to term and savings deposits. Last year the geopolitical and economic uncertainty forced Russians to adhere to the savings model of consumer behavior and to accumulate savings. Overheating of the mortgage market and declining interest in real estate investments, which, like the stock market, are an alternative to bank deposits, played their part on the behavior of individual clients.

Funds of individual customers in rubles reached Rb32.7 trillion, an increase of 17.8% over the year, while in 2021 the growth was markedly lower – 6.8%. Foreign currency deposits fell to Rb4.1 trillion (the fall over the year – by 42.8%, in the previous year – an increase of 1.4%). Currency deposits of legal entities were in a similar vein, their decline over the year constituted 20.9% (as opposed to the growth of 6.3% in 2021). In 2022, the share of ruble funds in the total amount of the customers' funds on deposits rose from 76.8% to 86.0%.

The reduction in foreign currency deposits was partially due to the outflow of funds abroad on the back of the imposition of Western sanctions and the disruption of the usual investment formats: investments in securities of Western countries became unavailable to Russian investors. Russian banks due to the lack of opportunities to place foreign currency funds in Western banks-counterparties reduced rates on foreign currency deposits almost to zero values. At the same time, additional commissions were introduced for servicing foreign currency accounts. Customers were thus forced to convert their foreign currency deposits into ruble deposits or to keep their foreign currency funds in cash. During the year, the Central Bank twice raised mandatory reserve requirements in respect of liabilities in foreign currency (from August 1, 2023 to 5% of the liability), which also reduced the attractiveness of borrowing in foreign currency for the banks. Another factor in the devaluation of client deposits was the strengthening of the ruble against the dollar and euro against the beginning of the year.

In Q1 2022, major banks with state participation incurred losses owing to the sanctions imposed on them, which provide for asset freezing. In general, the Russian banking system faced a serious indirect impact of sanctions in the form of asset impairment, growth of credit and other financial risks. In this connection, the issue of the need for systemic additional capitalization of the banking sector has become more relevant. According to estimates of the Central Bank of Russia, the total need for additional capitalization amounted to about Rb700 bn.<sup>2</sup> However, during the year banks successfully pursued a policy of risk minimization and

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1 National settlement depository – central depository of Russia, keeps records of ownership rights to Russian securities, makes settlements on transactions, performs functions of safekeeping foreign securities, and is a paying agent for Russian eurobonds.

2 URL: <https://www.forbes.ru/finansy/481880-cb-ocenil-vozmoznuu-potrebnost-bankov-v-dokapitalizacii-v-700-mlrd-rublej>



carried out active measures to replenish capital, interacting with their owners on the issues of additional capitalization. Last year, 29 banks received additional capitalization, the total volume of the authorized capital increase amounted to 180 billion rubles, mainly at the expense of additional issues and other investments in the capital.

At year-end 2022, Russian banks recorded a net profit of Rb203 bn, driven by growth of interest and commission income amid falling interest rates, the recovery of business activity in H2 2022, as well as regulatory easing by the Central Bank. At present, systemic additional capitalization of the banking sector is not required, and we can talk about “point solutions” for individual banks in the form of financial support from shareholders.<sup>1</sup>

In 2023, in the absence of new shocks, a large-scale outflow of funds of citizens is not expected, which will allow banks to maintain a stable positive trend in customer deposits. The likelihood that confidence in the stock market will be fully restored in the near future is low due to the instability of political and geopolitical factors. Meanwhile, the government forecasts an increase in the real incomes of its citizens. Under such conditions, instruments with fixed yield in the presence of the state deposit insurance system will remain the most attractive form of placement of free assets due to the lack of more profitable and reliable alternatives.

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<sup>1</sup> URL: <https://tass.ru/ekonomika/15627499>



## Section 3. The real sector

### 3.1. Dynamics and structure of GDP and investments<sup>1</sup>

#### 3.1.1. Demand and supply: adjusting to new realia

The 2022 economic dynamic was characterized by extreme volatility. The situation was shaped by the continuing trends, on the one hand, of economic recovery after the coronavirus pandemic and, on the other hand, the creation of new mechanisms to support, adapt and reduce the impact of sanctions restrictions in relation to the real and financial sectors of the domestic economy throughout the year.<sup>2</sup>

The profiles of the economic development in early 2022 were defined by: continuation of the imbalance of the growing demand and limited changes in the supply at high differentiation of the growth rates by types of economic activities and segments of the internal and external markets; intensification of the inflationary pressure on incomes and consumer behavior of the population; structural transformation of prices and production costs.<sup>3</sup> The starting position for 2022 was driven by the output growth by the basic types of economic activities by 5.9% according to the results of 2021, the final demand of the households increasing by 10.0% and the investment demand – by 7.6%. Domestic demand was propped up by raising the scale of foreign trade turnover: the increase in the contribution of net exports in 2021 came to 9.3% of GDP, including exports - 30.2% and imports – 20.9% (by the SNA methodology in current prices).

Changes in the internal and external environment determined the acceleration of inflation to 8.4% against 4.9% a year earlier and its increase in February 2022 up to 9.2% in annual terms. Regulation of inflation by instruments of monetary

1 Author: *Olga Izryadnova*, Head of Structural Policy Department of the Gaidar Institute; Leading Researcher, IAES RANEPa.

2 *Mau V.A.* Economic policy in times of the pandemic: The experience of 2021-2022 // *Voprosy Ekonomiki*. 2022.No. 3. Pp. 5–28.

3 *Drobyshevsky S.M., Pavlov P.N.* Structure of GDP growth rates in Russia up to 2024 // *Voprosy Ekonomiki*. 2022. No. 3. Pp. 29–51.

policy was accompanied by an increase in the key rate of the Bank of Russia from 4.5% per annum (March 22, 2021) to 8.5% (December 20, 2021) and 9.5% (February 14, 2022).

The change of political and economic environment at the end of February 2022 and the introduction of unprecedented in scale sanctions against the Russian Federation, limiting the access of the Russian business to the world markets of goods, services and technologies, resulted in the breach of established scheme of the domestic economy post-pandemic recovery. Under hard pressure of external factors on the financial sector and destabilization of the domestic market, raising of the key rate to 20% per annum (February 28, 2022) and implementation of exchange regulation measures made it possible in March 2022 to check inflation at 16.7% per annum and the nominal ruble exchange rate at 84.09 rubles/dollar.

The effect of the sanctions on the real sector of the economy turned out to be extended in time, and the situation in March remained in the context of positive values: in March 2022 the gross output by the basic types of economic activities made 101.6% versus March of the previous year (Q1 2022 – 104.5% versus Q1 2021), the minerals production growing by 6.6% (7.3%), in construction – by 5.9% (4.5%) and transport cargo turnover – by 3.6% (4.2%). With the acceleration of inflation, the rush of January-February has been replaced by the slowdown of retail trade turnover in March to 102.0% and wholesale trade – to 99.5% in annual terms. The negative point for the first time since November 2020 was the drop of the manufacturing industries output in March 2022 by 0.7% in annual terms, though the growth of the production in January-February ensured the continuation of the quarter upward trend at the level of 104.5% versus the corresponding period of 2021.

According to the results of Q1 2022 as compared to the corresponding period of the previous year, GDP went up by 3.5%, final consumption of households – by 4.5% and investment in fixed assets – by 13.8%. In the current foreign economic environment, the contribution of the net exports to the cost structure of GDP (according to the SNA methodology) at the level of 19.2% in current prices (8.0% in comparable prices) that was exceptionally high for the period of 20-year observations, had a positive impact.

Since April 2022, there has been an intensification of the negative influence of the sanctions restrictions on the economic dynamics: the output by the basic kinds of economic activities in Q2 made 96.3% of the similar period level of the previous year. The most acute reaction to the changes of the political and economic environment was observed in the manufacturing sector due to the severe violations of the trade and economic and transport-logistic relations: in June 2022 the output of the manufacturing industries dropped by 4.8% versus June of the previous year, while the wholesale trade turnover dropped by 18.2% and transport freight turnover – by 5.8%. The weakening of the dynamics from 103.9% in Q1 2022 to 103.6% in the Q2 against the corresponding figures of the previous year was demonstrated by the construction industry with an increase in prices for construction materials, growing cost of credits and unstable demand at the mortgage market. The situation was aggravated by a 9.8% contraction of

the consumer market with 2.1% contraction of the real money income and 5.4% contraction of the real wages compared to Q2 2021.

The adverse impact of external and internal factors determined 4.1% contraction of GDP in Q2 2022 in annual terms, 5.5% contraction of household final consumption and 13.8% contraction of gross savings as a result of inventory rundown. Although the contribution of net exports to GDP remained at a high level of 16.1% (5.9% in comparable prices) under the current structure of demand and prices, sanctions on financial transactions and the system of cross-border payments narrowed down the possibilities for transferring net income from foreign trade activities to support the domestic market. In the real sector, the sanctions significantly hampered international logistics, imports of high-tech goods and services, and Russian exports. The simultaneous drop in imports and the suspension/exit of foreign companies from the Russian market significantly complicated the situation in industries with a high level of dependence on imported intermediate and final goods, technologies and services.

Russian business, which had already accumulated some experience in resisting the 2014 restrictions and coronavirus lockdowns, reacted quickly enough to the disruption of production and technological, trade and transport-logistics chains and actively refocused on forming ties with new business partners in loyal markets for goods and services: in H1 2022, the value of exports of goods and services went up by 41.9% while imports dropped by 6.7% against the figures recorded the year before. With varying rates of change in foreign trade parameters, net exports in H1 2022 amounted to \$170.9 bn, 2.8 times higher than in the previous year. It should be noted that the damping effect on the output dynamics by types of economic activities was exerted by the anticipatory accumulation of imported and domestically produced material stocks in Q1 2022, which somewhat diminished the negative effect of the import reduction in Q2 by nearly 23.4% against the corresponding index of the previous year (*Table 1*).

The starting positions of H2 2022 formed the conditions for easing of monetary regulation, currency control, repatriation of proceeds and capital flows, and increased credit activity of non-financial corporations. The drop in GDP weakened to 3.7% in Q3 and stabilized in Q4 at a level close to that recorded a year earlier.

In Q3 2022, the differentiation of rates by basic type of economic activity intensified - the positive contribution of agriculture (+12.7% by Q3 2021) and construction (+5.2%) increased. In contrast, the indicators of infrastructure in this period illustrated the deepening of the decline in wholesale trade (-22.6%), freight transport turnover (-5.5%), with significant changes in the transport and logistics chains, the level of buyers' solvency and transaction costs.

The contraction of the retail trade turnover by 9.4% versus Q3 2021 was driven by the change in the consumer behavior with the decrease in the real disposable cash income by 3.1% and the inflationary pressure at the level of 14.3%.

The analysis of the quarter-by-quarter dynamics by types of economic activities in July-September of the last year showed the deceleration of the recession in the industry. In Q3 2022, the recession in annual terms was weakening to -1.8% in the manufacturing industries.

Table 1

**Dynamics of main macroeconomic indicators in 2021–2022, in % on corresponding period of the previous year**

	2021					2022				
	Year	Quarters				Year	Quarters			
		I	II	III	IV		I	II	III	IV
<b>Domestic environment: production</b>										
GDP	105.6	99.7	110.5	104.0	105.0	97.9	103.5	95.9	96.3	99.9
Output of goods and services by basic economic activity	105.9	100.1	113.1	104.7	106.1	98.7	104.5	96.3	97.3	96.9
Industry	106.4	99.7	111.1	107.1	107.9	99.4	105.1	97.4	98.8	97.0
Agriculture	99.6	100.3	100.1	94.6	107.1	110.2	105.4	108.4	112.7	109.4
Construction	107.0	104.4	111.0	104.0	108.2	105.2	103.9	103.6	105.2	106.9
Transport	105.6	100.5	110.2	107.0	104.8	97.4	104.2	97.0	94.6	94.4
Retail turnover	107.8	99.2	124.3	105.9	104.7	93.3	103.5	90.2	90.6	90.5
Paid services to population	116.7	96.8	153.2	116.4	112.6	103.2	107.8	100.0	101.3	101.6
Wholesale turnover	105.9	104.9	116.9	102.0	102.1	88.5	103.3	84.8	77.6	81.0
<b>External environment</b>										
Balance of foreign trade	221.9	93.4	238.2	314.2	319.9	166.0	307.7	263.9	138.4	73.8
Export of goods and services	144.2	101.6	158.5	163.0	158.5	114.2	160.4	127.6	104.0	84.6
Import of goods and services	124.6	104.6	140.9	132.5	123.0	91.0	112.6	76.6	87.5	90.9
Ruble exchange rate (Average for period) Rb/USD	73.6	74.34	74.2	73.47	72.59	67.5	84.73	66.01	59.40	62.3
Urals price, USD/bbl.	69.1	60.0	67.2	71.2	78.2	77.5	90.5	80.6	76.2	63.2

Sources: Rosstat, CBR.

The formation of new directions of exports of fuel and energy products was the basis of stabilization in the extraction of minerals. Production of oil and natural gas in this period dropped relative to the corresponding indicator of the previous year by 0.1%, but high fossil fuels prices supported the export component and domestic demand. Despite the strengthening of the sanctions restrictions on transportation and supplies to the traditional destinations, the overall dynamics of exports in value terms, taking into account the specifics of the commodity structure, in Q3 2022 remained in the positive area with a slowdown to 104.0%

against the exceptionally high level of the indicators of the corresponding period of the previous year.

The import downturn slowdown was driven by adjustment to the new outline of foreign economic relations: in Q3 2022, the import decline dropped to 12.5% against 23.4% in Q2 2022 against the figures registered a year earlier. Growth of the ruble real effective exchange rate by 23.6% in Q2 2022 and by 39.7% in Q3 as against December 2021 contributed to increase in the value of imports by quarters of 2022. In a situation where all the characteristics of foreign trade have changed, according to the balance of payments, the net export (balance) of goods and services fell from \$91.8 bn in Q2 this year to \$65.6bn in Q3, however, it was by 38.4% higher than in the same period of last year.

The situation in Q4, taking into account the different speed of adjustment of certain sectors of the economy, was influenced by positive results in construction and agriculture. The dynamics of exports of goods and services in Q4 shifted to the area of negative values (-15.4% against 2021). On the whole in 2022, the contribution of net exports (in current prices according to the SNA methodology) to GDP was 12.8%, against 5.1% in the acute phase of the Coronavirus pandemic in 2020 and 6.4% in the crisis situation in 2014. The balance of payments estimates that the value of exports of goods and services in 2022 came to \$628.1 bn (114.1% over the 2021 figure) and imports were \$345.8 bn (91.0%). The share of exports in the value structure of GDP in 2022 is 28.0%, and that of imports – 15.2%, a decline of 2.2 and 5.7 p.p., respectively, vis-à-vis the previous year.

Enhancement of dynamics differentiation by segments of the domestic market was apparent against the backdrop of the annual trend to reduce the scale of imports and to reduce their contribution to the gross resources in the economy. Final consumption in 2022 decreased by 0.6%, including households one by 1.8%, while the investment market showed an expansion of 4.6% (Table 2).

*Table 2*

### Dynamics and structure of use of GDP use in 2019–2022

	As % of total, In current prices					% on previous year, In comparable prices				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
<b>GDP</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>102.8</b>	<b>102.2</b>	<b>97.3</b>	<b>105.6</b>	<b>97.9</b>
including:										
Final consumption expenditure	68.1	69.7	71.5	67.3	65.0	103.5	103.4	96.1	108.0	99.4
Gross savings	21.8	22.6	23.4	23.4	22.2	98.4	102.3	95.7	114.2	96.8
– gross fixed capital formation	20.6	20.9	21.5	19.9	20.6	100.6	101.0	96.0	109.1	105.2
– changes in inventories	1.2	1.7	1.9	3.5	1.6	n/a	n/a	n/a	n/a	n/a
Net exports	10.1	7.7	5.1	9.3	12.8	n/a	n/a	n/a	n/a	n/a
– export	30.8	28.5	25.5	30.2	28.0	105.6	100.7	95.8	103.3	n/a
– import	20.7	20.8	20.4	20.9	15.2	102.7	103.1	88.1	119.1	n/a

Source: Rosstat.

The drop in the industrial production in 2022 by 0.4% with the increase in minerals extraction by 0.8%, stabilization of the electric energy supply and the decrease in the manufacturing production output by 1.3% versus the previous year determined the structural changes in the internal market, generation of export and demand for imported goods and services.

The most significant contribution into the dynamics was made by the types of activity oriented mainly to the internal market.

In the consumer complex, the decline in domestic production and imports led to 6.6% slowdown in retail market turnover, including the food market by 1.5% and non-food market by 11.1%.

The agricultural growth was translated into productivity progress in the food industry (by 0.5% by 2021); in light industry the dynamics (-2.0%) was significantly influenced by the decline in imports, which account for almost 20% of intermediate consumption of the consumer production complex, as well as disruption of supplies from related industries. Besides, the risks of weakening of the domestic consumer demand increased, with real wages and real incomes falling by 1.0% in 2022 and inflationary pressure intensifying by the end of the year. Rather stable position in the domestic market in the difficult situation of 2022 was preserved by the production of drugs, which remained outside the zone of strict restrictions on trade in chemical and biological substances and had a certain potential for development due to the domestic production base of chemical products and substances. When assessing the state of drugs production, it should be noted that the exit of some foreign companies operating in the Russian market from investment in scientific and clinical research required the actualization of the domestic pharmaceutical market development program, taking into account the new realities of inter-country cooperation and domestic potential.

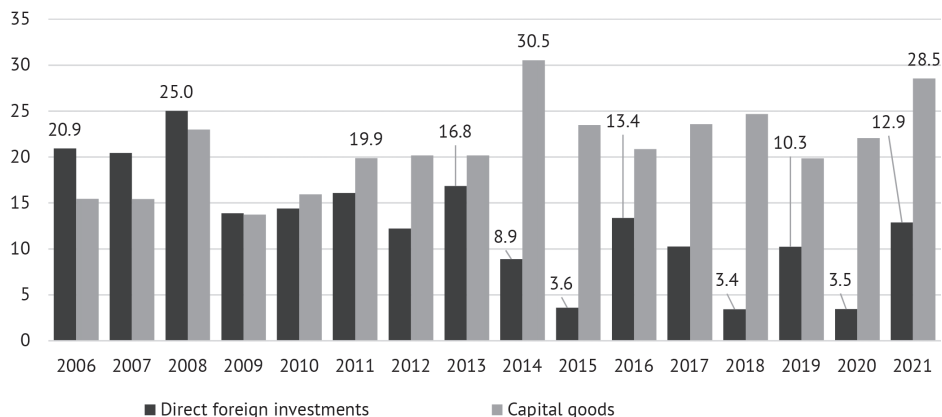
The nature of functioning of the metallurgical complex was driven by a change in the structure and volume of external demand with the reorientation of product flows to the markets of loyal partners and satisfaction of the domestic market demand for construction materials: production of finished metal products in 2022 went up by 7.0% and was supported by government measures to stimulate purchases with a response of producers to a temporary price restraint. This fact became especially important for the production of construction materials and the introduction of new technologies in construction.

The disruption and rupture of production, technological and trade chains under sanctions has complicated the functioning of export-oriented production of the timber and chemical complexes both due to the cut in supplies to foreign markets and the reduction in opportunities to purchase imported materials and reagents.

Scaling back of import of the investment goods and the components for the high- and medium-tech productions had an extremely painful effect on the dynamics of the machine-building complex, the drop in the production in which in 2022 came to 8.6% and in the fourth quarter it was at the critical level of 88.4% versus the corresponding period of the previous year.

It should also be noted that after the 2008 financial crisis, there was a change in the trend: foreign investments were replaced by imports of investment goods (*Fig. 1*).





**Note.** At the time of writing this material, data for 2022 was unavailable.

*Fig. 1.* Ratio between direct foreign investments and imports of capital goods to investments in fixed capital in Russian economy in 2006–2021, %

Sources: Rosstat, CBR.

In the complicated geopolitical situation, it allowed to maintain the participation both at the market of high-tech foreign goods and in the scientific-technological exchange, as well as to compensate for the pent-up internal demand amid the weak dynamics of the domestic production of investment goods. However, the development of this trend stepped up dependence on foreign partners and created potential threats to technological sovereignty. Average annual volumes of direct investment over the period of 2014–2021 were less than 2/5 of the corresponding figure of the recovery development of 2009–2013 and 1/4 of the maximum pre-crisis figure of 2008. The 2022 situation was aggravated by the intensification of capital outflows to the tune of \$223 bn versus \$74.2 bn a year earlier.<sup>1</sup>

The most sharp reaction to the suspension/exit from the market of large foreign companies and the disruption of production and technological chains was registered in the production of motor vehicles, the drop of which in 2022 amounted to 44.7% against the previous year.<sup>2</sup> Readjustment to new markets of suppliers, components and model lines of goods took a long time, and only in August-October the production rates against the previous month of 2022 reached the positive values.

Difficulties in the production of electrical equipment (96.3% against 2021) are also related to the traditional orientation of business partnerships to large foreign companies of unfriendly states, which, when abandoning production and trade

1 The medium-term forecast of the Bank of Russia following the meeting of the Board of Directors on the key rate on February 10, 2023 URL: [https://www.cbr.ru/collection/collection/file/43735/forecast\\_230210.pdf](https://www.cbr.ru/collection/collection/file/43735/forecast_230210.pdf)

2 Assessment of Russia's dependence on imports of intermediate products. Series of reports on economic research. No. 106. December 2022. URL: [https://www.cbr.ru/Content/Document/File/144138/wp\\_106.pdf](https://www.cbr.ru/Content/Document/File/144138/wp_106.pdf)

interactions with them, hindered the recovery of the output of these products, despite the production capacity created in the industry in recent years.

The diversified system of production, technological and trade-logistical interactions of domestic production of computer and electronic equipment in the foreign market determined the conditions for their fairly rapid adjustment to the sanctions restrictions, in particular due to mechanisms of parallel imports, strengthening of traditional partnerships in loyal markets. In 2022, the production of computer and electronic equipment went up by 1.7% relative to the previous year, but the instability of quarterly and monthly dynamics requires a cautious attitude to the assessment of this indicator.

The dynamics of machinery and equipment production, which was actively supported by the state purchases, remained in the field of positive values according to the results of the year. However, violation of intra- and inter-branch connections of machine-building production, difficulties with service maintenance of imported equipment and shortage of qualified personnel resulted in high fluctuations of monthly dynamics. The same reasons explain the drop in the production of other types of transport and repair of machinery and equipment. The unbalanced movement of stocks, high differentiation in capacity utilization, reduced supplies of imported materials, components and finished products, reaching over 40% of intermediate demand (as of 2019) had a negative impact on both the machine-building complex itself and the related economic activities (*Table 3*).

*Table 3*

**Dynamics of production by extraction and manufacturing sectors of economic activity in 2021 and 2022, in % to corresponding quarter of the previous year**

	2021					2022				
	Year	Quarters				Year	Quarters			
		I	II	III	IV		I	II	III	IV
Extraction of mineral resources	104.2	92.9	107.5	108.7	108.5	100.8	107.4	98.9	100.1	97.5
Production of crude oil and natural gas	102.6	90.6	105.4	107.8	108.4	100.7	107.5	98.0	100.0	97.5
Manufacturing activity	107.4	102.7	113.6	105.7	107.9	98.7	104.9	96.1	98.2	96.6
Consumer complex:										
– food industry	104.6	100.6	103.5	104.9	106.3	100.5	104.0	99.1	98.8	100.6
– textile, clothing and footwear industry	111.6	104.3	118.3	101.1	102.2	98.0	98.9	93.9	97.8	101.0
Timber processing complex	108.7	102.3	114.9	108.6	109.3	96.3	106.1	96.5	93.1	90.4
Chemical complex	108.7	110.9	109.1	104.5	105.4	98.5	105.9	98.5	98.3	92.8
Petrochemical complex	103.6	93.4	108.5	105.1	108.7	99.6	103.0	94.6	100.8	100.1
Building complex	109.3	97.7	113.8	107.1	109.7	101.1	111.0	101.8	98.0	92.0

	2021					2022				
	Year	Quarters				Year	Quarters			
		I	II	III	IV		I	II	III	IV
Metallurgical complex	104.1	95.7	108.3	101.1	103.3	101.1	106.0	96.1	103.4	99.8
Machine building complex	111.8	112.7	128.1	103.0	104.7	91.4	102.8	89.7	87.6	88.4

Source: Rosstat.

The reduction and radical changes in the movement of commodity flows in the domestic and foreign markets have exacerbated the problems of insufficient development of transportation and logistics infrastructure and financial and insurance services. The growth of costs for transportation and logistics, disruption of the rhythm of cargo delivery have become critical factors in adjusting the economy to the new realities of inter-regional domestic and foreign trade and production relations. In 2022, the turnover of freight transportation declined by 2.6%, wholesale trade – by 11.5%, and the contribution of financial and insurance activities decreased to 4.7% of GDP against 5.3% of GDP a year earlier. This has determined the intensification of government policy on infrastructure development: transportation, logistics facilities located in the vicinity of transportation hubs, as well as expanding opportunities for multimodal transportation, especially in the eastern direction.

The economy's adjustment to the new price proportions in the domestic market and to the ruble exchange rate was accompanied by a change in the structure of GDP by income as a result of a decrease in its share of payments to 39.6% of GDP and net taxes on imports and production to 8.2% against 40.1% and 10.0% respectively a year earlier. The economy's gross profits and gross mixed income in the GDP structure rose to its highest level in the past decade of 52.2% in 2022. This being said, it should be noted that the adaptive mechanisms of business regulation and fulfillment of social obligations allowed to maintain stability in the labor market with a decrease in the general unemployment rate from 4.1% in Q1 to 3.7% in Q4 (Table 4).

*Table 4*

**Structure of GDP by revenue source in 2021–2022, % to GDP**

	2021					2022				
	Year	Quarters				Year	Quarters			
		I	II	III	IV		I	II	III	IV
GDP										
Compensation of employees	40.1	46.9	43.6	39.0	37.6	39.6	41.7	42.1	39.7	35.9
Net taxes on production and imports	10.0	11.9	10.6	10.0	10.1	8.2	11.1	5.6	7.8	8.4
Gross profit of economy and gross mixed income	49.93	41.2	45.8	51.0	52.3	52.2	47.3	52.3	52.5	55.7

Source: Rosstat.

If the change in net taxes on production and imports was influenced by the reduction of the scale of foreign supplies, the dynamics of gross profit was driven by the transfer of growing production costs and transportation costs to prices with the persisting imbalance of supply and demand.

In H1 2022, producer prices for industrial goods increased by 25.6% in annual terms this year (by 36.1% in mining, 23.0% in manufacturing) and by 15.6% in construction.

Prompt measures to support backbone enterprises, import/import substitution of common and critical goods and technologies, permission for parallel imports, and the formation of alternative transportation and logistics routes relieved acute tension in the domestic market. Sufficiently rapid easing of inflationary pressure and the formation of a weak monthly deflationary wave in H2 2022 allowed four times in Q2 to reduce the key rate – from 17.0% per annum (11.04.2022) to 9.5% (14.06.2022), twice in Q3 – to 7.5% per annum (19.09.2022) and keep it at this level until the end of the year (Table 5).

Table 5

**Financial conditions: key rate and price index in 2021–2022,  
% to the corresponding period of the previous year  
(annual data on December previous year)**

	2021					2022				
	Year	I	II	III	IV	Year	I	II	III	IV
Key rate (quarter-end), % per annum	–	4.5	5.50	6.75	8.50	–	20.0	9.5	7.5	7.5
Consumer prices	108.4	102.1	102.0	101.1	102.9	111.9	110.0	101.3	99.1	101.3
Producer prices										
Industrial goods	128.5	110.8	108.2	103.1	104.0	96.7	110.2	95.0	96.0	96.3
Extraction of mineral resources	159.2	125.0	110.1	103.1	112.2	84.7	123.3	80.0	92.6	92.7
Manufacturing	123.5	108.1	109.2	102.6	102.0	99.1	106.9	100.4	95.5	96.6
Agricultural products	113.5	106.2	100.9	100.9	105.0	95.8	102.5	99.1	96.7	97.6
Capital goods	108.8	101.1	102.0	102.6	102.1	114.7	108.9	102.9	101.1	101.3

Sources: Rosstat, CBR.

Decline in inflation, key rate and implementation of the anti-sanction fiscal policy supported the domestic market. The level of economic activity achieved in 2022 determined the starting conditions for the next year, but it is necessary to take into account the continuing risks of changes in the value of Russian exports and redistribution of profits in the economy through tax channels, as well as the influence of exchange rate policy on the dynamics of imports of critical technologies and goods.

### 3.1.2. Domestic market: consumption and households' income

In 2022, the dynamics of social parameters was characterized by a restrained decline in household consumption with the implementation of an expanded package of systemic measures to support the population. The increase in government spending on final consumption played a key role in mitigating the shocks of the inflationary wave, reducing tensions in the labor market and maintaining social stability of the population. At the end of 2022, real disposable incomes of the population, real wages and real size of assigned pensions decreased by 1.0%. In 2022, final consumption expenditures were 3.2% higher than in pre-pandemic 2019, including households by 1.6% and public administration by 7.8% (Table 6).

Table 6

#### Dynamics and structure of expenditure on final consumption in 2018–2022

	In % of total, In current prices					In % to the previous year, In comparable prices				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
GDP	100	100	100	100	100	102.8	102.2	97.3	105.6	97.9
Including final consumption	68.1	69.7	71.5	67.3	65.0	103.5	103.4	96.1	108.0	99.4
– households	50.0	51.2	50.8	49.2	46.9	104.3	103.8	94.1	110.0	98.2
– public administration	17.7	18.1	20.1	17.5	17.6	101.3	102.4	101.9	102.9	102.8

Source: Rosstat.

When analyzing the dynamics and structure of the population's income, one should take into account the problems accumulated over the last decade of slowing down the indicators of living standards that were partially solved by indexation of wages in the public sector, increasing the minimum wage and social benefits. The simultaneous increase in wages and the expansion of social guarantees has determined the conditions for reducing the share of the population with incomes below the poverty line in the total population from 12.3% in 2019 to 11.0% in 2021 and 10.5% in 2022.

In the structure of the population's income in nominal terms, the change in the share of remuneration of labor compared to 2020 was compensated by increased contribution of social payments relative to the pre-demand year 2019. The dynamics of income from entrepreneurial activity was influenced by changes in the competitive environment in the domestic market and the appearance of new niches for economic activity of domestic businesses of various institutional structures. The decline in property income was partly due to the weakening activity of the population in the securities and real estate market (Table 7).

Table 7

**Structure of cash income generation in 2019–2022, in % of total**

	Total	Including					
	Cash income	Incomes from entrepreneurial activity	Labor wage	Employees' wages as part of labor wage	Social payments	Real estate incomes	Other cash incomes
2019	100	5.9	57.3	–	18.8	5.1	12.9
2020	100	5.2	57.2	42.1	21.4	5.8	10.4
2021	100	5.5	57.3	41.9	20.6	5.7	10.9
2022	100	6.2	57.2	41.7	20.7	5.0	10.9
Q1	100	6.5	66.2	48.7	20.5	4.5	2.3
Q2	100	6.0	56.5	42.0	21.2	4.3	12.0
Q3	100	6.4	54.6	38.5	21.7	5.1	12.2
Q4	100	5.8	53.9	39.4	19.7	5.9	14.7

Source: Rosstat.

The reaction of the population to changes in income levels throughout 2022 was extremely heterogeneous. In the context of high uncertainty in Q1 2022, the current spending hit 92.7% of the population's income, while savings dropped to 8.1% due to the reduction in deposits, transactions in the securities and real estate markets, the growth of debt on loans and increased demand for cash. However, the population reacted to the changes in the conditions of the monetary regulation in Q2 2022 by the renewal of the saving model of the consumer behavior. The investment potential of the households was formed while the trend for the increase in the share of deposits in the incomes of the population and in the GDP remained flat. According to the results of the year, the share of savings in incomes of the population increased to 7.3% against 4.3% a year earlier (Table 8).

Table 8

**Structure of household income aimed at current expenditure and savings, 2019–2021, in % of total**

	2019	2020	2021, quarters				2022, quarters					
	Year	Year	Year	I	II	III	IV	Year	I	II	III	IV
Incomes, total	100	100	100	100	100	100	100	100	100	100	100	100
Consumer expenditure Including:	80.9	75.7	80.2	87.6	80.5	81.7	73.8	77.7	92.7	76.2	77.9	68.8
– purchase of goods	59.6	58.4	61.1	66.8	61.6	61.9	56.2	59.1	70.6	58.4	58.8	52.0
– payment of services	18.3	16.3	17.8	19.9	17.9	17.7	16.3	17.5	20.9	17.0	17.9	15.5
Mandatory payments and contributions	15.2	15.2	15.5	15.4	15.5	15.1	15.9	15.0	15.4	13.7	15.5	15.5
Savings growth, total	3.9	9.1	4.3	-3.0	4.0	3.2	10.3	7.3	-8.1	10.1	6.6	15.7

	2019	2020	2021, quarters				2022, quarters					
	Year	Year	Year	I	II	III	IV	Year	I	II	III	IV
growth (+), decline (-) savings in deposits, securities, real estate, debt on loans and in accounts of individual entrepreneurs	3.4	4.6	3.4	-5.2	3.6	2.3	10.0	5.5	-12.8	12.8	5.1	11.9
growth/decline of cash on hand	0.5	4.5	0.9	2.2	0.4	0.9	0.3	1.8	4.7	-2.7	1.5	3.8

Source: Rosstat.

However, the trend towards an increase in investment activity at the real estate market, despite the prolongation and expansion of mortgage lending programs, including concessional lending, did not get momentum in H1 2022. In 2022, in the context of weakening dynamics of cash income, there was a slowdown of lending activity, including in the mortgage market. The share of loans in personal income dropped by 0.9 p.p., including mortgage loans – by 2.0 p.p. (Table 9).

Table 9

### Households investment potential and activity in 2015–2022

	2015	2016	2017	2018	2019	2020	2021	2022*
	<b>in % to GDP</b>							
Deposits of individuals	27.9	28.3	28.3	27.4	27.7	30.6	26.5	27.1
Loans granted to individuals	12.9	12.6	13.3	14.3	16.1	18.7	18.5	18.1
Including housing mortgages	1.4	1.7	2.2	2.9	2.7	4.1	4.2	3.2
	<b>in % to households cash income</b>							
Deposits of individuals	43.7	44.5	46.2	48.5	48.7	51.8	49.6	51.9
Loans granted to individuals	10.9	19.9	21.7	25.4	28.4	31.6	35.6	34.7
Including housing mortgages	2.2	2.73	3.6	5.2	4.7	7.0	8.1	6.1

\* Preliminary data.

Source: CBR.

Under a favorable development and the formation of attractive financial instruments, accumulated funds of the population in liquid form will return to the real estate market and become a significant factor in the implementation of investment programs, including housing construction.

#### 3.1.3. Investment and construction complex: structural features 2022

The dynamics and structure of the investment and construction activity in 2020–2022 was formed in the context of restrictions on the capital and capital goods movement, transformation of the production and technological interactions, changes in the ruble exchange rate versus foreign currencies. Despite the pressure of external factors, the government measures aimed at the support of the internal demand and the active use of the instruments of financial and credit regulation

allowed to dampen the influence of the unfavorable environment on the dynamics of the investment in fixed assets.

A slight decline in investment in fixed assets during the acute pandemic period of 2020 (-0.5% on the previous year) and a dynamic recovery of business activity in the construction and investment complex in 2021 (+8.6%) determined the basic conditions for the dynamics of investment in fixed assets.

In 2022, macroeconomic situation was driven by the continued contribution of the investment demand into the dynamics of the domestic market while the measures aimed at the decrease of the risks of the financial instability were implemented. Overall, the rate of investment in fixed capital in 2022 was 104.6%, in construction – 105.2%, with GDP at 98.3% and the final consumption of households – 97.6% relative to the figures of the year before.

The dynamic development of housing construction and social infrastructure facilities was a feature of the Russian economy in 2019–2022. The share of investments in the construction of residential buildings was 12.1% of the volume of investments in fixed assets. Residential space commissioning in 2022 was at an all-time high of 102.7 million square meters, an increase of 11.0% over the previous year. The total residential floor area in houses built by individual developers was 57.2 million square meters, or 55.7% of the total housing commissioned in 2022 (*Table 10*).

*Table 10*

**Dynamics of investment and construction complex in 2019–2022,  
in % to the corresponding period of the previous year**

	2019	2020	2021	2022	Quarters			
					I	II	III	IV
GDP	102.2	97.3	105.6	97.9	103.5	95.9	96.3	99.9
Investment in fixed assets	102.1	99.9	108.6	104.6	113.8	103.3	102.3	103.3
Construction	102.1	102.1	107.0	105.2	103.9	103.6	106.9	100.3
Commissioning of living space	106.2	100.2	112.7	111.0	164.6	124.8	101.7	76.8

*Source:* Rosstat.

The dynamics of investment in fixed assets throughout 2022 was extremely unstable. In Q1 2022, taking into account the fulfillment of obligations under the previously concluded construction contracts, the growth of investments in fixed assets by 13.8% hit the maximum quarterly values for the last years. The investment activity in Q2–Q4 was considerably supported by the dynamic expansion of public investments in the priority projects, which compensated for the restraint of the private sector in the environment of the risks of the sanctions pressure on the earlier concluded investment contracts and import of capital goods.

In 2022, the proportion of investments in the objects of state property increased to 16.9% (+0.7 p.p. as compared vs. 2021 and +2.1 p.p. vs. 2018) in the structure of investments in fixed assets with the outpacing dynamics of the



investment support of the federal property structures. In 2022, investments in fixed assets of the private Russian property increased by 4.0 p.p. as compared to the previous year, but ceded leadership in the dynamics of investment activity to the economic subjects of the federal property. In 2022, structural changes by institutional investors were driven by the drop of investments in the structures with various forms of foreign ownership by 16.2% (in actual prices), including the decrease in their proportion in the structure of investments by 3.5 p.p. as compared to the previous year (*Table 11*).

*Table 11*

**Share of investments in fixed capital by form of ownership in 2020–2022,  
in actual prices, %**

	Investment in fixed assets			For reference only, in % to GDP		
	2020	2021	2022	2020	2021	2022
Investment in fixed assets	100	100	100	18.9	17.2	18.4
Including:						
Russian ownership	87.4	86.0	90.2	16.6	14.8	16.6
Including:						
State ownership	17.5	16.2	16.9	3.3	2.8	3.1
Federal ownership	8.2	7.5	8.3	1.6	1.3	1.5
Ownership of subjects of the Federation	9.3	8.7	8.6	1.8	1.5	1.6
Municipal ownership	2.9	2.8	2.7	0.5	0.5	0.5
Private ownership	60.4	61.6	65.6	11.4	10.6	12.1
Mixed Russian ownership	5.8	4.4	4.1	1.1	0.8	0.7
State corporations ownership	0.8	1.0	0.9	0.2	0.2	0.2
Foreign ownership, joint Russian and foreign ownership	12.6	14.0	9.8	2.4	2.4	1.8
Foreign ownership	5.7	6.5	3.0	1.1	1.1	0.5

Source: Rosstat.

Financial environment considerably influenced the dynamics of investment activity in 2021–2022. Change in the key rate in 2021 from 4.25% to 8.5% and the surge to 20% in Q1 2022 resulted in the acceleration of price growth for goods and services of the investment purpose to 9.9% per annum in March 2022. The state operational measures of financial support and regulation of the construction and investment activity, such as restructuring of credits for big business,<sup>1</sup> changes in prices of the state contracts due to the increase in the cost of resources, adjustment of concessional mortgage programs,<sup>2</sup> acceleration of the output of the construction materials into the domestic market,<sup>3</sup> reducing the time for approval of territorial planning documents<sup>4</sup> made it possible to support business activity in the construction sector.

1 RF Government Edict of September 29, 2022 No. 2847-p.

2 RF Government Decree of May 31, 2022 No. 993.

3 RF Government Decree of April 19, 2022 No. 701; RF Government Decree of October 04, 2022 No. 1759.

4 RF Government Decree of October 21, 2022 No. 1878.

Changes in the conditions for financing of investment programs in Q2–Q4 2022 were driven by an increase in the volume and proportion of the budget funds, which enabled to partially compensate the changes in the demand for the bank credits while the interest rates remained high and the dynamics of the use of own funds of enterprises and organizations for the investment purposes weakened. The proportion of own funds of enterprises and organizations in the structure of investments in fixed assets in the economy as a whole made 54.2% in 2022, dropping by 1.8 p.p. vs. the previous year. The state support of the restructuring of credits taken at the floating rate enabled to support the investors and the construction companies, which found themselves in a difficult situation due to the increase in prices and considerable growth of the debt servicing expenses. Compared to 2021, the increase in the share of budget and borrowed funds from other organizations in the sources of funding partially compensated for the weakening dynamics of bank loans and enterprises' own funds (*Table 12*).

*Table 12*

**Investment in fixed assets by sources of financing  
in 2018–2022, in % of total**

	2018	2019	2020	2021	2022
Investment in fixed assets	100.0	100	100	100	100
Own funds	53.0	55.0	55.2	56.0	54.2
Borrowed funds Including:	47.0	45.0	44.8	44.0	45.8
Bank loans	11.2	9.8	9.9	11.0	9.7
Of which:					
Russian banks	6.8	7.8	8.1	9.1	8.4
Foreign banks	4.4	2.0	1.8	1.9	1.3
Borrowings from other organizations	4.3	4.8	4.9	4.5	5.4
Investment from abroad	0.6	0.4	0.3	0.4	0.3
Budget funds	15.3	16.2	19.1	18.3	20.2
Of which:					
Federal budget	7.6	7.6	8.7	8.1	9.6
RF subjects budgets	6.6	7.4	9.2	9.0	9.3
Local budgets	1.1	1.2	1.2	1.2	1.3
State extrabudgetary funds	0.2	0.2	0.2	0.2	0.2
Other	15.4	13.6	10.4	9.6	10.0

Source: Rosstat.

The critical reduction of the raised direct foreign investment in the Russian economy with the weakening dynamics of the supplies of the investment goods, technologies and imported equipment maintenance services against the backdrop of the 2022 geopolitical sanctions and high uncertainty decelerated the economic dynamic.

The movement and structure of the investment and construction activity has been formed in recent years against the backdrop of toughening competition on the world markets, restrictions on the movement of the imported capital goods,

changes in the ruble exchange rate versus foreign currencies. However, despite the pressure of the external factors, the state measures and the active use of the instruments of financial and credit regulation allowed to mitigate the influence of the unfavorable environment.

In this regard, the distribution of risks between the state, private business and the population was of fundamental importance. The state investment policy supported the demand for technological and institutional innovations and, at the same time, determined the correction of mechanisms of attraction of private investors through norms of special investment contracts,<sup>1</sup> agreements on protection and encouragement of capital investments<sup>2</sup> and formation of the extended package of mortgage programs. Changing the conditions for interaction between the state and private investors has become a significant component of competition on the domestic and foreign markets of capital, goods and services. The model of flexible investment strategic cooperation of business, population and state contributed to the identification of limitations and concretization of measures and instruments of reaching the trajectory of effective growth of investments in fixed assets.

An innovation in strategies and programs for stimulation of investment activity was a shift in the emphasis on the balance of tangible and human resourcing of capital investment, as well as flows of monetary and financial resources. The institutional aspect of the investment policy focused on the formation of the adequate structure and practice of the state regulation and corporate management as well as expansion of participation of development institutions.

Strategic initiatives to create high-tech products are supported by a modified mechanism of special investment contracts, interregional offset contracts (with counter investment commitments under guaranteed purchases); new approaches to import substitution in industry based on large priority projects. Revamping of technological potential of the Russian economy relies on systemic measures of engineering education development and transfer of scientific research results to the real economy, provision of financial resources to fast-growing, high-tech companies.

It is important to expand the norms of the agreement on protection and encouragement of capital investments for projects of innovative nature and the possibility of its use with the forms of investment support mechanisms of territories of advanced development, special economic zones, public-private partnerships and concessions. Harmonization of the principles of activity and accounting of budgetary obligations within the framework of these organizational-legal structures determines the umbrella mechanism of support for private investors.

Sectoral measures to support investment activity in 2022 were effective in relation to a limited range of activities, the main focus shifted to the identification

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1 Federal law "On industrial policy of the Russian Federation" of December 31, 2014 No. 488-FZ (version of October 07, 2022 No. 390-FZ). URL: <http://kremlin.ru/acts/bank/39299>

2 Federal law "On protection and promotion of investment in the Russian Federation" of April 01, 2020 No. 69-FZ (version of June 28, 2022 No. 226-FZ). URL: <http://www.kremlin.ru/acts/bank/45357>

of imbalances in the reformatting of significant projects. In terms of industries, in January-September more than 60% of the investments accounted for the extraction of minerals, projects in the sphere of transportation, storage, energy infrastructure and manufacturing industries. Investments in oil and natural gas extraction surged by 9.0%. While fulfilling the guaranteed obligations under the previously signed contracts for supply and maintenance of the technological equipment and the accumulated material reserves, the exit of foreign investors and the suspension of foreign companies has not yet had a significant impact on the continuation of the previously launched projects. At the same time, there have been adjustments to deadlines due to the postponement of imported equipment supplies or exit from projects of contractors from unfriendly states in the associated petrochemical and oil refining facilities.

Adjustment of investments to the changing movement of technological development, lifted the importance of the factors of transportation and logistics, information and communication, social infrastructure, competences and skills of the labor force.

Regarding transportation and storage, the investments in fixed assets surged by 19.2% in 2022. In the environment of reorientation of the freight flows from the western to the southern and eastern directions, the investments in the development of the port and railway infrastructure gained importance. The investments in the activity of the freight railway transportation soared by 25.6% as compared to 2021. Financing of the Complex plan of modernization and expansion of the trunk infrastructure in 2022 spiked by 24.6% as compared with 2021.

The processing industry demonstrated the decrease in the investment activity by 6.2% versus of the previous year due to the difficulties with the equipment supplies. The factors limiting the dynamics of the investments are the decline in demand for the investments in the export-oriented segment with the sharp reduction of the enterprises' own funds in the sub-products of timber processing, chemistry and metallurgy complexes.

The machine-building complex is in a difficult situation, whose share in the investments in fixed assets on the whole throughout the economy dropped to 2.1% versus 2.8% in 2021. The sharpest drop in financing of investment programs is recorded in the production of motor vehicles – up to 44.2% and energy equipment – up to 80.1% from the level of 2021.

In industries with the potential for import substitution, the impact of investment is usually manifested over a long-term timeframe. Operational short-term measures associated with changes in transportation and logistics links and partnerships with new suppliers affect the indicators of commodity output and are weakly related to investment programs.

The accumulated structural constraints of the investment and construction complex form the increased requirements for the determination of trends in the reproduction of fixed capital and the development of machine-building and associated production of construction materials, as well as the production capacity of construction itself.

In spite of the fact that the majority of basic productions in the last 20 years underwent rather active modernization with the outstripping growth of expenditures on renewal of machinery, equipment and transport vehicles, it should be admitted that in general the condition of fixed assets does not correspond to dynamic changes in demand for new product lines and production technologies. With the changes in the access to the world market of the investment goods, structure and dynamics of prices, exchange rate of the national currency there was a gradual shift in demand to the segment of the domestic investment goods. However, the production possibilities of the Russian machine-building complex did not make it possible to meet the demand for some types of technical means entirely, especially in the branches of industry highly dependent on the foreign technologies and ready-made investment goods, which became a factor slowing down the movement of construction and investment complex. The proportion of the import in the gross fixed assets accumulation on the whole throughout the economy came to 18.7% (2019), while in the machine-building complex it exceeded 55% and in the construction complex – 38.5%.

In 2022, the starting level of the capacity utilization on the whole throughout the economy amounted to 65% and in the export-oriented complex of the manufacturing industries – 80%; in the investment complex this figure was estimated to be approximately 40%. The average rate of fixed assets renewal in the economy being at the level of 8.3% (2021), in the manufacturing industries this figure stood at 9.6%, and in machine-building complex it was in the range of 6.3–12.2% by types of activity with high characteristics of the accumulated capital wear and the share of obsolete fixed assets. In the branches of natural monopolies (electric power and transportation), which account for more than 1/4 of fixed capital stock, the renovation ratios were somewhat lower than the average indicators for the economy, which raised the risks of unbalanced development of the transportation and energy infrastructure with other types of economic activity and regions. Increase in the risks associated with the renewal of capital assets updated the development of the concept of technological development for the period up to 2030, which will determine measures of support for institutions of innovative development and active involvement of private business in the implementation of investment projects aimed at ensuring the development of investment productions.

The gap in material and engineering support of capital investments and construction works in industrial and residential construction violates the rhythm of commissioning and leads to an increase in the volume of unfinished construction (*Table 13*).

Amid the 2022 sanctions, the issues of fulfilling construction plans in both housing and production construction demanded the involvement of idle production capacity of the construction industry, machine-building industries focused on the manufacture of machinery, equipment and technical means for the housing and utilities sector, while forming new channels and alternative foreign suppliers of engineering equipment and materials for construction projects. Reducing the share of machinery and equipment in the type structure of investment in fixed

Table 13

**Structure of investments in fixed capital by types of major funds 2019–2022, in % of total (excluding small businesses and informal activity parameters)**

	2019	2020	2021	2022
Investment in fixed assets, total	100.0	100.0	100.0	100.0
Including:				
Residential buildings and premises	14.4	14.5	12.9	12.1
Buildings (except for residential) and facilities	38.4	37.5	37.0	40.7
Machinery, equipment, means of transportation	37.0	37.1	39.5	36.4
Intellectual property	3.3	4.0	4.4	4.7
Other	6.9	6.9	6.2	6.1

Source: Rosstat.

capital with changes in the proportions of housing and industrial construction increases the risks of technological modernization programs of the industrial sector and related infrastructure. Creation of conditions for the development of own industrial base of the investment complex will have a multiplicative effect on the processes of economic strengthening and expansion of technological capabilities and creation of new jobs.

### 3.2. Sectoral dynamics of industrial production in 2022<sup>1</sup>

In 2022, The trend component of the industrial production index exhibited growth, which was provided by both the extractive sector and the manufacturing industry. In the first case, owing to high prices and growth of external demand for energy resources. In the second case, due to the production of goods replacing foreign brands, which curtailed their activities on the Russian market after the launch of the SMO, as well as due to the growth of demand for intermediate products for the state defense order.

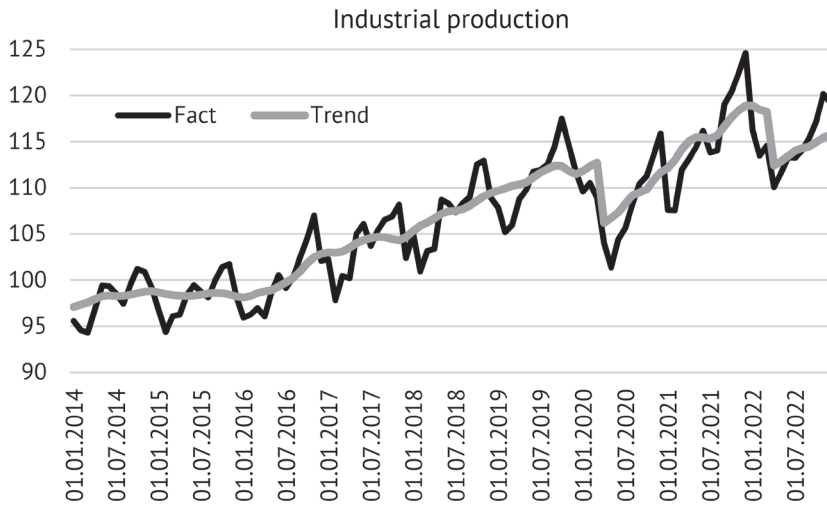
For correct interpretation of the existing trends in separate sectors, it is necessary to decompose their output into components: calendar, seasonal, irregular and trend component;<sup>2</sup> the interpretation of the latter is of substantial interest. The Gaidar Institute experts made seasonal adjustment of the series of indices of all the branches of industrial production for 2003–2022 and singled out the trend component<sup>3</sup> on the basis of the current statistics published by Rosstat on the indices of production in industrial sectors of the economy.

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2 “Trend component” is a well-established term used in the literature, but it should be noted that this component is not a “trend” in the strict sense used in econometrics when analyzing time series: in this case it is the residual from the separation of calendar, seasonal and irregular components from the series. “Trend component” is incorrect to use for time series forecasting (for most of the indexes of industrial production it is non-stationary in levels (and stationary in differences), but it can be used for interpretation of short-term dynamics and its comparison with the events that took place.

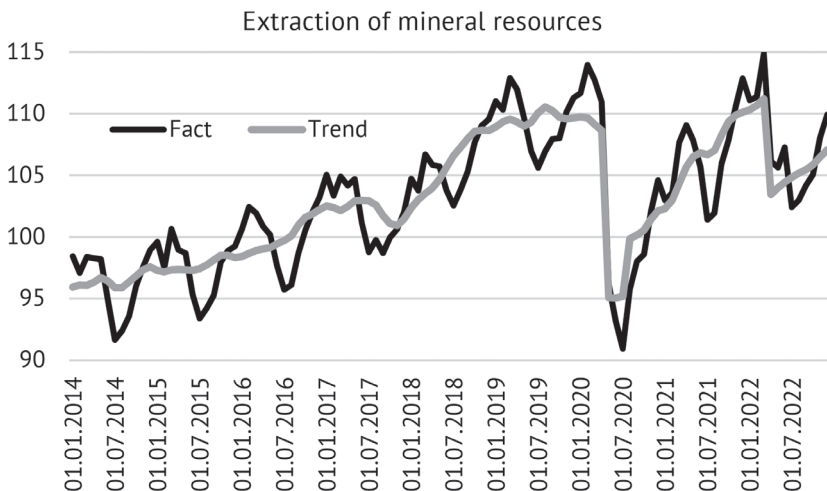
3 The trend component was extracted with the Demetra package using the X12-ARIMA procedure.

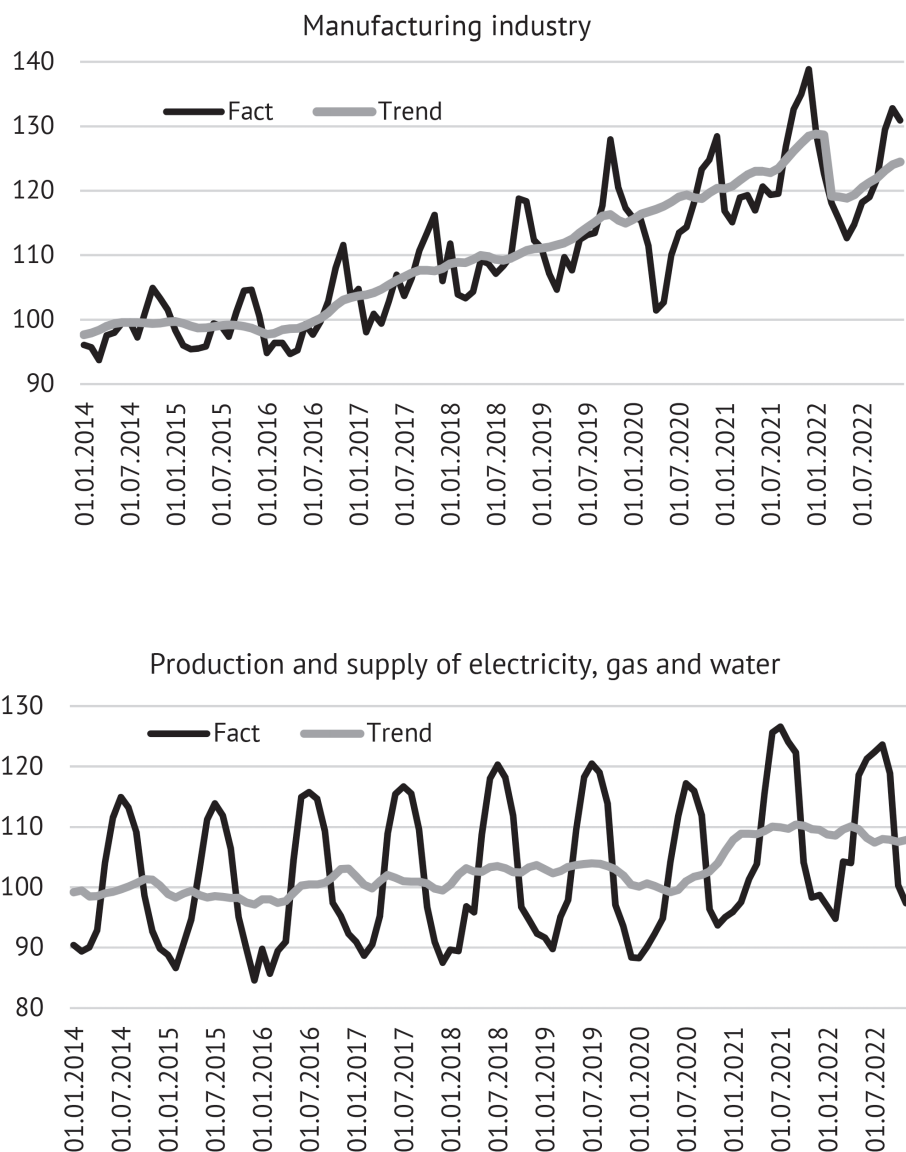
The results of series processing for the index of industrial production as a whole are shown in *Fig. 2*. *Fig. 3* presents the results for the aggregated indices of the extractive and manufacturing sectors, as well as the production and distribution of electricity, gas and water. For the rest of the series, the decomposition results are presented in *Table 14*.



*Fig. 2.* Dynamics of the industrial production index in 2014–2022 (Actual data and trend component), in % to 2016 annual average

Sources: Rosstat, own calculations.





*Fig. 3. The dynamics of production indexes by industry in 2014–2022 (Actual data and trend component), in % to 2016 annual average*

Sources: Rosstat, own calculations.



### 3.2.1. Dynamics of the industrial production index in Q1

According to the results of Q1 2022, the trend component of the industrial production index showed about zero growth rates. The main contribution was made by the extraction of fuel and energy minerals due to the growth in oil, gas and coal production. The stabilizing factor in the oil industry was the OPEC<sup>1</sup> deal, which was extended until the end of April 2022. In the gas industry, growth in the period under review was ensured by supplies to China via the Power of Siberia pipeline (including on the back of the reduction of LNG exports to China from the USA and Australia) and domestic demand (economic recovery after the pandemic). The growth in coal production is associated with increased demand in Europe and Asia-Pacific markets, which was facilitated by higher natural gas prices, making coal-fired generation competitive. The growth in demand from Asian countries has not been fully realized due to the existing infrastructural constraints in the Far East, which do not allow the entire additional volume of coal to be transported to Asia and Pacific markets by rail. In March, the existing infrastructural constraints were supplemented by competition with other cargoes, the transportation of which was reoriented to the eastern direction following the imposition of sanctions on supplies of Russian products against the backdrop of the events in Ukraine.

The trend component of the manufacturing sector in Q1 2022 showed a slow decline, the main positive contribution to the dynamics continued, as in H2 2021:

- production of food, textile and leather products. The shift of consumer demand to a lower price segment (as a rule, represented by Russian-made products) was supplemented by the factor of rush demand due to the departure from Russia and the temporary shutdown of some foreign companies triggered by the launch of SMO;
- production of chemical products mainly due to increased domestic and foreign demand for pharmaceuticals, medical materials, and fertilizers;
- machine-building – mainly owing to the growth of agricultural machinery. High world prices on agricultural products in 2021 provided additional funds to their producers, who had the opportunity to invest these funds in the renewal of the machine park, which increased the demand for exports of Russian agricultural equipment and, accordingly, its production volumes. Besides, consumers intensified purchases of equipment due to the apprehension of its appreciation caused by the expected increase in utilization fees, exchange rate fluctuations and increase in prices for metals and polymers observed on the world and domestic markets in 2021. Since March 2022, the restructuring of supply chains, search of new partners (manufacturers and suppliers of components), and other factors constraining export growth of agricultural equipment.

Wholesale and retail sales grew: wholesale trade was mainly due to increased sales of medicines and medical supplies, chemical fertilizers, and agricultural

1 Oil production increases by 400,000 barrels per day each month. This increase is extended until the end of April 2022 26st OPEC and non-OPEC Ministerial Meeting concludes // OPEC. 02.03.2022. URL: [https://www.opec.org/opec\\_web/en/press\\_room/6830.htm](https://www.opec.org/opec_web/en/press_room/6830.htm)

equipment; retail trade was driven by increased sales of nonfood products due to a rush in demand for the products of foreign companies that were temporarily shutting down operations in Russia.

The trend component of paid services to the population maintained negative dynamic. The trend component of freight turnover showed about zero growth rates. The main reduction in the freight base was owing to a decrease in export shipments as a result of sanctions and restrictions imposed, as well as the Russian government's retaliatory actions.

The sanctions imposed on Russia at the beginning of 2022 did not affect the dynamics of most industrial sectors during the first quarter. The negative impact will manifest itself later, when the following factors will affect the production process of companies: increased transportation costs, the breakdown of old supply chains, the cost of finding new consumers, etc., so the dynamics in the Russian industry may deteriorate amid the geopolitical crisis, which will lead to a narrowing of export markets.

### 3.2.2. Dynamics of the industrial production index in Q2

At the end of Q2 2022, the trend component of the index of industrial production showed a decline mainly due to the sanctions imposed by several countries after the launch of SMO.

The oil production contraction seen in Q2 2022 was due to: the refusal of consumers and traders from the EU to buy Russian oil; the embargo on oil supplies from Russia by the US and the UK; decrease in oil shipments by sea in March 2022, which led to a mirror reduction in the loading of production capacity in April 2022 amid the exhaustion of port infrastructure and storage capacity in the Transneft system coupled with the lack of formed alternative supply routes, which have already begun to operate since May 2022 (increasing exports to India and China) largely due to a discount in the price of Russian Urals crude oil relative to the price of the benchmark Brent brand.<sup>1</sup>

Despite the increase in gas supplies to China via the Power of Siberia pipeline and the active pumping of gas into European UGS (underground gas storage facilities) in April 2022, the volume of gas exports from Russia declined in Q2 2022. The reason is Russia's response to the EU sanctions: the introduction of a new gas payment scheme (converting euros into rubles) for supplies to the European market and the suspension of exports to Bulgaria, Poland, Finland and the Netherlands at the end of May 2022 because these countries refused to pay under the new scheme (according to 2021 data, their share in Russian gas exports was 11%).

An additional factor in Q2 2022 that limited coal export shipments to the Asia Pacific market, in addition to infrastructure restrictions on the Far East railroad lines, was competition with other cargoes that were redirected to the East after the imposition of sanctions.

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1 *Malkin V.* Russia raise crude oil production and export in May // *Vedomosti*. 02.06.2022. URL: <https://www.vedomosti.ru/business/articles/2022/06/02/924946-rossiya-eksport-nefti>

The main positive contribution to the dynamics of the trend component of the mining industry was made by the extraction of minerals, except for fuel and energy, due to the growth of external demand for nonferrous metals in anticipation of the introduction of new restrictive measures on export supplies from Russia. In addition, there was an increase in production related to the provision of services in the upstream sector, despite the fact that foreign oil service companies of the Big Four announced their withdrawal from March 2022, the suspension of investment and transfer of technology and equipment to Russian projects, the resale of business to Russian owners.<sup>1</sup>

The trend component of the manufacturing sector showed a slow decline at the end of Q2 2022. The restraining factors for the production growth in the manufacturing industries were the sanctions, due to which the logistics of the supply of components and raw materials did not have time to realign to the domestic market or to the markets of the countries that did not impose sanctions against Russia. In addition, there are products that are not produced in Russia and their import is prohibited, which stops the production of industries that use these products. The share of components subject to restrictions depends on the sphere. The greatest import dependence on the EU and the USA in machinery and equipment (40%), medicines (34.5%), cars (28.3%), rubber and plastic products (24.6%).<sup>2</sup>

Following the industrial sectors, other sectors of the Russian economy also showed a decline: freight transport due to the reduction of export flows of energy, chemical products and timber; wholesale and retail sales due to the departure of foreign firms and the reduction or termination of a number of commodity flows. The construction industry stagnated due to rising prices for building materials and components.

According to the results of the analysis of the dynamics of the trend components of industries, the Russian industry felt the impact of the imposed sanctions on their production processes in Q2 2022. A number of industries, which in retrospective dynamics provided the growth of the Russian economy, depend on imports: the share of foreign added value in their products exceeds 50%, mainly these imports from the countries that imposed sanctions (the EU and the USA). It takes some time to find alternative suppliers and sales channels, it is possible that new partners will supply components of lower quality, raise prices due to lack of competition, and this will again lead to dependence on imports. It takes more time to carry out self-reliant substitution; this way can, on the one hand, help avoid serious problems in future supply chain disruptions, but, on the other hand, lead to higher production costs due to ignoring the advantage of specialization and scale of production established in the global market. Another

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1 The share of foreign companies in this market is no more than 20%. See, for example: *Budris A.* Oil servicing companies terminate investment in Russia: what will happen to oil production // Forbes. 23.03.2022. URL: <https://www.forbes.ru/biznes/459711-nefteservisnye-kompanii-prekrasaut-investicii-v-rossii-cto-budet-s-dobycej-nefti>

2 *Kokoreva M.* From the automotive industry to pharmaceuticals: how dependent the Russian economy is on imports // Forbes. 19.04.2022. URL: <https://www.forbes.ru/finansy/462829-ot-avtoproma-do-farmaceutiki-naskol-ko-rossijskaa-ekonomika-zavisit-ot-importa>

risk is the narrow concentration of export flows from Russia only in the Chinese market. It is worth developing other sales channels that do not have a large capacity and are not considered traditional for Russia, but which are ready to buy products from Russia (for example, for timber products it could be the Middle East, the Persian Gulf, South-East Asia). To this end, it may be worth making these destinations more attractive by removing trade restrictions (for example, import duties).

### 3.2.3. Dynamics of the industrial production index in Q3

Over Q3 2022, the trend component of the industrial production index showed slow growth mainly due to manufacturing industries – in particular, metallurgy, petrochemicals and food production.

The trend component of the mining industry exhibited slow growth in Q3 2022. Oil production and export volumes were growing until September 2022, in October 2022 oil production decreased by 0.6% against the same period of the previous year, and exports dropped by 1%. In early October, the OPEC+ countries agreed to adjust downwards the overall production by 2 mn bpd from the August 2022 required production levels starting November 2022. According to set up schedule, Russia should reduce its daily production volumes by 0.4 mn bpd.<sup>1</sup> Apparently, the decrease in production volumes in October was due to preparations for the implementation of the deal.

Volumes of gas production and exports to far abroad countries declined in Q3 2022 compared to the same period of the previous year, the reason being the problems of export pipelines to Europe: firstly, in May 2022, gas transit through Ukraine was more than halved, as the country refused to agree on supplies through Donbass; secondly, in late August supplies through the pipeline Nord Stream (55 bn cubic meters per year) stopped because of faulty pumping equipment; thirdly, the sanctions imposed against Russia over the SMO in Ukraine and Russia's retaliatory actions<sup>2</sup> since February 2022 have resulted in the impossibility of gas supplies via Poland through the Yamal- Europe gas pipeline (capacity 33 bn cubic meters per year).

Russian gas is exported to Europe via one of the branches of the Turkish Stream (33 mn cubic meters per day) and through Ukraine (43 mn cubic meters per day). In addition, the EU countries have agreed to reduce gas demand by 15% from August 1, 2022 to March 31, 2023, compared to average consumption over the past five years. Following exports, gas production is also falling. Growth in the period under review was observed in the transshipment of liquefied gas at Russian ports, which can be attributed to the increase in export volumes before the tightening of sanctions.

During the period under review, there was an increase in lignite production, which is used as fuel in thermal power plants and boiler houses, a decrease in

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1 33rd OPEC and non-OPEC Ministerial Meeting // OPEC. 05.09.2022. URL: [https://www.opec.org/opec\\_web/en/press\\_room/7021.htm](https://www.opec.org/opec_web/en/press_room/7021.htm)

2 Introduction of payment for gas in Russian rubles. Poland refused to pay for gas in Russian rubles, gas supplies in this direction stopped.

coking coal production and exports due to infrastructure restrictions on rail lines in the Far East and competition from other cargoes that were redirected to the east after the imposition of sanctions.

The trend component of the manufacturing sector showed growth at the end of Q3 2022. The main contribution was made by:

- Food industry, partly on the back of the withdrawal of foreign producers from the market, and partly owing to the increased production of various types of canned goods, cereals and other durable goods, which is most likely due to increased demand for these products from the population of the regions bordering the SMO;
- Textile and garment production as well as the food industry partly amid the withdrawal of foreign competitors from the market, as well as due to increased demand for workwear, suits and kits for men made of textile materials, bags and travel kits used for personal hygiene;
- Metallurgy against the backdrop of growth in aluminum processing, production of aluminum pipes and structures necessary for heating lines construction and restoration of energy infrastructure in the attached territories, as well as owing to production growth of nonferrous metals, particularly gold (growth in demand for precious metals was due to the crisis in connection with the SMO and the high inflation rate of almost all major world currencies);
- Mechanical engineering due to increased production of tractors for agriculture and forge-and-press machines, mainline electric locomotives owing to the substitution of part of the demand for imported products; in agriculture on the back a good harvest year.

Q3 2022 saw growth in other sectors: in sales due to the departure of major players in the non-food segment of Russia and sales of their products; in construction owing to repair and construction of infrastructure in the attached territories; in agriculture on the back of a record harvest of some crops. Cargo turnover declined in the period under review due to restrictions on the transshipment of FEC products by sea and the low capacity of railroads in the easterly direction.

#### 3.2.4. Dynamics of the industrial production index in Q4

In Q4 2022, the trend component of the industrial production index showed slow growth, with the main contribution coming from fuel and energy extraction and manufacturing; production and supply of electricity, gas, and water had about zero growth rates.

On December 5, 2022, an embargo on sea shipments of oil from Russia to the EU came into force, as well as a “cap” on oil prices at \$60 per barrel. According to the IEA, despite the restrictions, the volume of oil production and exports in 2022 remained stable: oil production rose by 2% to 535mn tons, while export of oil to non-CIS countries via pipelines and the sea rose by nearly 19% to 207mn tons. In early 2023, there may be a temporary reduction in production (wells with a high level of water cut may be taken out of service) with subsequent recovery, as it

takes time to build alternative channels of oil supply. The embargo on the export of petroleum products, which came into force on February 5 will be an additional factor in the reduction of oil production in early 2023.

In addition to infrastructure constraints, gas exports from Russia in Q4 2022 were negatively affected by the EU's gas storage capacity utilization rate of 80%. An increase in demand from the EU is feasible at the end of H1 2023, when preparations for the next heating season commence. The positive effect of strengthening gas cooperation with Turkey, China and Iran can probably be expected beyond 2023.

At the end of Q4 2022, the coal industry kept growing in production of lignite, which is used as fuel in thermal power plants and boiler-houses. Coking coal production and export volumes continued to decline due to infrastructure constraints on the Far East railroad lines and competition from other cargoes whose transportation was redirected to the east.

The trend component of the manufacturing sector at the end of Q4 2022 exhibited growth. The industries oriented mainly at the domestic demand had positive dynamics: foodstuffs manufacturing, including beverages and tobacco; production of finished metal products; manufacture of machinery and equipment; manufacture of vehicles and equipment. The export-oriented branches of industry, in particular, chemical production and wood-working industry, had a restraining influence on the dynamics of the industry. The current dynamic was caused by the substitution of foreign production with the products of Russian producers due to the sanctions imposed on the technologies, termination of direct import of some goods, as well as the growth of demand for the products of industries, which are intermediate for the fulfillment of the state defense order.

The reasons for the growth of other industries in Q4 2022 remained: in trade – due to the departure of major players in the non-food segment of Russia and sales of their products; in construction – due to repair and construction of infrastructure in the attached territories. Cargo turnover drops on the back of the restrictions on the transshipment of FEC products by sea, the low capacity of railroads in the eastern direction, the reduction of gas exports through the main gas pipelines.

Potential challenges for the growth of the Russian industry in 2023 will be:

- Substitution of more complex production by relatively simple products due to the sanctions imposed on technology and reduction of the number of employees owing to the partial mobilization and departure of some specialists abroad;
- Reduced competition amid the departure of a number of foreign manufacturers from the Russian market and restrictions on access to foreign markets;
- Preserving revenues from Russian oil and gas exports under embargoes and price caps;
- Quickly building new logistics and supply chains and providing them with the necessary infrastructure.

Table 14

**Change in the output index across sectors of the economy, %**

Sectors	Share in industrial production index, %	December 2022 on December 2021	December 2022 on June 2022
Industrial production index		97.34	102.04
Extraction of minerals	34.54	97.19	102.51
Manufacturing, including:	54.91	96.86	104.26
Production of food, including beverages and tobacco	16.34	110.71	106.18
Textile and garment production	1.14	105.52	107.27
Manufacturing of leather, articles thereof and footwear	0.27	96.42	100.47
Wood processing and wood ware manufacturing	2.02	81.29	95.34
Pulp-and-paper industry	3.35	74.25	86.01
Production of coke and petrochemicals	17.25	101.48	101.53
Chemical industry	7.56	101.58	100.59
Manufacturing of rubber and plastic articles	2.14	96.67	104.03
Manufacturing of other nonmetallic mineral products	4.02	91.16	93.58
Metallurgy and manufacturing of ready-made fabricated metal products	17.42	114.76	115.83
Manufacturing of machinery and equipment	6.97	96.50	102.54
Manufacturing of electrical, electronic and optical equipment	6.27	94.54	98.81
Manufacturing of transport vehicles and equipment	6.75	92.49	111.60
Other industries	2.42	93.95	103.39
Electricity, gas and water supply	13.51	98.85	100.09
Wholesale trade		82.53	101.27
Retail sales		90.04	101.06
Cargo turnover		94.57	97.55
Construction		106.17	103.51
Volumes of paid services to households		105.43	102.41
Manufacturing of transport vehicles and equipment		101.23	101.55

Sources: Rosstat, own calculations.

### 3.3. Russian industry in 2022<sup>1</sup>

This section is based on the materials of opinion polls involving managers of industrial enterprises conducted by the Gaidar Institute for Economic Policy (IEP) according to the European harmonized methodology in the monthly cycle since September 1992.

The survey contains a very small number of questions (not more than 15–20). The starting questions of the IEP questionnaire were prepared in 1992

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based on recommendations of the Organization for Economic Cooperation and Development, which “supervises” the opinion polls in all countries of the world. The modern questionnaire of the IEP surveys consists not only of the minimum set of questions recommended by the OECD, but also includes other questions developed in light of many years of experience in monitoring of the situation in the Russian industry and allowing a better understanding of particular dynamics and condition of the industry. A systematic analysis of the situation in the Russian industry based on monthly opinion polls using a modified questionnaire amid “sanctions war” once again demonstrated the advantages of our data source.

Questions of the opinion polls traditionally concern actual and expected changes of the main indicators of the enterprise’s activity, as well as the estimates of their current situation. Enterprises are invited to respond to questions on a scale of “growth”, “no change”, “reduction” or “above the norm”, “normal”, “below the norm”. When analyzing the results of opinion polls, they used a derived index called a balance. Balances are calculated as the difference between the percentage responded “will grow” (or “above the norm”) and the percentage responded “will reduce” (or “below the norm”). The resulting difference allows us to present the distribution of answers to each question by a single number with a “+” or “-” sign. There are practically no classical quantitative questions (familiar to economists) in surveys.

Simple design of questions and answers allows respondents to fill out the questionnaire quickly and without reference to documentation. It is fundamentally important that the respondent at each enterprise was a manager of the highest possible level having a complete picture of the situation at the enterprise and directly related to its management.

### 3.3.1. Russian industry in January-February 2022

The traditional January decline in demand for industrial products in 2022 was not as strong as in previous years. The initial (before the exclusion of the seasonality) balance dropped only to -14 p.p., whereas in the inter-crisis period the January balances stayed in the interval of -42 to -21 p.p. The exclusion of the seasonal factor demonstrated continuing growth in demand and even a bit more intensive than in December 2021: +12 p.p. after +10 p.p. It should be noted that in August and October 2021 this indicator went up to +17 p.p. However, at that time the absolute maximum (1992–2022) of satisfaction with the volumes of sales was registered: 79% of enterprises considered their volumes as normal. However, the subsequent slowdown in demand growth lowered the share of normal estimates to 65% by December. In January 2022, the figure was 67%.

In the same August 2021, the Russian industry formed extremely optimistic forecasts of changes in demand. The balance reached +23 p.p., which is a little less than the absolute maximum of +25 p.p. shown in March 2008. But then the optimism of the sales forecasts started to decrease and stabilized at +12 p.p. in December 2021 – January 2022.

Even with the obvious growth in demand and high optimism of sales forecasts, Russian industry did not bring its stocks of finished products to the manageable



surplus that was observed in previous periods of positive industry dynamics. Since August 2020, the balance of inventory estimates has been negative: industry responses “below the norm” prevail over “above the norm” responses. A longer period of the stocks shortages was registered after the default of 1998. At that time enterprises hesitated for 30 months to bring their stocks to a reasonable level of redundancy due to uncertainty about the sustainability of the industrial growth that had begun.

However, lack of stocks of finished products allowed enterprises to keep high optimism of their output plans even in the context of negative adjustment of demand forecasts. In January 2022 the balance of expected changes in production reached +34 p.p., which became the best value of the index since June 2008.

With increasing optimism of output plans, enterprises realized that Russia's demographic problems combined with a hypertrophied higher education system, put the lack of qualified personnel at the top of the list of constraints to industrial growth. This problem was cited by 44% of enterprises at the beginning of 2022, whereas at the beginning of 2021 it was cited only by 16%. There was very little left till the record of July 2008 (49%) of the fast-growing economy and industry after the Covid crisis.

The internal demand could share the first place with the staff shortage only as a result of the growth of its citation from 37% in October 2021 to 43% in January 2022. The export demand was considered by 22% of enterprises as a constraint for the growth of output. The uncertainty of the current economic situation and its prospects in the environment of the next wave of morbidity increased its negative influence on the Russian industry from October to January by only 4 p.p.: after 35% (the post-crisis minimum) it was cited by 39% of enterprises.

However, the factor “weakening of the ruble and appreciation of imported equipment and raw materials” demonstrated the highest growth in the number of citations during this period (one quarter). After 15% in October 2021 the weak ruble at the beginning of 2022 was considered as an obstacle by 35% of the enterprises. This growth of the weak ruble negative influence is caused by the shortage of capacities in the Russian industry under the obvious growth of the output and growth of optimism of its plans, growth in prices for imported equipment and raw materials, as well as the insignificant success of import substitution. Indeed, the shortage of equipment restrained the growth of the output at the beginning of the year at 22% of the enterprises (this is the maximum number of the references since 2008). The shortage of investment in 25% of enterprises (this is the maximum since 2014, beginning of this factor monitoring).

In January 2022, inflation expectations in the Russian industry resumed their growth. The balance of the expected changes of producer selling prices rose by 3 p.p. over a month after an increase by the same 3 p.p. over September-December 2021. It should be noted that a year earlier (in January 2021) this indicator went up considerably: by 21 p.p. after the December failure, when the industry (as well as the whole country) expected another surge of incidence and a decline in demand in case a new lockdown was announced. Growth in the incidence of the next strain of coronavirus in early 2022 was perceived more relaxed by both Russian

authorities and Russian manufacturers. The smaller scale of hospitalization, as well as of mortality and the experience of already two years of work under pandemic conditions also had its impact.

At the beginning of the year, Russian industry reported the most significant shortages of production capacity and labor force due to expected changes in demand. Balance estimates of enterprises securities with these resources fell to the absolute minimums of the whole monitoring period, which began in 1993 and 1996. Even in 2008, the scale of the deficit was smaller.

The unprecedented labor shortage forced companies to plan equally unprecedented hiring. In January, these plans reached an all-time high of +24 p.p. surpassing both the post-crisis record of September 2021 and the pre-crisis record of January 2008.

In February, according to the latest estimations of enterprises before the beginning of the SMO, the slow-down of the demand growth continued. The balance lost another 6 p.p. and fell down to the values registered in the spring of the previous year. However, the positive value of the February balance testified that the demand for industrial goods continued to grow.

Moreover, in February there was a sharp revision by enterprises of their estimates of current sales on the scale of “above normal”, “normal” and “below normal”. The share of “normal” answers increased by 11 p.p. reaching 79% and repeating the absolute record of August 2021. The previous record of 14 years (sustained for 168 months) was registered in August 2007 and amounted to 72%. The surge in sales satisfaction occurred in the context of a slowdown in demand growth. Such a combination indicated that by February 2022 the industry got rid of the inflated expectations formed during the “rebound from the peak of the crisis” demonstrated by the industry in 2020–2021. Indeed, demand forecasts fell by another 6 p.p. in February and the decline from August 2021 (a multi-year high) was 17 p.p.

Meanwhile, estimates of stocks of finished products showed that enterprises did not expect a sharp deterioration in the following months. The balance of these assessments remained negative from August 2020: the responses “below the norm” exceeded the responses “above the norm”. In other words, until February 2022, there remained a shortage of stocks in industry, which supported both the current growth in output and the production plans.

The output plans, although they dropped by several p.p. in February after reaching their multi-year maximum in January, remained positive and the enterprises were ready to grow the volume of industrial output. Historically (1996–2022) the record shortage of labor force registered by surveys in January 2022, forced Russian industry to increase hiring plans in February as well. Such an optimistic balance index related to the expected changes in the number of workers was not registered even in 2008.

### 3.3.2. Russian industry under the first stage of SMO

During the first month of the “total war” declared on the Russian economy by French Minister Bruno Le Maire, demand for industrial products quite expectedly showed a decline, but not as “crisis” as in the previous actual crises of the 1990s,

2008–2009 and 2020. The March 2022 result was comparable with the worst result of 2015, which for the industry was just another year of stagnation in 2012–2016. Such non-crisis growth in demand amid “total war” explains the non-crisis assessments of the March sales volumes by the Russian industry. They were recognized as normal by 64% of enterprises. This result is 15 p.p. worse than the result of February 2022, but it is comparable with the best values of 2017–2019.

The output of industrial products in March also showed no crisis dynamics at all: the balance of the actual index changes became negative (the output was lower than in February), but surprisingly small in magnitude, i.e., only -5 p.p. In April 2020 the same balance dropped to -35 p.p., in November 2008 to -38 p.p., in September 1998 to -31 p.p. and in 1994 to -53 p.p.

The desire of enterprises to replenish stocks of finished products provided support to output in the first month of the next crisis. The experience of the Covid crisis of 2020 clearly showed to Russian manufacturers the relevance of the proverb “store is no sore” when shipment of components and their movement across state borders were limited for medical reasons.

Another reason to produce to stock was again the devaluation of the ruble and a surge in inflation. In such a situation the enterprises preferred most likely not to curtail the production in the crisis sharp way, but to use the Russian components which were not yet much more expensive and the imported ones available on the territory of Russia. However, the result for domestic producers seemed unsatisfactory: there was still a shortage of stocks of finished goods in the industry.

In March, Russian industry demonstrated a decisive growth in its prices. The balance of their actual changes increased by 26 p.p. for the month and reached the level (the intensity of growth to the previous month), which was not registered by surveys since October 1995. All records of this indicator in the XXI century and the post-default record of October 1998 were broken.

Enterprises’ price forecasts assumed further growth of selling prices in April–May. Inflation expectations of the Russian industry increased in March by modest 20 p.p., however, due to the high values of February the March level made +51 p.p., having renewed the record of the XXI century. Though, this level could not surpass the local maximum of post-default September 1998 and even less the absolute record of June 1993. Then, the balance reached +99 p.p.

In March, Russian industry reported layoffs, and the balance of actual changes in employment became negative for the first time since September 2020, but very little for the beginning of the crisis and comparable with the period of industrial stagnation in 2012–2016. Hiring plans, on the other hand, fell in March the way they have never fallen before. They lost 46 p.p. in one month changing the historical maximum of January–February 2022 to pessimism, which yielded only to the crisis lows of 1998 and 2009.

The investment plans of enterprises also experienced an unprecedented decline in March. After a remarkably stable and high 11-month optimism, the desire to invest in domestic production lost 46 p.p. in the first month of the “total

war” between the West and Russia and fell to the low level of the investment crises of 2015–2016 and 2020.

In April the actual dynamics of the demand demonstrated the decline slowdown, i.e., the balance grew but remained negative, that is the sales (according to traditionally underestimated producers’ assessments) continued to decrease but not as intensively as in March. At the same time both the March and April values were far from the crisis levels of the 1990s, 2008 and 2020 index.

Demand forecasts after a record dip in March to a record level of pessimism showed a record growth in April. They gained back 32 p.p. from 43 p.p. lost a month earlier. Although the balance of April remained negative (that is the enterprises still expected the decline of the demand), its expected decline in May-June should not have been so catastrophic as compared with the March forecasts.

In such a situation the April balance of the enterprises’ production plans demonstrated a logical but still surprising growth by 30 p.p. after the March drop by 50 p.p. Hence, this indicator became positive, i.e., the industry was ready to switch over to growth in production as early as May-June. A similar surge of optimism was registered in May 2020. A surprisingly successful rebound from the bottom of the viral crisis began at that time.

The negative balance of estimates of the finished products stocks, which has persisted in Russian industry since August 2020, demonstrated that the deficit of stocks shaped during the viral crisis, has smoothly turned into the current geopolitical crisis of Russian industry. Both in 2020 and 2022, enterprises feared that worsening problems related to the availability of raw materials, supplies and components could result in a halt in production even if demand remained unchanged. Estimates of stocks of raw materials and supplies also demonstrated enterprises’ concern about their ability to ensure normal (i.e. satisfying demand) production processes in the context of sanctions restrictions. The balance of estimates of these stocks fell to a low of 2010–2022.

In April, enterprises maintained intensive growth in prices, even slightly more intensive than in March: the balance increased from +50 p.p. in March to +54 p.p. and reached the level of October 1995. The absolute record for the whole period of its monitoring since October 1994 was registered in December 1994 and amounted to +84 p.p. However, a sharp decline in inflation expectations in April indicated that the Russian industry was not ready to reach the record values of actual price growth of 1994. Inflation expectations of enterprises lost 26 p.p. in April and returned to the “pre-war” level of August 2021 – February 2022.

After a record intensity of hiring at the beginning of the year, which, however, lagged behind plans, March saw a logical crisis decline in employment. However, the March balance was far from its “normal” crisis values recorded in 2008–2009 and 2020. In April the balance of the index increased from -8 to -5 p.p., i.e., the enterprises continued to reduce the staff, but less intensively. At the same time, the actual dynamics of the number of employees of Russian industrial enterprises in 2022 significantly differs from the industry’s intentions in this area. Whereas the pre-war hiring plans were full of unjustified optimism, in the first months of the SMO one can speak of unfulfilled pessimism. Thus, enterprises revised their

intentions in March by a record amount from a record +21 p.p. to -23 p.p. with the actual April balance of -5 p.p.

After the April slow-down of the drop in demand in May the intensity of the sales' decline grew again and returned to the March level. However, values of this index in March-May are still far from the real crisis failures faced by the Russian industry in the 90-ies of the 20th century, in 2008 and 2020. Demand forecasts also failed to continue the recovery that began in April and lost in May 5 p.p. out of the 33 p.p. gained a month earlier. However, the output plans in May retained positive dynamics adding another 8 p.p. and making a good stead comparable with the pre-Covid values of the indicator. Finally, production intentions of Russian industry, as in the case of the 2020 Covid crisis, got rid of pessimism already during the second month of the sanctions crisis and consolidated it during the third month.

The main reason for rapid recovery of output plan optimism was the chronic shortage of finished product inventories, which began back in August 2020. The 2022 sanctions crisis did not end in a revision of inventory estimates. The blocking of imports and a powerful inflationary wave, on the contrary, strengthened the desire of enterprises to produce to stock as long as supplies from abroad and prices for components make it possible to support domestic production. Russian industry also has to work under shortage of components, raw materials and supplies, which increased significantly with the onset of the sanctions crisis and surpassed the deficit of the period of the viral crisis of 2020. In April 2022 the balance of estimates ("above the norm" minus "below the norm") fell to -25 p.p., which evidenced the worst value of the indicator since 2009. In May, this indicator rose to -20 p.p.

In May enterprises considerably slowed down the actual growth of selling prices. Whereas in April the balance ("growth" minus "reduction") was +54 p.p. and was a 27-year record, in May it dropped to +14 p.p. and reached the level of the end of 2020. At that time, Russian industry, like the rest of the world, was just getting into a post-Covid inflationary race. However, the industry did not expect any further (in June-July) deceleration in the growth of selling prices. Whereas in April inflation expectations of enterprises dropped record-breakingly (by 26 p.p.), the reduction in May showed only 3 p.p.

The staffing intentions of enterprises in the first 5 months of 2022 experienced extremely dramatic changes. If in January amid a considerable staffing deficit the industry reported record plans for hiring workers, in March these intentions collapsed, surpassing the failure of April 2020. However, by May, the industry had almost completely overcome the pessimism of the early SMO. The balance of staffing intentions became almost zero, i.e., mass layoffs in June-July were no longer planned, but growth in the number of employees was not expected either.

The June sales volumes disappointed the Russian industry as the share of estimates "below the norm" rose to 39%, which was a 20-month anti-record for the indicator. Even in March 2022, the first month of the sanctions' crisis, such estimates were received from only 28% of enterprises. A month earlier, in February 2022, the figure demonstrated an absolute minimum of 17% (1992–2022). However, the June

figure of 39% dissatisfaction with demand was still far from the crisis peaks of 2020 (57%), 2016 (55%), 2009 (80%), 1998 (92%) and 1996 (94%).

Growing dissatisfaction with sales is explained by low dynamics of demand in Q2 2022. After the balance of the actual changes in the demand has logically dropped in March from February +5 to -20 p.p. (the latter value was not related to crisis at all by standards of 2020, 2009, 1998, 1996 and 1994) this figure could neither demonstrate the rebound from the crisis peak nor the fall to the really crisis levels of the mentioned years. The entire Q2 2022 the balance was in the corridor of -20...-14 p.p.

Demand forecasts in May-June failed to continue further recovery after the April rebound. For the whole quarter the balance of this indicator was in the interval of -13...-9 p.p. The uncertainty of the industry in the further recovery of sales definitely had a negative effect on the output plans. The latter showed a sharp drop in June. After two months of the confident growth the balance of the enterprises' production intentions lost 10 p.p. reaching zero. The Russian industry did not expect growth or reduction of the output in July-August. However, the actual output in June demonstrated growth by May 2022 and for the first time since the pre-war February the balance ("growth" minus "reduction") of this habitual index was positive.

However, the main "beneficiary" of the June output growth was not the consumers of Russian industrial products (who never decided to increase their purchases), but warehouses of finished products. The June output growth allowed the industry to reduce the shortage of finished goods inventories to 12%, which was the best (minimum) value of the indicator since August 2020.

At that time, at the stage of a definitive recovery from viral crisis of 2020, a long period of shortage of stocks of finished products began, which did not end by the middle of 2022. However, in June the balance of estimates of these stocks ("above norm" minus "below norm") was only -2 p.p., while in December 2020 it was down to -14 p.p.

Hoping to revive the weak (but nevertheless non-crisis) demand the Russian industry in June refused to increase the selling prices and has already passed to their absolute reduction. This is evidenced by the negative balance of actual changes in June prices compared to their May level. Thus, over May-June 2022 the index lost 59 p.p. after the April 27-year record of this balance. Our surveys in 1994–2022 have never registered such a definitive transition from a rather intensive growth of prices to a reduction within two months.

Hence, the May plans did not imply such a change in the pricing policy of industrial enterprises. The May balance of expected price changes remained positive (pricing growth should have remained) and large in absolute terms (prices should grow significantly). The June balance of expected changes in prices moved from "plus" to "minus" and broke two local records: in May 2019 (-3 p.p.) and in June 1998 (-3 p.p.).

In June, the Russian industry resumed recruitment after a three-month pause and the balance of actual changes in the number of workers became positive, although in May enterprises had no such plans. The hiring plans became positive

only in June, continuing the consistent recovery after the record-breaking failure in March. Apparently, the chronic shortage of personnel forced the Russian industry to recruit workers even under the protracted sanctions crisis.

The July data on a wide range of indicators of surveys indicated a slowdown in the recovery from the sluggish crisis.

In July the drop in demand for industrial products continued and with growing intensity, according to the enterprises' estimates. The balance of actual changes of sales demonstrated the decline after the situation stabilized in May-June. Consequently, its July indexes were worse than those of March, the beginning of the sanctions' crisis. However, this index was still far from the crisis failures of 2020, 2008, 1998 and 1994. The negative dynamics of the balance of actual changes in demand caused growing dissatisfaction with the established volumes of product sales in July. The share of "below norm" estimates increased up to 43% after the 28% level of dissatisfaction with demand registered in March 2022. It should be noted that the pre-crisis value of this indicator in February (2022) amounted to 17% and repeated the historic (1992–2022) minimum registered in August 2021. The changes in product sales expected by enterprises after the extremely vigorous rebound in April of the next three months failed to sustain the positive dynamics. In May-July the balance of these forecasts was in the range of -13 ... -10 p.p. Such a "hang-up" of demand forecasts at the recovery from previous crises had never been registered.

The July output plans did not promise a resumption of an effective recovery from the sanctions' crisis either similar to overcoming the 2020 Covid crisis. At that time, the Russian industry managed to cope very quickly with the shock of the first wave of the disease, and the subsequent infection outbreaks failed to lower the balances of production plans to negative values. In June-July 2022 the output plans, which have considerably benefited by May, began to decrease. During these two months they lost 17 p.p. and became negative again. The intentions to decrease the production volumes began to prevail among the enterprises.

Non-positive dynamics of demand forecasts and output plans relieved the Russian industry in July from the deficit of stocks of finished products registered by surveys since August 2020. This very fact deprived production of another supporting factor, the need to replenish stocks.

In July, Russian industry continued to lower its prices. The balance of their actual changes fell from -4 to -13 p.p. As a result, two local lows were beaten: July 1998 and July 2020. The next step was to overcome the absolute minimum of January 2009, when the balance of the actual changes of prices fell down to -16 p.p. However, the July pricing plans of enterprises did not imply overcoming this absolute minimum. After three months of record-breaking (from +51 to -8 p.p.) reduction in the balance of expected price changes, this index increased by 7 p.p. in July.

The negative dynamics of demand and output forced the industry to abandon recruitment in July, which for the first time since the start of the "special military operation" was registered by surveys in June. Then the balance of actual changes in the number of workers became positive, small in absolute terms, but still



positive. In July the balance became negative again. Nevertheless, hiring plans, successfully recovering from the record March failure, stopped improving in July and froze at zero. The industry was neither ready to switch to hiring, nor to return to downsizing.

The main reason for the industry's reluctance to move to logical layoffs in the context of negative dynamics of demand and output was a chronic shortage of personnel, primarily skilled workers. This fact resulted in a record shortage of personnel in January 2022 and failed to form an overhang of excess employment in April 2022. Then the balance of estimates became only zero, i.e. the share of answers "more than enough" equaled the share of answers "not enough. In July 2022, the balance of estimates became negative again and the industry again faced a shortage of personnel "due to the expected changes in demand."

In August, according to the estimates of enterprises, demand maintained a moderately negative dynamics (that is, less products were sold than in July). However, such dynamics of sales has been observed since April: after the March slump the balance of demand remained steady within the range of -24...-17 p.p. Industrial enterprises have neither witnessed the crisis collapse of this figure (as it happened in 2020, 2008, 1998, 1996 and 1994), nor the rebound from the peak of the crisis. This situation began to disappoint more and more enterprises. The share of the normal estimates of demand after the non-crisis failure in March 2022 and slight recovery in May started to decrease slowly and dropped to 51% by August. The forecasts of demand also remained stable and non-crisis restrained after the record and logical failure in March. The output plans in August got rid of the modest (-5 p.p.) negative of July and returned to the same absolute term (+4 p.p.).

The next period of the finished stocks shortage, typical for the Russian industry had been operations within 24 months, ended in the summer of 2022. In August, the balance of estimates became positive. The record of 1998–2001, when shortage of inventories lasted 30 months and the balance dropped to -25 p.p. (in 2020 the balance dropped only to -14 p.p.), remained unbroken.

Estimates of stocks of raw materials and supplies also had a generally positive dynamics in August. A slight reduction in the usual provision with Russian components and raw materials from 79 to 74% was combined with growing usual provision with imported components from 20 to 29%. Growth in the second of the two indicators amid "sanctions war" seems to be more important than the decline in the first one.

In August, Russian industry continued (despite intentions to abandon it in July) its price decline. The balance fell to -16 p.p. beating the local pre-default July 1998 low. However, industry tried to get rid of deflationary expectations in its forecasts for the second month in a row. After the June multi-year low, the balance of price intentions rose from -8 to -2 p.p. in July and remained at that level in August. The absolute minimum of this index (-21 p.p.) was registered in December 2008.

The record-low official unemployment, which was formed, among other things, as a result of the Russian industry's non-crisis staffing policy, forced enterprises to stop expanding employment. During April-June 2022 the balance



of the hiring plans increased by 25 p.p. and became zero. The industry did not plan either growth or reduction of the number of workers in July–August. However, the actual number of employees in July–August, according to the estimates of enterprises, began to decline. The balance of actual changes decreased from +1 to -4 p.p. This fact forced enterprises to adjust their hiring plans for July–August from 0 to -3 p.p.

The determining factor in the formation of September estimates of the situation in the Russian industry was a considerable improvement in the dynamics of the demand. According to the estimates of enterprises, the balance of actual changes in sales reached the best values since the beginning of the SMO. The worst value of this indicator was obtained in July. However, all six months after the March dip the balance of actual changes in demand was in a fairly narrow range, which was able to breakthrough only in September.

This fact logically resulted in growth of satisfaction with sales volumes. In September the share of normal estimates of the demand has sharply increased up to 67% and was the best among the enterprises participating in the non-governmental IEP surveys since the beginning of SMO. The worst value of this figure for 2022 was registered in August and made, strictly speaking, 51%, which was not crisis value at all. It should be noted that historically (1992–2022) the higher value of the index was registered in February 2022 and it equaled 79%.

Clearly positive dynamics of demand in September allowed Russian industry to increase output and the balance of actual changes in production became positive for the second time during the SMO. For the first time growth of output vs previous month was registered by surveys in June. The output plans also showed growth and almost reached crisis maximum in September registered in May. The crisis minimum of this indicator, which logically fell in March, was comparable with the lows of the previous crises. However, already in April, the production plans of Russian industry managed to get rid of pessimism, which was definitely helped by lack of stocks of finished products.

The Russian industry was able to get rid of the shortage of finished product stocks only by July 2022. In August and September, the balance continued to grow, but very modestly – by 1 p.p. per month. This fact indicated two definitely positive signals. First, industry was able to maintain a small and manageable surplus of stocks. It lost such an opportunity during the 2020 Covid crisis. Secondly, the industry decided to move from policy of crisis minimization of stocks to supporting their excess typical for the stages of recovery from crises.

Another sign of recovery from the sanctions crisis, which began in September and planned by the industry, was a sharp decline in the provision of enterprises with stocks of raw materials and supplies. The share of “normal” answers dropped both when estimating stocks of Russian raw materials, supplies and components as well as when estimating similar imported ones, and significantly: by 10 p.p. in the first case and by 7 p.p. in the second case. The Russian industry’s current supply of raw materials and components does not seem to be sufficient for the sustainable growth of production that has appeared in the enterprises’ plans.

The intensive hiring registered by surveys in September was also a positive signal. After five months of shrinking employment and weak (+1 p.p.) growth in June, September's +9 p.p. fit nicely into recovery from the sanctions crisis that began in September.

In September the industry managed to slow down considerably the reduction of selling prices. The balance grew by 7 p.p., but remained negative, i.e. prices continued to drop, but not as intensively as in July-August. Enterprises' price forecasts promised growth in prices and the September balance of expectations increased to +9 p.p. after zero values of July-August 2022. Minimum inflation expectations of sluggish sanctions' crisis fell on July, when the balance dropped to -9 p.p.

### 3.3.3. Russian industry after announcement of partial mobilization

The main driver of declining optimism in the Russian industry in October was the deterioration of demand dynamics. After the September surge by 12 p.p., the balance of changes in actual sales lost 15 p.p. in October and returned to the worst values of this indicator registered in July. The deterioration of the demand dynamics logically reduced the satisfaction with the current volumes of sales down to 58% after September's 66%. However, both the October value of this index and the worst in 2022 (51%) in August were also far from the minimums of all the previous Russian crises of the XXI century, not to mention the estimates of the enterprises received in the 90-ies of the XX century. At the same time, demand forecasts maintained high level of September 2022. Sales expectations improved by 1 p.p. in October after a 3 p.p. growth in September. Finally, the above forecast figure cemented its break from stagnation of April-August, when it steadily reached the range of -12...-8 p.p. after the March failure, being the record-breaking in all senses and amounted to -41 p.p. The output plans, as well as demand forecasts, continued to gain optimism in October, having added another 3 p.p. and, consequently, having reached the best values after the collapse in March.

The output plans were supported not only by improvement in demand forecasts, but also by newly emerged deficit of finished product stocks in the industry. In October, the balance of their estimates ("above the norm" minus "below the norm") fell to -5 p.p. after three months of being near zero (0...+1).

Amid negative dynamics of demand and a drop in satisfaction with its volumes, in October the industry was forced to abandon the planned price increase. The balance of actual price changes remained negative (-3 p.p.). Enterprises reduced their prices more often than hiked them. Although the September plans envisaged growth in October with the balance of +8 p.p. Herewith, the October plans of the Russian industry retained the price optimism of September: enterprises still planned to push up prices, but now with the balance of +9 p.p.

The dynamics of employment in the industry also went through negative changes in October. Whereas in September enterprises for the first time during the current geopolitical crisis reported a significant growth in the number of

employees (the balance of change reached +8 p.p. after -5 in August), in October this indicator dropped to +2 p.p. This reduction seems absolutely logical not only due to deterioration of the actual dynamics of demand and output, but also due to partial mobilization. However, positive value of the balance shows that there was no absolute layoff in the industry.

Thus, hiring plans, symbolically improved by 1 p.p. in October after the September jump of 8 p.p., demonstrate the desire of enterprises to return to the recruitment record for the current crisis. This intention of enterprises is based not only on the demand forecasts and the output plans, which are record-breaking for the current crisis, but also on the record shortage of staff registered in October 2022 (and for the whole monitoring period of this index in 1996–2022).

The share of estimates of the current number of workers of the enterprises as “insufficient in connection with the expected changes in demand” reached 33%. The Russian industry has never known such a shortage of personnel before. The previous records, logical for periods of economic warm-up in early 2008 and 2022, were broken by a combination of partial mobilization and record low unemployment.

Positive dynamics of demand with its balance of actual changes improving by 11 p.p. helped to resume enterprises’ November recovery of optimism and almost returned to the September level, which was the best since March 2022. In this situation, November estimates of demand (on the scale “above the norm”, “normal” and “below the norm”) showed a recovery, but not as definitive as the dynamics’ indicators. Whereas the share of normal assessments of demand fell from 66 to 58% in October, in November this figure increased only to 60%. Most likely, the industry was counting on a greater improvement in the dynamics of sales amid the ongoing SMO and the “sanctions war”.

The forecasts of demand after the announcement of partial mobilization demonstrated high stability to all the subsequent events and cemented in the interval of -5...-4 p.p. after they had been within -12...-8 p.p. in April-August. As a reminder, in March 2022 the balance of forecasts fell to -42 p.p., reaching its absolute minimum and breaking the previous record of -38 p.p. registered in September 1998.

The actual output dynamics also demonstrated stability: for the third month in a row the balance was within -1...+2, whereas in March-August this index varied from -7 to +6 p.p. The near-zero values of the September-November balance demonstrated minimal changes in the output of industrial products as compared with the preceding month. However, the worst value of this balance after the beginning of the SMO was not at all the crisis -7 p.p., which is fundamentally different from traditional crisis failures of this index.

The November output plans resulted in reaching the maximum level of optimism in October after three months of growth since the beginning of the SMO, were down by 6 p.p. in November. However, they remained in the positive territory: the intentions to increase output still prevailed in the Russian industry over the plans to reduce it. Such a situation had been registered by surveys since

August, i.e. for the fourth month in a row. The negative balance of output plans in the course of the SMO was evidenced only twice: in March and July.

The shortage of stocks of finished products, which enterprises were able to overcome in August-September 2022 after a two-year deficit, began to increase again in the Russian industry. In October, the balance of estimates of stocks (“above the norm” minus “below the norm”) dropped to -5 p.p., and in November to -7 p.p. This could mean both the enterprises’ lack of confidence in their physical ability to maintain sufficient production volumes in the following months and their unwillingness to replenish stocks of finished products in the context of a prolonged, though shallow, crisis.

Enterprises’ price forecasts remained “in the positive territory” in November. The industry reported its desire to increase prices since September. However, these plans failed to materialize: for the sixth month in a row, enterprises reported a reduction in their prices. For the first time such a situation (an excess in the share of answers “reduced” over share of answers “grew”) in 2022 was registered in June (-7 p.p.), in July and August this excess reached its maximum (-13 p.p.), in November the balance rose to -1 p.p. it should be reminded that in April 2022 the indicator reached a multi-year maximum of +51 p.p. Such an intensive growth in prices as registered in April, has never been recorded since October 1995.

Partial mobilization resulted in a slowdown in the growth of number of employees at Russian industrial enterprises, however it was not an absolute reduction in the number of those employed in the industry. The balance of actual changes in the number of employees after the record +9 p.p. in September dropped in October to +3 and increased in November to +6 p.p.

Thus, the industry was able to continue hiring after the “withdrawal” of 318,000 men from the national economy. The record shortage of personnel, which the October survey registered, and the degradation of the system of vocational secondary education forced the domestic industry to plan intensive recruitment of workers regardless of demand forecasts and output plans. In September-November 2022, the balance of hiring plans showed surprisingly stable and high optimism.

Our monitoring of formal and informal reasons for layoffs at industrial enterprises launched in 2012, showed in November 2022 logical sharp growth of the one – once formal – reason for layoffs. The share of enterprises that lose employees “for formal reasons (conscriptio, trial, death)” rose from the usual 38% in the past to 60%, and came out on top.

Reference to voluntary retirement of pensioners in 2022, although it increased from 48% to 53% of references, was not a record high for the entire monitoring period of 2012–2022. This year this reason switched to the 2nd place. The chronic shortage of qualified workers has for two years now forced the management of enterprises to retain pensioners and even more prevent their layoff when reaching retirement age. Although in 2013 this was practiced by 10% of enterprises. Only 25% of enterprises cite low wages as a reason for layoffs in 2022, being a historic low, and perhaps it indicates that the washout of personnel from industry, those who can find more attractive jobs, has gradually subsided.

December did not bring any fundamental changes in the dynamics of demand for Russian industrial products. The balance of actual changes in sales grew by 3 p.p. and fully recovered the October losses of the index, which occurred, most likely, due to the September partial mobilization. However, this indicator was never able to demonstrate in 2022 either the usual crisis failure or the traditional recovery path observed in the previous crises.

The output in September-December showed a near-zero dynamics, almost unchanged as compared with the previous month. This situation suggests that the industry resisted the pressure of sanctions. The output plans able to quickly get rid of the March pessimism, were quite optimistic for almost all the next months, but failed to demonstrate any growth to the pre-crisis levels in 2022.

Hoping to revive demand, Russian industry once again decided to use the price factor in December, and enterprises reported a renewed decline in selling prices. After almost a complete rejection of price cuts in November, which was evidenced by a balance of -1 p.p., in December this indicator dropped to -12 p.p. It should be noted that the crisis minimum of the balance in 2022 was equal to -13 p.p., while in 2020 the minimum evidenced -8 p.p. The absolute minimum of this indicator (-19 p.p.) was registered in 2009. At the same time, Russian industry has for four months in a row reported an intention to increase its prices - the balance of expected price changes in September-December was in the range of +8...+9 p.p.

Amid record low unemployment, industrial enterprises nevertheless managed to recruit until the end of 2022 and reduce the record shortage of personnel registered by the October (2022) survey. Hence, the plans for hiring employees after positive trends in September were steadily gaining optimism during all the following months and in December, they already exceeded the similar plans for 2010 and H1 2021. It should be noted that the record optimism of this indicator for the whole period of the monitoring was registered in January 2022.

### 3.4. Transportation complex<sup>1</sup>

#### 3.4.1. New challenges and new tasks

The transportation complex is a key branch of the Russian economy, its most important connecting element. The development of traffic infrastructure is one of the main factors of economic growth and an important tool for overcoming the economic crisis. New economic environment has highlighted the need to ensure the stable operation of transport and logistics. Priority areas for the transportation complex in 2022 are adaptation to changes in the economy and overcoming of the sanctions challenges, promotion of import substitution, technological independence and restorative growth of the transportation sector. The key objectives of the transportation sector are always to support the connectivity of the country's territory and increase the population mobility.<sup>2</sup>

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2 Mikhail Mishustin participated in the 16th International Forum "Transport of Russia" // RF Government. URL: <http://government.ru/news/47042/>

In 2022, the transportation industry faced unprecedented sanctions challenges affecting all modes of transport, especially their international activities. The restrictions on the full operation of transport in 2022 were not only directly related to the transportation industry, such as reciprocal bans on cargo transportation within countries and entry into seaports, the closure of airspace, but also foreign trade sanctions, which led to the termination of exports to EU countries, a decrease in imports of machinery, equipment and components to Russia. As a result, established supply chains have been disrupted, and the main foreign trade flows of goods have been reoriented from European markets to the Middle East and Asia. According to first estimates, the total losses of the transportation industry in Russia due to the decline in exports of transport services will amount to \$5 bn, which, however, does not include the costs associated with the restructuring of supply chains.<sup>1</sup>

Despite the decrease in freight turnover and cargo volume, according to incomplete data available for 2022, the indicators of the volume of total freight services decreased to a lesser extent than in the 2020 pandemic year.<sup>2</sup> This was facilitated by the reorientation of passenger and freight flows, including transit flows, to the eastern direction and the increase in the volume of haulage services within the country. Air traffic accounted for the largest drop in the transportation operations in 2022. In contrast, the total volume of passenger turnover and passenger traffic increased slightly compared with the corresponding period in 2021.

To mitigate the impact of sanctions and their consequences on the transportation industry and maintain the availability of transportation within the country, comprehensive measures have been taken to support air and rail carriers, transport leasing companies, businesses and employees temporarily idle due to the suspension of transportation operations.

In addition to new challenges, the transport industry faces old problems, such as bottlenecks and insufficient infrastructure capacity and throughput, falling rail freight rates, aging public transportation infrastructure, insufficient in-house fleet, and high transportation tariffs.<sup>3</sup> Particular attention is now paid to the implementation of digital solutions in the transportation sector, in particular, the promotion of the transition to domestic software development<sup>4</sup> (for example, domestic automated systems of registration of air traffic<sup>5</sup> and

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1 International consignments will get support // Maritime news of Russia. URL: <http://www.morvesti.ru/analitika/1691/96191/>

2 On the current situation in the Russian economy // Ministry of Economic Development of Russia. December 2021 – January 2022 URL: <https://www.economy.gov.ru/material/file/6211dc39795bea0da2120d1d8df9d646/20220209.pdf>; On the current situation in the Russian economy // Ministry of Economic Development of Russia. October 2022. URL: [https://www.economy.gov.ru/material/file/a9fbc41aeb4681259708168ff7119a78/2022\\_11\\_30.pdf](https://www.economy.gov.ru/material/file/a9fbc41aeb4681259708168ff7119a78/2022_11_30.pdf)

3 Transportation bottlenecks will be liquidated at the expense of the budget // Nezavisimaya Gazeta. URL: [https://www.ng.ru/economics/2022-11-15/4\\_8590\\_problems.html](https://www.ng.ru/economics/2022-11-15/4_8590_problems.html)

4 Chernyshenko D. The transportation industry allocates almost Rb20 bn for the creation and replacement of imported software. URL: <http://government.ru/news/47045/>

5 All domestic airlines have completed the transition to Russian reservation systems // RF Transportation Ministry. URL: <https://mintrans.gov.ru/press-center/news/10467>

software for the aggregation of meteorological data<sup>1</sup>). At present, the projects “Green Digital Passenger Corridor” (movement of passengers between regions by various types of transport without presenting documents and paying in cash) and “Free Flow” (nonstop passage of cars on toll roads equipped with fare recording devices) are being implemented. Automated transportation data transmission and exchange systems are also being developed: in 2022, the Agreement on the Use of Navigation Seals in the Territory of the EAEU for Tracking Transportation was ratified.<sup>2</sup> Within the framework of international transportation cooperation, transport corridors, unified transportation operators and settlements in national currencies (multicurrency) are being developed.<sup>3</sup> Unmanned technologies, such as autonomous driving, for example, autonomous navigation,<sup>4</sup> autonomous cargo delivery using unmanned freight vehicles,<sup>5</sup> are being actively implemented. In addition to digitalization, streamlining flows and eliminating bottlenecks by introducing intelligent checkpoints, in particular, electronic queues to reserve travel time<sup>6</sup> (for example, through the Kani – Kurgan checkpoint in the Amur Region) remain relevant.

### 3.4.2. Transportation operations performance in 2022<sup>7</sup>

According to Rosstat, the share of the transportation sector in gross value added (GVA)<sup>8</sup> in 2022 was 5.6% (approximately zero growth against 2021 and a decrease of 0.4 p.p. against 2020). Land and pipeline services account for a major part in the structure of GVA of the transportation sector. Balanced financial result (net of losses) of organizations in the transportation industry excluding small and medium-sized enterprises (SME) in 2022 accounted for Rb1,482.6 bn, which is 1.37 fold above the figure in 2021.<sup>9</sup> The share of profit-making organizations in the industry decreased from 71.4% in 2021 to 69.1% in 2022.

#### ***Freight traffic activity***

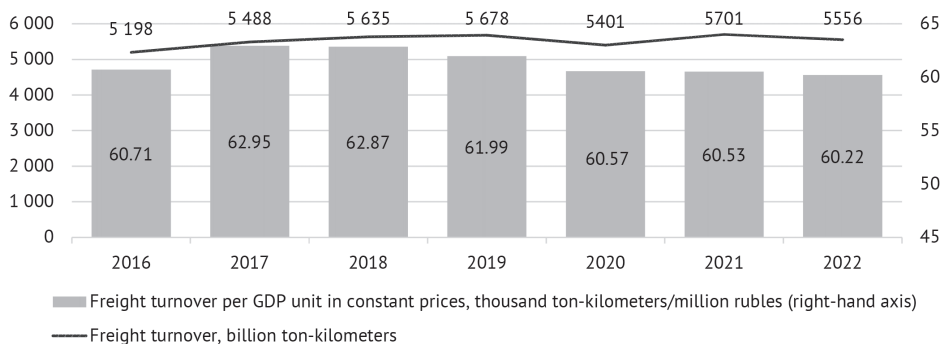
According to estimates of the Ministry of Economic Development of the Russian Federation,<sup>10</sup> the dynamics of freight turnover in 2022 dropped by 2.6% against

- 1 Rossiya airlines announced the launch of Russian meteorological software // TASS. URL: <https://tass.ru/ekonomika/16276305>
- 2 The EAEU will use navigation seals to track shipments // GARANT.RU URL: <https://www.garant.ru/news/1581498/>
- 3 Vgudok. Forum “Russia’s Transportation”. URL: <https://vgudok.com/lenta/o-divnyy-novyy-mir-forum-transport-rossii-perevozki-mezhdu-rf-i-eaes-nastolko-horoshi-chto-o>
- 4 Vitaly Savelyev briefed about new technologies of maritime transport in Russia // Maritime news of Russia. URL <http://www.morvesti.ru/news/1679/99296/>
- 5 By the end of the year, KAMAZ will present an unmanned truck for testing on the M-11 highway // TASS. URL: <https://tass.ru/ekonomika/16363483>
- 6 It won’t hurt for the country // Transportation operations of Russia. URL: <https://transportrussia.ru/razdely/logistika/9368-za-derzhavu-ne-budet-obidno.html>
- 7 Excluding statistical information on the Donetsk People’s Republic (DPR), Luhansk People’s Republic (LPR), Zaporizhia and Kherson regions.
- 8 GDP. Annual data on OKVED 2 in current prices. // Rosstat. URL: <https://rosstat.gov.ru/statistics/accounts>
- 9 Socio-economic situation of Russia. January 2023 // Rosstat. URL: <https://rosstat.gov.ru/storage/mediabank/osn-01-2023.pdf>
- 10 On the current situation in the Russian economy. December 2022 – January 2023. URL: [https://www.economy.gov.ru/material/file/c5eae890fdea17276c86004981bd51f2/2023\\_02\\_08.pdf](https://www.economy.gov.ru/material/file/c5eae890fdea17276c86004981bd51f2/2023_02_08.pdf)



2021. The largest decrease took place in September: -7% vs. the corresponding period of the previous year. The decline in business activity was also observed in the related industries – retail sales (-6.7%) and wholesale trade (-14.5%), industrial output (-0.6%) and manufacturing (-1.3%).

Against the background of positive dynamics of cargo turnover growth in 2022, the freight transport intensity<sup>1</sup> of the economy remains at a relatively lower level than it was before the pandemic, which indicates an increase in the efficiency of transport use in specific terms and added value in the economy due to transportation (*Fig. 4*).



*Fig. 4. The dynamic of freight turnover, 2016–2022*

Sources: Rosstat, own calculations.

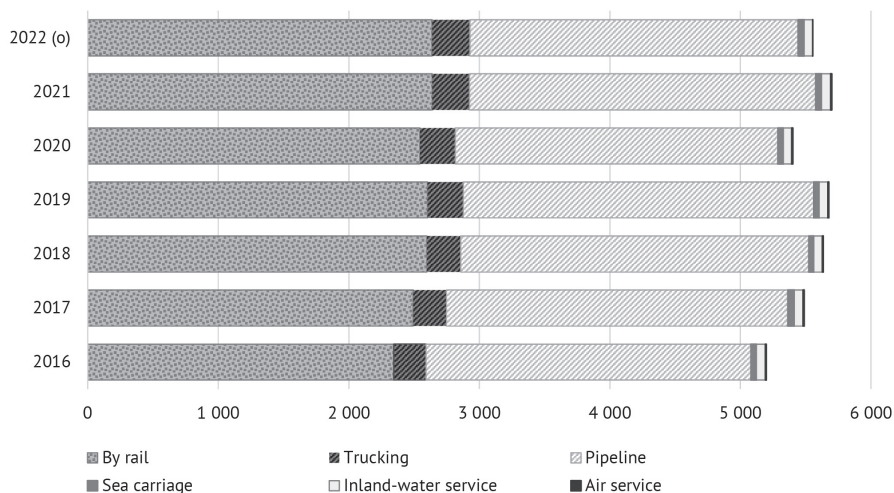
According to Rosstat operational data, in 2022, freight turnover in Russia decreased by 2.6% vs. 2021. A significant decline was shown by air transport (-69%), which is associated with the extension of transportation routes and the ban on direct transportation of a number of goods.<sup>2</sup> Cargo turnover of gas pipeline system (-15%) and inland waterway transport (-8%) declined to a comparatively lesser extent. The most stable situation is observed with regard to freight turnover by rail and petroleum product pipeline system (change within 1% downward). The oil pipeline system (6%), freight transport by road (2%) including commercial cargo transportation (5%), and ocean transport (1.5%) showed positive dynamics of freight turnover. Despite the multidirectional dynamic of the indicators of various types of transport, there were no significant changes in the structure of freight turnover (*Fig. 5*).

According to operational data, in 2022, the volume of freight traffic dropped by almost 3% to the corresponding period of the previous year. The dynamics of the volume of freight traffic by modes of transport largely coincides with the

1 Freight transport intensity, or “overload” of the economy by cargo operations – the value of cargo turnover (sum-of-products of the weight of each batch of transported cargo on the distance of its transportation) per unit of GDP.

2 Get out of a cargo dive // RZHD Partner.ru URL: <https://www.RZhD-partner.ru/aviation/comments/vyyti-iz-gruzovogo-pike/>





**Note.** 2022 is represented by updated information (“0” is close to year).

*Fig. 5. Freight turnover by the type of transportation (billion ton-kilometers), 2016–2022*

Sources: Rosstat, own calculations.

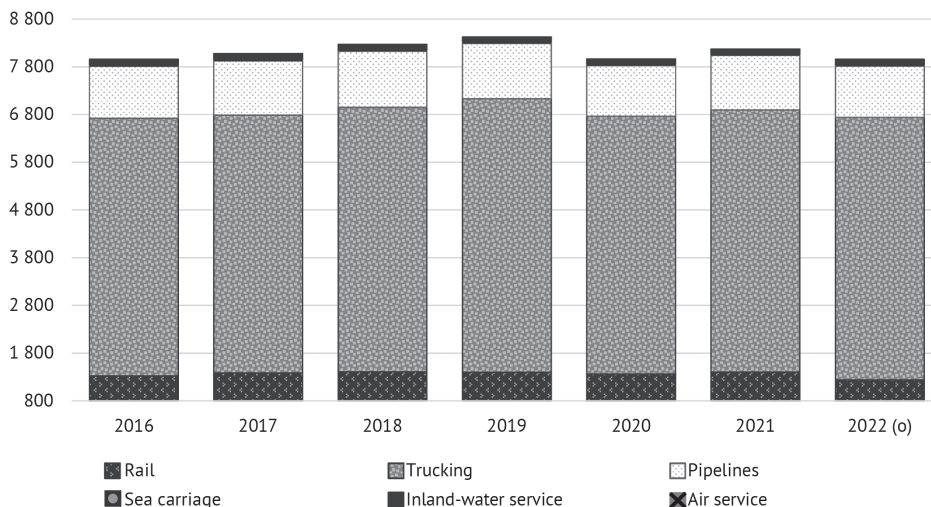
dynamics of freight turnover (*Fig. 6*). Air traffic accounted for the major part of the decrease in freight traffic (-62%), while pipeline transport (-6%) and rail transport (-12%) declined to a lesser extent. The decrease in freight transportation by rail transport was caused by the reduction of loading on the Russian Railways network and the fact that the growth in freight transportation within the country could not offset for the fall in export shipments.<sup>1</sup> Road (0.3%) and inland waterway transport (-0.4%) showed a near zero growth in freight traffic in 2022. In contrast to other modes, the volume of freight transported by sea in 2022 grew by 23% on the previous year. The positive dynamics was due to the reorientation of cargo from northwestern ports to far eastern ports and an increase in shipments to Asia-Pacific countries by maritime transport,<sup>2</sup> an increase in cargo shipments along the Northern Sea Route.<sup>3</sup>

In 2022, the cost of transportation and transit services in a number of directions went up and the share of logistics costs in the cost of goods increased. Also, in order to reduce the funding gap in the transportation sector, freight tariffs were indexed, in particular, by rail transport (twice in 2022: by 7.7% – since the

1 Reduction in loading on the network of Russian Railways by the end of 2022 is expected up to 4% – IPEM // Portnews. URL: <https://portnews.ru/news/339786/>

2 Russian seaports are adapting to the current environment // Maritime news of Russia. URL: <http://www.morvesti.ru/analitika/1691/99515/>

3 In 2022, the volume of traffic along the Northern Sea Route 2022 exceeded the target set in the national project // Rossyiskaya Gazeta. URL: <https://rg.ru/2022/12/15/obem-perevozok-po-sevmorputi-v-2022-godu-prevysil-celevoj-pokazatel-zalozhennyj-v-nacproekte.html>



**Note.** 2022 – updated information (“0” close to year).

*Fig. 6. Freight traffic pattern by the type of transportation (million tons), 2016–2022*

Sources: Rosstat, own calculations.

beginning of the year, by 11% – in June).<sup>1</sup> As a consequence, tariffs on freight transportation in the industry as a whole rose by 28% (*Fig. 7*), which is much higher than the average rate of growth in prices for all goods and services (12% in December 2022 against December 2021<sup>2</sup>).

In 2023, it is planned to carry out the next indexation of tariffs by 8%<sup>3</sup> (tariffs of JSC “Russian Railways” – by 10%<sup>4</sup>). On January 1, 2023, Rosneft tariffs for oil transportation services will be increased by 5.99%.<sup>5</sup> Further growth of tariffs for freight transportation will increase the financial burden on shippers, which may adversely affect the loading volumes dynamic.<sup>6</sup>

1 Tariffs for cargo transportation by rail may increase by 11% from June 1 // *Vedomosti*. URL: <https://www.vedomosti.ru/business/articles/2022/05/27/924029-gruzovie-perevozki-virasti>

2 Rosstat. URL: <https://rosstat.gov.ru/statistics/price> (дата обращения: 10.12.2022); ЕМИСС. URL: <https://www.fedstat.ru/indicator/31074>

3 The Government of the Russian Federation approved the indexation of freight railway tariffs for 2023. // *Trans.ru*. URL: <https://trans.ru/news/pravitelstvo-rf-utverdilo-indeksatsiyu-gruzovih-zheleznodorozhnyh-tarifov-na-2023-god>

4 JSC RZG tariffs will be up by 10% // *Kommersant*. URL: <https://www.kommersant.ru/doc/5651246>

5 Transneft’s tariffs for pumping oil in 2023 will increase by 5.99% // *Interfax*. URL: <https://www.interfax.ru/business/876015>

6 Indexation of tariffs for freight transportation by 8% from 2023 adds anxiety and financial burden to the market // *RZD Partner.ru*. URL: <https://www.RZhd-partner.ru/zhd-transport/news/indeksatsiya-tarifov-na-gruzoperevozki-na-8-s-2023-goda-dobavlyaet-trevogi-i-finansovoy-nagruzki-na->

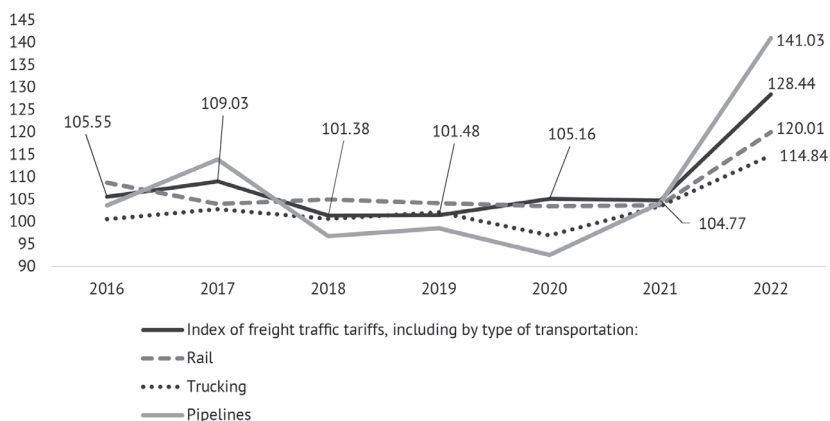


Fig. 7. Dynamics of freight tariffs index (aggregate and by the type of transportation) December against December of the previous year, %

Sources: Unified Interdepartmental Statistical Information System, own calculations.

### Passenger traffic

In 2022, the passenger traffic (excluding tram, trolleybus and metro traffic) declined by 2% compared to 2021. Population transport mobility within Russia dropped slightly: 3,024 million passengers-km/million people in 2022 compared to 3,080 million passengers-km/million people in 2021 (Fig. 8). The dynamics of passenger turnover is differently directed by types of transport: increase in passenger turnover by rail (19%) and inland waterway (32%) transport, reduction – by bus (-13%), air (-6%) and sea (-21%).

According to the latest available data of Rosaviatsiya,<sup>1</sup> in January-February 2022, the passenger traffic on domestic and international routes was 1.5-fold higher (on international routes – three times higher) than during the same period in 2021, which is even higher than the rate of recovery growth after the pandemic (in 2021 the increase was 59%).

The increase in passenger traffic by water transport is mainly due to the resumption of cruise navigation after the lifting of coronavirus restrictions in Moscow<sup>2</sup> and St. Petersburg.<sup>3</sup>

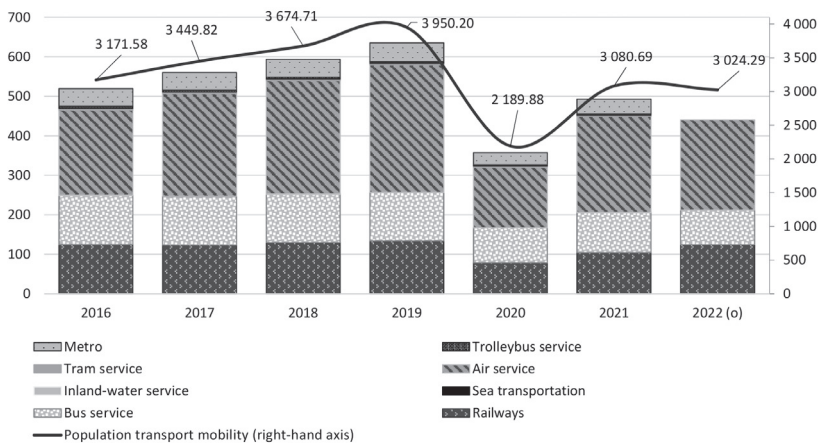
There were no significant changes in the structure of passenger traffic, but there was an increase in the share of rail transport and a decrease in the share of bus transport.

According to the 2022 results, the volume of passenger traffic increased by 3.5% against 2021 mainly due to the growth in transportation by rail (8%), bus (3%) transport. In contrast, the volume of passenger traffic by air (-15%) and sea

1 Rosaviatsiya. URL: <https://favt.gov.ru/deyatelnost-vozdushnye-perevozki-stat-pokazately/>

2 Navigation-2022 in the Moscow basin shows a significant increase in shipments by water // Rosmorrechflot. URL: <https://morflot.gov.ru/news/lenta/n6311.html>

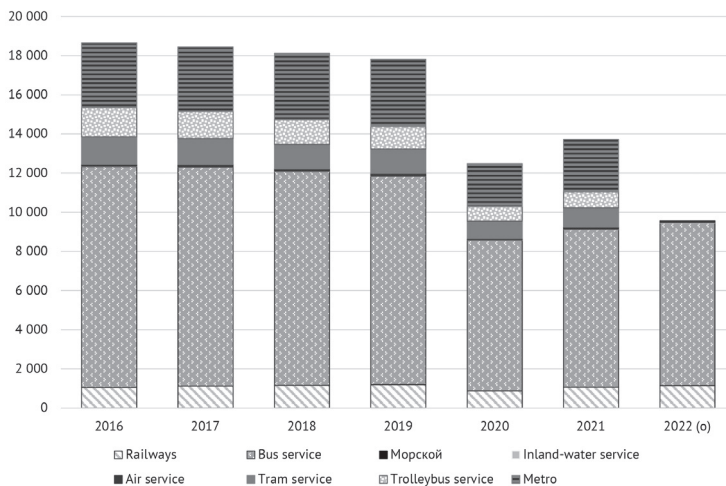
3 Passenger traffic of water transport in St. Petersburg during navigation in 2022 increased by 31% // Maritime news of Russia. URL: <http://www.morvesti.ru/news/1679/99332/>



**Note.** Transport mobility of the population is a correlation between passenger traffic without tram, trolleybus and metro traffic taken into account and the average annual number of the population (million passenger kilometers/million persons); the year 2021 is represented by updated information without tram, trolleybus and metro traffic taken into account.

*Fig. 8.* Passenger traffic by type of transportation (billion passenger kilometers), 2016–2022

Sources: Rosstat, own calculations.



**Note.** 2022 is represented by updated information without tram, trolleybus and metro traffic taken into account.

*Fig. 9.* Passenger traffic pattern by the type of transportation (million passengers), 2016–2022

Sources: Rosstat, own calculations.

(-32%) declined notably. Decrease is also observed in passenger transportation by inland waterway transport (-0.3%).

The structure of transportation has not undergone significant changes, the shares of all modes of transport are relatively stable (*Fig. 9*).

### 3.4.3. Transportation dynamic, the state of transport infrastructure and rolling stock

#### ***Railway service***

In 2022, the number of countries imposed financial and material sanctions against Russian Railways, including an asset freeze, a ban on transactions with securities<sup>1</sup> and transactions with the company, the seizure and expropriation of freight cars<sup>2</sup> and a ban on the export of locomotives. Financial sanctions prevent the company from borrowing on international markets and material sanctions prevent the modernization and maintenance of rolling stock (for example, trains Strizh – Talgo 9, Sapsan – Siemens Velaro and Lastochka – Siemens Desiro). Because of the ban on deals with Siemens, which supplies Sapsan trains to Russia, the construction of high-speed lines can be suspended.<sup>3</sup>

Moreover, the sanctions affected rail transport between Russian regions: in June, a short-term ban was imposed on the transit of sanctioned cargo by rail and road through Lithuania to Kaliningrad. At the moment, there are still restrictions on transit transport by refrigerated trucks.<sup>4</sup>

As a consequence of multiple restrictive measures, over 10 months of 2022 the volume of loading on the railroad decreased for almost all categories of cargo, except for building materials (+5%): coal (-5.7%), iron and manganese ore (-3.6%), ferrous metals (-1.6%), chemical and mineral fertilizers (-6.2%), timber (-24%), grain (-8.6%), etc. At the yearend results, general decline in loading comes to 5%. According to forecasts of the Russian Railways, the loading on the railway network in 2023 may fall by 1.2% compared to the previous year.<sup>5</sup> Analysts of the Institute of Natural Monopolies Research assume a deeper decline – about 3–4% with the main losses in the loading of coal (-8.3%), metals (-2.4%), ore (-0.1%).<sup>6</sup>

Changes took place not only in the structure of transportation, but also in its direction. Cargo flows were reoriented from the west in three directions: to the east, in the direction of the ports of the Azov-Black Sea basin and along

1 Sanctions against Russia and Russian counter sanctions // Russian-German Chamber of Commerce. URL: <https://rusland.ahk.de/ru/obzor/obzor-sankcii>

2 Finland and Ukraine seized RZHD freight and passenger cars worth of Rb32 bn // Vgudok. URL: <https://vgudok.com/lenta/finlyandiya-i-ukraina-lishili-set-rzhd-vagonov-na-32-milliarda-zheleznodorozhnye-operatoru>

3 Will Sapsan stop in Russia because of sanctions? // RZHD Partner.ru URL: <https://www.RZhd-partner.ru/zhd-transport/comments/ostanovitsya-li-dvizhenie-sapsanov-v-rf-iz-za-sanktsiy/>

4 Lithuania imposed a ban on the transit of refrigerators by rail to the Kaliningrad region // Interfax. URL: <https://www.interfax-russia.ru/northwest/main/litva-vvela-zapret-na-tranzit-po-zh-d-refrizheratorov-v-kaliningradskuyu-oblast>

5 Raw materials will leave the wagons // Kommersant. URL: <https://www.kommersant.ru/doc/5707280>

6 Raw materials will leave the wagons // Kommersant. URL: <https://www.kommersant.ru/doc/5707280>

the international transport corridor “North-South”.<sup>1</sup> The regions of Eastern Siberia and the Far East are promising for the development of new supply chains. In 2022, more than 390 Russian enterprises shipped their products by rail for the first time in the eastern direction, including for export.<sup>2</sup> Moreover, the rail passenger transportation directions have undergone changes: the volume of passenger traffic to southern destinations, in particular to Crimea, has increased by 35%.<sup>3</sup>

In favor of developing the eastern direction, the construction of the Northern Latitudinal Railway, a railroad in the Yamal-Nenets Autonomous District, has been suspended. The development of the Murmansk rail hub and the construction of infrastructure at the Eastern range remain priorities.<sup>4</sup> In 2022, new railway infrastructure facilities were opened and existing facilities were modified. In particular, regular shipments began at the new Nizhneleninskoye – Tuntzyan rail border crossing in the Jewish Autonomous Region. Export traffic through the Makhhalino – Hunchun border crossing point in Primorsky Krai in September 2022 increased by 60% after the transition to a 24-hour operation mode.<sup>5</sup>

However, the Far East still has areas with limited traffic capacity and bottlenecks in transportation infrastructure,<sup>6</sup> which hampers export opportunities and the quick reorientation of freight flows to promising destinations. Due to congestion of railway wagons and delays in railroad deliveries by 20% of the base time, there was a risk of production stoppages, in particular of blast furnace.<sup>7</sup>

### **Road transportation**

Despite the sanctions challenges faced by the road transportation sector (the ban on transportation through the EU, including transit, partial or complete cessation of import of spare parts and components), the volume of road transportation, which accounts for up to 69% of all freight traffic, did not drop in 2022. With the growth of freight transportation by road in 10 months of 2022 by 0.45% over the same period of the previous year, freight turnover increased by 1.87%, which indicates the lengthening of road transport routes and supply chains. As support measures for freight carriers, a partial abolition of weight and dimensions control was introduced and a decision was made not to raise the Platon system tariffs.

1 The “Transport of Russia” forum included a plenary discussion on “International Transport Cooperation-2022. New directions, trends, results”. // RF Ministry of Transportation. URL: <https://mintrans.gov.ru/transport-news/10511>

2 Dmitry Chernenok: Wagons to the East: How the railway responds to sanctions // RBC. URL: <https://www.rbc.ru/opinions/business/01/06/2022/62977ebe9a7947485528b403>

3 “Transport of Russia”: success, luck, optimism. The realists have not been invited to the opening of the transport forum in Moscow // Vgudok. URL: <https://vgudok.com/lenta/transport-rossii-uspeh-udacha-optimizm-na-otkrytie-transportnogo-foruma-v-moskve-realistov-ne>

4 “Transport of Russia”: success, luck, optimism. The realists have not been invited to the opening of the transport forum in Moscow // Vgudok. URL: <https://vgudok.com/lenta/transport-rossii-uspeh-udacha-optimizm-na-otkrytie-transportnogo-foruma-v-moskve-realistov-ne>

5 Coordinate activities. Russian Railways, together with partners, eliminate the negative effects of sanctions // Vgudok. URL: <https://gudok.ru/content/freighttrans/1620213/>

6 How Russia can reorient supplies to the East // Nezavisimaya Gazeta. URL: [https://www.ng.ru/kartblansh/2022-11-10/3\\_8587\\_kb.html](https://www.ng.ru/kartblansh/2022-11-10/3_8587_kb.html)

7 Transportation bottlenecks will be eliminated at the expense of the budget // Nezavisimaya Gazeta. URL: [https://www.ng.ru/economics/2022-11-15/4\\_8590\\_problems.html](https://www.ng.ru/economics/2022-11-15/4_8590_problems.html)



2022 observed the restructuring of established trade and supply chains, in particular, the development of road transportation in the Far East direction, the International Transport Corridor (ITC) “North – South” and in the direction of ports of the Azov-Black Sea basin. Demand for road transportation to Russia from Armenia and Kazakhstan, Turkey, Georgia, Azerbaijan and Uzbekistan surged (+53% in annual terms). In addition, the development of land routes within the country through new regions: the volume of freight transportation by road in the direction of the DNR, LNR and Kherson region surged by 280%.<sup>1</sup>

After the reorientation of traffic flows to new directions and the increase in congestion at existing checkpoints, priority was given to the expansion of checkpoints and the organization of their dynamic operating hours, the introduction of electronic queuing systems, work on bilateral agreements with international partners to optimize documents circulation.<sup>2</sup>

As a consequence of import restrictions, there has been a shortage of components in the domestic automotive market and an increase in prices for auto parts and consumables, which limits the renewal of the car fleet<sup>3</sup> and public transport fleet. In 84 major cities, 190 bus routes and 10 trolleybus routes were cut during the year.<sup>4</sup> The decline in automobile production in Russia occurred in almost all categories. As a measure to support the domestic car market, the programs of preferential car loans for owners of old cars were extended.<sup>5</sup>

### ***Air service***

In 2022, the airline industry was affected by the largest number of sanctions restrictions: termination of aircraft maintenance and leasing, arrest of aircraft abroad, a ban on the import of components and spare parts, closure of the airspace of the EU, the USA, Canada and other countries for Russian airlines. In addition, the airworthiness of Russian airlines was downgraded as a result of a safety audit by the International Civil Aviation Organization (ICAO)<sup>6</sup> due to the dual registration of the aircraft in operation. For the same reason, Russian aircraft re-registered in Russia have been banned from flying in Turkish airspace<sup>7</sup> since November 1, 2022.

- 1 Road freight traffic returned to growth // Kommersant. URL: <https://www.kommersant.ru/doc/5459439>
- 2 Border crossing points are a priority // Transportation of Russia. URL: <https://transportrussia.ru/razdely/avtomobilnyj-transport/9497-punkty-propuska-v-prioritete.html>; Twelve additional vehicle lanes were opened at the Upper Lars border crossing point on the Russian-Georgian border // Trans.ru. URL: <https://trans.ru/news/v-punkte-propuska-verhnii-lars-na-granitse-rossii-s-gruziei-otkrili-12-dopolnitelnih-polos-dlya-transporta>
- 3 Cargo companies warned of the risk of bankruptcy in the market // RBC. URL: <https://www.rbc.ru/business/06/06/2022/629a1f419a794737332869a8>
- 4 Russian cities have cut 200 routes of public transport // RBC. URL: <https://www.rbc.ru/business/14/11/2022/636e73949a79471f6fdbfafa>
- 5 The Russian Federation has extended the program of preferential car loans for 2023 // Moskwa24. URL: <https://www.m24.ru/news/transport/22112022/523835>
- 6 Safety Audit Results: USOAP interactive viewer // ICAO. URL: <https://www.icao.int/safety/Pages/USOAP-Results.aspx>
- 7 Turkey banned the flights of Russian planes with double registration // RBC. URL: <https://www.rbc.ru/business/08/11/2022/636925de9a7947f6ad5f00b9>

In addition to all the sanctions challenges, 11 airports in southern Russia were closed for flights during most of 2022 for security reasons.<sup>1</sup>

The sector faced challenges related to the loss of the number of aircraft in the fleet, the work stoppage of professional staff, the deterioration of the financial condition of airlines, and the decline in airport revenues. As a consequence, the volume of operations declined, predominantly on international routes: only 33% of cargo and 94% of passenger traffic was handled against January-October 2021.

In order to minimize losses, the domestic air transport market was reoriented to the eastern direction, in particular to the delivery of cargo from China and countries of South-East Asia.<sup>2</sup> Measures to stabilize the situation in the industry also included keeping airfares at last year's level<sup>3</sup> and increasing the number of domestic flights. Thus, the expansion of passenger traffic within the country stimulates not only the emergence of new hubs (for example, Sochi and Krasnoyarsk<sup>4</sup>), but also the development of local aviation, including in the Far East.<sup>5</sup>

In order to preserve the aircraft and use them for domestic flights, foreign leased aircraft were re-registered and reinsured and Russian certificates of airworthiness were issued. Due to limitations of import supplies and shortage of spare parts, the airliners were disassembled for spare parts to be used for repair of other aircraft. At the end of October all Russian airlines switched to domestic reservation systems – Leonardo and TAIS.<sup>6</sup>

In order to compensate airlines and airports for operating expenses due to the extension of the flight restrictions, budget funds were allocated to preserve the operating activities of airlines, airport infrastructure and qualified personnel. In cities with suspended air service, additional services of ground transport, in particular intercity buses and trains, were launched to ensure uninterrupted delivery of goods and cargo and to preserve the transport mobility of the population.<sup>7</sup>

The main challenges for the industry remain the lack of prompt replacement of foreign aircraft with domestic one, as well as the retirement of existing aircraft due to problems with maintenance and the supply of spare parts. From April 2022 to January 2023 the domestic airlines' aircraft fleet decreased from 1,287<sup>8</sup> to

1 The head of Rosaviatsiya asked the industry what is lacking // RZhD Partner.ru URL: <https://www.RZhD-partner.ru/aviation/comments/glava-rosaviatsii-sprosil-u-otrasli-chego-ey-ne-khvataet/>

2 Time for transformation: how the airline market will change in 2022 // RBC. URL: <https://ekb.plus.rbc.ru/news/6268cdd97a8aa97357fa6a4d>

3 Rosaviatsiya held a round table discussion on the effectiveness of state support measures during the sanctions // Rosaviatsiya. URL: <https://favt.gov.ru/novosti-novosti/?id=9686>

4 "Russia" is expanding its routes. The airline is actively developing regional networks // Aviaport. URL: <https://www.aviaport.ru/digest/2022/10/14/732829.html>

5 Head of « Aurora » – RBC: «Russians have begun to look more inward // Aviation Explorer. URL: <https://www.aex.ru/fdocs/2/2022/12/6/33203/>

6 The government has clarified the requirements for the domestic airline ticket reservation system // RF Government. URL: <http://government.ru/news/46205/>

7 The government has allocated another almost Rb2.5 billion to compensate operating costs of airports in the south and center of Russia // RF Government. URL: <http://government.ru/news/46261/>

8 The stage of wings. The Ministry of Transport has developed a strategy for the aviation industry until 2030 // Kommersant. URL: <https://www.kommersant.ru/doc/5329222>



1,164.<sup>1</sup> According to the Program of Industry Development until 2030, the number of domestic aircraft to grow from 359 to 1395, foreign – to decline from 738 to 319.<sup>2</sup> More than a thousand domestic aircraft of different capacity will come to replace the imported ones: Sukhoi Superjet New, MS-21-310, Il-114-300 and Tu-214.<sup>3</sup> Massive demand on the part of the airlines will facilitate acceleration of the domestic aircraft industry development. Iran, Turkey and Malaysia could become suppliers of components for domestically assembled aircraft.<sup>4</sup>

### ***Ocean transportation***

Before the sanctions were imposed, ocean transportation accounted for 80% of foreign trade shipments. In 2022, the ban was imposed on calls of ships certified by the Russian Maritime Register of Shipping to ports and locks of the EU countries, leasing of ships by foreign manufacturers, import of radio communication and maritime navigation technologies to Russia, export of coal and crude oil from Russia to EU through seaports. Foreign maritime operators refused to work with Russian cargo and to enter Russian seaports, and the EU customs authorities refused to handle and release Russian container cargoes. Insurance coverage was raised for vessels operating in the Russian direction, and port dues payments have been restricted.

Due to the exit of global container carriers from the Russian market, there was an acute shortage of containers and container ships for sea and rail transport. Due to insufficient container, bulk carrier and tanker fleet, there were difficulties with export of containers from ports to the APR countries, and ports were overloaded (example: the port of Vladivostok, which overload comes to 130–140%). Insufficiency of own marine infrastructure and production facilities in Russia restrains implementation of ship-owners plans regarding fleet renewal and expansion.

In response to the sanctions challenges, foreign trade flows from Russia were redirected to the countries of Asia, the Middle East and Latin America. Since the beginning of 2022, seven new shipping lines with friendly countries, in particular China, have been registered with 13 vessels;<sup>5</sup> however, their small capacity does not allow to fully unload the ports. Cargo flows to Russia from the EU, previously going through the Baltic Sea, are redirected to the ports of the Far East or to Turkey and Iran with subsequent delivery by ferry to the port of Novorossiysk or the port of Kavkaz.<sup>6</sup>

1 Russian airlines plan to increase air traffic to 101 million passengers in 2023 // TASS. URL: <https://tass.ru/ekonomika/16872953>

2 Cannibalism and 500 planes: How the airline industry will live until 2030 // Aviaport. URL: <https://www.aviaport.ru/digest/2022/10/26/733763.html>

3 The EEF-2022 discussed the state and prospects of development of the domestic aircraft industry // Ministry of Transport of the Russian Federation // RF Ministry of Transport. URL: <https://mintrans.gov.ru/press-center/news/10359>

4 Russian civil aviation has good prospects // Ekonomika I Zhizn. URL: <https://www.eg-online.ru/article/460710/>

5 Russian seaports are adapting to the current situation // Maritime news of Russia. URL: <http://www.morvesti.ru/analitika/1691/99515/>

6 Sanctions against logistics // Maritime news of Russia. URL: <http://www.morvesti.ru/analitika/1685/97432/>

Significant reduction in container traffic by sea was in the north-west, namely in the port of St. Petersburg (-35.7% for 8 months of 2022 against the corresponding period of the previous year). In addition, a decline in container turnover was observed in the Azov-Black Sea basin.<sup>1</sup> Due to the redistribution of freight traffic to the ports of the Far East, sea transport freight turnover did not decrease relative to 2021, but even went up by 0.7%.<sup>2</sup>

Dry cargo (coal, grain, timber, ferrous metals, containers) declined by 5% in the structure of sea cargo shipping (for all ports from January to July), but liquid cargo transshipment went up (+4.5%)<sup>3</sup> due to the increase of hydrocarbons deliveries to Asia-Pacific region via the Northern Sea Route.<sup>4</sup>

As support measures for the maritime industry, customs procedures were abolished, certification and reinsurance of ships in Russia were simplified (which is not recognized in a number of countries, including China), the rule on non-discriminatory access of cargoes to railway infrastructure and some sea ports (to redirect cargo traffic from North-Western ports) was suspended.<sup>5</sup> Retaliatory measures have been introduced to prohibit foreign ships from entering Russian ports.

The Portovy LNG terminal was built and commissioned in 2022, and the berths of the Taman Bulk Terminal were reconstructed increasing throughput capacity to 35 million tons per year.<sup>6</sup> The number of ships sailing to Kaliningrad moved up from 3 to 18.<sup>7</sup> The key priority is the development of the Northern Sea Route, which in 2022 transported more than 25 million tons of cargo (the goal for 2024 is 80 million tons).

### ***Inland water service***

In 2022, the inland water transportation sector faced an increase in the price of shipbuilding steel, which exceeds its cost twofold,<sup>8</sup> as well as a rise in the cost and timing of ship construction and repair. In addition, this year, due to the low water content of rivers and geopolitical factors, the terms and geography of navigation were adjusted and shifted, in particular, in the southern part of inland waterways, in the Lena and Yenisei basins.

1 Russian ports are ready to adjust to new economic environment // Analytical Center for the Government of the Russian Federation. URL: <https://ac.gov.ru/news/page/rossijskie-porty-gotovy-podstroitsa-pod-novye-ekonomiceskie-uslovia-27237>

2 Russian seaports are adapting to the current situation // Maritime news of Russia. URL: <http://www.morvesti.ru/analitika/1691/99515/>

3 Ibid.

4 Cargo turnover of the Arctic basin seaports increased by 3.3% // Neftegaz.ru. URL: <https://neftegaz.ru/news/transport-and-storage/746804-gruzooborot-morskikh-portov-arkticheskogo-basseyna-vyros-na-3-3>

5 Western sanctions are changing the logistics of transportation in Russia // Maritime news of Russia. URL: <http://www.morvesti.ru/analitika/1691/95280/>

6 The piers have been reconstructed in Taman // SeaNews. URL: <https://seanews.ru/2022/08/12/ru-v-tamani-rekonstruirovali-prichaly/>

7 Exhibition of water management achievements // Vgudok. URL: <https://vgudok.com/lenta/vystavka-dostizheniy-vodnogo-hozyaystva-na-transportnoy-nedele-rasskazali-o-tom-kak-morskie-i>

8 Actual prices for shipbuilding steel in Russia exceeded the cost by 2-3 times // Portnews. URL: <https://portnews.ru/news/327099/>

Despite the restrictions, there has been an increase in the share of inland water transportation regarding sipping. In addition, the competition between inland waterway and railroad transportation<sup>1</sup> has been overshadowed by the sufficiency of cargoes for both types of transportation. The dynamics of shipping volumes in inland waterway basins was multidirectional: growth in the Yenisei basin (+20% by 2021), a drop in the Amur basin and staying at the previous year's level in the Volga basin.

There were changes in the structure of shipping by inland water transportation. Shipping by inland waterway in the Amur basin was redirected to construction cargo and coal due to the ban on the export of untreated fine wood.<sup>2</sup> In the Volga basin there was an increase in transportation of dry cargo – crushed stone and grain, which is due to the demand for crushed stone owing to the construction of the M-12 highway, as well as the high grain yield. On the contrary, Volga Shipping Company, the largest shipping company, is exiting the oil tanker segment, selling tankers due to unprofitability of crude oil transportation and reorienting the liquid fleet towards transportation of food cargoes, molasses and liquid chemicals.<sup>3</sup>

This year, as part of the federal project “Inland Waterways” of the Comprehensive Plan of Modernization and Expansion of Mainline Infrastructure, a new buoy tender “Mikhail Gromov” for the maintenance of ship navigation equipment on inland waterways in the Kama basin has been commissioned.<sup>4</sup>

Construction and commissioning of new vessels is central for the inland water transportation sector. More than 45–50% of the river fleet has exceeded its service life, which indicates the urgent need for fleet renewal and mass retirement of obsolete vessels. Due to the long payback period of investment projects, vessel construction depends almost entirely on state support.<sup>5</sup>

### **Pipelines**

As a result of the reciprocal sanctions policy (ban on gas transit,<sup>6</sup> transition to payment in rubles,<sup>7</sup> establishing a price cap<sup>8</sup>) and reduction of Russian energy

1 Exhibition of water management achievements // Vgudok. URL: <https://vgudok.com/lenta/vystavka-dostizheniy-vodnogo-hozyaystva-na-transportnoy-nedele-rasskazali-o-tom-kak-morskoe-i>

2 Results of river navigation – 2022: stability against the background of sanctions turbulence // RZHD Partner.ru. URL: <https://www.RZHD-partner.ru/wate-transport/reviews/itogi-rechnoy-navigatsii-2022-stabilnost-na-fone-sanktsionnoy-turbulentnosti/>

3 The Volga Shipping Company will sell eight oil tankers in October 2022 // PortNews. URL: <https://portnews.ru/news/336378/>

4 A new buoy tender “Mikhail Gromov” arrived in the Kama basin // PortNews. URL: <https://portnews.ru/news/337650/>

5 Results of river navigation – 2022: stability against the background of sanctions turbulence // RZHD Partner.ru URL: <https://www.RZHD-partner.ru/wate-transport/reviews/itogi-rechnoy-navigatsii-2022-stabilnost-na-fone-sanktsionnoy-turbulentnosti/>

6 Gazprom explained what happened to the flow of Russian gas through Poland // Gazeta.ru URL: <https://www.gazeta.ru/business/2022/05/12/14846882.shtml>

7 Countries that refuse to pay for gas in rubles have already been cut off from Russian supplies // Interfax. URL: <https://www.interfax.ru/russia/845534>

8 The EU briefed what prices are being discussed for a price cap on gas // RBC. URL: <https://www.rbc.ru/politics/19/12/2022/63a02a639a79471cccd336d7>

consumption in European countries,<sup>1</sup> restrictions on energy exports from Russia directly affected the volume of pipeline transport in 2022. According to the results of ten months, the pipeline transportation dropped by 6% against the corresponding period of 2021 (cargo turnover – by 4%).

The main decrease in pipeline transportation was due to a decline in gas production and pipeline transportation: gas production fell by 12%,<sup>2</sup> while cargo transportation and freight turnover declined by 16% and 14%, respectively. Pipeline transportation infrastructure has been subjected to damage: cumulative fuel losses due to damage to the Nord Stream 1 and Nord Stream 2 pipelines have been estimated at \$2 bn.<sup>3</sup> In contrast, the volume of transport activity by oil pipeline demonstrates a positive trend.

Companies are taking measures to reorient cargo export flows. For example, Rosneft's shipments in 2022 increased by 3% to 86.9 mn tons, of which 52.4 mn tons were supplied to Asian markets, a third higher than the previous year. According to industry experts, the turnaround of cargo flows to the eastern direction will make it possible to avoid a decline in energy production and exports and achieve indicators comparable to those of 2021.<sup>4</sup>

### 3.5. State of agricultural production and food security<sup>5</sup>

In 2022, index of physical volume of agricultural output in agricultural organizations, peasant (private) farms and household farms grew by 10.2% as compared to the previous year. In monetary terms growth was 14.8% due to rising prices on agricultural products (+4.2%, i.e. much lower as compared to general inflation). Such high growth in physical volume is determined among other things by a lower comparison base – in 2021 index was 99.6% against 2020.

*Fig. 10* shows contribution of main products to the change in volume of agricultural production. Main positive factor of change was increase in the gross harvest of grain crops (+29.9% relative to 2021) that led to an increase in physical volume index by 8.0 p.p. for wide range of products.

In 2022, output of livestock went up, however here an impact on overall dynamics of agricultural production is much less significant than in crop production (+1.1 p.p., vs. 9.6 p.p.). Largest increase was observed in pork (+5.0%) which led to a 0.5 p.p. increase in the index. Beef is the only livestock product with negative dynamic (drop in the production of cattle meat in slaughter weight came to 3.6%).

Increase in grain production in 2022 was mainly on the back of a sharp increase in yields (126.9% vs. 2021), which resulted in a record-high gross harvest

1 The EU countries have decided to reduce gas consumption by 15%. What's important to know // RBC. URL: <https://www.rbc.ru/business/27/07/2022/62dfeca29a7947649a78baef>

2 Gas production in Russia dropped by almost 12% // Vedomosti. URL: <https://www.vedomosti.ru/business/articles/2022/12/05/953639-dobicha-gaza-v-rossii-snzilas>

3 Potential losses from leakage at Nord Streams have been estimated // Vzgliad. URL: <https://vz.ru/news/2022/9/27/1179658.html>

4 ACRA announced the recovery of Russian oil exports amid the embargo // RBC. URL: <https://www.rbc.ru/business/08/12/2022/6390756f9a794733bf81beb9>

5 Authors: *Shagaida N.I.*, Doctor of Economic Sciences, Director of Center for Agro-Food Policy, IAES RANEPa; *Ternovskiy D.S.*, Doctor of Economic Sciences, Leading Researcher at the Center for Agro-Food Policy, IAES RANEPa.

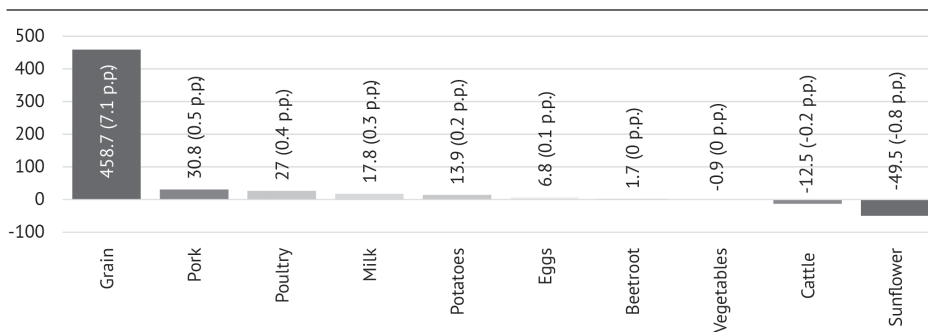


Fig. 10. Contribution of main agricultural products to gross output growth in 2022 (preliminary estimate in 2021 prices, Rb bn)

Source: Own calculations based on Rosstat data.

in country's history. Crop area expansion was negligible at 101.1% relative to 2021 which is within five-year range of crop area fluctuations.

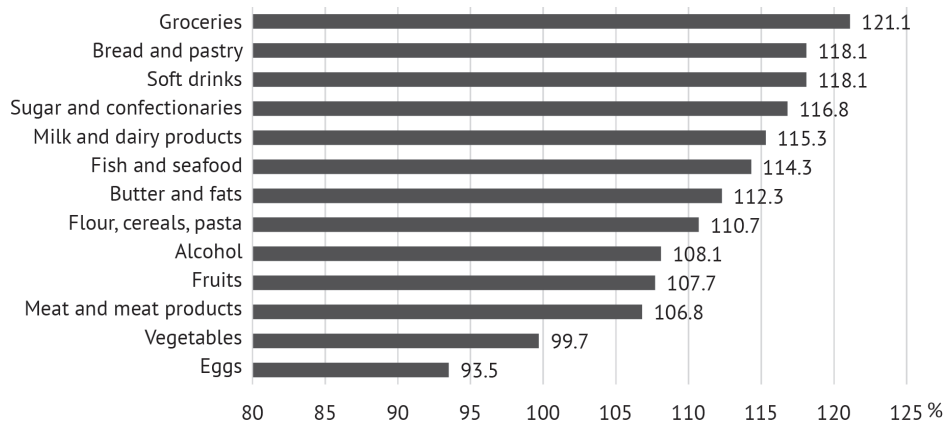
Jump in prices for vegetables in 2021 stimulated an increase in areas sown by agricultural organizations and peasant (private) farms, especially for potatoes (+7.3 and +10.9%, respectively). At the same time, production of vegetables in household farms – main producer of these products, continues to decline (-2.4%) and production of potatoes – slightly increases (+2.0%). Weak dynamics in household farms was compensated by the growth of production of all-farm organizations and peasant farms, which allowed to raise potato production by 4.2% and vegetables production by 3.8%.

Opposed to 2020–2021 when the rise in food prices was mainly owing to higher prices for primary agricultural products or products with a low depth of processing (flour, sunflower oil, potatoes, vegetables) in 2022 rise in prices affected other groups of food products to a greater extent (Fig. 11).

In December 2022 against December 2021, retail prices for basic foodstuffs increased by 11.0%.<sup>1</sup> Main contributors to rising prices were milk and dairy products (2.0 p.p., 18.2% of total increase), meat and meat products (1.8 p.p., 16.4% of total increase) (Fig. 12). It is worth noting that increasing contribution of meat and meat products to growing consumer prices was played by rising prices for sausages and other meat products rather than rising prices for most common types of meat (poultry, pork, beef). Similarly, milk and dairy products drove up consumer prices (by 4-fold) not because of the higher prices for cheese and other products but because of higher price for milk.

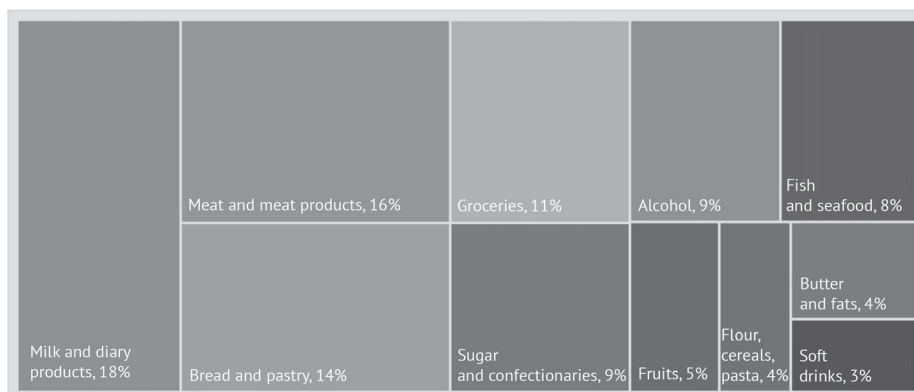
At the end of 2022, real prices (current/nominal prices adjusted for general inflation) for a large part of food products remained above the five-year average (Fig. 13). However, lower prices for meat and alcohol (-3.2% and -11.6%, respectively) led to only a 1.3% increase in the value of food consumed in constant prices, given dietary structure.

1 Excluding catering.



*Fig. 11. Growth rate of consumer prices for certain food groups (December 2022 to December 2021)*

Source: Own calculations based on Rosstat data.



*Fig. 12. Contribution of individual commodity groups to overall growth of food retail prices in 2022*

Source: Authors' calculations based on Rosstat data.

List of products with a significant contribution to the growth rate of real prices shows that these are the products which are highly self-sufficient (*Table 15*). Thus, grain is the most self-sufficient product but prices for flour, cereals and bread, basis for production of which is grain were the largest contributors to growth of consumer food prices. Fruits are the products with the highest level of import dependence while at the same time they do not contribute to the growth of food prices. As for meat, there is a high degree of import-independence and its contribution to increase in prices was not observed. In other words, level of

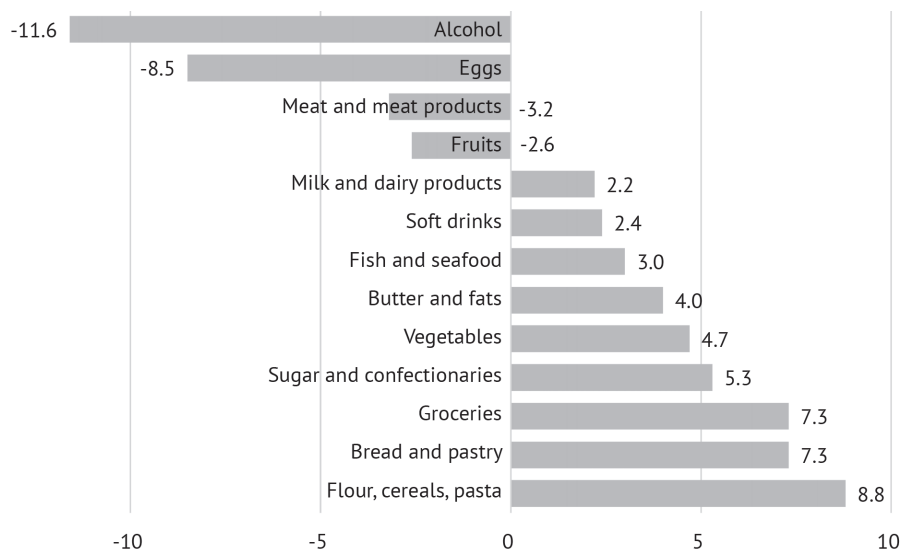


Fig. 13. Growth rate of real prices for individual commodity groups in 2022 to average prices in 2017–2021, %

Source: Own calculations based on Rosstat data.

Table 15

**Share of domestic agricultural and fish products in total consumption, %**

Products	Produced, mn tonnes		Used for personal, industrial purposes, mn tonnes		Ratio of own production to personal and industrial consumption, %		Value according to the "Food Security Doctrine" (criterion of food independence - at least), %
	2020	2021	2020	2021	2020	2021	
Grain	133.4	121.4	79.4	80.8	170	150	95
Sugar	5.8	5.9	5.7	6.0	101	99	90
Vegetable oil	7.5	6.7	4.7	5.1	158	133	90
Meat and meat products	11.2	11.3	11.2	11.4	100	100	85
Milk and dairy products	32.2	32.3	38.3	38.3	84	84	90
Fish and seafood	5.1	5.3	3.1	3.4	163	156	85
Potatoes	19.6	18.3	20.6	19.3	95	95	95
Vegetables and gourds	15.4	15.4	17.4	16.9	89	91	90
Fruits and berries	4.3	4.7	10.2	10.6	43	45	60

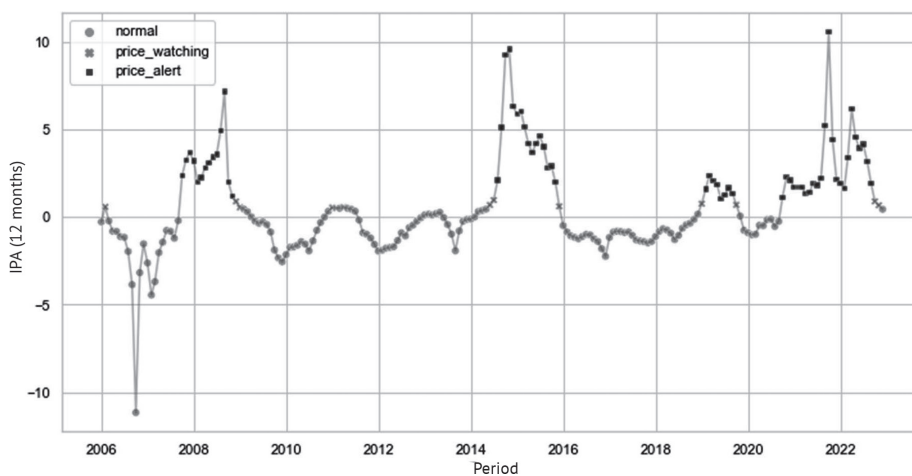
Sources: Rosstat; Food Security Doctrine of the Russian Federation.

self-sufficiency does not guarantee containing increasing prices which directly affects main aspect of food security – economic access to food for the Russian population.

Increase in food prices determined their high volatility. Annual volatility (calculated based on the Food and Agriculture Organization of United Nations (FAO) approach to price warnings<sup>1</sup>) from 2006 to 2022 is shown in *Fig. 14*.

High volatility period of 2021–2022 differs from previous periods of high volatility: a shortened period of normal price volatility before the period of high volatility (price alert), the longest period of high volatility since 2006 and the highest amplitude of volatility. Only in October 2022 did the annual volatility indicator move out of the high zone and into the moderately high zone (price watching) and into the normal zone in December.

Based on available information we can conclude that in terms of food availability and stability of food chains epy situation in Russia was favorable in 2022: a high degree of self-sufficiency (main criterion for the state of food security according to Doctrine of Food Security 2020), country is a net exporter of food. By early 2022, most products became competitive with foreign products as evidenced by coefficient of nominal consumer support (*Table 16*).



*Fig. 14.* Level of annual volatility of food prices in Russia (FAO methodology, Price Anomaly Indicator, units)

Source: Rosstat; own calculations.

1 Price volatility is calculated as the difference in the rate of increase in prices in the year under review and the average for the previous 3 years, divided by the standard deviation of the rate of increase. See: Price volatility and food security. Report of the High-Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security. Rome, 2011. P. 104. URL: <https://www.fao.org/publications/card/en/c/ca7b994d-715a-5f6e-84ee-6879701d75b2/>



Table 16

Nominal consumer support coefficient in Russia

Products	2012	2017	2018	2019	2020	2021
Wheat	0.89	0.95	0.92	0.99	0.94	0.92
Barley	0.82	0.93	0.80	1.00	0.91	0.91
Corn	0.94	0.97	0.98	1.19	0.99	0.86
Oat	0.84	0.83	0.91	0.77	0.78	0.69
Rye	0.94	1.14	0.96	0.98	1.09	0.93
Sunflower	0.74	0.89	0.94	0.92	0.86	0.90
Sugar	1.00	1.31	1.43	1.30	1.23	1.00
Milk	1.17	1.25	1.42	1.05	1.07	1.00
Beef and veal	1.26	1.23	1.18	1.27	1.23	1.05
Pork	1.53	1.30	1.22	1.24	1.28	1.42
Poultry	1.07	1.13	1.07	1.07	1.11	1.02
Eggs	1.00	1.00	1.00	1.00	1.00	1.00
Potatoes	1.00	1.00	1.00	1.00	1.00	1.00
Other products	1.00	1.01	1.01	1.01	1.00	0.98

**Note.** Consumer nominal support coefficient: domestic prices + subsidies to agricultural producers / world prices.

*Source:* Producer and Consumer Support Estimates. OECD Agriculture statistics (database). URL: [https://stats.oecd.org/Index.aspx?DataSetCode=MON2022\\_SINGLE\\_COMMODITY\\_INDICATORS](https://stats.oecd.org/Index.aspx?DataSetCode=MON2022_SINGLE_COMMODITY_INDICATORS)

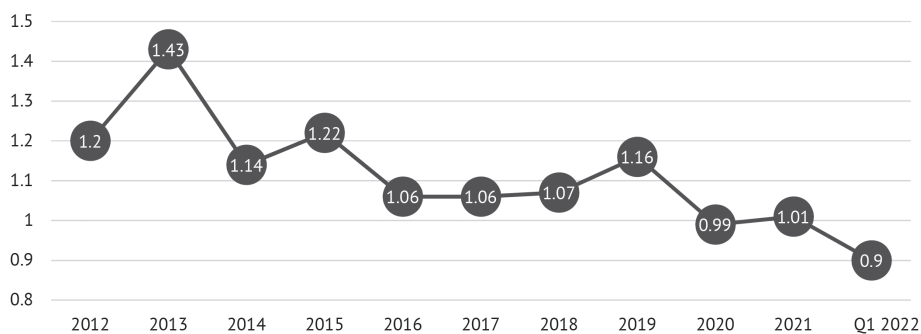


Fig. 15. Share of expenditures on agriculture in total expenditures of the consolidated budget, %

*Sources:* Federal treasury; Rosstat.

Federal policy in the field of agriculture is implemented through state programs. The budget of these programs in 2022 amounted to 451 billion rubles. (Table 17).

Main part of financing was directed to the “State program for development of agriculture and regulation of markets of agricultural products, raw materials and foodstuffs” (83%), main point of which was stimulation of investment activity in

Table 17

**Federal budget expenditures in 2022 for the implementation  
of agrarian policy programs**

Expenditure directions	mn RB	%
<b>State programs, overall</b>	<b>451 444.90</b>	<b>100.0</b>
<i>SP for the development of agriculture and regulation of markets of agricultural products, raw materials and foodstuffs</i>	375 947.50	83.3
FP "Development of branches and technical modernization of the agro-industrial complex"	89 503.20	19.8
FP "Stimulation of investment activity in the agro-industrial complex"	183 181.80	40.6
FP "Development of vegetable and potato growing industries"	0.00	0.0
FP "Export of agro-industrial products"	62 957.40	13.9
KPM "Ensuring activities of the Ministry of Agriculture of the Russian Federation and subordinate organizations"	17 503.10	3.9
KPM "Organization of Veterinary and Phytosanitary Supervision"	12 661.40	2.8
Other	10 140.60	2.2
<i>SP "Integrated Rural Development"</i>	<i>50 136.40</i>	<i>11.1</i>
FP "Development of housing construction in rural areas and improving the level of home improvement"	21 660.90	4.8
FP "Modern Face of Rural Areas".	18 635.60	4.1
Other	9 839.90	2.2
<i>SP "Effective involvement in turnover of agricultural land and development of land reclamation"</i>	<i>25361.00</i>	<i>5.6</i>
SP "Involvement and comprehensive reclamation of agricultural land"	4 927.70	1.1
SP "Export of agro-industrial products"	6 847.10	1.5
VP "Construction, reconstruction and overhaul of land reclamation facilities of state property of Russian Federation"	2 508.10	0.6
KPM "Ensuring effective management of land reclamation complex and organization of rational use of agricultural land"	10 578.10	2.3
Others	500.00	0.1

Source: According to the 2022 consolidated budget schedule

the agro-industrial complex. Additional measures (as compared with financing under general state programs for the whole country) are envisaged under the State Program "Integrated Development of Rural Areas" – which is 11% of the total federal agrarian budget. Despite the fact that Russia has a high degree of self-sufficiency in food, government supports development of export potential. To this end about 6% of federal agrarian budget was allocated for the involvement of unused land in agricultural turnover and for the development of land reclamation.

State support contributes to production of a sufficient volume of products (with the exception of fruit and dairy products for which the self-sufficiency level in 2022 was not reached) and sustainability of food chains. In 2022, the situation in this component of food security is favorable. The situation with possibility of maintaining access to imported resources that also provided the self-sufficiency and sustainability remains unclear. Based on preliminary data, investments in fixed assets of agricultural organizations declined in 2022 if we judge by available

operational data on medium and large business entities (*Table 18*). Meanwhile, in economy the level of investment surged (+7.6%).

*Table 18*

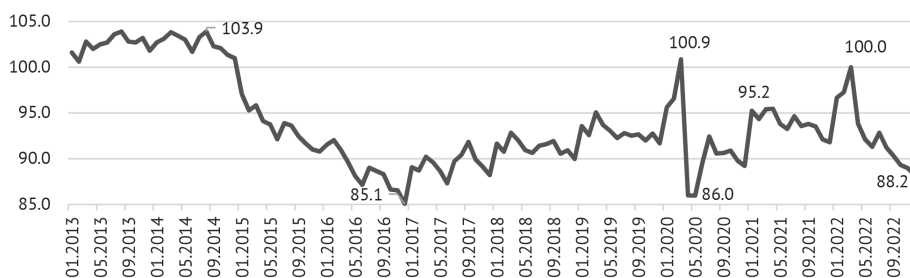
**Index of physical volume of investment in fixed assets in agriculture in the Russian Federation in January-September (without small businesses and volume of investment not observed by direct statistical methods)**

Year	Growth rate relative to previous year, %	In % to total
2021	105.3	3.4
2022	91.8	2.8
<i>For reference: total for all types of economic activity</i>	107.6	100

Source: Rosstat.

In terms of economic affordability of food in 2022, it is unlikely to improve in comparison with 2021 (data on consumption in 2022 will be available only in July-August 2023): income growth is not observed as well as annual food deflation. According to data for 2021, a member of an average household could purchase 94% of the cost of his or her diet (in 2020 it was 96%). About 30% of households steadily spend between 47% and 52% (+1/-1% year-on-year) of their final consumption expenditures on food but cannot go beyond 85% of the rational norm of consumption. The fact that consumption situation has not improved in 2022 is evidenced by dynamics of food retail sales (*Fig. 16*).

Access to food has not changed: the share of sparsely populated villages is not decreasing (where it is economically unprofitable to have stores with a wide range of food products), the share of villages with paved roads changes little (which makes it difficult to travel from sparsely populated villages to stores with a wide variety of products as there is no regular public transportation due to the lack of roads with paved surfaces).



*Fig. 16.* Retail sales of food products relative to corresponding month of 2012 (in 2012 prices), %

Source: Rosstat.

From the position characterizing the use of food, there were no changes in 2022: average diet boasts of an excess consumption of fats and a lack of consumption of proteins and carbohydrates. Difference in quality of diet can be estimated through the cost per calorie of the actual diet: cost in the first income group (most vulnerable families) was 7 kopecks and in the tenth (most well-off) – 13 kopecks.

In conclusion, it is necessary to note the following. In 2022, agriculture demonstrated its resilience during deterioration of macroeconomic situation: 1) in the short term, industry was provided with resources for production of current year's crop even before the imposition of sanctions; 2) agricultural sector is very inertial and can function for a long time, moving from modern and imported resources to those produced in the country with varying compliance to international level; 3) agricultural products and resources for their production are not subject to direct sanctions and should be taken out from the secondary sanctions (but in fact barriers exist); 4) agricultural sector is largely modernized, machinery and process lines can function until their natural wear and tear.

It is difficult to estimate volume of exports, which in recent years has replaced domestic consumption as the main driver of agricultural growth due to lack of official data. According to industry estimates, since November 2022 the volume of grain exports of the current season began to exceed indicators of 2021, which is facilitated by the grain deal (over July-October 2022, 3.5% less wheat was exported than a year earlier but it is expected that in July-October shipments will exceed last year's level by 9%). In August 2022, total backlog of 2021 exports was approaching 30%. Above trend indicates that Russian grain exporters have overcome implicit sanctions restrictions (refusal of certain carriers to do the job, restrictions on entering ports, restrictions on insurance and financing of shipments). Nevertheless, growth rate of grain production is much higher than its exports: according to estimates of the International Grain Council growth of wheat production in Russia is 25 million tons and exports – 8 million tons. With insignificant growth of domestic consumption this situation will lead to actual doubling of stocks at the end of the season – to the highest level ever in Russia which negatively affects situation on the grain market and income of grain producers.

Export prices for Russian wheat are reduced not only in rubles due to strengthening of exchange rate in H2 2022 but also in dollars (in December 2022, a decrease of 6.3% from prices of the year before while ruble strengthened by 10.8%). Domestic wheat prices in 2022 dropped by 20–30% as compared with 2021 depending on variety and region, approaching level of 2019. A less acute but similar situation is typical for sunflower products of which constitute second most important article of Russian agricultural export.

Given the fact that grain producers are numerous and are mostly small businesses (more than 60% are peasant farms and organizations – small businesses) the problem of their financial standing may outgrow the framework of the sector. Prices for their products are falling while prices for resources are rising: in 2021, the overall growth of prices for agricultural products lagged behind growth of prices for resources (for products it was 14% and for resources

for agriculture – 17.8%). This situation is exacerbated by the fact that this level of domestic prices is due not only to export problems, level of external prices but also to export duties which are only partially returned to agricultural sector and distributed primarily to other beneficiaries. It would be advisable to reconsider refund mechanism if export duties are retained: return the entire volume to the agricultural sector and distribute it among producers in proportion to the volume of sold grain.

In general, the problem of food security in the Russian Federation has finally shifted from the need for self-sufficiency to facilitating economic access to food for citizens while support for functioning of the agro-industrial complex moved to helping producers to export products.

### **3.6. Business activity of small and medium-sized enterprises in Russia in the context of sanctions<sup>1</sup>**

2022 demonstrated intensification of sanction pressure on the Russian Federation. Consumer demand contracted against the backdrop of inflation coupled with the rising cost of borrowing, many entrepreneurs faced the risk of bankruptcy. Under pressure from unfriendly countries, many large foreign companies left Russia, and established supply chains were severed. The release of jobs, caused by the closure of a number of industries, created the preconditions for the development of forced entrepreneurship, mainly for people who lost their jobs. Small and medium-sized enterprises suffered both from the imposed restrictions and the ensuing decline in consumer demand, and therefore became one of the objects of the anti-crisis state policy.

In the meantime, the prevailing conditions opened up opportunities for the development of entrepreneurship in the form of vacated market niches, reduced competition in a number of commodity positions, increased demand for domestic high-tech goods and services, as well as for the services of small businesses when participating in parallel imports. Small and medium business plays a significant role in the reduction of sanction pressure and in import substitution due to greater flexibility and adaptability. In addition, small and medium-sized enterprises (SMEs) are less interesting to external regulators because of their scale. According to the Spring 2022 surveys,<sup>2</sup> SMEs are pessimistic. SMEs were pessimistic about their prospects, but by the end of 2022, it became clear that they had partially adapted to the new conditions: indicators such as the number of SMEs and employment there increased, although we cannot yet say that they returned to the pre-crisis values of 2019.

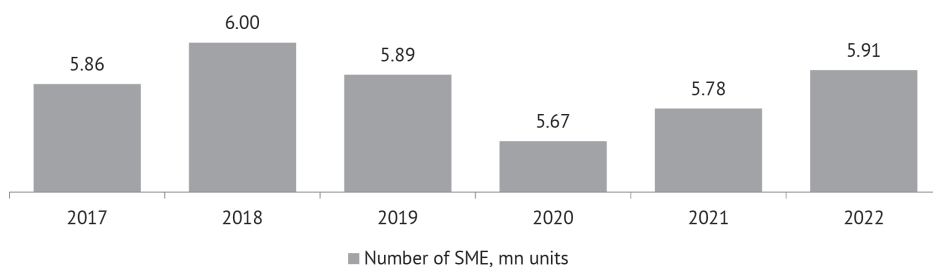
1 Authors: *Barinova V.A.*, Candidate of Economic Sciences, Head of Innovation economy department, Gaidar Institute; Head of Department of Sustainable development issues studies, IAES RANEPa; *Zemtsov S.P.*, Candidate of Technical Sciences, Director of Center for Economic geography and regional studies, IAES RANEPa; *Demidova K.V.*, Junior Researcher, Department of Sustainable development issues studies, IAES RANEPa; *Levakov P.A.*, Junior Researcher, Department of Sustainable development issues studies, IAES RANEPa.

2 The first wave of rapid socio-economic monitoring among entrepreneurs. March 2022. URL: <https://nafi.ru/projects/predprinimatelstvo/pervaya-volna-operativnogo-sotsialno-ekonomicheskogo-monitoringa-sredi-predprinimateley/>, InFom "Voices of Entrepreneurs". April 2022. URL: <https://smbiz.fom.ru/>

### 3.6.1. Analysis of the state of the SME sector

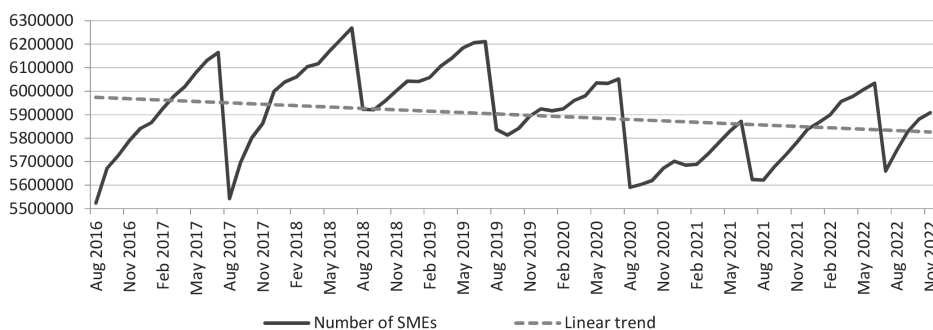
As of November 2021, the number of firms in the SME sector surged by about 100,000 units from the height of the 2020 crisis period triggered by coronavirus restrictions (Fig. 17). By November 2022, the number of firms in the SME sector returned to the values of the same period in 2019, but despite the positive trend, the peak values of 2018 have not yet been reached. Compared to values at the end of 2018, however, the pre-pandemic level has been exceeded. This may be due to the post-pandemic recovery and adaptation of the business sector to the sanctions. Probably, the pandemic experience, when logistical links were severed, prepared the business sector for external shocks, in particular, certain stocks of goods were accumulated, experience in dealing with sanctions restrictions was gained, and competences in supplying sanctioned goods to Russia appeared. In addition, a six-month moratorium on bankruptcy was introduced in March 2022, which statistically reduced the number of liquidated enterprises.

Analyzing the data from the Unified Registry of SMEs of the Federal Tax Service, it should be borne in mind that there is a peculiar “seasonality” (Fig. 18)



*Fig. 17. Dynamic of the number of firms (including IE in SME sector in Russia in 2017–2022 (has of November each year)*

Source: According to data of Unified register of SME FTS RF.



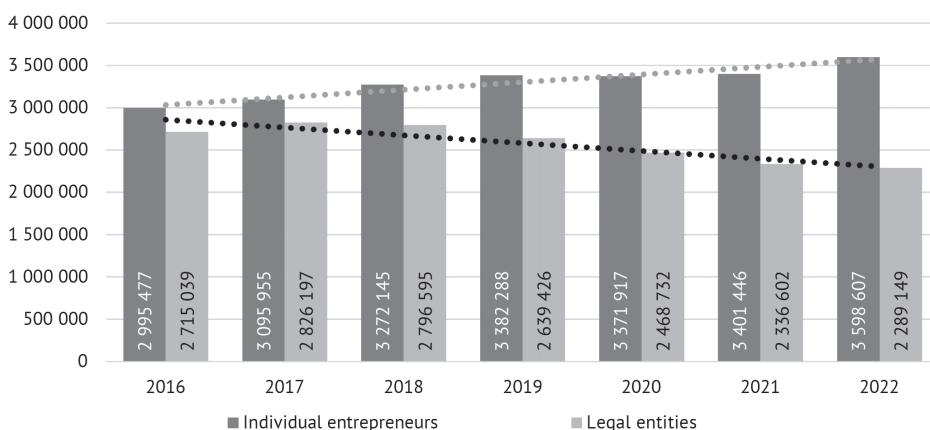
*Fig. 18. Dynamics of the number of SMEs in Russia in 2016–2022*

Source: According to data of Unified register of SME FTS RF.

associated with the fact that annually in August (from 2021 – July) the registry is cleared of businesses that ceased operations, failed to submit reports, no longer meet the criteria for inclusion as SME subjects (failure to meet the criteria must be recorded for 3 consecutive years). It should also be noted that legal entities and individual entrepreneurs who have ceased their activities are also excluded from the Register on the 10th of each month. For these reasons, the data immediately after the Registry is cleared is the most correct.<sup>1</sup> As of July 2022, the number of SMEs was up from a year earlier, but was still 1.5% below the pre-pandemic 2019 value. The decreasing linear trend in *Fig. 18* demonstrates the overall dynamics of the number of firms in the SME sector – a gradual shift to other business formats, including the self-employed, whose number as of November 2022 was approximately 5.72 mn people.

Over the past 6–7 years, the number of legal entities in the structure of the SME sector has been steadily decreasing (*Fig. 19*), while the number of individual entrepreneurs has been steadily increasing. It is very likely that many legal entities are moving to the format of individual entrepreneurship in order, among other things, to optimize the tax burden.

The dynamics of the number of firms over the period under review is positive for 65 regions. Of the regions with negative dynamics, nine were in the CFD and North Western Federal District, for which this pattern can be explained by the effect of the proximity of the largest agglomerations – Moscow and St. Petersburg, where business could migrate. Among the regions with positive dynamics of the SME sector in 2021–2022, it is worth mentioning the national republics of the North Caucasus Federal District: the Chechen Republic (+15.6%),



*Fig. 19.* Ratio of the number of individual entrepreneurs and legal entities - subjects of the SME sector for 2016–2022 (calculated on the basis of the average values for the year)

Source: Own calculations on the data of Unified register SME FTS RF.

1 Russian Economy in 2021. Trends and Outlooks. Issue 43. Moscow. Gaidar Institute Press. 2022.

the Republic of Ingushetia (+11.4%), the Republic of Dagestan (+6.6%), the Republic of North Osetia-Alania (+2.5%), the Kabardino-Balkarian Republic (+2.4%), the Karachay-Cherkess Republic (+4.1%). Two key factors played a major role for these republics – a rather low base and a traditionally large informal sector of the economy. State support measures created additional incentives for the transition to the formal economy, while the proximity to neutral countries (Georgia, Azerbaijan) contributed to the emergence of enterprises focused on parallel imports.

In absolute values, the increase in the number of firms in the SME sector was maximum in the largest city of the Russian Federation and its agglomeration – Moscow (+52,300), the Moscow region (+25,000). These regions are traditionally considered as one of the key centers of SME development. Also, an additional amount of support for starting a business due to the increased sanction pressure and the departure of foreign companies had a positive impact on the indicator under consideration in these agglomerations.

Employment in SMEs is also one of the key indicators of the overall state of the SME sector.<sup>1</sup> According to VCIOM,<sup>2</sup> in 2022 about 10% of Russians surveyed have their own business, which is higher than in 2016 and 1992 (around 3%). A large proportion of them are self-employed. The share of those who want to start their own business has fallen from 33% to 23% since 2016. Among those who do not plan to open a business, the share of those who believe that the state can liquidate private businesses has increased. The crisis phenomena stimulated forced entrepreneurship when alternatives to employment and income generation are limited. The share of those employed in the SME sector (together with the self-employed) in the total number of the employed in Russia reached 34.8%, in 2021 - around 30%.

By November 2022, SME employment surged by about 15% compared to the same period of the previous year (*Fig. 20*). The key driver of growth was the increase in the number of self-employed, which increased by around 2.53 mn over the past two years (from 2021 to 2022).<sup>3</sup> Employment by individual entrepreneurs has also increased and exceeded pre-crisis values. However, compared to 2020, the number of employees in SMEs – legal entities could not recover, although it shows a positive trend. As of July 2022, excluding the self-employed, the value of this indicator was below the 2019 level.

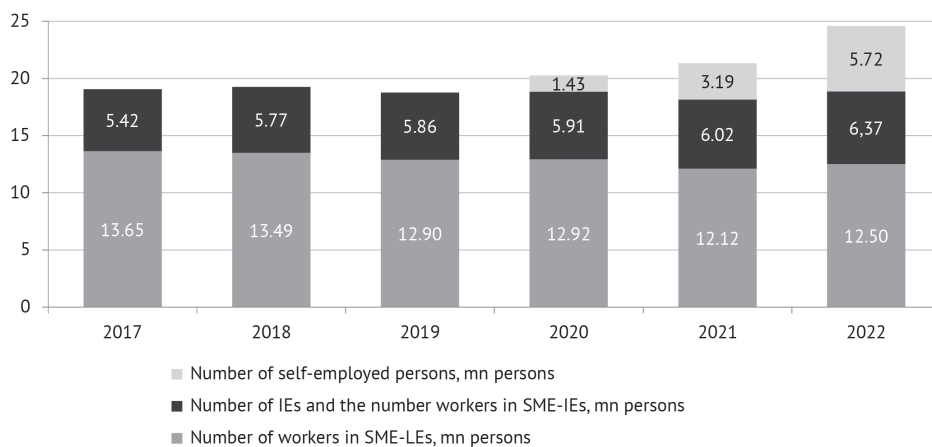
Employment in the SME sector went up in all regions of the Russian Federation. Special mention should be made of the North Caucasian Federal District, where

1 Zemtsov S.P., Tsareva Yu.V., Salimova D.R., Barinova V.A. Small and medium-sized enterprises in Russia: In search of the employment growth factors // *Voprosy Ekonomiki*. 2021. No. 12. C. 66–93.

2 VCIOM. URL: <https://wciom.ru/analytical-reviews/analiticheskii-obzor/pora-predprinimat-monitoring-1992-2022>

3 For correct estimation, it is necessary to distinguish the share of citizens who combine their self-employed status with work in another organization in the SME sector. According to the Unified Register of SMEs, for the period from June 2021 to March 2022, the share of job combinations in the employment structure was about 6%, which is lower than the total growth of employment in the SME sector for the relevant period. Data on the share of part-time workers for earlier periods are not available, but even the current figures suggest that employment growth is not entirely due to an increase in the number of part-time workers.



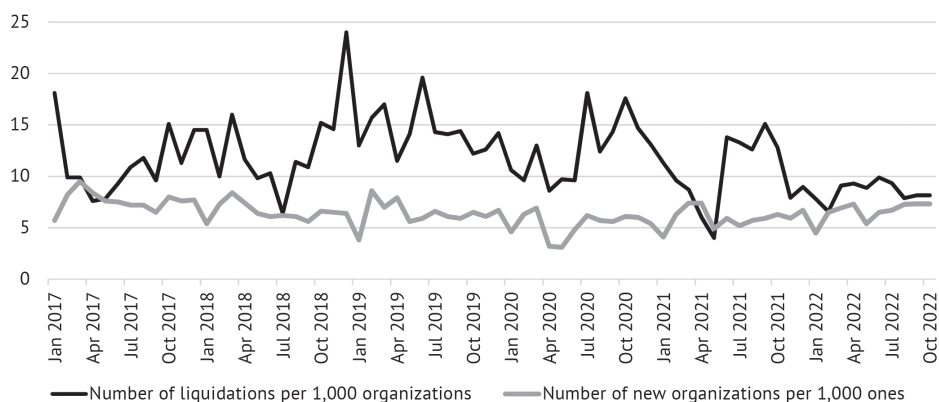


*Fig. 20. Employment dynamic in SME sector in Russia in 2017–2022 (data for November each year)*

Source: Data of Unified Register of SME FTS RF.

employment in 2021–2022 grew at a record pace, which has already been explained by the “whitewashing” of the economy, including for taking advantage of parallel imports. In absolute terms, employment growth was maximal mostly in the biggest cities and agglomerations – Moscow (+525,100 people), Moscow region (+213,900), St. Petersburg (+224,000).

Between 2017 and 2022, the number of organizations liquidated exceeded the number of newly created ones (*Fig. 21*), but the gap between the figures in



*Fig. 21. Dynamic of liquidations and new organizations per 1,000 organizations for 2017–2022*

Source: Rosstat.

question was narrowing due to the bankruptcy bans enacted during the pandemic and in 2022 and policies supporting the opening of new businesses.

#### 4.6.2. Sanctions restrictions and anti-crisis support measures of SME

At the beginning of 2022, a number of countries imposed various kinds of anti-Russian sanctions, which directly affected the activities of small and medium-size businesses in Russia (*Table 19*). Foreign economic relations of business were reduced through direct and indirect restrictions on exports and imports of goods, bans on the transportation of goods through certain countries were introduced, refusals to insure cargo from Russian ports became more frequent. Financial sanctions (disconnection from SWIFT system, bans on lending to Russian counterparties, etc.) created difficulties in payment of foreign trade contracts. Under external pressure, the Russian government, on the one hand, adopted a number of counter-sanction measures, which could have had a negative impact on the SME sector, but on the other hand, continued to look for new ways of support.

*Table 19*

#### **Sanctions and measures of the Russian authorities in response to sanctions that directly affect SMEs in Russia in 2022**

<b>Sanctions<sup>1</sup>/measures</b>	<b>Possible issues for SME</b>	<b>Support measures and markets adaptation</b>
The United States, the United Kingdom, European Union countries, Japan, and Taiwan have banned exports to Russia of a number of categories of equipment and spare parts, as well as technology, including in high-tech industries (telecommunications, electronics, aircraft, and shipbuilding). Restrictions were imposed on imports of a number of goods from Russia.	The shrinking volume of available markets. Firms using foreign equipment or components may face a lack of analogues or insufficient quality, as well as higher prices when purchasing in other markets.	Authorization of parallel imports. <sup>2</sup> Preferential lending program for purchases of priority imported products. <sup>3</sup> «Import substitution exchange». <sup>4</sup>
Disconnection of a number of Russian banks from the SWIFT system.	Inability to carry out operations for firms that use the services of these banks and work with foreign counterparties.	Expansion of the number of countries where the Mir payment system operates.

1 Guide to sanctions and restrictions against the Russian Federation. URL: <https://base.garant.ru/57750632/>

2 Permission for parallel import means that importers no longer need the consent of the Russian trademark owner to import goods into Russia. Federal Law No. 213-FZ of 28.06.2022 «On Amending Article 18 of the Federal Law «On Amending Certain Legislative Acts of the Russian Federation».

3 Decree of the Government of the Russian Federation of 18.05.2022 No. 895 «On approval of the rules for granting subsidies from the federal budget to credit institutions for reimbursement of lost income on loans extended for the purchase of priority imported products.»

4 URL: <https://etppb.ru/portal/import-substitution/>

Sanctions <sup>1</sup> /measures	Possible issues for SME	Support measures and markets adaptation
Bans on Russian cargo through a number of ports of sanctioning countries.	Logistical complexities for foreign economic relations.	Expansion of border infrastructure with neutral and friendly countries.
Suspension of Visa and Mastercard payment systems in Russia.	Problems will arise for companies that pay salaries to employees outside the country.	Deployment of the quick payment system, as well as the «Mir» payment system.
The Bank of Russia raised its key rate from 9.5 to 20% per annum in March – early April 2022. Already at the end of July 2022, the rate returned to the values of the beginning of the year.	Increase in interest rates on loans by 10 p.p. or more; increase in penalties for late payment of taxes, fees, contributions; increase in prices for goods and decrease in demand for products from the population.	SME concessional lending programs.
Blocking Facebook and Instagram.	Loss of important channels to promote SME brands and products.	Growth of e-commerce via online marketplaces (Ozon, Wildberries, etc.).

Source: Own compilation on data according to the official pages of authorities and bank on the internet.<sup>1</sup>

In our view, the most important decision in response to the sanctions restrictions on imports and exports was to allow parallel imports, which lets entrepreneurs to seek ways to circumvent the sanctions and fill Russian markets with basic goods. We managed to avoid market shortages and create incentives for entrepreneurial activity. Against the backdrop of the closure of certain foreign stores due to the sanctions, some consumer demand moved online, as the sought-after goods imported through parallel imports began to be sold on marketplaces. The share of e-commerce in the total volume of retail reached its maximum on the eve of the sanctions – 11.2% (8.8% in 2021). At the same time, not only the population, but also small and medium-sized enterprises are using the possibilities of online orders. For example, according to Avito, the number of ads for the sale of equipment and consumables has doubled.<sup>2</sup>

The government also launched a program of preferential lending for purchases of priority foreign-made products at a rate of no more than 30% of the key rate of the Central Bank plus 3 p.p. The program also made it possible to avoid shortages of certain goods, in particular, it applied to the purchase of foreign-made drugs, foodstuffs, vehicles, construction materials, machine tools and electronics. In response to the shortage of components, a digital service “Import Substitution Exchange” was put in place. With its help, customers can order the purchase of industrial products, spare parts and components, and suppliers can send their price lists and offer analogues.

According to Rosstat, the manufacturing sector, which could potentially be affected by the ban on the import of equipment and technologies into Russia, employs about 8% of microenterprises, 13% of small enterprises and 26% of medium enterprises. At the same time, they employ 12, 17 and 33% of workers in

1 Demidova K.V. SME in the context of anti-Russian sanctions: Results of the first half of 2022 and possible areas of support // Russian Economic Development. 2022. No. 11. Pp. 46–58.

2 URL: <https://kommersant-ru.turbopages.org/kommersant.ru/s/doc/5839267>

each sector, respectively. The sanctions primarily affect medium-sized businesses. The main issues could be the lack of components, materials and raw materials, lack of their full-fledged analogues in the Russian market, higher prices both in the domestic and Asian markets. Among the measures of potential state assistance in this direction is the launch on the SME digital platform sales of 112 products of Russian software at a discount of 50% for SMEs and individual entrepreneurs, subsidized from the federal budget. In addition, SME Corporation has extended preferential leasing, the rate of which when SMEs purchase Russian equipment is 6%. The income of the company-applicant must not exceed Rb800 mn, and it can employ not more than 100 people. In order to stabilize the market, the government banned export of a number of goods and raw materials, including among others hardware instrumentation, equipment, means of transport.

In response to shrinking markets, the government stimulated purchases from small businesses. From July 1, 2022, amendments were introduced to the laws No. 44-FZ and No. 223-FZ, through which purchases from SMEs can be made through a non-competitive electronic procurement, outlined the requirements for an independent guarantee for transactions in which they participate. Over the 9 months of 2022, the share of purchases by large companies from small and medium-sized businesses under the law No. 223-FZ was almost a half (48.5%) of the total volume, although in 2021 it did not exceed 30%.<sup>1</sup> Every fifth large company today has purchases from SMEs.<sup>2</sup> Around 2% of SMEs in 2020 against almost 3% of SME's in 2022 were suppliers to the government customers on average in Russia. The self-employed can participate in procurements under Law No. 223-FZ on the same terms as small and medium businesses. The number of such self-employed people tripled in 2022.

As a response to restrictions on banking operations, the system of fast payments<sup>3</sup> became widespread among entrepreneurs, the volume of transactions through which surged by more than 2-fold in 2022. There are 311 banks connected to the system.

One of the most significant issues was the raising of the key rate of the Central Bank (CB) to 20%. Although the rates on loan contracts, which were concluded before February 28, 2022, were supposed to be preserved. For those borrowers who had taken a loan before March 1, 2022, there was an opportunity to request until September 30 this year to have a credit vacation for a period of up to six months. After the imposition of sanctions, the lending banks were recommended to freeze penalties and fines for the borrowers, affected by the imposition of economic sanctions. At the same time, the affected industries are named most types of activities where private business is predominant.

To support SMEs, SME Corporation in cooperation with the Central Bank implemented three lending incentive programs (LIP), under which loan rates did not depend on the key rate of the Central Bank. Among them are "LIP Anti-

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1 Companies with state participation made purchases from SMEs this year to the tune of Rb3 trillion. URL: [https://www.economy.gov.ru/material/news/zakupki\\_kompaniy\\_s\\_gosuchastiem\\_u\\_msp\\_v\\_tekushchem\\_godu\\_prevysili\\_3\\_trln\\_rublej.html](https://www.economy.gov.ru/material/news/zakupki_kompaniy_s_gosuchastiem_u_msp_v_tekushchem_godu_prevysili_3_trln_rublej.html)

2 SME Corporation. URL: <https://t.me/corpmospof/1807>

3 FPS: main indicators. URL: [https://cbr.ru/analytics/nps/sbp/4\\_2022/](https://cbr.ru/analytics/nps/sbp/4_2022/)

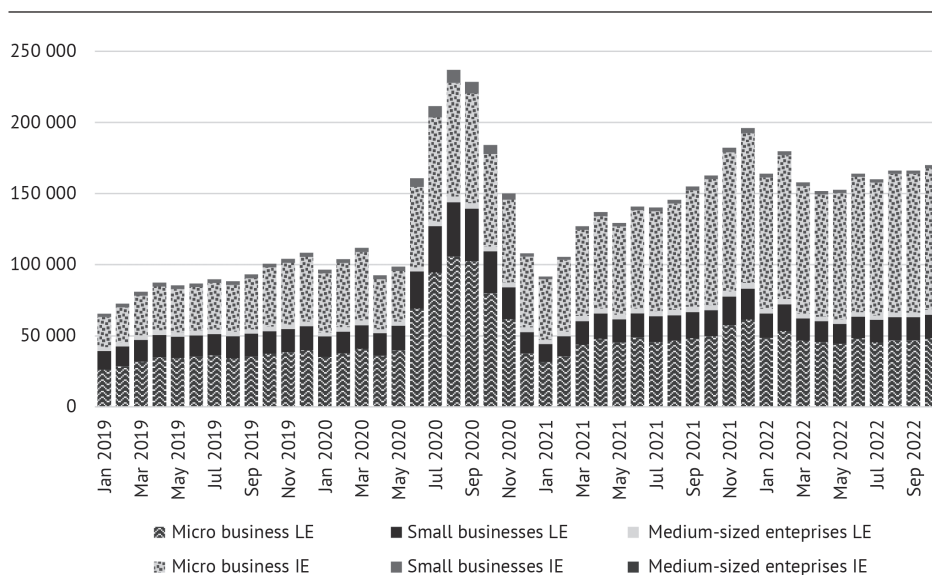


Fig. 22. Number of SMEs dynamic that received loans in 2019–2022

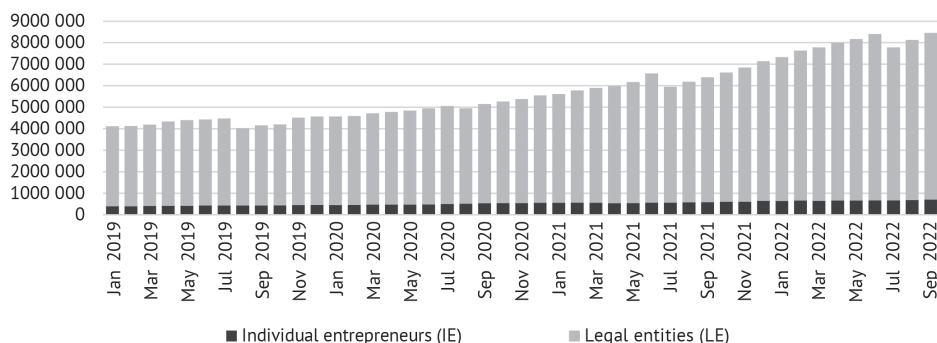
Source: Bank of Russia data.

Crisis” (Rb60 bn, SMEs), “LIP Investment” (Rb335 bn, all SMEs) and “LIP Revolving” (Rb340 bn, all SMEs). The first LIP allowed to obtain a loan for investment purposes or working capital and refinancing at the rate of 8.5% per annum. Rates on the second program differ depending on the size of the business: for medium-sized businesses it is up to 13.5%, for small and micro businesses – up to 15%. Loans for medium-sized businesses were provided at a rate of up to 13.5% and up to 15% for other businesses. Since June 15, 2022, when the key rate of the Central Bank was reduced to 9.5%, the conditions of the main program of turnover loans have also changed, which are now calculated as “the key rate of the Central Bank minus 1.5 p.p. High-tech and innovative SMEs to replenish working capital or investment SME Bank provides concessional loans with an interest rate of 3% for up to 3 years. The volume of possible credit is up to Rb500 mn.

In times of crisis, the demand for credit increases, and the government seeks to provide financial support to SMEs.<sup>1</sup> Fig. 22 shows the peak of credit recipients among SMEs in the summer of 2020 when the state programs commenced operating; during the period of increased sanction pressure in 2022, the values of the indicator increased.

An increase in the number of concessional loans can lead to a rise in debt and an increase in the number of enterprises whose financial condition is unstable. Since

1 Barinova V.A., Zemtsov S.P., Tsareva Yu.V. In Search of Entrepreneurship in Russia. Part. I. What hinders the development of small and medium-sized businesses. Moscow. Delo Publishing House RANEPA, 2023.



*Fig. 23. Credit exposure dynamic (including past-due debt) of SMEs in 2019–2022, Rb mn.*

Source: Bank of Russia data.

September 2019, the volume of SMEs’ credit indebtedness has been increasing almost continuously (*Fig. 23*).

Additional SME support measures included: exemption of enterprises from inspections until the end of 2022; provision of tax deferrals; provision of property tax benefits for individual entrepreneurs (IE); temporary reduction of administrative burden, implying automatic renewal of licenses and agreements that expire before December 31, 2022, simplified mode of declaring imported goods, the opportunity not to pass qualification examinations; cancellation of fines under government contracts; limitation of the list of causes for institution of proceedings. The launch of the “МСП.РФ”<sup>1</sup> platform was an additional opportunity for SMEs to obtain information about all available types of state support under sanctions and to receive targeted assistance for their specific problem.

Among the support measures announced by the government on March 22, 2022 is the reduction of the barrier to entry for investments in offset contracts from Rb1 bn to Rb100 mn for contracting and construction in different regions. Presumably, this could facilitate the involvement of SMEs in the investment process.

In addition, already in April 2022 reduced rates of insurance contributions for SMEs (reduction from 30 to 15%), paid on the part of the salary above the minimum living wage. Several support measures were also introduced for SMEs operating under the STS (simplified taxation system). In particular, the deadline for payment of tax under the simplified taxation system was moved from 31.03.2022 to 31.10.2022 for legal entities and from 30.04.2022 to 30.11.2022 for individual entrepreneurs. Day of payment of advance payment of STS for Q1 2022 was moved from April 25 to November 30. For the year extended deadline for the payment of insurance premiums. Some regions have reduced rates on STS for small businesses operating in the IT sector. With the object of taxation “income”,

<sup>1</sup> URL: <https://mcp.rf/>

the rate is reduced from 6% to 1% and to 5% in case of taxation “income minus expenses”. A moratorium on bankruptcy was introduced from April to October.

Regarding regional support measures, until December 1, 2025, the subjects of the Russian Federation extended the option to reduce the rate of STS and PST (patent system of taxation) for the first registered IEs that operate in manufacturing, consumer services, providing temporary accommodation, as well as in the social sphere.

A large number of exemptions were introduced in 2022 for the strategic IT sector. Even though some of them were cancelled during the year, the IT sector remains one of the most supported. The following support measures (in addition to those mentioned above) are provided for IT organizations that have received state accreditation:

- Corporate income tax rate at 0% in 2022–2024 and 3% from 2025;
- VAT exemption for operations on the transfer of rights to use software;
- Reduction of insurance premium rates from 14 to 7.6%, their deferral for one year;
- Moratorium on inspections until 03.03.2025;
- In some regions, land tax and rental rates for communications facilities and data centers have been halved.

The agro-industrial complex was also supported, as well as industrial and trade enterprises – for strategic organizations (not necessarily SMEs), preserving employment. For the agro-industrial complex (AIC), the initial amount for concessional investment loans was Rb7 bn for a period of 1 year at 10%; for the rest of the industries – up to Rb10 bn at the rate of 11%. Later, on August 11, the rate for agricultural producers was cut to 5%; besides, the possibility of receiving concessional investment loans was extended to the organizations engaged in transportation of agricultural products. Thus, among the main support measures can be noted the active work of the government in terms of concessional lending and facilitation of payment of interest on loans in the form of rescheduling, etc.; reduction of the burden in terms of mandatory payments on insurance premiums; significant reduction of administrative burden in the form of moratoria on inspections, restrictions on fines, criminal cases, simplified public procurement, etc.; digitalization of services provided via the set-up of an official platform.

### 3.6.3. Entrepreneurs’ situation assessment and anti-crisis policy

The attitude of business to the situation in the economy in 2022 was unclear.

According to the National Agency for Financial Studies (NAFI)<sup>1</sup> surveys conducted in March 2022, the most common reaction of businesses to the crisis was to cut costs (this was noted by 83% of respondents, and among micro- and small enterprises – 86% and 87%), in particular, firms reduced spending on IT, advertising or marketing, reduced staff and wages, especially its stimulating part, transferred employees to remote working mode, refused to rent offices. In

1 The first stage of rapid socio-economic monitoring among entrepreneurs. March 2022. URL: <https://nafi.ru/projects/predprinimatelstvo/pervaya-volna-operativnogo-sotsialno-ekonomicheskogo-monitoringa-sredi-predprinimateley/>



April 2022, 28% of surveyed by NAFI SMEs anticipated that it would take them up to six months to resolve supply chain issues.<sup>1</sup> By early May, the proportion of entrepreneurs, according to NAFI research,<sup>2</sup> assessing the financial standing of their business as good, has increased from 25 to 34%, and the share of those who assessed it as bad has almost halved (from 40 to 23%). Sense of the future has also become more optimistic: 35% of respondents among business representatives assessed the financial prospects of their companies as good (in March – 27%), while 36% expected deterioration of their companies' financial standing (instead of 51% in March). According to opinion polls conducted by Boris Titov in May 2022,<sup>3</sup> the majority of businessmen assessed their situation negatively: 67.1% of the respondents' indexes were decreasing, 12% of the respondents were in a state of crisis, and 22.4% “were hovering around zero”.

At the same time, in April 2022, according to the FOM survey,<sup>4</sup> 33% of the surveyed SMEs expected that new opportunities will open in connection with the sanctions, their business prospects will improve, in particular, on the back of increased demand (13%), the need for import substitution (9%), reduced competition (8%).

According to a November survey conducted by Boris Titov,<sup>5</sup> around 55% of Russian companies have either already adapted to work under sanctions or hope to do so, although in general the sanctions affected 86.8% of Russian companies.

According to the April FOM surveys,<sup>6</sup> sanctions or retaliatory measures of the Russian authorities had a negative impact on business of 80% of surveyed small and medium-sized enterprises, and negative impact concentrated in the following areas: general price hike, an increase in purchase prices for goods and services, depreciation of the ruble (57%), reduced demand for goods and services (less work, orders, customers) (25%), problems with deliveries (16%).

Surveys of entrepreneurs are aimed at finding out the SMEs' response to the crisis, identifying the most sought-after areas of support and are used to adjust existing areas of support based on previously established targets. Many support measures are inaccessible to SMEs due to asymmetry of information. According to FOM estimates,<sup>7</sup> less than a half of the respondents know about the support measures (the share dropped by 12 p.p. from 60% in Q2 to 48% by the end of 2022), only 33% were planning to receive support (43% in Q2). The share of those who applied went up from 4% in Q2 to 6% among all respondents in Q4, but among them 49% were dissatisfied with the results. The surveyed SMEs have an understanding of what measures are really needed. 67% of SMEs surveyed by

1 Entrepreneurs plan to fix supply chains within six months. 25.04.2022. URL: <https://nafi.ru/analytics/predprinimateli-planiruyut-naladit-tsepochki-postavok-v-techenie-polugoda/>

2 NAFI Business Climate Index: Dynamics for 3 months. 17.05.2022. URL: <https://nafi.ru/analytics/index-delovogo-klimata-nafi-dinamika-za-3-mesyatsa/>

3 Business rights commissioner. May 2022. URL: <https://www.vedomosti.ru/business/news/2021/12/07/899413-opros-pokazal-vozstanovivshih-sya-predpriyatii>.

4 FOM Voices of entrepreneurs. April 2022. URL: <https://smbiz.fom.ru/>

5 Business rights commissioner. November 2022. URL: <http://www.finmarket.ru/news/5836006>

6 FOM Voices of entrepreneurs. April 2022. URL: <https://smbiz.fom.ru/>

7 URL: <https://smbiz.fom.ru/post/otnoshenie-predprinimatelej-k-meram-podderzhki-malogo-biznesa>



FOM, confirmed the need for additional measures, of which 17% consider lower taxes, fees, payments, 14% – lower interest rates, 12% – restriction of price growth, 9% – increase in purchasing power of the households, improvement of living standards, 8% - development of domestic production, import substitution.

According to FOM,<sup>1</sup> in Q4 2022 compared to Q1, the number of entrepreneurs focused on survival dropped from 35% to 28%, and the number of those focused on growth moved up from 10 to 15%; the proportion of those who believe that the situation in the economy has deteriorated (from 66% to 44%) is decreasing. Sufficiency of available income to cover direct business expenses is noted by 74% of respondents at the end of 2022 (66% at the beginning of the year).

\* \* \*

The greatest damage from the crisis of 2022 for small and medium-sized enterprises is associated with a drop in demand, rising prices and problems with supplies. According to open surveys, business assesses the crisis ambiguously, but by the end of 2022 more optimistic estimates began to occur. Many government support measures are modeled on the experience of supporting business in the Covid period (reduced administrative burden, provided tax vacations, extended concessional lending programs), and business itself was to some extent more prepared by the experience of the Covid period and the previous sanctions restrictions (use of online, stocks of goods, import of subsanctioned products, etc.). The most relevant support measures for entrepreneurs are tax cuts and increase in the loan availability coupled with an increase in government procurement. It is important to ensure that SMEs are promptly informed about the current situation in the economy, as well as about available support measures. Establishing ties with companies from friendly countries and expanding the relevant infrastructure at the border and in the ports of the Far East can be useful. As in the period of the Covid crisis, the digitalization of business and the transition to online sales have become one of the tools for enterprises to adapt to the sanctions restrictions.

### 3.7. Foreign trade<sup>2</sup>

#### 3.7.1. The state of the world economy and the global trade

In late 2021 and early 2022, the global recovery from the pandemic was expected to continue in 2022 and 2023, supported by continued progress in vaccination, favorable macroeconomic policies in major economies, and financial conditions. In December 2021, the OECD projected global GDP growth of 4.5% in 2022 and 3.2% in 2023.<sup>3</sup> National accounts data in early 2022 were broadly in line with this forecast, with business activity recovering quickly in most countries following a decline in the number of people infected with the Omicron strain.

1 FOM. Stabilizing perceptions of the business environment: optimism grows. URL: <https://smbiz.fom.ru/post/stabilizaciya-vospriyatya-biznes-sredy-optimizm-rastet>

2 Author: *Volovik N.P.*, Head of Foreign Economic Activity Department, Gaidar Institute; Senior Researcher at the World Trade Studies Department, IAES RANEP.

3 OECD official website. URL: <https://www.oecd.org/economic-outlook/december-2021/>.

However, higher food and energy prices, supply constraints associated with the pandemic, and a rapid recovery in demand since mid-2020 have accelerated inflation in most OECD countries, especially in the United States, Latin America, and many Central and Eastern European countries.

As a result, after a rapid but uneven recovery in 2021, the global economy finds itself in the midst of multiple crises. With incomes in many major economies still below 2019 levels, growth is slowing everywhere. Cost-of-living crises are hurting most households in developed and developing countries. Damaged supply chains remain fragile in key sectors. Government budgets are under pressure from fiscal rules and highly volatile bond markets. Countries with debt problems, including more than half of low-income countries and about a third of middle-income countries are moving ever closer to default. Financial markets are turbulent as questions arise about the soundness of certain asset classes. In some countries, the economic difficulties stemming from these worsening crises are already causing social unrest that could escalate into political instability and conflict.

While the effects of the pandemic were still being felt in major economies in Q1 2022, the launch of the Russian Federation's special military operation in Ukraine has increased the level of global economic uncertainty. This conflict has exacerbated a number of problems, including rising commodity prices, which have further exacerbated global inflation. Moreover, the gradual loosening of bottlenecks in global supply chains has been compounded by the disruption of trade flows and transport logistics as a result of the conflict.

In 2022, global growth has slowed to the point where the global economy is dangerously close to slipping into recession. The main economic problem of the past year was a decade high inflation in developed economies caused by pandemic demand overstimulation and supply shocks (lockdowns, the geopolitical conflict between Russia and Ukraine, the break-up of almost 50 years of successful energy cooperation between Russia and the EU). High inflation triggered an unexpectedly rapid and synchronized tightening of monetary policy around the world in order to curb price increases, including in the largest advanced economies. While this tightening was necessary for price stability, it has contributed to a significant deterioration in global financial environment with significant effects on business activity. Given the lag between changes in monetary policy and their economic effects and the fact that real rates are expected to continue to rise, this slowdown will increase.

According to the World Bank, the global economy will grow by 2.9% in 2022.<sup>1</sup> Global economic growth is expected to slow to 1.7% in 2023, the third weakest pace of growth in nearly three decades, comparable only to the pandemic induced global recessions in 2020 and the global financial crisis in 2007–2009. Growth forecasts for 2023 have been downgraded for almost all advanced economies and about two-thirds of emerging and developing economies (EMDEs), and for 2024 for about half of all countries.

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1 World Bank official website. URL: <https://openknowledge.worldbank.org/bitstream/handle/10986/38030/GEP-January-2023.pdf>

The world's three main growth engines – the US, the euro area, and China – are undergoing a period of pronounced weakness with adverse secondary effects for EMDEs countries, many of which are already struggling with deteriorating domestic conditions.

In the United States, inflation reached its highest level in decades, leading to the most aggressive monetary policy tightening in more than 40 years. Activity declined in H1 2022, while domestic demand remained weak in the second half of the year, with residential real estate investment particularly weak. Overall, growth in 2022 is estimated to have slowed to 1.9%. Economic growth in 2023 is projected to slow to 0.5%, 1.9 p.p. below previous forecasts, the weakest rate outside of official recessions since 1970.

In the euro area, activity in H1 2022 exceeded expectations, resulting in revised annual growth to 3.3%. However, activity declined substantially in the second half of the year as a result of sharp increases in energy prices and supply uncertainty, exacerbated by rising borrowing costs. Inflation reached record highs. Growth in the euro area is forecast at 0% in 2023, a downward revision of 1.9 p.p. due to continued energy supply disruptions and greater than expected monetary policy tightening. Activity is projected to decline in H1 2023 and then stabilize later in the year. Inflation is expected to decline as labor markets cool and energy prices fall.

Overall, growth in advanced economies is projected to slow from 2.5% in 2022 to 0.5% in 2023.

Economic activity in China declined markedly in 2022. COVID-19-induced restrictions, unprecedented droughts, and continued stress in the real estate sector constrained consumption, production, and investment in housing. Real estate sales, housing starts, and new home prices continued to drop, and several real estate developers defaulted on their debt obligations. Fiscal support focused on infrastructure, lower interest rates and reserve requirements, and regulatory easing measures, including cash subsidies and lower down payment requirements, only partially offset these headwinds. Overall, the Chinese economy is estimated to have slowed to 2.7% growth in 2022, 1.6 p.p. below previous forecasts. With the exception of 2020, this is the weakest growth rate for the PRC economy since the mid-1970s. In 2023, growth is also expected to be below trend, around 4.3%, although higher growth rates are possible if progress is made in solving the main accumulated problems.

Despite the expected slowdown in growth, India, Indonesia, Saudi Arabia, Thailand, and Turkey may have relatively good dynamics in 2023.

On January 30, 2023, another IMF report, "World Economic Outlook: Inflation Peaking amid Low Growth,"<sup>1</sup> was released, which updated the short-term forecast. World economic growth, estimated at 3.4% in 2022, is projected to decelerate to 2.9% in 2023, before rising to 3.1% in 2024. Compared to the IMF's October forecast, the 2022 estimate and 2023 forecast are higher by about 0.2 p.p., which reflects the greater-than-expected resilience of many economies. Negative

1 IMF official website. URL: <https://www.imf.org/en/Publications/WEO/Issues/2023/01/31/world-economic-outlook-update-january-2023>

growth in global GDP or global GDP per capita, which often occurs during a global recession, is not expected.

Nevertheless, global growth projected for 2023 and 2024 is below the historical (2000–2019) annual average of 3.8%. The expectation of slower growth in 2023 reflects an increase in central bank rates to combat inflation (especially in advanced economies), as well as a special military operation in Ukraine. The decline in growth rates in 2023 compared to 2022 is due to the state of affairs in developed economies: the IMF expects the US economy to grow by 1.4% this year, and the euro zone by 0.7%.

In emerging and developing economies, economic growth is estimated to bottom out in 2022. In 2024, projected growth in both groups of economies reflects a gradual recovery in business activity and lower inflation. The IMF forecasts global inflation to decline from 8.8% in 2022 to 6.6% in 2023 and 4.3% in 2024, still above the pre-pandemic level (2017-2019) of about 3.5%.

The IMF expects global trade growth to decline to 2.4% in 2023, despite easing supply issues, before rising to 3.4% in 2024 (*Table 20*).

*Table 20*

**Growth rates of world GDP and world trade (growth rates, in%  
on the previous year**

	2014	2015	2016	2017	2018	2019	2020	2021	Estimate	Forecast	
									2022	2023	2024
World GDP	3.6	3.5	3.3	3.8	3.6	2.8	-3.1	6.0	3.4	2.9	3.1
Developed economies	2.1	2.3	1.7	2.5	2.3	1.7	-4.5	5.2	2.7	1.2	1.4
USA	2.5	2.9	1.6	2.4	2.9	2.2	-3.4	5.7	2.0	1.4	1.0
Euro zone	1.4	2.1	1.9	2.5	1.9	1.3	-6.4	5.2	3.5	0.7	1.6
Germany	2.2	1.5	2.2	2.5	1.5	0.6	-4.6	2.6	1.9	0.9	1.4
France	1.0	1.0	1.1	2.3	1.7	1.5	-8.0	6.8	2.6	0.7	1.6
Great Britain	2.9	2.3	1.8	1.7	1.4	1.5	-9.4	7.4	4.1	-0.6	0.9
Emerging and developing economies	4.6	4.0	4.3	4.7	4.5	3.7	-2.0	3.7	3.9	4.0	4.2
Russia	0.6	-3.7	-0.2	1.5	2.3	1.3	-2.7	4.7	-2.2	0.3	2.1
Developing countries in Asia	6.8	6.6	6.4	6.5	6.4	5.5	-0.9	7.2	4.3	5.3	5.2
China	7.3	6.6	6.7	6.9	6.6	6.1	2.3	8.1	3.0	5.2	4.5
India	7.3	7.6	7.1	6.7	6.8	4.2	-7.3	8.7	6.8	6.1	6.8
Latin America and the Caribbean	1.3	0.0	-0.9	1.3	1.0	0.0	-6.9	6.9	3.9	1.8	2.1
Brazil	0.1	-3.8	-3.6	1.4	1.1	1.1	-3.9	4.6	3.1	1.2	1.5
Mexico	2.1	2.5	2.3	2.2	2.0	-0.3	-8.1	4.8	3.1	1.7	1.6
World trade in goods and services	3.3	2.6	2.2	5.2	3.9	0.9	-8.2	10.4	5.4	2.4	3.4

Source: IMF official website World Economic Outlook. URL: <https://www.imf.org/en/Publications/WEO/Issues/2023/01/31/world-economic-outlook-update-january-2023>

According to the WTO,<sup>1</sup> the global merchandise trade grew by 9.7% in 2021, following a 5.2% decline in 2020. In 2021, the trade growth was significantly higher than the average growth rate (2.7%) for 2010–2019 (the period between the global financial crisis and the beginning of the pandemic). In value terms, trade in goods showed even greater growth, rising 26% (to \$22.46 bn) in 2021 after falling 7% (to \$17.76 bn) in 2020. More significant growth in value than in volume terms is explained by the growth of export and import prices by an average of 15.4%.

Despite the start of the SWO and the subsequent sanctions imposed on the Russian Federation, as well as the ongoing quarantine in China, especially affecting Shanghai, world trade showed resilience in H1 2022. Perception has emerged that other difficulties that have hampered the movement of goods around the world since 2020 were gradually easing: freight rates began to decline in Q4 2021 and disruptions in international supply chains and logistics decreased after they peaked in late 2021.

According to the latest Global Trade Report, released by UNCTAD<sup>2</sup> on December 13, 2022, global trade hit a record \$32 trillion last year, but the slowdown that began in the second half of last year is expected to worsen in 2023 as geopolitical tensions and tight financial conditions continue. Despite the SWO in Ukraine and the lingering effects of the pandemic, trade in both goods and services grew strongly in 2022. Trade in goods increased 10% from the previous year to an estimated \$25 trillion, due in part to higher energy prices. Trade in services rose 15% to a record \$7 trillion.

But according to UNCTAD, slowing growth in H2 2022 points to expectations of tighter conditions in 2023. Forecasts of economic growth for 2023 are being revised downward due to high energy prices, rising interest rates, persistent inflation in many economies, and the negative global economic impact of the special military operation in Ukraine. Continued tightening of financial conditions is expected to further increase pressure on highly indebted governments, increasing vulnerabilities and negatively impacting investment and international trade flows.

Despite the slowdown in the growth of the value of world trade, the physical volume of trade continued to grow during 2022, indicating the sustainability of global demand. Part of the decline in the value of international trade in H2 2022 is due to the drop in commodity prices.

Uncertainty about supply chain formation remains high. Mitigation strategies, including supplier diversification, reorientation, close and friendly cooperation, will have an impact on global trade patterns this year.

According to the WTO Merchandise Trade Barometer released March 1, 2023,<sup>3</sup> global merchandise trade growth lost momentum in Q4 2022 and is likely to remain weak in Q1 2023. The current Barometer value continues to point to

1 WTO official website. World Trade Statistical Review 2022. URL: [https://www.wto.org/english/res\\_e/booksp\\_e/wtsr\\_2022\\_e.pdf](https://www.wto.org/english/res_e/booksp_e/wtsr_2022_e.pdf)

2 UNCTAD official website. URL: <https://unctad.org/news/global-trade-set-hit-record-32-trillion-2022-outlook-increasingly-gloomy-2023>

3 WTO official website. URL: [https://www.wto.org/english/news\\_e/news23\\_e/wtoi\\_01mar23\\_e.htm](https://www.wto.org/english/news_e/news23_e/wtoi_01mar23_e.htm)

weakening trade growth in physical terms - it is now 92.2 points on a 100-point scale, down from 96.2 points in November of last year. All constituent Barometer indexes fell below trend except for the auto index (105.8), which was supported by stronger sales and production numbers in the U.S., Europe and Japan than the decline in those numbers in China. The export orders index (97.4) remains below trend but is rising, giving hope for a possible rise in the near future. Meanwhile, the indexes for shipping containers (89.3), air freight (87.8), electronics trade (84.9) and commodities (92.0) remain below trend and continue to decline, suggesting that the weakening trade is broad-based and affects many sectors.

### 3.7.2. Terms of Russian foreign trade: price trend for the main goods of Russian exports and imports

In 2022, the World Bank's energy price index was 154.6%, up 64.7% from 2021. All components of the index (coal, crude oil, natural gas) saw price increases.

Following a steady growth in H1 2022, in June the price of crude oil hit its maximum value since April 2012 (Brent – \$120.08/bbl, WTI – \$114.59/bbl), after which oil started to fall in price. In September 2022, prices were on average 25% lower than their June highs. The fall in prices reflects a combination of factors: the slowdown in global growth and growing fears of an impending global recession, continued restrictions due to COVID-19 in China and significant release of crude oil from the strategic reserves of some countries. Oil prices recovered partially in October (Brent to \$93/bbl and WTI to \$87.26/bbl) as OPEC+ members agreed to cut production by 2 mn bpd.

Concerns about the global economy slowdown amid tightening financial conditions, exacerbated by ambiguous signals from China's COVID-19 policy, continued to put pressure on crude oil prices, which reached their lowest level in a year in December. Nevertheless, prices in December 2022 exceeded the prices formed in December 2021. Thus, the Brent oil rose in a year by 8.9%, WTI – by 7%.

A barrel of Urals crude oil in December 2022 was worth \$50.47, which is 30.6% lower than in December 2021 (\$72.71/bbl). At the end of 2022, the average Urals crude oil price was \$76.09/bbl. In 2021, the average price of Urals oil was at the level of \$69/bbl. Thus, in 2022, the average annual oil price for the year increased markedly – by 10.3%.

Natural gas prices were volatile throughout the year. After reaching record highs in Q3 2022, prices began to decline. While the natural gas market is becoming increasingly global, there remain significant regional price differences due to different supply dynamics. European natural gas reached a record high of \$70/MMBTU in August 2022 as some European countries sought to rebuild their storage capacity and offset declining gas supplies from Russia. EU storage was over 90% full at the beginning of October, pushing prices down to \$45/MMBTU, and consumers reduced consumption in response to higher prices and warmer-than-normal weather. Contract prices in Japan rose to a record high of \$23.73/MMBTU in September, well below European prices. Natural gas prices in the United States rose to \$8.8/MMBTU in August the highest level since 2008, due

to strong domestic demand and record LNG exports, but fell to \$5.28/MMBTU in November.

Natural gas markets have been largely driven by developments in Europe, leading to major changes in trade patterns. Pipeline exports of natural gas from Russia to Europe plummeted, leading Europe to turn to the LNG market as its main alternative (as well as some additional pipeline flows from the North Sea and North Africa).

Overall, for 2022, natural gas prices in Europe surged 2.9 times compared to 2021, in the United States by 66.9%, and in Japan by 78.1%.

Coal prices held high throughout 2022. After reaching a record high of \$330/t in July, prices began to decline. Coal markets were greatly influenced by high natural gas prices, which prompted many countries to switch from natural gas to coal in power generation, a marked turnaround from the trend toward decommissioning of coal-fired power plants. In 2022, Australian coal prices were, on average, 2.5 times higher than in 2021; South African coal prices were 2.4 times higher.

The European Union's August 2022 ban on Russian coal imports altered trade flows, with Europe importing more coal from Colombia, South Africa, the United States and even Australia. Meanwhile, Russia diverted cargoes that would normally go to the European Union to other countries, including India and Turkey. These diversions resulted in significantly longer transport distances and thus higher transportation costs because coal is bulky and expensive to transport.

The WB price index for non-energy commodities in 2022 was 10.6% higher than in 2021. Among the four major components of this index, there was an increase in prices for agricultural products and fertilizers – by 13.3% and 62.6%, respectively, while metals and precious metals fell in price by 1.2% and 2.4%, respectively (Fig. 24).

The World Bank's metals and minerals price index for Q3 2022 took steep dive by 20% from the previous quarter and was 31% below its March peak in September.

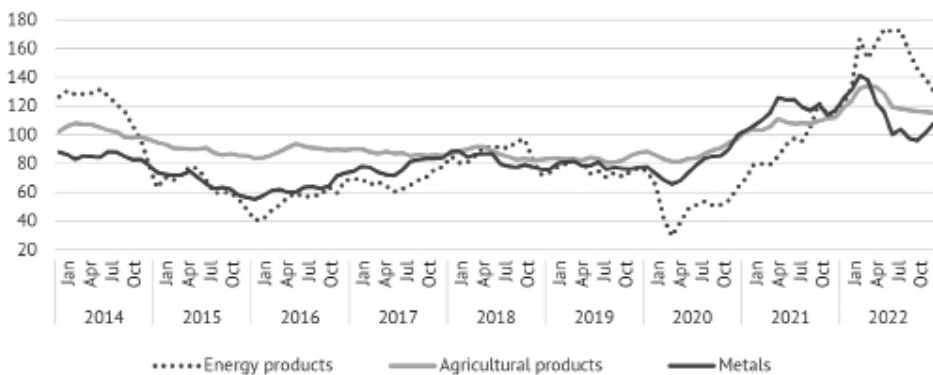


Fig. 24. World Bank commodities price indexes (2010 = 100%)

Source: URL: <http://www.worldbank.org/en/research/commodity-markets#1>



The decline primarily reflected deteriorating global economic activity and fears of a possible global recession. Global demand for industrial metals continued to weaken following the post-pandemic surge, while in China, the world's largest metals consumer, demand remained weak due to COVID-19-related restrictions and stress in the real estate sector.

Over the past three years, there have been significant fluctuations in aluminum and copper prices. The COVID-19 pandemic caused a severe global recession, and in the three months since January 2020, global aluminum and copper prices have fallen to a record low. This episode was followed by the strongest economic recovery and price spike in eight decades. By March 2022, inflation-adjusted prices for copper and aluminum reached their highest level in 10 years: aluminum rose to \$3,498.37/t, copper to \$10,230.89/t. It should be noted that in November the prices of aluminum and copper fell back from the highs by 32.8 and 21.3% respectively. Overall for 2022, aluminum was 9.4% more expensive than in 2021, while copper was 5.3% cheaper.

Nickel prices fell 24% in Q3 2022 and in September were a third below their unprecedented highs in March (\$33,924.18/t). Lower demand from the stainless steel sector and strong production growth in Indonesia contributed to the drop in prices. Production of stainless steel, which accounts for more than two-thirds of refined nickel consumption, slowed markedly after a surge in 2021 due to weak demand for consumer durables, high energy prices and electricity shortages. The use of nickel in batteries also slowed, especially in China. However, nickel supplies have increased significantly, especially from Indonesia, which is rapidly expanding nickel pig iron production to produce nickel for both stainless steel and battery use. Nickel was 39.9% more expensive in 2022 than in 2021 (*Table 21*).

*Table 21*

**Average annual world prices**

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Crude oil (Brent), USD/bbl.	111.97	108.86	98.94	52.37	44.05	54.39	71.07	64.03	42.3	70.44	99.82
Natural gas (USA), USD/MMBTU	2.75	3.72	4.37	2.61	2.49	2.96	3.16	2.57	2.01	3.85	6.37
Natural gas, European market USD/MMBTU	11.47	11.79	10.05	6.82	4.56	5.72	7.68	4.80	3.24	16.12	40.34
Natural gas (Japan), USD/MMBTU	16.55	15.96	16.04	10.93	7.37	8.61	10.67	10.56	8.31	10.76	18.43
Coal (Australia), USA/t	96.36	84.56	70.13	58.94	66.12	88.52	107.02	77.86	60.79	138.05	344.9



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Copper, USD/t	7962	7332.1	6863.4	5510.5	4867.9	6169.9	6529.8	6010.2	6173.8	9317.1	8822.4
Aluminum, USD/t	2023.3	1846.7	1867.4	1664.7	1604.2	1967.7	2108.5	1794.5	1704	2472.8	2705
Nickel, USD/t	17557	15032	16893	11863	9595.2	10409	13114	13914	13787	18465	25834
Iron ore, USD/t	128.50	135.36	96.95	55.85	58.42	71.76	69.75	93.85	108.9	161.71	121.3

Source: Calculated on WB data

Agricultural products began to rise in price in 2020. In Q1 2021, the WB price index for agricultural products rose more than 9% on Q4 2020, building on the momentum of the previous quarter. For 2021, prices soared by 20% and were close to a seven-year high. The price increases were driven by supply shortages in some food commodities, especially corn and soybeans, strong demand for forage commodities from China, and the depreciation of the dollar. Cereals rose the most because of production shortfalls, followed by oils and meal. Beverage prices rose modestly, while agricultural commodity prices remained generally stable as supply disruptions due to the pandemic were resolved.

Food prices continued to rise in early 2022, reaching an all-time high in April with the WB Agricultural Price Index came to 134.07%.

Larger-than-expected global supplies of food and oilseeds, a UN-brokered agreement that allowed Ukrainian grain to enter global markets, and a worsening global growth outlook contributed to a decline in agricultural commodity prices. As a result, the price index decreased by 11% in Q3 2022 relative to Q2 2022. Wheat prices fell nearly 20% from the previous quarter (while remaining 24% higher than a year ago), corn prices dropped 10%; rice prices generally remained stable. The price index for edible oils and meals fell 18% in Q3 2022. Beverage prices for the group as a whole have remained fairly stable over the past three quarters, with moderate increases in tea and coffee prices offset by declines in cocoa prices. Agricultural commodity prices declined nearly 11% over Q3 2022 following increases in cotton and natural rubber supplies.

At the end of 2022, the average value of the FAO Food Price Index (FPI) was 143.7 points – 18 points higher than in 2021. Thus, the cost of cereals reached a new high, beating the 2011 figures. Average wheat prices were 15.6% higher than in 2021, while corn prices were 24.8% higher. The FAO attributed the rise in cereal prices to “significant market disruption, increased uncertainty, higher energy and input prices, adverse weather conditions in some major supplying countries, and strong demand.” Average prices of vegetable oils, milk, meat at the end of 2022 were the highest in the history of FAO observations (since 1990), sugar prices – the highest since 2012.

The World Bank Fertilizer Price Index jumped 24% in Q1 2021 relative to Q4 2020, driven by higher phosphate and carbamide prices due to strong demand and higher raw material costs. Potash prices remained broadly unchanged, with ample supply. Prices continued to rise until April 2022, when the fertilizer price index reached its highest level since August 2008 at 254.97%, after which prices began

to decline. In Q3 2022, the WB Fertilizer Price Index dropped nearly 8% from Q2 2022, while still remaining at historically high levels. The recent price decline reflects lower demand as farmers reduce fertilizer applications in the fields due to affordability issues. Overall, the WB fertilizer price index is up 62.6% for 2022 compared to 2021.

After reaching year-end highs in March 2022, precious metal prices began to decline. The World Bank Precious Metals Price Index fell 9% in Q3 2022 from the previous quarter, driven by weak investment and physical demand due to a stronger dollar, as well as higher yields due to rising interest rates. These factors outweighed the impact of increased demand for safe-haven assets related to the SMO in Ukraine and rising inflation. Silver prices were down 15% amid lower industrial demand, while gold and platinum dropped 8%. For the year as a whole, platinum fell by 11.9% and silver by 13.4%. The price of gold remained at the level of 2021.

According to the World Bank's forecast,<sup>1</sup> Brent crude oil prices will average \$92/bbl in 2023 and then decline to \$80/bbl in 2024. Despite the expected weakening, prices will remain well above their recent five-year average of \$60/bbl. The forecast envisages a worsening macroeconomic prospects, offset by increased natural gas consumption in favor of oil and lower production among OPEC+ countries (including Russia). The outlook is highly uncertain, and the continuation of increased price volatility with further spikes in the short term is likely due to low levels of spare capacity and reserves, the European Union ban on Russian oil imports and potential price caps, and ongoing geopolitical events.

Natural gas and coal prices are projected by the WB to decline in 2023 and 2024, but remain at much higher levels against the 2017–2021 average. By 2024, U.S. prices for Australian coal and natural gas are still expected to be twice as high as the past five-year average, while European natural gas prices could be 4 times higher. The expected price decline in 2024 is due to lower demand for natural gas as households and industries reduce their consumption and switch to substitutes, while coal production is expected to increase significantly as China, India and major coal exporters ramp up production. Giving up natural gas could jeopardize climate change goals, given that alternative fossil fuels have higher carbon dioxide emissions.

The outlook for natural gas supplies will depend on the severity of Europe's winter and the ability of consumers to reduce their demand. While current expectations are for a mild winter, a worse-than-expected outcome could still result in very low inventory levels by the end of the winter. Policy coordination among key importers will be vital to ensure a fair burden of high energy prices or supply disruptions. The European Union has announced several policies to address these issues, including joint gas purchases and a focus on reducing demand. Natural gas price controls have also been discussed, but this must be balanced with ensuring sufficient supply.

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1 WB official website. Commodity Markets Outlook. October 2022. URL: <https://openknowledge.worldbank.org/bitstream/handle/10986/38160/CMO-October-2022.pdf>

With declining imports of Russian gas, Europe will face further problems in replenishing supplies. The International Energy Agency (IEA) forecasts<sup>1</sup> that European LNG imports will increase by 60 bcm in 2023, helped by new import terminals, including floating terminals. However, this increase is more than double the expected increase in global LNG export capacity, which will put upward pressure on prices as Europe competes with other markets, and the disruptions seen this year at some LNG importers could continue through 2023. One additional risk to natural gas exports is the potential damage to critical infrastructure from explosions at Nord Stream 1 and Nord Stream 2 pipelines in September. Future growth in natural gas consumption may also be weaker than expected, as high price volatility and lack of access to LNG may prompt some countries to reconsider its role as a reliable fuel. Partly reflecting this, the IEA cut its forecast for natural gas consumption growth by half over the next five years.

The WB forecasts that metal prices will fall by 15% in 2023 after a slight decline in 2022. Risks to the outlook are skewed to the downside and include a global recession as well as prolonged lock-ins and further deterioration of the real estate sector in China. Risks to higher prices include the possibility of further closures of energy-intensive smelters if energy prices rise more than expected. Aluminum and zinc are particularly vulnerable to fluctuations in energy prices because they are the most energy-intensive metals to process.

After rising in 2022, aluminum prices are expected to decline by 11% in 2023. Risks to the outlook include lower production due to electricity rationing, especially in Europe. On the policy side, the U.S. has announced its intention to impose additional sanctions on Russian aluminum exports, which could lead to higher prices. In the longer term, the energy transition could increase the use of aluminum, especially in electric cars, solar panels and long-distance power lines.

According to the World Bank, copper prices will fall another 16% in 2023 after slumping in 2022. In the long term, copper would benefit from increased production of electric vehicles (which consume 2.5–4 times more copper than gasoline-powered cars), renewable energy production (more copper-intensive than conventional power plants), and wiring for associated grid infrastructure and recharging.

Nickel prices, after rising in 2022, are projected by the WB to fall by 16% in 2023. The long-term risk is that demand for nickel, and subsequent prices, could decline as non-nickel alternatives for batteries, such as lithium-iron-phosphate (LFP), which increasingly dominate the electric vehicle market in China, are developed. Other battery makers are also exploring LFP or other technologies such as sodium-ion.

After rising in 2022, agricultural commodity prices are expected to fall by nearly 5% in 2023 before stabilizing in 2024 as supplies of most food commodities increase owing to higher yields. Despite the expected decline, most prices will remain at historically high levels.

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1 IEA official website, World Energy Outlook. URL: <https://iea.blob.core.windows.net/assets/830fe099-5530-48f2-a7c1-11f35d510983/WorldEnergyOutlook2022.pdf>

There are many risks to the price outlook for agricultural commodities. They include the likelihood of higher-than-expected commodity prices or energy supply disruptions, adverse weather conditions (including an intensification of La Niña for the third consecutive year), and restrictive trade policies.

After a significant increase in 2022, the fertilizer price index is projected to fall by 12% in 2023 as supply disruptions gradually subside. Upside risks to the outlook include higher raw material costs, additional sanctions against Belarus and Russia, and expanded export restrictions from China.

Because of expectations of historically high interest rates and concerns about the possibility of a global recession affecting industrial activity, the WB forecasts that the precious metals price index will fall another 4% in 2023 after falling in 2022.

### 3.7.3. Main indicators of the Russian foreign trade

According to the Central Bank of Russia,<sup>1</sup> in 2022, the foreign trade turnover of the Russian Federation amounted to \$973.9 bn, which is 4.7% higher than in 2021. The foreign trade balance amounted to \$282.3 bn which is 66% higher than in 2021.

While the physical volumes of goods exported abroad decreased due to the growth in prices for energy carriers, the value volumes of export increased considerably. In 2022, export of goods and services from Russia amounted to \$628.1 bn, thus exceeding the relevant index of the preceding year by 14.2% (\$550.0 bn in 2021). It is worth noting, the negative dynamics of the increase in the value of exports of goods and services during the year: while in Q1 2022 as compared to Q1 2021 it increased by 60.5%, in Q2 – by 27.6%, in Q3 – by only 4%, and in Q4 it dropped by 15.4%. This was due to a decrease in the annual growth rate of world prices for many commodities. In addition, the physical volume of energy exports declined, mainly due to the stoppage of gas transportation via Nord Stream 1 and Nord Stream 2 pipelines, as well as due to the growing effect of restrictions imposed by unfriendly states on the supply of Russian goods to the world market.

Russia's imports of goods and services in 2022 stood at \$345.8 bn, down by 9.0% from \$379.9 bn in 2021. After a 23.4% decline in imports in Q2 2022 compared to Q2 2021, the situation has stabilized since mid-July. In Q3 the decrease slowed down to 12.5%, and in Q4 – to 9.1%. The improvement of the dynamics of imports was promoted by the formation of new logistic routes and expansion of the list of goods allowed for parallel imports from August. By weight of goods, there is a stable growth of 18% per month on average, by their statistical value – by 20%. Thus, in August 383,000 tons of various goods were imported via parallel import and since the beginning of this regime – more than 1.3 mn tons. The ruble's appreciation also contributed to the increase in imports.

In 2022, current account surplus of the balance of payments of the Russian Federation amounted to \$227.4 bn, which is by 85.9% higher than in 2021 (\$122.3 bn). A record-breaking increase in the surplus of the balance of goods and

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1 CBR official website. URL: <https://cbr.ru/statistics/?CF.Search=&CF.TagId=183&CF.Date.Time=Any&CF.Date.DateFrom=&CF.Date.DateTo=>

services as a result of growth in the value of export of goods due to favorable price situation with a decrease in the value of imports played a decisive role in expansion of the surplus of the current account of the balance of payments.

Russia's foreign trade surplus in goods and services soared by 66% to \$282.3 bn in 2022 from \$170.1 bn in 2021.

Thus, in 2022, due to changes in the geography of supplies and high world prices for energy resources, Russian exports managed to significantly exceed the 2021 volume. By the end of 2022, the volume of imported goods slowed down owing to the reorientation of the supplier market to other countries and the expansion of the list of goods of parallel imports.

On March 13, 2023, the Federal Customs Service of Russia partially resumed publication of customs foreign trade statistics. According to the FCS, Russia's foreign trade turnover in goods in 2022 stood at \$850.5 bn, an increase of 8.1% compared to 2021. Exports for 2022 amounted to \$591.46 bn, which was 19.9% higher than in 2021. Imports for the previous year amounted to \$259.083 bn, which was 11.7% lower than in 2021 (Fig. 25). Thus, last year's trade surplus reached a record \$332.377 bn.

The value of export of mineral products in 2022 exceeded the level of 2021 by 40.8%, foodstuffs and agricultural raw materials – by 14.8%, chemical products – by 10.9%, textiles, textile products and footwear – by 8.5%, metals and their products – by 2.3%. The value of exports of wood and paper products decreased by 16.7%, precious metals – by 41.4%, machinery, equipment and transport vehicles – by 20.5% (Fig. 26).

In 2022, there was a decline in the value of imports across almost the entire expanded commodity classification. Thus, import of mineral products dropped by 6%, timber and pulp and paper products – by 6.9%, textiles, textile products and footwear – by 7.3%, metals and metal products – by 10.2%, machinery, equipment and transport vehicles – by 18.4% (Fig. 27).

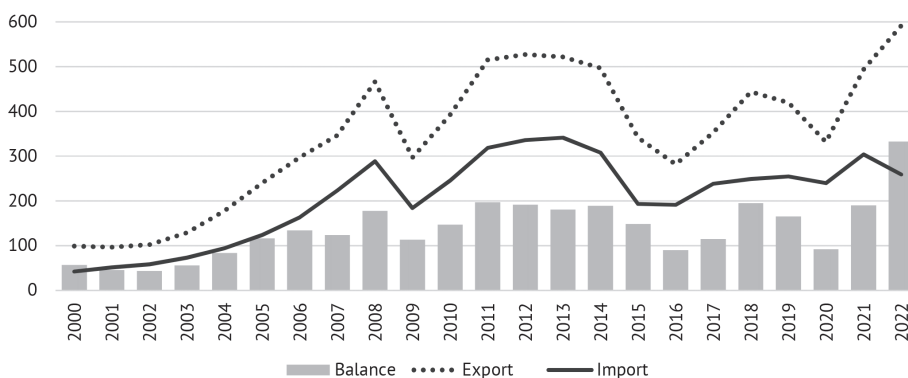
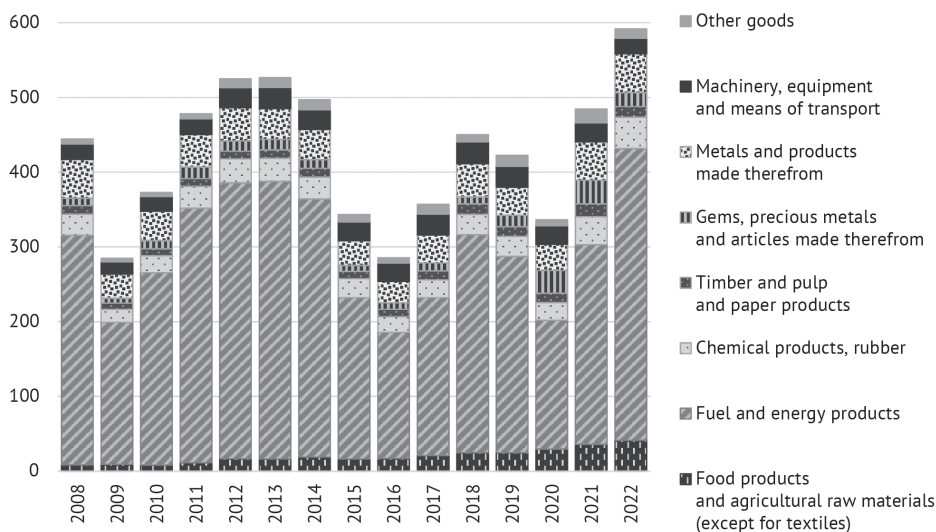


Fig. 25. Main indicators of Russian foreign trade in goods, USD bn

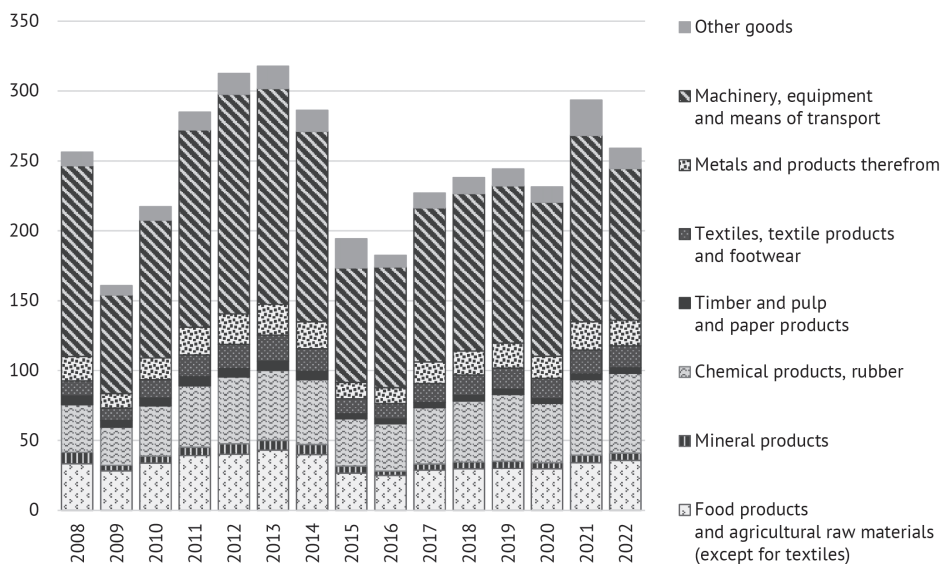
Sources: RCB official website, FCS of Russia.

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*Fig. 26. Goods-wise dynamic of Russian exports, USD bn*

Source: FCS.



*Fig. 27. Goods-wise dynamic of Russian imports, USD bn*

Source: FCS.

#### 3.7.4. Regional pattern of Russian foreign trade

Sanctions imposed by unfriendly states have dealt a heavy blow to logistics and foreign trade of the Russian Federation. Ten years ago, the EU countries accounted for 54% of Russian foreign trade. After the imposition of sanctions in 2014, this share gradually contracted and reached 35.9% in 2021.

EU trade with Russia suffered even more after the start of SMO, when the EU imposed restrictions on imports and exports of certain goods. The effect of these measures was especially noticeable in the last months of last year. On a seasonally adjusted basis, both exports and imports fell well below pre-SMO levels. Between February 2022 and December 2022, the value of Russian supplies to the EU slumped by 51%, and Russia's share of EU imports fell from 9.5% to 4.3%. Over the same period, Russia's share of total EU exports fell from 4.0% to 2.0%.<sup>1</sup>

The EU trade deficit with Russia peaked at €18.2 bn in March 2022 and then gradually declined to €6.0 bn in December 2022. The value of Russian exports plummeted by 53%: from €21.8 bn in March 2022 to €10.3 bn in December 2022.

As other trading partners gradually replaced Russia, Russia's share of EU imports of key commodities declined with the most significant declines being seen in coal, natural gas, fertilizers, petroleum products, and ferrous metallurgy. In particular, the biggest nosedive was recorded for Russian coal, the share of which fell from 45% in 2021 to 22% in 2022, natural gas (from 36% to 21%), fertilizers (from 29% to 22%), heating oil (from 28% to 21%) and ferrous metallurgy products (from 16 to 10%).

Nevertheless, the trade turnover between Russia and the EU in 2022 reached a maximum for 8 years, having increased by 2.3% to €258.6 bn. The EU's trade deficit with Russia reached a record €148.2 bn, twice as high as in 2021.

Supplies of goods from Russia to the EU in 2022 increased by 25% and reached €203.4 bn (€230 mn less than the historical maximum of 2012). Imports of mineral products increased by 41%, nickel and its products by 45.1%, aluminum and its products by 22.1%, copper and its products by 8.8%, other non-precious metals by 90.1%, fertilizers by 45.1%, oilseeds and fruits by 14.9%. At the same time, the volume of supplies of ferrous metals to the EU decreased due to the EU ban on imports of steel and iron products from Russia. Imports of alloyed steel to the EU from Russia almost ceased in May. Volume of supplies of timber and timber products dropped significantly in the context of EU restrictions and Russia's ban on exports of timber to a number of countries.

Imports of goods from the EU into Russia fell by 38.1% to €55.2 bn, the lowest since 2005. The contraction in imports of European goods into Russia made the largest contribution to the reduction of Russian imports. According to the International Trade Centre<sup>2</sup> (ITC), imports of means of land transport, except for railway or tramway rolling stock and their parts and accessories into Russian territory from the EU declined for 11 months of 2022 as compared to the same period of 2021 by 75.7%, nuclear reactors, boilers, equipment and mechanical

1 Eurostat official website. URL: <https://ec.europa.eu/eurostat/en/web/products-eurostat-news/w/ddn-20230303-1>

2 Trade Map – Bilateral trade between European Union (EU 27) and Russian Federation.



devices – by 53.4%, electrical machinery and equipment – by 64.3%, optical instruments and apparatus – by 31.3%, plastics and articles thereof – by 43.4%, alcoholic and non-alcoholic beverages – by 13.3%.

The People's Republic of China is the Russian Federation's largest trading partner. In 2021, the trade turnover between the countries soared by 30% and reached the mark of \$145 bn. In 2022, according to Chinese customs data, the trade turnover hit a record point of \$190.27 bn, which was 29.3% higher than the same indicator of the previous year. Chinese exports of goods to Russia rose 12.8%, to \$76.1 bn and imports from Russia rose 43.4% to \$114.1 bn. Both countries want to reach the goal of \$200 bn by 2024.

Russia has more than doubled its LNG exports to China in 2022 as part of the drive to diversify its energy imports. According to Gazprom, Russia's largest gas producer, Russian natural gas imports to China via the Power of Siberia pipeline surged by at least 50 percent in 2022. Russia's crude oil imports to China rose by 10% year on year in the first 11 months to nearly 80 mn tons.

China accounts for about 20% of Russia's trade turnover. In 2022, this share went up markedly due to the reduction in trade relations with Western countries.

According to OPEC forecasts, by 2030, two countries, China and India, will account for a quarter of global oil demand. Consequently, these countries will continue to increase their energy purchases from the Russian Federation. Given this and the growth of parallel imports in Russia, we should expect a further increase in Russian trade with China.

If we compare April-November 2022, when sanctions and restrictions began to take full effect, with the same period in 2021, we can note the complete collapse of Russian trade with the United States and Great Britain. Imports to Russia from the United States collapsed sevenfold, and from Great Britain fivefold (in fact, all financial, investment, and trade transactions with these countries were terminated).

As a result, India entered the top 10 of Russia's largest trading partners, replacing the United States. In 2022, the foreign trade turnover between Russia and India increased rapidly, exceeding the same indicator in 2021 by 3.7 times. The growth in trade turnover was due to a significant increase in the supply of Russian goods to India, while the supply of Indian goods to Russia declined. According to India's Ministry of Commerce and Industry,<sup>1</sup> India's imports of goods from Russia went up 4.8 times in 2022, as compared with 2021, while India's exports of goods to Russia dropped by 12%. The main factor behind India's import growth is a sharp increase in Russian oil supplies. According to Vortexa, Russia became India's largest oil supplier in October 2022, overtaking the traditional leaders Saudi Arabia and Iraq. In October, Russia supplied India with 946,000 bpd, or 22% of India's total crude oil imports. Iraq accounted for 20.5% and Saudi Arabia for 16%.

As a result, India's negative trade balance went up 7.5 times in 2022 compared with the previous year. Indian authorities intend to increase their exports to Russia to almost \$10 bn in the coming months. However, some Indian companies

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1 Ministry of Commerce and Industry of India official website. URL: <https://tradestat.commerce.gov.in/meidb/default.asp>



are wary of exporting to Russia because of possible sanctions from the West, lack of clarity on payments and problems with insurance.

In a difficult geopolitical environment, the development of trade relations between Russia and Turkey gets a special impetus. In 2021, trade turnover between these countries amounted to \$34.7 bn, i.e. reached a fairly high level if compared to previous years. Especially compared to 2016 and 2017, when trade turnover dropped significantly during the cooling of relations between our countries. During that period, it fell to less than \$25 bn. In 2022, the foreign trade turnover between the countries almost doubled (up to \$68.2 bn) compared to 2021. Import of Russian goods into Turkey more than doubled – from \$28.96 bn to \$58.86 bn, import of Turkish goods into Russia soared by 62% – from \$5.77 bn to \$9.35 bn.

There are several reasons why Turkey is currently one of the most favorable partners for Russia. Firstly, Turkey does not support anti-Russian sanctions. Secondly, this country is a convenient partner in terms of logistics.

Thirdly, Turkey is ready to replace brands, which have left the Russian market. A promising area is Turkish fast food, which is now actively aiming at Russia. The Turkish brands LK burger and LK pizza, Arabica Coffee House, the Turkish chain Gagawa, specializing in chicken meat dishes and others are seriously considering the possibility of developing their chains in Russia.

Turkish textile and clothing brands are also taking a close look at the Russian market. In Turkey there is an association called the Union of United Brands, which comprises 554 Turkish brands, of which only 32 are represented in Russia, i.e. less than 6%.

Fourthly, the development of Turkish production on Russian territory is promising. Representatives of this sphere of business understand that they can now occupy a good niche: since supplies between Russia and many Western countries are disrupted, it is possible to localize production here. Especially since Turkey currently has a high inflation rate: the lira is falling, and, of course, in this environment a large Russian market with a lower inflation rate than in Turkey is attractive (in 2021, 28.7%).

Another promising area of cooperation is the increase in export flows of Russian goods to Turkey. Today, Turkish B2B-marketplace TurkishExporter, which is the largest electronic trading platform in Turkey (more than 2 million users, 180 thousand companies, annual traffic of 7.3 million visits) offers Russian companies extensive opportunities and mechanisms for quick selection of partner, distributor or buyer of Russian products with a view to the Turkish and nearby markets. The platform was originally created to raise export sales of Turkish companies, but today this trading platform is being developed as an opportunity for companies from all over the world to find a relevant partner in a number of markets, including Turkey.

Traditionally, enhanced cooperation between the countries in the construction market continues. This includes both the direct activity of Turkish companies as contractors and the supply of construction materials. In 2021, Turkish construction companies implemented projects worth around \$85 bn in Russia. Turkey is likely

to intensify its activity in this area. Turkey will also play an increasing role in the supply of household appliances, paper products and household chemicals.

Russia remains a leading exporter not only of energy, but also of other goods, from fertilizers and asbestos and from nuclear reactors to wheat. International automakers still depend on palladium and rhodium from Russia to produce catalytic converters. French nuclear power plants depend on Russian uranium, and Belgium cannot give up its diamond trade with Russia. Therefore, many countries have not only failed to give up trade with Russia, but have also increased their foreign trade turnover (*Table 22*).

*Table 22*

**Main changes in regional pattern of Russian foreign trade**

	<b>Change in the average monthly volume of Russian foreign trade after the start of the SMO compared to the average for the previous 5 years, %</b>
India	410
Turkey	298
Brazil	206
Belgium	181
PRC	164
Spain	157
Netherlands	132
Japan	113
Germany	97
South Korea	83
USA	65
Sweden	24
Great Britain	21

*Source:* The New York Times. Russian Trade Boomed After Invading Ukraine, Providing Ample War Funds. URL: <https://www.nytimes.com/interactive/2022/10/30/business/economy/russia-trade-ukraine-war.html>

**3.7.5. Regulation of Russian foreign trade<sup>1</sup>**

In the context of growing geopolitical and economic tensions, Russian foreign trade has got into dire straits. Many production and logistics chains related to export-import and financial transactions, as well as interaction with foreign companies that have announced winding up of their activities in Russia, have been disrupted. Business is looking for new opportunities, and the task of the Russian government is to take support measures to adapt to the new environment in these conditions.

***Tariff regulation***

*Export customs duties*

In 2022, the rates of export duties on crude oil and petroleum products were calculated in accordance with the methodology approved by Resolution No. 276

<sup>1</sup> Materials from the information and legal portal GARANT.RU were used to prepare this section.

of the Government of the Russian Federation of March 29, 2013 “On calculation of the rates of export customs duties on crude oil and certain categories of goods derived from oil” (Table 23).

*Table 23*

**Export duty rates on crude oil and petroleum products  
in 2020–2021, USD/t**

	Crude oil	Petroleum products	
		Light oil products	Dark oil products
<b>2021</b>			
January 1	38.7	11.6	38.7
February 1	43.8	13.1	43.8
March 1	49.6	14.8	49.6
April 1	57.6	17.2	57.6
May 1	54.9	16.4	54.9
June 1	58.8	17.6	58.8
July 1	61.5	18.4	61.5
August 1	67.8	20.3	67.8
September 1	64.6	19.3	64.6
October 1	62.8	18.8	62.8
November 1	71.2	21.3	71.2
December 1	77.5	23.2	77.5
<b>2022</b>			
January 1	46.7	14.0	46.7
February 1	47.7	14.3	47.7
March 1	58.3	17.4	58.3
April 1	61.2	18.3	61.2
May 1	49.6	14.8	49.6
June 1	44.8	13.4	44.8
July 1	55.2	16.5	55.2
August 1	53.0	15.9	53.0
September 1	52.0	15.6	52.0
October 1	44.4	13.3	44.4
November 1	42.7	12.8	42.7
December 1	43.3	12.9	43.3

Sources: RF Government Decree, information of the RF Ministry of Economic Development.

The Decree of the RF Government of March 31, 2022 No. 532 has established that the rate of the export duty on sunflower meal exported from the Russian Federation outside the territory of the EAEU is calculated in accordance with the established Statute on the calculation and application of the rate. The Regulation determines the formula for calculating the export duty on sunflower meal. The rate of the export duty is calculated by the Ministry of Agriculture of the Russian Federation. The Regulation entered into force on May 1, 2022 and was in force up to August 31, 2022.

The Decree of the Government of the Russian Federation of March 31, 2022 No. 531 has introduced changes to the Decree of the Government of the Russian Federation of November 27, 2021 No. 2068 “On rates of export customs duties on goods exported from the Russian Federation outside the customs territory of the EAEU” in respect of other flax seeds. For the period from May 1 through August 31, 2022 a temporary combined export duty rate of 20% but not less than \$100 per 1,000 kg was set.

Decree of the RF Government No. 2188 of November 30, 2022 has amended Decree of the RF Government No. 2068 of November 27, 2021 “On rates of export customs duties on goods exported from the Russian Federation outside the customs territory of the EAEU”. According to the amendments, temporary zero rates of the export customs duty are set for mineral fertilizers, goods of the given group in pills or in similar forms, or in packages with the gross weight not exceeding 10 kg. The tariff will be valid up to December 31, 2023 provided that the customs value per ton of these types of fertilizers when exported outside the EAEU does not exceed the amount equivalent to \$450. If the said level of customs value is exceeded, the export customs value rate is applied at the rate of 23.5% of the difference between the customs value and \$450. The Resolution entered into force on January 1, 2023.

#### *Import customs duties*

Decision of the EEC Council of March 17, 2022 No. 37 amended the decision of the Customs Union Commission of November 27, 2009 No. 130 “On the common customs-tariff regulation of the EAEU” in terms of the establishment of tariff benefits for the payment of import customs duties on several goods within the counter-sanctions.

The lists of goods which are subject to exemption from payment of import customs duty up to September 30, 2022 when they are placed under the procedure of release for domestic consumption were established. These are food products and goods used in their production; goods used for the production and sale of food products; goods used for the production of pharmaceutical products; goods used for the production of electronic products; goods used for the development of digital technology; goods used for the production of light industry products; goods used for the production of metallurgical products; goods used in the construction industry, as well as goods used in the transportation sector.

The tariff concession is granted subject to the submission to the customs authority of the EAEU member state of confirmation of the intended use of the imported goods issued by the authorized body of the member state and containing information on the classification, quantity, value of such goods, as well as on the organizations that are importing. The decision entered into force on March 28, 2022.

Decision of the EEC Council of April 05, 2022 No. 46 and Decision of the EEC Board of April 12, 2022 No. 63 introduced an additional list of goods for which temporary zero rates of import duties and tariff benefits (more than 900 items). The decisions entered into force on April 25, 2022.

Decision of the EEC Board No. 25 of February 15, 2022 sets a zero rate of import customs duties on certain types of wood pulp semi-bleached or bleached of deciduous species from June 1, 2022 up to May 31, 2023.

Decision of the EEC Council No. 34 from March 17, 2022 a zero rate of import customs duty is established for a period up to April 30, 2023 for apricot puree, pear puree and peach puree. The temporary zero rate of import customs duty will be applied to aniline and its salts, fabrics from synthetic fibers up to April 30, 2025.

Decision of the EEC Board of March 15, 2022 No. 41 set the rate of import customs duty CCT EAEU for industrial fatty alcohol at 0% of the customs value from the date of entry into force of this decision up to March 31, 2025.

Decision of the EEC Board of March 15, 2022 No. 42 established rates of import duties on waste and scrap precious metals at 0% of the customs value from the date of entry into force of this decision up to December 31, 2025.

The list of goods in respect of which temporary zero rates of import customs duties are established was approved by Decision of the EEC Council No. 46 of April 05, 2022. Temporary zero customs duty rates have been agreed for 537 items of critical imports. Those are, in particular, certain types of organic chemical compounds and products of inorganic chemistry, certain types of parts for machinery, equipment and mechanisms, certain types of leguminous crops and certain types of paper and cardboard.

RF Government Decree No. 956 of May 27, 2022 included new items in the list of manufacturing equipment, the import of which is exempt from VAT if it does not have analogues in Russia, previously approved by RF Government Decree No. 372 of April 30, 2009. The list includes a complex of equipment for the manufacturing of large-scale reinforced concrete modules for housing construction and a line of equipment for the production of MDF boards.

Decision of the EEC Board No.116 of August 16, 2022 specified import duty rates for certain types of components for electric hand tools at the rate of 0% of the customs value for the period from July 1, 2022 up to June 30, 2023. Corresponding amendments have been made to the Single Customs Tariff of the Eurasian Economic Union (EAEU).

Decision of the EEC Board No. 135 of September 28, 2022 determines the rates of import customs duties of the ETT EAEU for certain types of goods. Inulin, fish oil, sugar-free cocoa powder, vitamin mixtures for balanced nutrition, refractory clay, detergents and cleaners, refractory cements, etc. are included in the list of zero rates - a total of 110 items.

EEC Board Decision No. 154 of October 25, 2022 established that a zero import customs value rate will be applied to certain types of food products and pushbuttons from October 1, 2022 up to March 31, 2023.

#### *Tariff quotas*

Decree of the Government of the Russian Federation of March 16, 2022 No. 380 establishes that annually will be determined the maximum volume of export of certain types of timber to the countries – members of the Eurasian Economic

Union (EAEU). The size of quotas for the export of timber in 2022 to Armenia, Belarus, Kazakhstan and Kyrgyzstan is set. The procedure for calculating the quotas for 2023 and subsequent years was also established. Export licenses are issued by the Ministry of Economic Development. It is determined that the export of timber from the territory of the Russian Federation is carried out only by rail to Belarus, Kazakhstan and Kyrgyzstan and to Armenia – by road transport only through “Upper Lars”. Control over the volumes of timber exported will be carried out through the USAIS for timber accounting.

RF Government Decree No. 670 of April 15, 2022 amended Government Decree No. 1910 of November 03, 2021. According to the amendments, current export quotas for Russian producers of mineral fertilizers were temporarily raised by almost 700,000 tons. Thus, the quota for export of nitrogenous fertilizers has been increased by 231,000 tons, amounting to about 5.7 mn tons. The export quota for compound fertilizers was increased by 466,000 tons to 5.6 mn tons.

Decree of the Government of the Russian Federation of May 28, 2022 No. 972 from June 1, 2022 to July 31, 2022 tariff quota for export outside the Russian Federation to the states that are not members of EAEU, scrap and waste of ferrous metals exported in line with the customs export procedure in the total volume 540,000 tons.

Decree of July 31, 2022 extended the quota for exports of scrap and waste of ferrous metals outside the EAEU. From July 31 to the end of the year, the quota is equal to 1,350,000 tons. When exporting metals within the quota, the duty is 5% (minimum €100 per 1 ton), and when exceeding the quota – 5% (but minimum €290 per 1 ton). Until July 31, there was a quota of 540 thousand tons.

RF Government Decree No. 1392 of August 06, 2022 a quantitative restriction on export of liquid, granulated and clod lump sulfur in the amount of 1.1 mn tons was introduced from August 10 up to December 31, 2022.

Decision of the EEC Board No. 117 of August 16, 2022 sets the volume of tariff quotas for 2023 in relation to certain types of goods originating from the Republic of Serbia and imported into the territory of the EAEU member states in line with the Agreement between the EAEU and Serbia of October 25, 2019.

Decree of the RF Government of August 18, 2022 No. 1434 established from September 3 up to December 3, 2022 a quantitative restriction on export of recycled paper and paperboard (waste paper and paperboard) that are essential to the domestic market of the Russian Federation outside the territory of Russia to countries, which are not members of the EAEU, when placing them under the customs export procedure in the amount of 30,000 tons.

Decision of the EEC Board of August 23, 2022 No. 119 established tariff quotas for some types of meat products and milk for 2023. For all countries, except for Armenia, the quotas remained at last year's level. It is established that the tariff quotas apply to agricultural products imported into the customs territory of the EAEU placed under the customs procedure of release for domestic consumption except for products originating in and imported from CIS member states.

### *Import bans and restrictions*

Executive Order of the President of Russia No. 100 of March 08, 2022 established additional anti-sanctions measures. Until December 31, 2022, a ban was imposed on the export outside the Russian Federation and (or) the import into the Russian Federation of products and (or) raw materials according to the lists determined by the Government of the Russian Federation. Restrictions are also imposed on the export and (or) import of products and raw materials in accordance with the lists established by the Government of the Russian Federation. The Executive Order was signed in addition to the measures provided for by the Executive Orders of February 28 “On application of special economic measures in connection with unfriendly acts of the USA and foreign states and international organizations joining them” and of March 1 “On additional provisional economic measures aimed at ensuring financial stability of the Russian Federation”.

Decree of the Government of the Russian Federation No. 302 of March 06, 2022 introduced a temporary ban on the export of foreign medical devices from the country, which were delivered from the states that joined the sanctions and were in importers’ warehouses or underwent customs procedures. The temporary ban also applies to goods that had been placed under customs procedures prior to the entry into force of this Decree and the actual export of which was to be carried out after the entry into force of this Decree. The Decree entered into force from the date of its official publication and shall be valid until December 31, 2022.

A temporary ban on the export of goods from the Russian Federation in accordance with the established list was introduced by RF Government Decree No. 311 of March 09, 2022 up to December 31, 2022. The list of goods prohibited for export includes, in particular, pharmaceutical products, ordinary drill pipes, cooperage products, ferrous metal compressed or liquefied gas tanks, hand tools, replaceable work tools for hand tools with mechanical drive, nuclear reactors, steam boilers, dish washers, hoists and elevators, fork-lift trucks, etc. The list of countries for which there is a ban on export is specified. Earlier this list was established by Edict of the Government of the Russian Federation No. 430-r of March 05, 2022.

Within the framework of the RF President Executive Order of March 08, 2022 No. 100 “On application of special economic measures in the sphere of foreign economic activity in order to ensure security of the Russian Federation”, a temporary ban on export of certain types of timber from the Russian Federation to foreign countries and territories was introduced by RF Government Decree of March 09, 2022 No. 313 till December 31, 2022. A list of foreign states and territories in respect of which the export ban is introduced has been determined. The list of certain types of goods in respect of which a temporary export ban is introduced has also been approved.

RF Government Decree No. 361 of March 15, 2022 introduced a temporary ban on the export of white sugar and raw cane sugar from the Russian Federation to third countries amid high demand and rising prices for the product. The restriction was in effect until August 31. At the same time, preferential import of sugar into the EEU countries was extended in summer until the end of October 2022.

RF Government Decree No. 362 of March 14, 2022 placed a temporary ban on export of wheat, meslin, rye, barley and corn from the Russian Federation, including to the countries of the EAEU, from March 15 up to June 30, 2022. Having said that, according to the Decree of March 31, export of the above crops to the EAEU countries was already permitted by order of the Agriculture Ministry.

Under RF Government Decree No. 529 of March 31, 2022 a temporary ban on export of rapeseed and sunflower seeds from the Russian Federation was introduced from April 1 up to August 31, 2022. There are cases where temporary ban does not apply, for example, when seeds are exported to the EAEU states, Abkhazia, South Ossetia, DNR and LNR; for goods exported by individuals for personal use, etc.

RF Government Decree of June 30, 2022 No.1171 “On temporary ban on export of rice and rice groats from the Russian Federation and on amendments into some acts of the Government of the Russian Federation” and RF Government Decree of June 30, 2022 No.1169 “On temporary ban on export of amino acids from the Russian Federation” restricted export of feed amino acids, rice and rice groats from July 1 up to December 31, 2022. Restrictions on export of rice and rice grits do not apply to export to the countries of the Eurasian Economic Union and within the frameworks of international intergovernmental agreements, and restrictions on export of feed amino acids will not affect the Eurasian Economic Union, Abkhazia, South Ossetia, DNR and LNR. The measures are aimed to ensure food security of the country, as well as to maintain price stability. In addition, the restriction on the export of feed amino acids will support livestock breeding and processing industries.

RF Government Decree No. 1580 of September 08, 2022 imposed a temporary ban on export of rapeseed from September 9, 2022 up to February 28, 2023 in connection with growth of global demand on this type of products due to growth of prices. Exports to EAEU member states and countries with which an intergovernmental agreement was signed were allowed.

RF Government Decree No. 1519 of August 31, 2022 imposed a temporary ban on the export from the Russian Federation of waste and scrap containing precious metals or metals plated with precious metals, other waste and scrap containing precious metal or compounds of precious metals used primarily for the extraction of precious metals, and waste and scrap of electrical and electronic products used primarily for the extraction of precious metals, which are essential for the domestic market of Russia.

In August 2014, Executive Order of the Presidential of Russia No. 560 of August 06, 2014 “On certain special economic measures aimed to ensure security of the Russian Federation” imposed a ban on import of certain types of agricultural products, raw materials and food products from the countries that imposed anti-Russian sanctions. Certain products, agricultural products and raw materials – beef, pork, fish, most vegetables, sausages, cheese, etc. are restricted for import into Russia (RF Government Decree No. 778 of August 07, 2014). As the sanctions imposed by foreign countries persisted, the Russian Federation extended its retaliatory measures as well. Executive Order of the President of the Russian



Federation of September 20, 2021 No. 534 “About extension of action of some special economic measures for safety of the Russian Federation” prolonged food embargo for the period from January 1 till December 31, 2022.

RF Government Decree No. 1843 of October 17, 2022 amended the List of agricultural products, raw materials and food products banned for import into the Russian Federation, approved by Decree of the Government of the Russian Federation No. 778 of August 07, 2014, and the Rules for destruction of products banned for import from the USA, Canada, Australia, Norway and EU countries, approved by Decree of the Government of the Russian Federation No. 774 of July 31, 2015.

In order to implement Executive Order of the President No. 725 of October 11, 2022 “On prolongation of certain special economic measures in order to ensure security of the Russian Federation” the Government of the Russian Federation prolongs the validity of these Decrees until December 31, 2023.

RF Government Decree of March 29, 2022 No. 506 stipulates that on proposals of federal executive bodies the Ministry of Industry and Trade of Russia is instructed to approve lists of goods (groups of goods), in respect of which the provisions of subparagraph 6 Art. 1359 and Art. 1487 of the Civil Code of the Russian Federation, provided the said goods (groups of goods) are put into circulation outside the territory of the Russian Federation by the right holders (patent holders), as well as with their consent.

In early May, the Ministry of Industry and Trade approved the list of goods subject to parallel imports. It includes more than 50 categories of goods, including cars (Volkswagen, Skoda, BMW, Toyota, etc.), electronics (Apple, Samsung, Sony, etc.), household appliances (Siemens, Dyson, etc.) and game consoles (Xbox and PlayStation).

The list will be adjusted: it can be both expanded and diminished depending on the decisions of foreign companies to work in Russia. The list is supposed to be updated quarterly or bi-monthly. Thus, with Order No. 2299 of June 03, 2022, the Russian Ministry of Industry and Trade adjusted the list of goods for parallel imports, the nomenclature for BMW and Siemens was expanded, while a number of brands that guaranteed supplies were, on the contrary, excluded.

Information of the Ministry of Industry and Trade of August 04, 2022 communicates that the list of goods for parallel imports includes reagents and consumables for equipment for cancer treatment, brands of auto parts, products of radio electronic, chemical industry and other goods. It is also reported that some brands of perfumes and cosmetics are removed from the list of exceptions due to the lack of products of these manufacturers in retail chains.

The Order of the Ministry of Industry and Trade of October 21, 2022 No. 4456 amended the list of goods in relation to which the provisions of subparagraph 6 Art. 1539 and Art. 1487 of the Civil Code, provided these products are put into circulation outside Russia by right holders, approved by the Order of the Ministry of Industry of April 19, 2022 No. 1532. This list includes certain brands of alcoholic beverages (Aberfeldy, Aerstony, Bell’s, Bulleit, Cupper Dog, Oban, Sheridan’s, Jose Cuervo, etc.).

The new version contains the 27th group of TN VED EAEU – “Mineral fuels; oil and products of their distillation; bituminous substances; mineral waxes”. This group is supplemented with new commodity brands of manufacturers – in particular, such as Mitsubishi, Mobil, Shell, Mercedes, etc. New commodity brands of manufacturers of perfumes, cosmetics and other care products have been introduced. The list was also supplemented with brands of automotive spare parts, chemical industry products, toys and other goods.

## Section 4. The social sector

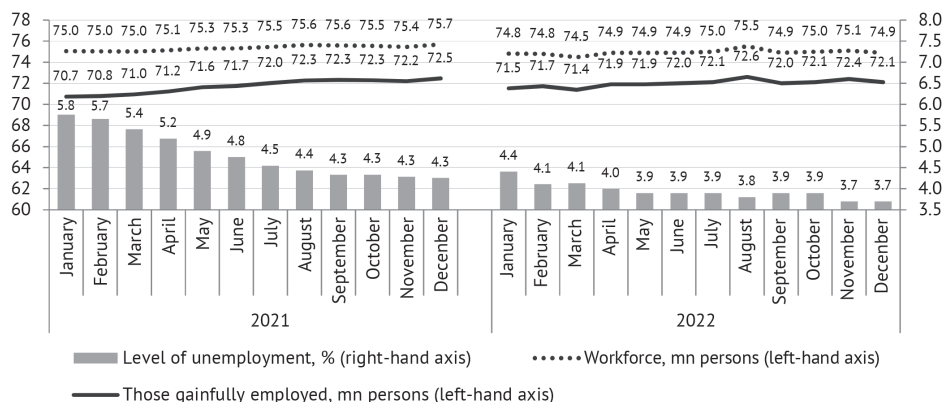
### 4.1. Labor market dynamics<sup>1</sup>

In 2022, the labor market saw an ambiguous situation. On one side, in 2022 it completely recovered after the coronacrisis: the level of unemployment fell below the pre-crisis values and wages kept growing in real terms. On the other side, as far back as the beginning of 2022, the Russian economy encountered various, mostly negative, implications related with the special military operation, including foreign economic sanctions and the exit from the Russian market of a number of foreign companies, while from September it was the partial mobilization and increased outflow of a portion of the workforce abroad. At the same time, the Russian economy demonstrated a high degree of resilience and economic recession turned out to be substantially lower than predicted at the beginning of the year. In the new economic environment, employers have been actively using the main mechanisms of adjustment to economic crises since last spring; these mechanisms have been developed during the past 30 years and helped overcome effectively the most acute phase of adaptation.

Throughout 2022, the main labor market indices demonstrated sustainable positive dynamics. In 2022, the number of workforce and gainfully employed persons remained virtually unchanged<sup>2</sup>, the level of unemployment calculated in accordance with ILO methods was falling and at year-end amounted to the record-low of 3.7% (*Fig. 1*). Further, as in 2021 the level of unemployment did not see seasonal growth which is typical of autumn and winter. The average length

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2 A small spike in the number of the workforce and those gainfully employed in August registered by the survey of the workforce could have been caused by a pickup in the number of those employed under verbal agreements and temporary labor contracts. At the same time the data on mid-sized and large entities do not show growth in the number of filled job vacancies. We can assume that the August growth was related with a short-term hiring of workers for assistance to households in production of goods (primarily agricultural products) for their own consumption and seasonal fluctuations as a whole.



*Fig. 1. Dynamics of the number of the workforce, those gainfully employed and the level of unemployment in 2021–2022*

Source: Data of ORS; Rosstat.

of job search decreased from 6.8 months in 2021 to 6.2 months in 2022 and the share of those looking for a job for over 12 months among the unemployed fell from 22% to 18%. At year-end 2022, the number of the unemployed registered with employment services amounted to 568,000 or 0.8% of the entire workforce.

However, this unemployment dynamics entails a serious long-term challenge. It shows unambiguously that the Russian labor market faced labor shortages late in 2022, which phenomenon is quite unique for the struggling economy. Normally, in such an environment employers seek to get rid of workers and this leads to the opposite situation: labor surplus and unemployment growth. Actually, in 2022 demand for labor was falling, which fact is illustrated by the dynamics of job vacancies and labor turnover.

According to the data of hh.ru, in 2022 the number of vacancies throughout the year was much lower than a year before. The biggest fall was registered in May (23%); at year-end 2022 it was equal to 9% (*Fig. 2*). According to the data of the state employment services, demand for workers decreased among employers (18% lower on average per year than in 2021).

In 2021–2022, labor turnover accelerated at mid-sized and large enterprises: both the numbers of those laid off and those hired were much higher than in the previous ten years (*Fig. 3*). In 2021, it can be explained by recovery processes after the crisis year 2020. The pandemic caused a decrease in labor turnover on the Russian labor market because workers did not seek to leave their jobs and employers took advantage of loan programs created specifically to stimulate them to retain their workers. In 2021, most programs ceased to work. In 2022, the rate of labor turnover accelerated further (one in three workers changed a job!), thus illustrating active changes on the labor market. It seems, such dynamics could have been caused at least by the restructuring of a large portion of Russian enterprises and renegotiation of labor contracts on new terms.

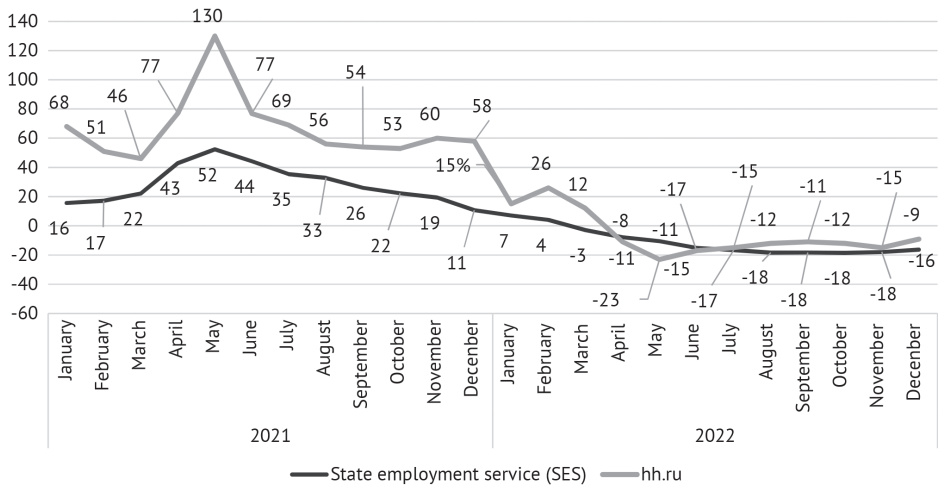


Fig. 2. Dynamics of the number of vacancies relative to the same period of the previous year, %

Source: Data of hh.ru, Rosstat.

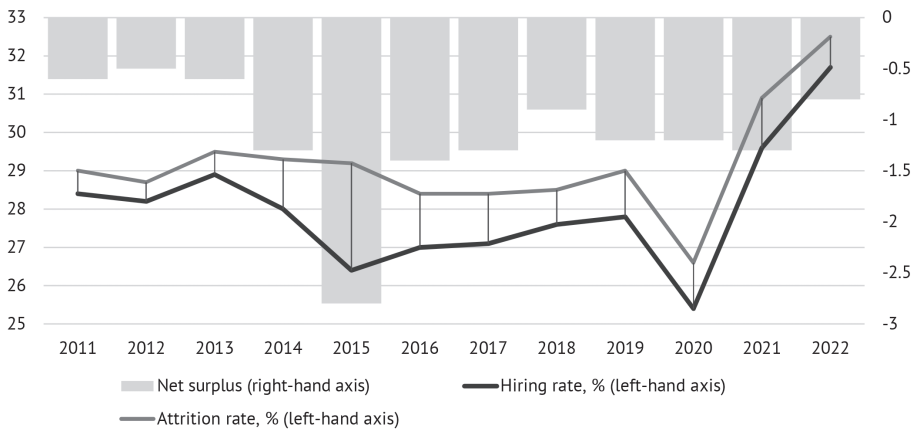


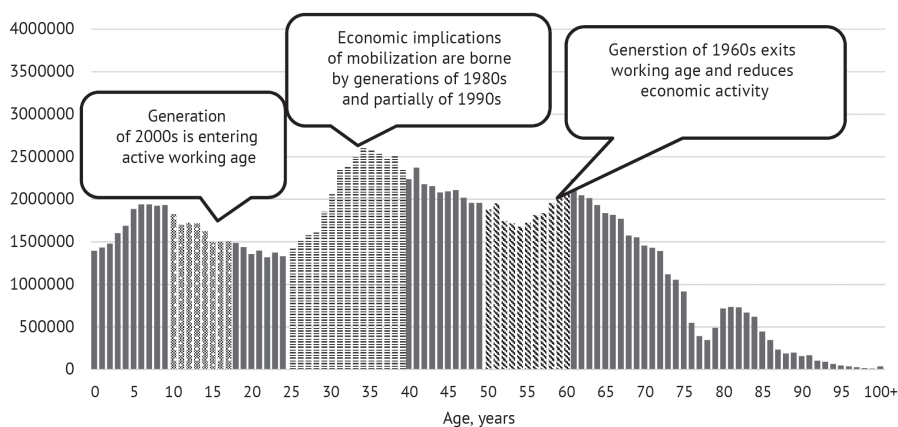
Fig. 3. Hiring, attrition and net surplus of personnel at large and mid-sized enterprises in 2011–2022, % of all workers

Source: Data of ORS; Rosstat.

At the same time, a decrease in demand for labor coincided with a constriction of labor supply, that is, a decline in the number of workforce. A low level of unemployment suggests that labor resources were decreasing at a substantially higher rate than demand for labor. A legitimate question arises: what is the cause of such a fall and why was not it reflected directly in the Russian statistics?

First, it is related with long-term demographic trends and the specifics of the Russian age pyramid (*Fig. 4*). At present, more numerous generations born in 1950s and 1960s are leaving the labor market, while smaller generations born in the 2000s come to it. Demographic trends lead to a pickup in the share of older population, thus reducing the potential of an innovation component for the Russian economy. According to the data of the workforce survey, in 2022 a decrease in the number of workforce was equal to about 0.4 mn people, which situation can be attributed completely to the effect of this factor. However, such a factor existed before, as well, but never brought about dramatic labor shortages of such an extent as happened at the end of last year.

Second, an important factor was the partial mobilization and withdrawal of a portion of workers from the labor market. The extent of a decline in the number of the workforce engaged directly in manufacturing of goods and provision of services in 2022 can be assessed only approximately. According to the official data, 318,000 persons were mobilized for the special military operation. It is infeasible to name the exact number of those who left the country, but we can assume that it may vary from 300,000 to 600,000 persons. As a result, in 2022 the overall number of workforce declined owing to these two factors by 0.6 mn to 0.9 mn persons, a decrease of 1.0%–1.5%. It should be taken into consideration that an important aspect is not only the number of labor resources withdrawn from manufacturing of goods and provision of services in the Russian economy, but also a declining quality of the human capital. A substantial portion of this group of the population is made up of men born in the 1980s and 1990s. These generations make up the bulk of Russian labor resources and have a higher level of efficiency. The decision to emigrate was taken primarily by skilled and well-educated workers who had an opportunity and savings to live abroad.



*Fig. 4.* The number of the population in terms of age in 2022, persons

Source: Data of ORS; Rosstat.

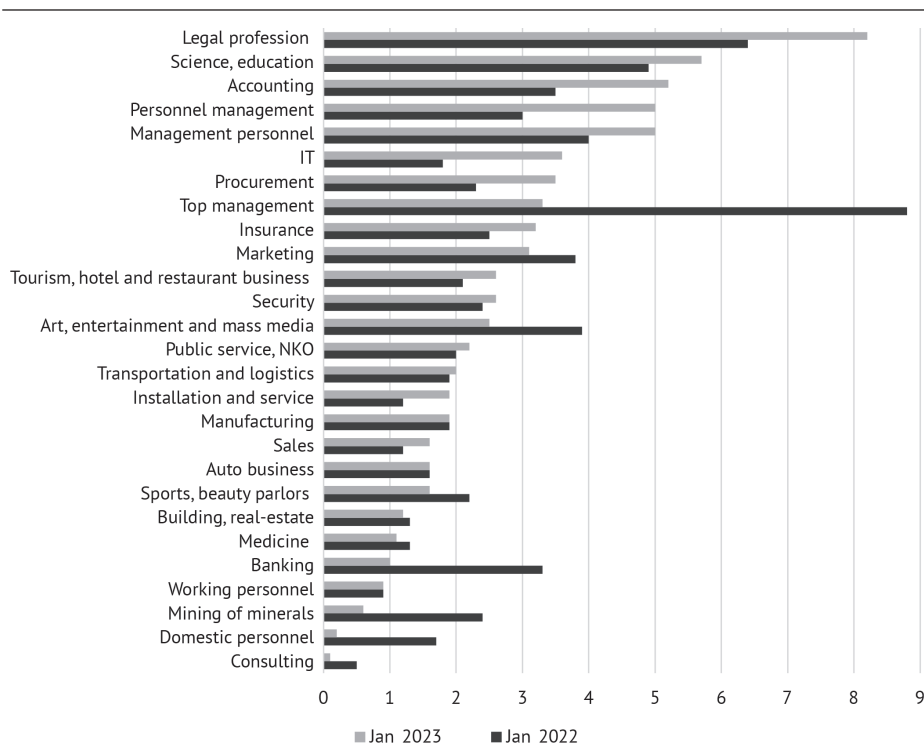
Unfortunately, Rosstat's statistics does not virtually register changes related with the partial mobilization and emigration of a portion of the working population which started as far back as March 2022 and intensified late in September. According to the official statistical methodology, mobilized workers are actually still included in the number of those employed. For similar methodological reasons, Rosstat's statistics did not register a decline in the number of the workforce owing to multiple emigration.

The "effect of mobilization" on the labor market can be traced through regional dynamics of the levels of unemployment. By contrast with a similar period of 2021, Q4 2022 saw the largest fall in unemployment in the Republic of Adygeia (4.2 p.p.), the Republic of Buryatia (2.7 p.p.) and the Republic of Tyva (2.5 p.p.). We can assume that employers in these regions had to replace mobilized workers with the unemployed more than others. No decline in the rate of unemployment was registered in the capital regions of St. Petersburg and Moscow; on the contrary unemployment even picked up there.

Third, a temporary labor migration to Russia from the near abroad has largely decreased, but it is not reflected in the workforce indicator, either.

At the same time, a shortage of labor varied largely in terms of professions and sectors. Based on the hh.index dynamics between January 2023 and January 2022, one can see which sectors and professions showed trends towards labor shortages and which ones saw growth in the number of resumes relative to the number of job vacancies. The largest labor shortages were seen in consulting, extractive industries, the banking sector and top management. Quite the opposite trend prevailed in the IT sector, personnel management and accounting. For example, the IT sector saw a 23% decline in the number of job vacancies during the year, while the number of resumes increased by 9%, which means sooner a surplus of job seekers as compared with the situation in February 2022. Demand for workers in the manufacturing industry remained stable during the entire year. It is noteworthy that the sample of job vacancies on hh.ru is partly shifted, however, at present this problem is not as acute as five years ago. For example, an average pay offered at the website (Rb 58,179 as of the end of January 2023) is close to an average accrued wage in the economy (*Fig. 5*).

Apparently, in 2022 the most important mechanism of adjustment on the Russian labor market was the introduction of part-time work schedules. Though in most sectors, the share of those working part-time or being in idle time remained unchanged during the year or even decreased, in sectors which were hit the most by sanctions the share of such workers increased substantially. It concerns primarily the automaking industry which as far back as April faced the forced shutdown and, subsequently, the statistics registered a pickup in the share of workers being in idle time from 13.5% in Q3 2021 to 29.3% in Q2 2022 and a slight decline to 23.9% by the end of the year. Similar processes were evident in woodworking (growth from 1.2% to 9.6%) and to a lesser extent in most sectors of the manufacturing industry. In the services sector, trade saw growth in the number of workers being in idle time (from 0.1% to 0.8% in Q2–Q3 and 0.5% in Q4), while in other subsectors the number of such workers even decreased.



*Fig. 5. The hh. Index dynamics in terms of professions*

Source: The data of hh.ru.

In its turn, a shortage of workers sped up growth in wages in most sectors. On the back of rapid inflation in March-May, real wages fell by 6.1%-7.2% on the relevant period of 2021, however, they returned to the pre-crisis level by the end of last year (*Fig. 6*). On average, in 2022 the average monthly pay of workers amounted to Rb64,191, a decrease of 1.0% in real terms relative to 2021. In 2022, the highest increase in wages in absolute terms was registered in coal mining (23.4%), railway transportation: intercity and international passenger services (22.7%) and printing and copying of information from media (21.6%). The year 2022 saw the lowest growth in wages in absolute terms and a decrease in real terms in such sectors as provision of other types of services, activities in the sphere of culture and sports, leisure and entertainment, public administration, healthcare, automobile manufacturing and woodworking. Overall, in 2022 wages grew faster in most sectors of the industry and agriculture than in the services sector.

Telephone surveys of households carried out by ISAP RANEPА in 2022 showed that the assessment of labor market processes by workers correlated well with the statistics data. On one side, respondents point to stabilization on the labor market since last summer: if in March-April up to 16% of workers pointed to high



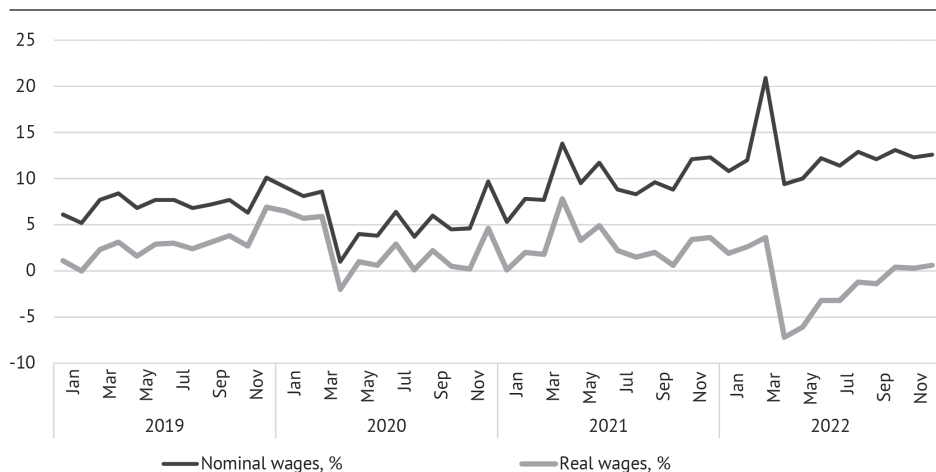


Fig. 6. An increase in real and nominal wages on the relevant indicator of the previous year

Source: The data of ORS; Rosstat.

or very high risks of losing a job next month, starting from June this share of the respondents fell to 9%–10%. At the same time, the share of those who believe that they can find a new job on the same terms and with the same pay fell from 69% to 55%–59%. On the other side, a large portion of the respondents refer to high economic costs related with the partial mobilization: 38% of the respondents from enterprises where a portion of workers were mobilized noted that efficiency declined. If only managers are taken into account, this share increases to 40%. One of the main factors, which respondents referred to, was a decrease in the number of workers at enterprises and the need to hire or transfer unskilled workers. Another common factor reducing labor efficiency was higher anxiety and conflicts in work teams. Finally, some respondents said that the number of their customers and orders for their products and services had decreased.

In short, though the situation on the Russian labor market looked quite favorable on the outside in 2022 if compared with 2014–2015 or 2020, the situation from the inside was not so rosy. Indeed, the rate of unemployment renewed on a monthly basis its record low and a decline in real wages was rather limited as compared with GDP dynamics. At the same time, a complicated business environment affected largely employers of a number of sectors, primarily, car manufacturing and woodworking. In 2022, a large number of workers in these sectors were in idle time or received only a portion of their wages. The emigration of a large number of people and the mobilization of able-bodied manpower made it feasible to preserve a low level of unemployment. However, along with a decrease in the number of the unemployed in 2022, the number of job vacancies declined, as well. By the end of the year, substantial labor shortages were seen in some professions. It depends on the situation in the Russian economy in 2023

whether these shortages prevail or this trend is short-lived. Labor shortages will be an important factor preventing a prompt adaptability of the economy to a new economic environment. However, in case of growing crisis phenomena in some sectors owing to sanctions (mining of minerals, the banking sector, manufacturing industries), a low volume of labor resources is expected to mitigate the extent of the crisis for the population.

## 4.2. Households' incomes and assessment of their financial situation<sup>1</sup>

### 4.2.1. Forecasts and assessments of households' incomes

Late in 2021, the Russian economy reached the level in many positions to implement strategic economic development objectives. Relative to 2020, various economic indicators demonstrated positive dynamics, which was evidence of the fact that the Russian economy reached the pre-COVID 2019 level and gave us grounds to expect more substantial progress in 2022.

Against this background, early in 2022 expert assessments in respect of economic forecasts showed positive trends. Late in 2021, the RF Central Bank presented several scenarios of Russia's macroeconomic development in 2022–2024.<sup>2</sup> According to the estimates of the baseline scenario, GDP was expected to grow by 2%–3% by the end of 2022. Apart from that, the regulator presented other three scenarios proceeding from potential risks to Russia: +2.4%–3.4% (the “Financial Crisis” scenario and the “Global Inflation” scenario); (-0.8%)–(-0.2)% (a decrease in GDP in case of the “Growing Pandemic” scenario).

In the consensus-forecast presented by the TASS, it was specified that experts expected Russian GDP to grow on average by 2.5%.<sup>3</sup> Think tanks' proposed estimates (at year-end 2021) were as follows: UK Alfa-Kapital (2.7%), the Sovkombank (2.5%), BKS Mir Investitsii (2.6%), Expert RA (2.8%), FG Finam (2.3%) and NRU HSE (2.2%). Some companies presented their estimates of growth in households' real incomes: 1.5%–2% (by estimates of FG Finam) and 4%–5% (UK Alfa-Kapital). The Analytical Credit Rating Agency (ACRA) predicted economic growth of 2.7% by the end of 2022.<sup>4</sup> According to ACRA's forecast, households' disposable real incomes were expected to increase by 2.4%.

In September 2021, the RF Ministry of Economic Development prepared the forecast of Russia's social and economic development in 2022.<sup>5</sup> It predicted a 3%

1 Authors: A.A. Osavolyuk, Junior Researcher of ISAP RANEPa; E.A. Tsatsura, Candidate of Social Sciences, Senior Researcher of the ISAP RANEPa.

2 The main guidelines for the state monetary policy in 2022 and in the 2023–2024 period // The RF Central Bank. URL: [https://www.cbr.ru/about\\_br/publ/ondkp/on\\_2022\\_2024/](https://www.cbr.ru/about_br/publ/ondkp/on_2022_2024/)

3 Experts predict that Russian GDP growth will slow down to 2.5% by the end of 2022 // TASS. URL: <https://tass.ru/ekonomika/13311805>

4 Global prices for energy and food and the rate of inflation in Russia // ACRA. URL: <https://www.acra-ratings.ru/research/2666/>

5 The Forecast of the Social and Economic Development of the Russian Federation in 2022 and the 2023–2024 Planned Period. Table 1. “The main indicators of the social and economic development of the Russian Federation.” The Ministry of Economic Development of the Russian Federation. URL: [https://www.economy.gov.ru/material/directions/makroec/prognozy\\_socialno\\_ekonomicheskogo\\_razvitiya/prognoz\\_socialno\\_ekonomicheskogo\\_razvitiya\\_rf\\_na\\_2022\\_god\\_i\\_na\\_planovyy\\_period\\_2023\\_i\\_2024\\_godov.html](https://www.economy.gov.ru/material/directions/makroec/prognozy_socialno_ekonomicheskogo_razvitiya/prognoz_socialno_ekonomicheskogo_razvitiya_rf_na_2022_god_i_na_planovyy_period_2023_i_2024_godov.html)

growth in GDP in case of the baseline scenario and a 2.5% growth in GDP in case of the conservative scenario in 2022 amid a pickup in production of oil within the frameworks of the OPEC+ deal (4.6%), tightening of the monetary policy, as well as the expansion of domestic demand. According to the forecast, retail trade turnover was to grow by 2.3%–2.8% in 2022. At the same time, the forecasted increase in households' real disposable incomes was to amount to 1.9%–2.4%. Further, real wages were to grow by 2.0%–2.4%. This forecast did not present the assessment of poverty for the next year, but previous long-term forecasts predicted a fall in the poverty rate to 9.4% (based on the estimate relative to the minimum subsistence level).<sup>1</sup>

In Spring 2022, upside dynamics and expert evaluations started to move in a negative direction on the back of the beginning of the special military operation and, as a consequence, the war of sanctions and the pressure on the part of Western countries. The RF Central Bank, the RF Ministry of Economic Development and experts-economists started to adjust their forecasts with these developments taken into account. So, the RF Central Bank revised several times within a year its forecast of the decline in GDP: 8.0%–10.0% in May<sup>2</sup>, 6.0%–4.0% in July<sup>3</sup> and 3.5%–3.0% in October.<sup>4</sup> In Spring 2022, the Center for Macroeconomic Analysis and Short-Term Forecasting (CMASF) released an analytical report, including the Russian economic forecast with the “sanctions shock” taken into account. According to the forecast, GDP was expected to decrease by 6.3%–6.6% by the end of the year. Also, real wages and households' real disposable income were predicted to fall by 4.0%–4.2% and 7.0%–7.2%, respectively, and, as a consequence, the rate of unemployment was to pick up (the forecast value of 7.0%–7.3%)<sup>5</sup>. Forecasts of other expert groups were mostly pessimistic, too. So, in March 2022 the JP Morgan presented its findings with a 7% fall in GDP by the end of 2022.<sup>6</sup> In 2022, the International Monetary Fund revised more than once its outlook for the Russian economy (a fall up to -8.5%). The Ministry of Finance presented its assessment of a fall in real disposable incomes (6.8% year-on-year).

However, as seen from the comparison of the forecast values with the actual ones in 2022, experts' negative expectations did not materialize in full. Indeed, various fluctuations of incomes and the consumption pattern, which are difficult to predict, actually took place, but owing to the measures of state support of the population the fall in incomes was less dramatic than experts forecasted.

1 The Russian economy: under the effect of the credit cycle // The RF Ministry of Economic Development. URL: [https://www.economy.gov.ru/material/news/rossiyskaya\\_ekonomika\\_pod\\_vliyaniem\\_kreditnogo\\_cikla.html](https://www.economy.gov.ru/material/news/rossiyskaya_ekonomika_pod_vliyaniem_kreditnogo_cikla.html)

2 The Report on the Monetary Policy // The RF Central Bank. May 2022. URL: [https://www.cbr.ru/collection/collection/file/40972/2022\\_02\\_ddcp.pdf](https://www.cbr.ru/collection/collection/file/40972/2022_02_ddcp.pdf)

3 The Report on the Monetary Policy // The RF Central Bank. July 2022 r. URL: [https://www.cbr.ru/Collection/Collection/File/42214/2022\\_03\\_ddcp.pdf](https://www.cbr.ru/Collection/Collection/File/42214/2022_03_ddcp.pdf)

4 The Report on the Monetary Policy // The RF Central Bank. October 2022. URL: [https://www.cbr.ru/Collection/Collection/File/43452/2022\\_04\\_ddcp.pdf](https://www.cbr.ru/Collection/Collection/File/43452/2022_04_ddcp.pdf)

5 On some parameters of the short-term forecast: adaptability to sanctions // CMASF. URL: [http://www.forecast.ru/\\_Archive/analitics/DB/foreparam2022.pdf](http://www.forecast.ru/_Archive/analitics/DB/foreparam2022.pdf)

6 The Russia-Ukraine Crisis: What Does It Mean For Markets? URL: <https://www.jpmorgan.com/insights/research/russia-ukraine-crisis-market-impact#:~:text=J.P.%20Morgan%20Research%20forecasts%20that,contraction%20of%20at%20least%207%25>

#### 4.2.2. The main developments in the sphere of social protection

According to the new methods of calculating the minimum subsistence level (MSL), which have been applied since 2021, it was equal to 44.2% of the median salary. However, owing to a high rate of inflation in 2022, the calculations based on these methods were suspended, including in 2023 and 2024, and the unscheduled MSL indexation based on the forecasted poverty line was carried out. So, in 2022 MSL increased twice: from January 1 it was equal to Rb12,654 (for the whole population) and from June 1 it increased to Rb13,919.<sup>1</sup> By contrast with 2021, the overall increase in the minimum subsistence level amounted to 19.4%. From January 1, 2023, the MSL base amount rose by 3.3% to be equal to Rb14,375. It is noteworthy that growth in the minimum subsistence level has an effect both on the coverage of the population with social support measures and the size of numerous monthly social payments. Further, the measurement of the size of the poor population on the basis of the poverty line, which is calculated with the headline inflation taken into account and not on the basis of changes in the cost of the consumer basket, may produce the effect of moderation of the poverty level because the cost of the consumer basket grows faster than the rate of inflation as whole.

The minimum wage growth in 2023 and 2024 is set 3 p.p. above the growth in the minimum subsistence level of an able-bodied person. In 2022, the minimum wage increased twice: by 8.6% from January 1 (to Rb13,890)<sup>2</sup> and by 10% from June 1 (to Rb15,279)<sup>3</sup>. From January 1, 2023, the minimum wage increased again by 6.3% (to Rb16,242)<sup>4</sup>. So, as of January 1, 2023, the minimum wage exceeds the basic subsistence level and the subsistence level of an able-bodied person by 13% and 3.7%, respectively.

The benefits, which indexation is envisaged by the law, have been indexed by 11.9% since February 1, 2023. The high percentage of indexation is related with the high rate of inflation in 2022. From 2023, wages in the public sector will grow at the same rate as average wages of those engaged in economic activities. In 2022, indexation was equal to 6.5%. In 2023, indexation was already planned from January 1, 2023, and not from October 1, 2023, however, implementation of the plans is currently delayed.

From May 1, 2022, full families with average per capita incomes below one minimum subsistence level received an opportunity to apply for benefits for children aged 8-17 years (before that these benefits were granted only to single parents). In 2023, it is planned to continue the transformation of the system of social support of families with children. From January 1, 2023, a single benefit for

1 The value of the minimum subsistence level as a whole in the Russian Federation // Rosstat. URL: [https://rosstat.gov.ru/storage/mediabank/vpm-643\\_doc](https://rosstat.gov.ru/storage/mediabank/vpm-643_doc)

2 Federal Law No.406-FZ of December 06, 2021 "On Amendment of Article 1 of the Federal Law "On the Minimum Size of the Labor Remuneration." URL: <http://publication.pravo.gov.ru/Document/View/0001202112060038>

3 RF Government Decree No. 973 of May 28, 2022. URL: <http://publication.pravo.gov.ru/Document/View/0001202205300031?index=2&rangeSize=1>

4 Draft Law No. 201618-8 "On Amendment of Article 1 of the Federal law "On the Minimum Labor Remuneration" and Suspension of its Individual Provisions." URL: <https://sozd.duma.gov.ru/bill/201618-8>

families with children aged 0–17 years and pregnant women was introduced, but for a number of categories the conditions for receiving this support have been changed. A larger volume of support will be directed to the poorest pregnant women (the size of payments may amount to 75% and 100% of MSL, rather than 50%), and families with children below the age of 3 years will be able to receive two payments: one payment from the budget in case of income below 1 MSL and the other from the maternity capital in case of average per capita incomes being less than 2 MSL. At the same time, for some categories the criteria for the entitlement to the state social support have been tightened. For example, mothers with children below the age of 1,5 years who did not work before their pregnancy used to receive Rb7,677.81 per month regardless of any need criteria. Families with children aged 0–3 years with the first baby used to have the right to receive a payment equal to 100% of MSL of a child, if average per capita incomes were less than 2 MSLs. After the unification for them and other families with children was carried out, the income threshold amounts to 1 MSL, while in compliance with the new rules the payment from the budget may be equal to 50%–75%–100% of MSL depending on the family's income. Overall, these changes are mostly of administrative nature, making it feasible to harmonize the conditions of granting support to families with children aged 0–17 years regardless of the birth order with need criteria, property restrictions and the zero-income rule taken into account. In the current environment, the support of low-income families with children by means of target social payments plays an important role in curbing growth in poverty.

However, apart from implementation of the above administrative changes there are no grounds so far to speak about the introduction of the Social Treasury project and expansion of target social support of the population. On the contrary, the year 2022 saw the introduction of a number of social support measures for the mobilized persons and participants in the special military operation (SMO) both at the federal and regional levels without a family's incomes taken into account. In particular, in assigning a single child allowance for families with children aged 0–17 years, incomes of mobilized persons' and SNO participants' family members are not taken into account. However, according to the data of ISAP RANEPА in February 2023 only 2% of the respondents declared that they or their family-members received payments, wages or allowances in connection with the special military operation.

In 2018, a national goal was set to reduce the level of poverty by half compared to 2017 (12.9%) by 2024. Amid the coronavirus pandemic, the period was shifted to 2030. At present, it is difficult to forecast whether the target value can be achieved by that time, however, in 2022 the indicator coincided with the planned one.

In the RF President's Address to the Federal Assembly on February 21, 2023, a few lines were identified in the development of the system of social support of the population and protection of citizens' incomes, including: the establishment of the special government fund for support of families of SMO participants; the launch of a special preferential rental housing program for workers of defense

industry enterprises; the introduction of the system of insurance of voluntary pension savings (up to Rb2.8mn) and protection of citizens' investments in other long-term investment instruments; provision of maternity capital to families with children born from the year 2007 in the Donetsk and Lugansk People's Republics and the Zaporozhye and Kherson regions; a further increase of 10% in the minimum wage (overall, from January 1, 2024 the minimum wage will increase by 18.5%); an increase in the limit for social tax deductions for educational expenses of children from Rb50,000 to Rb100,000 and for expenses on one's own education, medical treatment and purchasing of medicines from Rb120,000 to Rb150,000, as well as the introduction of a proactive regime of granting tax deductions.

#### 4.2.3. The level and dynamics of households' incomes

By Rosstat's preliminary estimates, in 2022 real disposable cash incomes decrease by 1.0% relative to 2021. At the same time, by contrast with the previous year, in Q4 2022 this indicator increased by 0.9%. In Q4 2022, real wages grew by 0.5% on the relevant period of the previous year. The real size of the assigned pensions picked up by 4.2% in Q4 2022 year-on-year (Fig. 7). In 2022, real pensions fell by 0.9% without a lump-sum payment taken into account in 2021 and 5.8% with a lump-sum payment counted in.

In Q4 2022, the volume of cash incomes increased slightly by 0.37% as compared with the relevant period of 2021. During that period, incomes from entrepreneurial activities picked up by 14.2%. The volume of social payments (+0.88%) and other cash receipts (+5.39%) increased slightly. However, a downward trend was

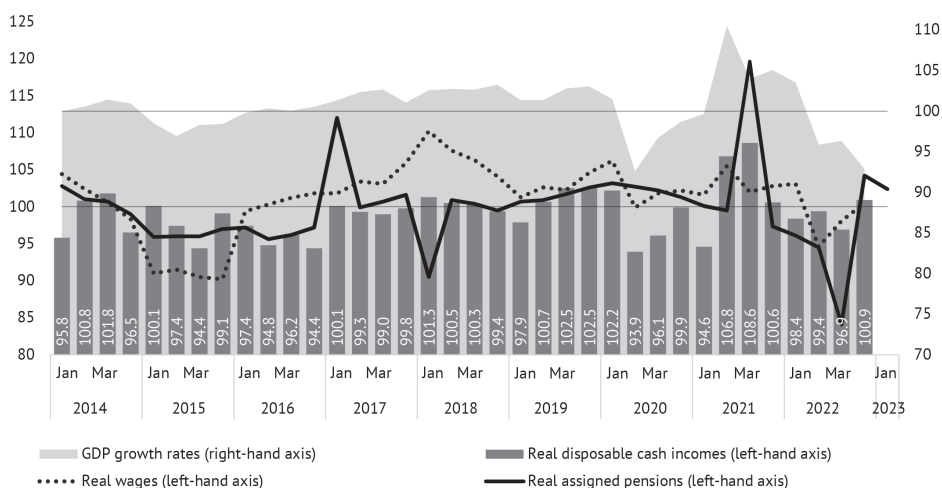
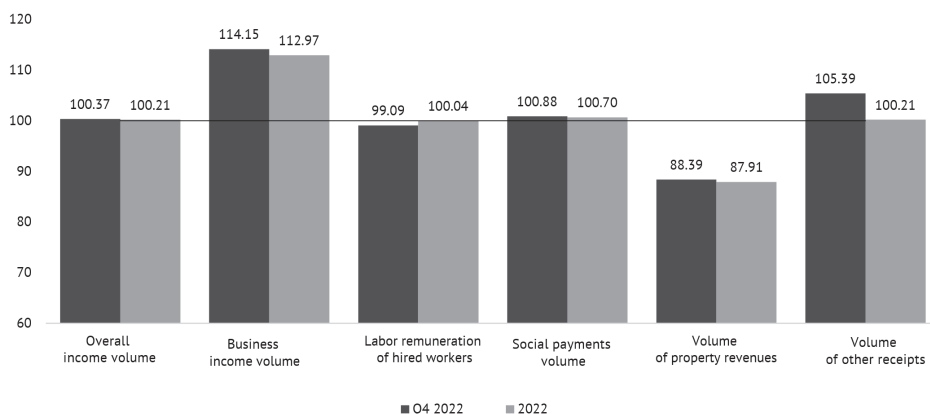


Fig. 7. Dynamics of households' real disposable cash incomes, real accrued wages, real size of assigned pensions and GDP growth rates in 2014–2023, % relative to the corresponding period of the previous year

Source: Rosstat.



*Fig. 8.* The dynamics of households' overall cash income volume and its components in real terms in Q4 2022 on Q4 2021, as well as in 2022 on 2021, %

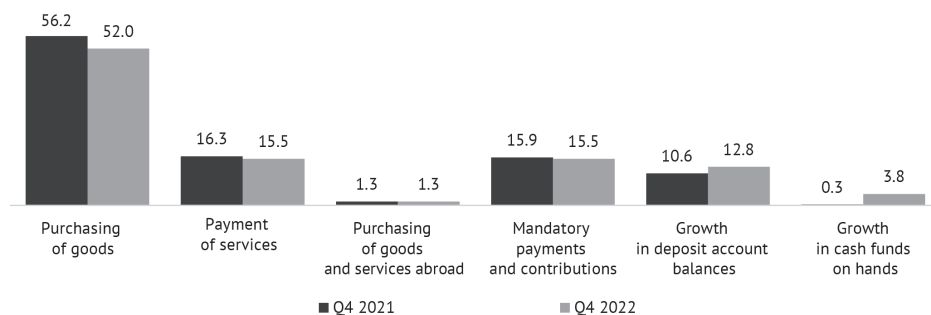
Source: Own calculations based on Rosstat's data.

observed on the part of the labor market: labor remuneration decreased by 0.91%. Incomes from property saw the most negative dynamics; they fell by 11.61% year-on-year in Q4 2022 (*Fig. 8*). In 2022, overall dynamics of incomes are similar. The volume of incomes in 2022 increased by 0.21% relative to 2021. The main growth driver was business income, which grew by 12.97% in 2022. A slight increase was observed in the volume of labor remuneration (+0.04%), social payments (+0.7%) and other cash receipts (+0.21%). A substantial downward trend was evident in revenues from property: they fell by 12%.

In Q4 2022, in the household cash expenditures pattern the share of expenditures on purchasing goods and services declined by 5 p.p., including those on purchasing goods (4.2 p.p.) and services (0.8 p.p.) on the domestic market. The dynamics of expenditures on purchasing goods and services abroad remained at the same level. Expenditures on mandatory payments and contributions decreased slightly by 0.4 p.p. At the same time, as seen from Rosstat's data the Russian population started to save more in Q4 2022 relative to Q4 2021: growth in deposit account balances was equal to +12.8% (compared with +10.6% in Q4 2021) and the volume of cash on hand increased by 3.8% (*Fig. 9*).

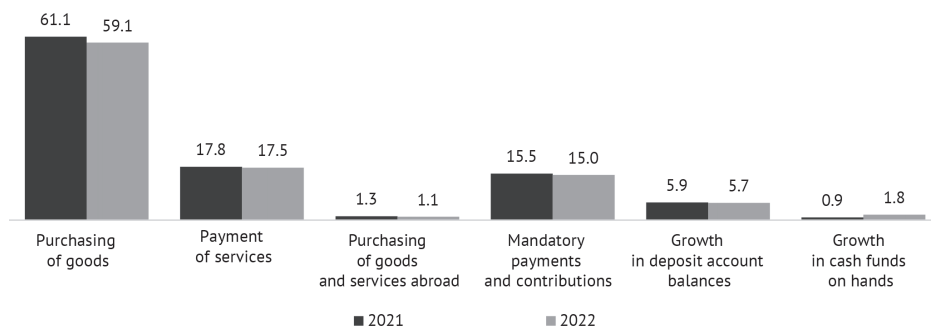
It is noteworthy that Q1 2022, the start of the SMO, accounted for the largest increase in demand for cash (+4.7%) and the largest fall in the volume of deposit account balances (-11.2%). In Q2 2022, the situation stabilized: savings in deposits started to grow (+9.5%) and cash volumes declined (-2.7%). In Q3 2022, the situation aggravated: savings and cash continued to grow (+7.0% and +1.5%, respectively).

According to the annual statistics, households' expenditures declined virtually across all the sources (*Fig. 10*). In particular, the volumes of payments for goods and services on the domestic and foreign markets declined. In the pattern of



*Fig. 9. The pattern of utilization of household cash incomes in Q4 2021 and 2022, %*

Source: Rosstat.



*Fig. 10. The pattern of household cash income utilization in 2021–2022, %*

Source: Rosstat.

household cash income utilization, the share of expenditures on goods and services of the Russian market declined by 2 p.p. and 0.3 p.p., respectively. On foreign markets, relevant indices decreased by 0.2 p.p. The share of expenditures on mandatory payments fell by 0.5 p.p. At the same time, deposit account balances decreased from 5.9% in 2021 to 5.7% in 2022). Also, the volumes of households' cash funds on hand increased from 0.9% in 2021 to 1.8% in 2022). Similar dynamics points indirectly to a decline in households' confidence in the banking sector and uncertainty in the financial sector's stability.

In Q2 2022, the average incomes of the tenth decile group of the population fell by 2.1% in real terms as compared with Q2 2021, while those of the poorest first decile group and the second decile group, by the mere 0.1% and 0.4%, respectively. In Q3, the average incomes of the tenth decile group declined by 2.4% in real terms relative to Q3 2021, while no decrease was registered in the first two poorest decile groups; by contrast, the first decile group saw growth of 0.7%. The minimal decrease in incomes of the poorest decile groups can be explained by

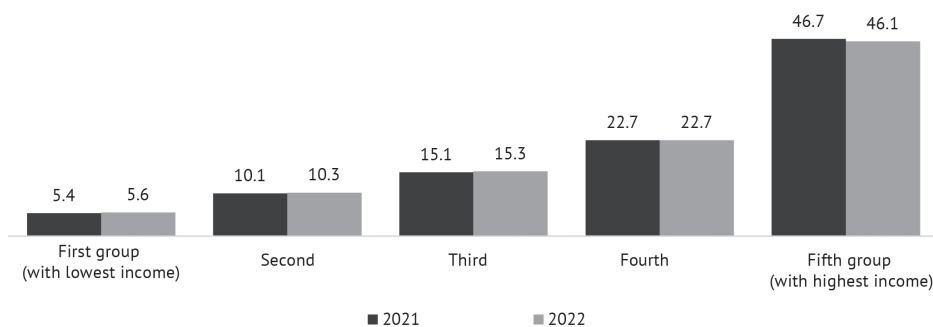


a high share of pensions and allowances in the pattern of these groups' incomes which were indexed by the government. However, the replacement of incomes from labor and entrepreneurial activities, which trend has been observed in the past few years, with payments from the state cannot be called a positive trend on which basis one can judge about the sustainability of the poorest population's economic situation.<sup>1</sup>

In 2022, the level of income inequality decreased slightly as compared with the previous year (the Gini index was equal to 0.402 and 0.409 in 2022 and 2021, respectively). In 2022, the ratio between the average income of 10% of the wealthiest population and 10% of the poorest population decreased and amounted to 14.4 (in 2021 R/P 10% ratio was equal to 15.2%). The incomes of the poorest population group increased by 0.2 p.p. (relative to 2021), as well as those of the second and third income groups (+0.2 p.p. in each group) (*Fig. 11*).

Actually, this trend is the evidence of redistribution of households' incomes in favor of less well-off groups. The government's social support of the most vulnerable groups has created costs, a so-called "penalty" which the higher-income population had to pay.

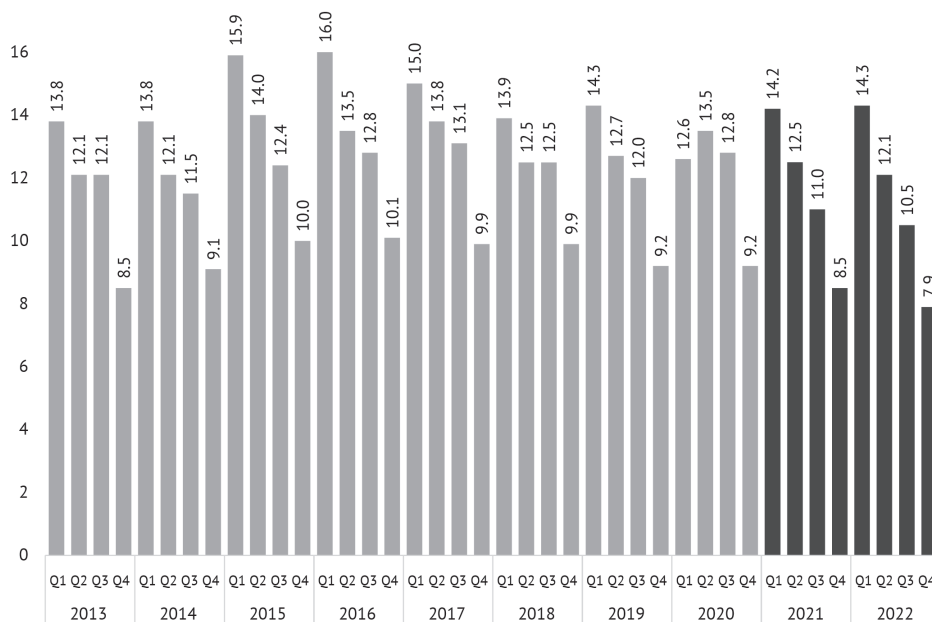
In Q4 2022, the share of the population with incomes below the poverty line became 0.6 p.p. lower than in Q4 2021 (*Fig. 12*). From Q1 2022, poverty growth (0.1 p.p. relative to Q1 2021) was compensated in subsequent Q2, Q3 and Q4 2022 owing to the government's social support measures and the year-on-year dynamics saw a positive trend as compared with 2021. The number of the population with incomes below the poverty line declined by 0.7 mn people in 2022 (year-on-year) and amounted to 15.3 mn people (without the statistical data on the Donetsk and Lugansk Peoples' Republics and the Zaporozhye and Kherson regions taken into account).



*Fig. 11.* Distribution of the overall volume of households' cash income across income groups, %

Source: Rosstat.

1 Households' incomes, expenditures and consumption in 2022 (based on the sampling survey of households' budgets) // Rosstat. URL: [https://gks.ru/bgd/regl/b22\\_102/Main.htm](https://gks.ru/bgd/regl/b22_102/Main.htm)



*Fig. 12.* The dynamics of the share of the population with cash incomes below the poverty line (before 2020: the minimum subsistence level), % of the overall number of the population

Source: Rosstat.

### 4.3. Demography and migration processes<sup>1</sup>

#### 4.3.1. The demographic situation

In 2022, natural population decline was equal to nearly 600,000 persons (599,600) or 4.1‰ (per mille) which is much below the level of a natural decline in the population in 2021 (1,042,700, 7.2‰) (*Fig. 13*). Such a decrease was feasible owing to the return of the mortality rate to the normal (non-pandemic) level.

Experts approached the beginning of 2022 with negative expectations regarding the birth rate dynamics and the demographic situation as a whole. First, Russia is approaching the “bottom” as regards the number of women of the most active reproductive age (*Fig. 14*). With each year, a large generation of the late 1980s makes a smaller and smaller contribution to the current birth rate. All subsequent cohorts of women are substantially smaller in number. Second, as of the beginning of 2022 an upcoming decrease in the intensity of childbirth was mainly driven by the COVID-19 pandemic in 2021 and the accompanying

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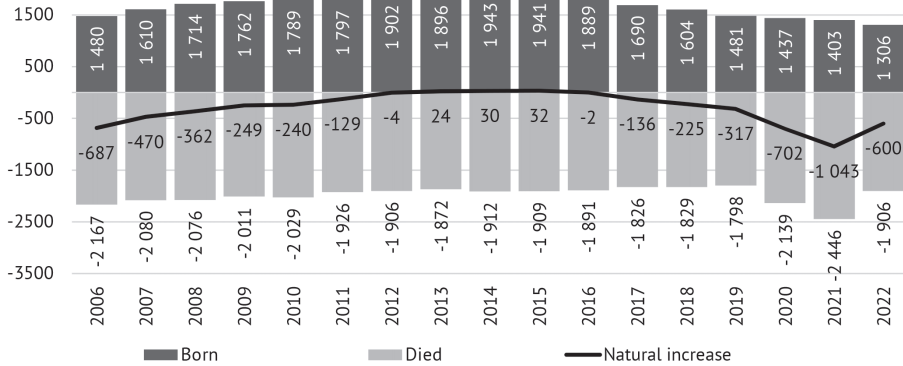


Fig. 13. The numbers of those born and died and natural increase (decline) in the population, 2006–2022, thousand persons

Source: UISIS; Rosstat's real-time data.

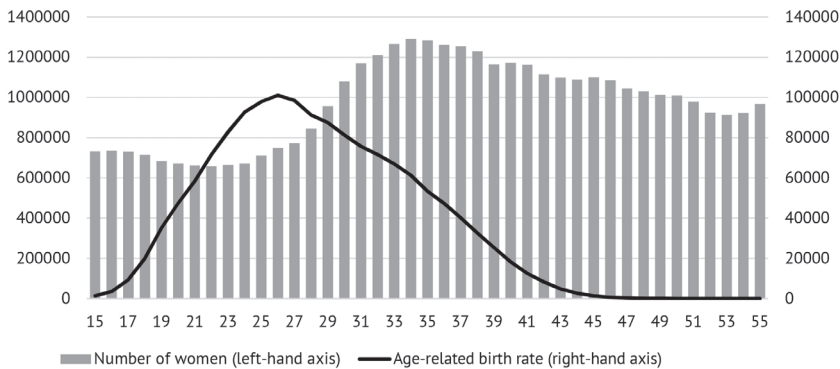


Fig. 14. The number of women and age-related birth rate across one-year age groups, 2021.

Source: The database of the Center for Demographic Studies, NES.

economic stagnation. Now we can say that the effect of the coronavirus pandemic on the birth rate has become inseparable in Russia from the effects of subsequent developments (the beginning of the special military operation, the sanctions regime and the economic crisis) since Autumn 2022.

In 2022, 1,306,200 children were born, a decrease of nearly 100,000 children or 6.2% relative to 2021. The overall fertility rate was equal to 9‰ and the preliminary estimate of the total fertility rate, to 1.45 babies. A decrease in the intensity of births was evident for the first and second order, as well as for most maternal ages.

Proceeding from the monthly dynamics of the number of births, it can be stated that in 2022 the birth rate demonstrated a more all-round negative trend

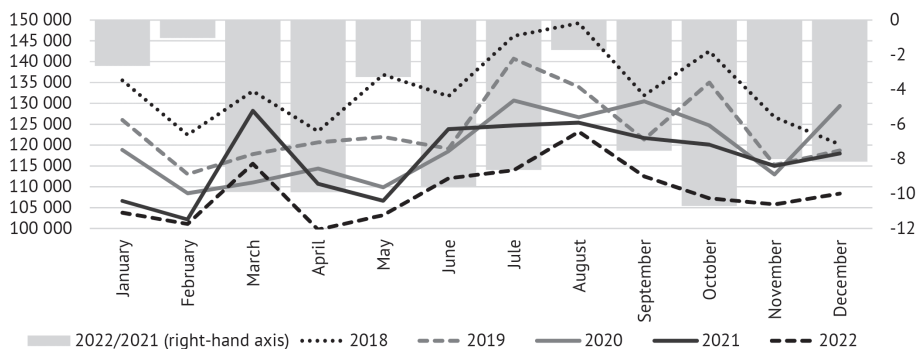
as compared with 2021 when fluctuations occurred (Fig. 15). The most dramatic decline in the number of births was seen in October 2022 (-10.7% as compared with the relevant period of the previous year), March and April 2022 (-9.9% each) and June (-9.6%). So far, judging by the data on December 2022 and the preliminary data on January 2023 (about 103,000 births) there is no evidence of a sharp decrease in births nine months after the beginning of the SMO. Such a decline in births is likely to be evident nine months after the partial mobilization was declared.

By the beginning of 2023, experts' expectations regarding the intensity of births became more negative due to crises phenomena in Russia. A further decline in births is forecasted (up to 1.12 mn).

A major factor for the decrease in the extent of a natural population decline was a substantial reduction in the number of deaths. Early in 2022, Omicron, a lighter coronavirus variant, which spread around the world, as well as in Russia forced out Delta, a more deadly coronavirus strain. Along with the vaccination of the population, this led to a decrease in the fatality rate associated with coronavirus infection. Based on the data on 2022, in January-March, the period of an active spread of Omicron and explosive growth in the incidence of the disease, the number of deaths surpassed the average values seen in 2015–2019 (Fig. 16) and from April the absolute indicators of the year 2022 became lower.

In January-December 2022, 1,905,800 people died in Russia, 22% and 10% less than in 2021 and 2020, respectively, and 6% more than in the pre-pandemic 2019. In 2022, the overall death rate of the population was equal to 13.1‰.

By preliminary estimates, life expectancy increased to 72.6 years<sup>1</sup> (Fig. 17), but failed so far to reach the pre-pandemic level (73.3 years). At the same time, the indicator is much lower than that forecasted by Rosstat in 2020 (74.7 years



**Fig. 15.** The number of births in 2018–2022 (persons) and changes in 2022 relative to 2021 (%)

Source: UISIS: Rosstat's real-time data.

1 In 2022, life expectancy increased in Russia // The Kommersant daily. The News – Society (kommersant.ru).

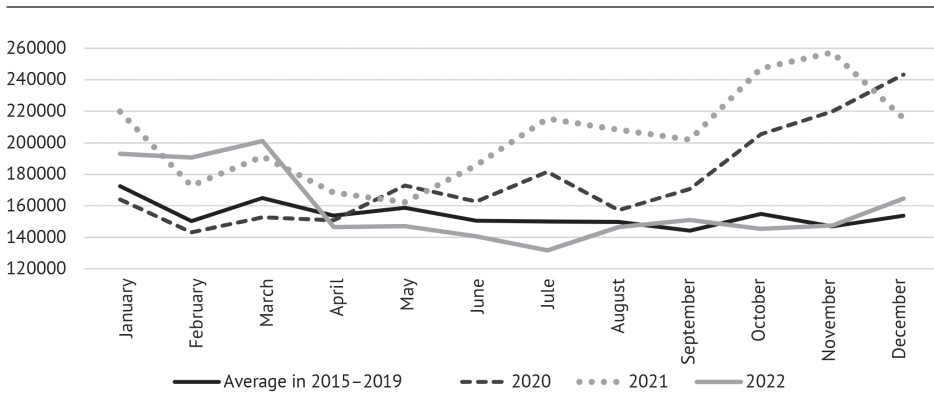


Fig. 16. The number of deaths by months in 2020–2022 and on average in 2015–2019, persons

Source: UISIS; Rosstat.

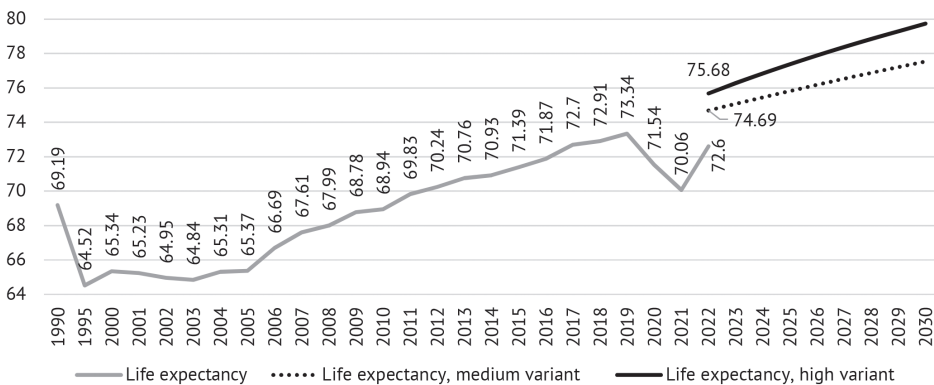


Fig. 17. Life expectancy at birth, 1990–2021 (actual), 2022 (estimate) and 2022–2030 (forecast), years

Source: Rosstat.

in 2022 and 75.7 years according to the medium and high projection variants, respectively).

According to the data of UISIS, along with growth in life expectancy of the population, 2022 saw negative trends which characterized health of the population. The share of the population leading a healthy life style largely decreased since 2019 (from 12% in 2019 to 7.2 % in 2022). This integrated index of the population's commitment to a healthy lifestyle is a conditional characteristic of a healthy lifestyle and includes the following components: no smoking, daily consumption of at least 400 gr of vegetables and fruits, adequate physical activity (minimum 150 min of moderate physical activity or 75 min of intense physical activity per

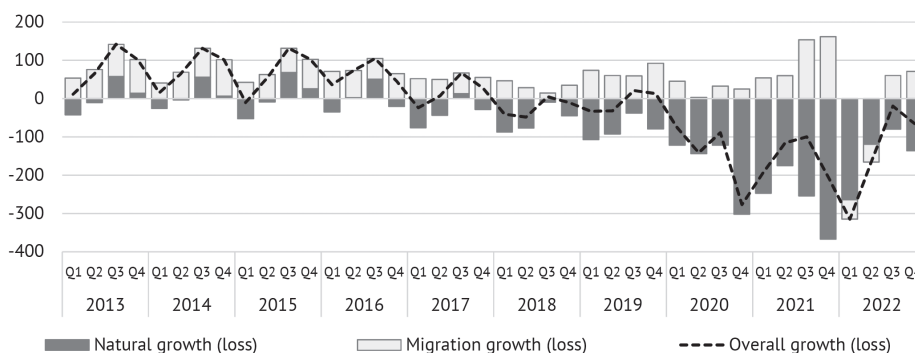
week), normal consumption of salt and alcohol consumption of no more than 168 gr and 84 gr of pure ethanol per week for men and women, respectively.<sup>1</sup>

Within a year, healthy life expectancy increased by the mere 0.4 years and failed to attain the pre-pandemic level (59.8 years in 2022, 59.4 years in 2021 and 60.3 years in 2019). Probably, the low level of healthy life expectancy can be explained by a considerable deterioration of the population's health after the coronavirus infection, high risks of noncommunicable diseases caused by tobacco smoking, alcohol consumption and weak physical activity and nutrition. According to the data of UISIS, in the past four years retail sales of alcohol increased from 6l per capita in 2019 to 6.5l in 2022).

#### 4.3.2. Long-term migration

In 2022, migration growth in the Russian population was equal to 34,900 persons. Formally, it is an unprecedentedly low indicator, but it is formed on the back of a transfer of a larger portion of departures (about 200,000) from H2 2021 to H1 2022. From July 2021, the validity period of documents of migrants, foreign nationals registered at the place of their stay, was extended till December 31, 2021. As a result, Rosstat stopped recording departures related with the end of the registration period at the place of stay and in 2021 the indicator of migration growth of the population amounted to the record value of 430,000 people. The registration of these departures was carried forward to H1 2022, so in January-June Rosstat recorded a record migration loss of 97,600 persons (*Fig. 18*). In H2, indicators started to return to normal, but a fall in H1 was covered by the end of the year. In 2021, migration growth of the population was overstated by approximately 200,000 persons; in 2022 it was understated by the same value.

As a result, in 2022 migration growth made up for natural loss of the population by the mere 5.8%, despite its decline relative to the previous year.



*Fig. 18. Components of change in the RF population, 2013–2022, quarterly data*

Source: Rosstat.

1 Rosstat's Order No.181 of March 29, 2019 "On Approval of the Methodology of Calculation of the "Share of Citizens Leading a Healthy Lifestyle" Indicator, %." URL: docs.cntd.ru

In 2022, Russia has migration growth with a very limited number of countries (*Table 1*). The contrast is particularly explicit as compared with 2021, but, as stated above, the indicators for these years are too distorted. In our opinion, it is correct to operate with the data for 2021–2022 on the average. In 2017–2022, there was no substantial distortion of the statistics, except for 2017 and 2019; in other years there were either problems related with interdepartmental networking between Rosstat and the RF Ministry of Internal Affairs (2018 ) or limitations related with the COVID-19 pandemic and its implications (from 2020).

*Table 1*

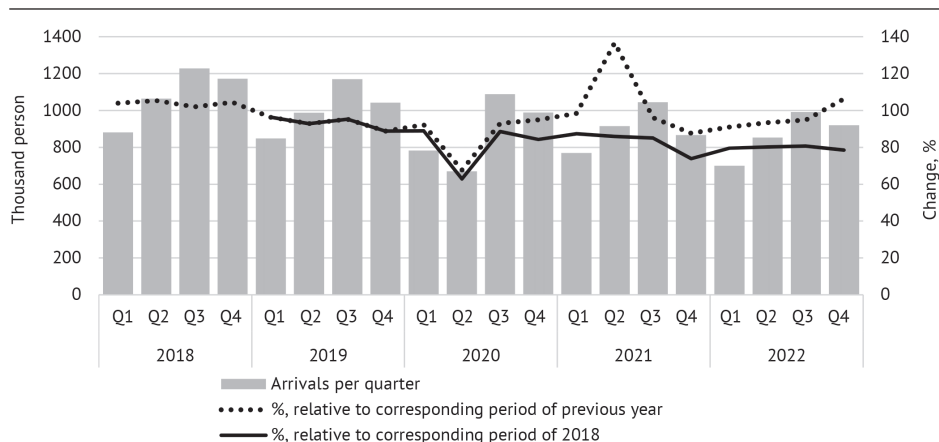
**Migration growth (loss) of the RF population in 2017–2022, thousand persons**

	2017	2018	2019	2020	2021	2022
<b>Overall international migration</b>	<b>211.9</b>	<b>124.9</b>	<b>285.8</b>	<b>106.5</b>	<b>429.9</b>	<b>34.9</b>
With CIS member-states	203.4	129.1	256.4	118.9	395.8	51.4
Including:						
Azerbaijan	8.6	8.7	16.8	10.9	23.7	-3,7
Armenia	14	14.4	35.5	-1.8	45.2	-10,7
Belarus	11.8	7.2	6.3	-1.4	15.4	-0,2
Kazakhstan	32.7	26.5	39.1	8.4	48.3	-4,9
Kirgizia	19.4	8.8	14.9	1.4	42.5	-6,8
Moldova	9.6	7.7	5.5	3.5	16.1	2,4
Tajikistan	34.6	31	47.8	39.4	96.6	87,3
Turkmenia	2.9	3	6.2	0.8	7.2	-3,7
Uzbekistan	22.2	6.8	19.1	4.9	36	-8,5
Ukraine	47.7	14.8	65.1	52.8	64.7	0,2
With other countries	8.4	-4.2	29.4	-12.4	34.1	-16,5

Source: Rosstat

In this regard, the remaining high level of Russia’s migration growth with Tajikistan seems surprising. Despite the fact that there was “double counting” of departures with Tajikistan, arrivals, which number of was so high, made up for the number of departures. The number of arrivals from Tajikistan was equal to 186,600 persons, an increase of 47% relative to 2021. No growth in arrivals was seen with any other country; on the contrary, arrivals declined.

Internal migration has been falling since 2018 (*Fig. 19*); in 2022 it decreased by 144,400 persons or 4%. In 2019–2022, the number of those migrating internally increased only by 100% on the relevant period. The first time it happened in Q2 2021 and it did not facilitate the recovery of the number of internal migrants after tight COVID-19 restrictions which were in effect in 2020. The second increase was registered in Q4 2022; it was equal only to 6.3% as compared with the relevant quarter of 2021 when the indicator fell by 12.4%. Overall, in 2022 the number of in-country resettlements was equal to the mere 79.7% of the level seen in 2018. The loss of more than 20% of migration in four years is a very high rate of decline; notably, the internal migration accounting methodology (as far as we know) has not changed.



*Fig. 19.* Internal migration in Russia in 2018–2022, quarterly data

Source: Rosstat.

In 2022, over three-quarters Russia's regions experienced a migration loss of the population and that is not surprising amid a reduced rate of increase in the international migration. Migration growth of the population in large centers of gravity for migrants ceased to be sustainable. So, growth declined in St. Petersburg, the Leningrad region, the Moscow region and the Krasnodar Krai. According to Rosstat's data, as far back as January-November 2022 Moscow experienced a substantial migration loss (-18,900 persons), but at the year-end migration growth of 88,700 persons was registered. It turns out that in December 2022 alone Moscow's migration growth was equal to 107,600 persons, while the number of arrivals to Moscow in December, to 128,500 persons. This cannot possibly be in reality; probably, a portion of arrivals was underreported within a year and Rosstat did not take them into account. It is noteworthy that in 2022 the number of arrivals to Moscow grew, an increase of 91,000 persons or 40.6% as compared with the previous year. It is unclear what caused such an increase in arrivals amid the continuing contraction of internal migration volumes and the normal level of international migrants. Recovery of the usual volumes of migration growth of the Moscow population is logical, however, monthly dynamics of migration indicators in the region raises questions.

In 2022, with a migration loss seen in all regions of the Far Eastern federal okrug and nearly all regions of the Privolzhsky federal okrug and the North-Caucasian federal okrug, the normal migration processes pattern, enhanced by a virtual lack of growth on the back of international migration, recovered.

#### 4.3.3. Temporary migration

In 2022, as in 2021, the number of foreign citizens staying in the territory of the Russian Federation was the lowest in the past decade (*Fig. 20*). At the beginning of 2022, there were hopes for a gradual recovery of international migration volumes



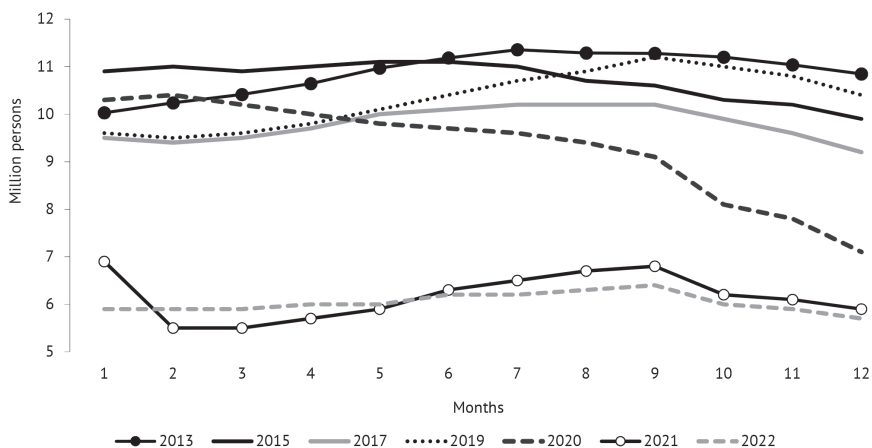


Fig. 20. Foreign citizens in the RF territory at month end, million persons

to Russia after the pandemic and late in February 2022 this index even surpassed by 7% the relevant one of 2021. However, after February 24, 2022 this trend was broken and by the beginning of summer the data on the number of foreigners in Russia turned out to be even lower than in 2021 when the pandemic-related restrictions on travelling to Russia were in effect. Consequently, during 2022 the index fluctuated from 5.7 mn foreigners to 6.4 mn foreigners staying in Russia as of the end of each month ( from 5.5 mn to 6.8 mn in 2021 ). By the end of 2022, 5.66 mn foreign citizens were staying in the RF territory, a decrease of more than 40% and 5% as compared with the pre-pandemic 2019 and the end of 2021, respectively. By contrast with the data on the relatively favorable 2019, the most dramatic decline was seen in the number of tourists (over 80%), as well as transit, business and private travelers to Russia (a decrease from 78% to 54%), while the number of those arriving in Russia for the purpose of work declined the least (30%); educational migration remained unchanged.

Among all foreign citizens staying in Russia, citizens of CIS countries accounted for the majority with their share remaining at the level of the previous year, that is, 89% (79% in 2019 and 84% in 2020). Early in 2022, 5.2 mn people from CIS countries were staying in Russia (Table 2); at year-end 2022 their number was equal to 5.0 mn (8.2 mn at year-end 2019). The leaders as regards the number of foreign migrants were two countries of Central Asia (Uzbekistan and Tajikistan) and Ukraine (in 2021 citizens of Kirgizia were rated the third in this regard).

By contrast with 2019, the number of citizens of Moldova, Azerbaijan and Ukraine staying in the Russian Federation decreased the most (by 77%, 75% and 58%, respectively), while that of citizens of Tajikistan, the least (by 6%). Even compared with the previous year, the number of foreign citizens from nearly all CIS states declined (from 5% in case of citizens of Uzbekistan to 29% in case of

Table 2

**Arrivals of foreign citizens from the CIS to Russia  
as of the date specified, persons**

	01.12.2015	01.12.2017	01.12.2019	01.12.2020	01.12.2021	01.12.2022
Azerbaijan	531080	601704	758377	548389	253961	186970
Armenia	490156	494848	483250	339985	301035	260032
Belarus	644598	689534	690854	628134	515694	502155
Kazakhstan	671751	531865	547398	365632	270887	230728
Kirgizia	541855	624756	746477	599294	663683	591135
Moldova	512637	425269	310679	205747	98510	70247
Tajikistan	898849	988771	1243080	1012186	1143290	1168233
Uzbekistan	1884110	1719492	2007895	1460120	1514596	1442419
Ukraine	2598303	2129446	1708652	1037016	577225	713339*
<b>CIS, overall</b>	<b>8773339</b>	<b>8205685</b>	<b>8496662</b>	<b>6196503</b>	<b>5338881</b>	<b>5165258</b>

\* As of the beginning of winter, apart from Ukrainian citizens in Russia there were 78,500 citizens of the Donetsk People's Republic (DPR) and 65,000 citizens of Lugansk people's Republic (LPR) (from Spring 2022, the Ministry of Internal Affairs publishes separately the statistical data on citizens from DPR and LPR, as well as Ukrainian citizens).

Source: The RF FMS; Main Directorate for Migration Affairs of the RF Ministry of Internal Affairs; CBD UIG database.

citizens of Moldova), except for Tajikistan and Ukraine (growth of 2% and 24%, respectively).

The number of citizens from developed western countries in Russia decreased even further as compared with 2021 (Table 3). Early in 2022 their number fell on average 7.6 times as compared with 2019: Spain (a decrease of 31 times), France (21 times), Germany and the UK (18 times each), the US (17 times), Italy (15 times) and Finland (4 times). This reduction in numbers concerned primarily those individuals who were in Russia on tourist, commercial and business trips (90%–96%). The number of labor migrants from developed countries and student migrants fell by 74% and 80%, respectively.

Table 3

**Foreign citizens from some EU countries and the US in Russia  
as of the date specified, persons**

	01.12.2015	01.12.2017	01.12.2019	01.12.2020	01.12.2021	01.12.2022
EU, overall	484981	437189	700325	551964	190157	92340
Germany	112053	105524	150914	122565	34616	8469
Spain	14960	14109	31239	22139	4421	1001
Italy	29004	24092	43989	34787	7373	2900
UK	29225	23616	30297	31853	8175	1655
Finland	76220	73500	87635	66983	36852	24530
France	34161	26071	54997	47510	8363	2640
US	47355	43875	59509	63296	20400	3545

Source: The RF FMS; Main Directorate for Migration Affairs of the RF Ministry of Internal Affairs.

Late in 2022, 2.61 mn labor migrants (those who stated the “work for hire” in the immigration card as the purpose of their visit) were staying in the Russian Federation (3.07 mn migrants late in 2021; 3.9 mn migrants in 2019). This is the lowest index value in the past few years. The number of labor migrants fell by 15% and a third as compared with the end of 2021 and the pre-pandemic 2019, respectively. Labor migration is driven almost completely by CIS citizens (98%); the number of labor migrants from the far abroad declined to 59,500 persons.

As compared with the pre-pandemic indicators (2019), there was a decrease in the number of labor migrants from Ukraine and Moldova (82% and 78%, respectively); Azerbaijan, Armenia and Kazakhstan (50% or more); Tajikistan (20%), Uzbekistan (25%) and Kirgizia (30%). At present, the labor migration is driven for 82% by migrants from three countries of Central Asia.

It is noteworthy that out of 2.61 mn labor migrants staying in Russia 1.9 mn migrants had valid work permits or patents and another 700,000 migrants were from the EAEU, that is, they had the right to work without any permit documents. So, almost virtually 100% of foreigners staying in Russia as labor migrants had an official permit to work. Probably, those labor migrants who are staying in Russia amid uncertainty prefer to avoid risks and have legitimate grounds for their residence and work in the Russian Federation.

The level of securing by foreigners of new documents for work in Russia remains high (*Table 4*), though the peak was passed in 2021 when the government took measures to simplify legalization of labor migrants who were staying in Russia.<sup>1</sup> In 2022, 2.07 mn work permits and patents were executed, a decrease as compared with the previous year and an increase relative to the 2015–2020 level.

*Table 4*

#### **Execution for migrants of permit documents for work in the Russian Federation, persons**

	2014	2015	2017	2019	2020	2021	2022
Work permit (WP) for foreign citizens (FC)*	1334899	177175	139595	117452	58475	87331	89771
Including:							
WP for qualified specialists (QS)*	158644	22099	17333	16877	7286	6557	8673
WP for high qualified specialists (HQS)	34225	41829	21363	31754	18937	44295	31579
Patents**	2379374	1779796	1658119	1686418	1101832	2156125	1980225
<b>Overall</b>	<b>3714273</b>	<b>1956971</b>	<b>1797714</b>	<b>1803870</b>	<b>1160307</b>	<b>2243456</b>	<b>2069996</b>

\* From January 1, 2015, work permits are issued only to FC from visa countries.

\*\* From January 1, 2015 work permits are issued to FC from visa-free countries for work for individuals and legal entities.

Source: The RF FMS; Main Directorate for Migration Affairs of the RF Ministry of Internal Affairs.

1 Executive Order No. 364 of June 15, 2021 of the RF President “On Temporary Measures on Regulation of the Legal Status of Foreign Citizens and Stateless Persons in the Russian Federation in the Period of Overcoming the Implications of the Spread of the New Coronavirus Infection (COVID-19).”

Labor migrants' payments to regional budgets for patents kept growing: in 2022 the sum was equal to Rb97.2 bn (Rb67.9 bn in 2021; Rb47.5 bn in 2020; Rb60.4bn in 2019). The main payers remained the same: labor migrants from Uzbekistan and Tajikistan (97% of all patents in 2022 against 94% in 2021), Azerbaijan (2.5%) and Moldova and Ukraine (0.5%).<sup>1</sup>

#### 4.4. Health care and public health<sup>2</sup>

The main challenge of the year for domestic health care was the need to maintain the achieved level of quality and accessibility of medical care in unfavorable macroeconomic atmosphere. Despite medical products were not formally the core of Western sanctions, provision of the industry was dramatically complicated due to restrictions on transportation, uncertainty of the exchange rate and departure of a number of suppliers from the Russian market.

For most of the year, health care system also continued to struggle with the pandemic of a new coronavirus infection. While the severity of the disease declined sharply, the spread of COVID-19 remained widescale enough to place a high burden on health care organizations.

External and internal constraints were bound to have a negative impact on the implementation of the national project "Health Care" and sectoral projects of smaller scale. Overall consequences of the crisis for the sector development can be assessed only after the restructuring of previously approved programs and projects is completed. Nevertheless, implementation of the majority of planned activities continues, while cancellations or significant temporary shifts of projects are isolated.

##### 4.4.1. Adaptation to new macroeconomic conditions

The most dangerous impact of sanctions imposed by foreign countries against the Russian Federation for the health care system was the threat of losing access to modern medical technologies. According to the Ministry of Health of Russia, the share of domestic medical devices in total consumption is 31%.<sup>3</sup> Of the 31.500 medical products registered in Russia, the share of manufacturers from unfriendly countries in March 2022 amounted to more than 4.500, of which 254 items were recognized as critical to the health care system.<sup>4</sup> According to a later assessment conducted for the most demanded medical products in the health care, out of 5.900 product codes more than 1.500 items are not produced in Russia or its

1 From Autumn 2022, citizens of Ukraine can work in the Russian Federation without work permit documents (Executive Order No.585 of August 27, 2022 of the RF President).

2 Authors: *N.A. Avksentiev*, Researcher, Department of Health Care Economy, IAES, RANEPa; *V.S. Nazarov*, Candidate of economic sciences, Head of Department of Health Care Economy, IAES, RANEPa; *N.N. Sisigina*, Researcher, Department of Health Care Economy, IAES, RANEPa.

3 Ministry of Health: over 30% of medical items in RF are domestically-produced // Interfax, 07.07.2022. URL: <https://www.interfax-russia.ru/index.php/main/minzdrav-bolee-30-medicinskih-izdeliy-v-rf-otechestvennogo-proizvodstva>

4 *T. Beskaravajjnaya*. Ministry of Health disclosed data on non-reproducible types of medical products in Russia // Medvestnik // 29.03.2022. URL: <https://medvestnik.ru/content/news/Minzdrav-raskryl-dannye-o-nevosproizvodimyh-v-Rossii-vidah-medizdelii.html>

friendly countries, of which more than 800 items are not among the promising areas to organize their own production in the near future.<sup>1</sup>

A similar situation is observed in the sphere of drug supply. In 2021, the share of domestic drugs in total sales was 61.2% in packages and 35.1% in rubles. The cumulative share of imported substances is estimated at 80% of the total amount of raw materials needed. The technological capabilities to organize production of the full cycle of drugs included in the list of vital and essential drugs (hereinafter - VED) in the territory of Russia exist only for half of the drugs (all estimates according to the Ministry of Industry and Trade).<sup>2</sup>

In February-March 2022, most international pharmaceutical companies announced that they suspended recruitment of new patients for participation in clinical trials conducted in Russia, as well as postponed the start of new research projects. This measure may seem illogical and inconsistent with sanctions imposed by Western countries, which do not affect the supply of medicines. The reason for such actions was the impossibility of ensuring uninterrupted logistics of medicines for clinical trials, which turned out to be disrupted amid restrictions on international passenger and cargo flights. Taking into account the fact that majority of clinical trials conducted by pharmaceutical companies in Russia are international multicenter (i.e., they take place in several medical organizations in different countries), manufacturers began to minimize the risks of lower quality trials, which could affect their activities in other countries.

In addition to significant reduction of research programs, many international pharmaceutical manufacturers also announced the suspension of new investments in Russia. However, the spirit of this wording for a long time made it impossible to assess the companies' real plans, which eventually ranged from withdrawal from the Russian market and transfer of rights to their medicinal products to partner companies to suspension of planning new capital investments (while maintaining the existing production and supply chains).

Certain challenges related to supply of equipment from abroad and rising costs caused by the complexity of international transportation during the pandemic were already observed in 2020–2021.<sup>3</sup> Introduction of Western sanctions dramatically worsened the situation. In spite of the fact that medical and pharmaceutical products were excluded from the USA and EU sanctions, the ban on direct air and road freight traffic, limitations of currency transactions and bank mutual settlements, departure of some foreign producers and importers from the Russian market resulted in mass delays of supplies and increase of logistics costs (by 300–500%<sup>4</sup>) by estimates of profile companies). In early March 2022 import of

1 Ministry of Health informed that over 1.500 items of medical products are not produced in Russia // TASS. 28.06.2022. URL: <https://tass.ru/obschestvo/15052789>

2 V. Kulakova. Our share: the Russian Federation can fully produce 50% of essential and vital drugs // Izvestia. 21.03.2022. URL: <https://iz.ru/1307280/veronika-kulakova/nasha-dolia-v-rf-polnostiu-mogut-proizvodit-50-zhiznenno-vazhnykh-lekarstv>

3 Explanatory note to the draft Resolution of the Government of the Russian Federation “On Suspension of Individual Provisions of Certain Acts of the Government of the Russian Federation.” URL: <https://regulation.gov.ru/projects#npa=125843>

4 O. Ageeva, M. Kotova. Medical equipment will be sent abroad for repairs. However, foreign manufacturers will be required to guarantee their return. // RTVI. 10.08.2022. URL: <https://rtvi>.

medical devices to Russia has almost completely stopped and by the end of April it was half of the usual level.<sup>1</sup>

To ensure uninterrupted supply of health care, a package of counter-sanctions measures was adopted already in March, which can be roughly divided into four areas.

*1. Ban for exports of potentially deficit items from Russia.*

Already on March 6, a temporary ban was imposed on the export from Russia of medical products manufactured in countries that had announced introduction of sanctions against Russia.<sup>2</sup> Later, the ban on the export of devices and appliances used in medicine was extended until the end of the year<sup>3</sup> and further until the end of 2024.<sup>4</sup> Exceptions are allowed for exporting the equipment for repairs, but each case of such export requires an individual permit and guarantees for return of the equipment.<sup>5</sup>

Similar restrictive measures were not applied in the sphere of drug provision. At the end of the year, the regions of the Russian Federation received a recommendation to maintain a four-month supply of drugs to mitigate logistics risks.<sup>6</sup>

*2. Advance provision of funding to medical organizations for purchasing fixed assets and consumables.*

In order to prepare reserves of medicines and other material supplies, as well as for the early purchase of fixed assets amid high uncertainty, medical organizations were granted the right to receive advance financing for the next month in the amount of more than 1/12 of the annual amount, but not more than the amount of costs for the purchase of fixed assets and material supplies at the expense of MHI funds in 2021.

At the request of a RF region, the advance funds were transferred from the annual subvention for implementation of the territorial MHI program.<sup>7</sup> Moreover, the maximum cost of medical devices used for medical interventions, laboratory and instrumental examinations permitted to be purchased at the expense of MHI

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com/stories/medtehniku-otpustyat-na-remont-za-rubezh-no-ot-inostrannyh-proizvoditelej-potrebuyut-garantii-ee-vozvratu/

- 1 Guarascio F. Risk of medical gear shortage in Russia falls as West restores exports // Reuters. 20.04.2022. URL: <https://www.reuters.com/world/europe/risk-medical-gear-shortage-russia-falls-west-restores-exports-2022-04-20/>
- 2 RF Government Decree of 06.03.2022 No. 302 "On the introduction of a temporary ban on the export outside the Russian Federation of medical devices previously imported into the RF from foreign countries that have decided to introduce restrictive economic measures against the Russian Federation."
- 3 RF Government Decree of 09.03.2022 No. 311 "On measures for implementing the Executive Order of the President of 08.03.2022 No.100."
- 4 RF Government Decree of 02.11.2022 No. 1959 "On amendments to particular acts of the Russian Federation."
- 5 O. Ageeva, M. Kotova. Medical equipment will be sent abroad for repairs. However, foreign manufacturers will be required to guarantee their return. // RTVI. 10.08.2022. URL: <https://rtvi.com/stories/medtehniku-otpustyat-na-remont-za-rubezh-no-ot-inostrannyh-proizvoditelej-potrebuyut-garantii-ee-vozvratu/>
- 6 Ministry of Health requested regions to ensure supply of drugs at least for four months // TASS. 12.11.2022. URL: <https://tass.ru/obschestvo/16306269?ysclid=lebg9k5paq968604414>
- 7 RF Government Decree of 16.03.2022 No. 373 "On Amendments to the RF Government Decree of 28.12.2021 № 2505"

funds (if the medical organization has no outstanding payables within 3 months) was increased from Rb100,000 to Rb1mn per unit.<sup>1</sup> According to Ministry of Health of Russia, regions had received Rb240 bn by April for purchasing drugs, which allowed to offset up to 80% of the costs for drug supply.<sup>2</sup> The effect of the special order of advance payment to medical organizations and the increased limit of expenditures for purchasing fixed assets was extended for 2023.<sup>3</sup>

The deferral to pay insurance fees to state non-budgetary funds became an additional measure of support for medical organizations and organizations producing medicines and medical products. It was assumed that the released funds could be used to cover price growth and logistics costs, which would reduce the need for borrowed funds. The funds' revenues were compensated at the expense of budgetary funds.<sup>4</sup>

The measures taken to support procurement mitigated the impact of sanctions on domestic health care, making it possible to avoid massive shortages of drugs and medical equipment. People could not access single high technologies (for example, cell therapy for oncohematological patients and bone marrow transplantation).<sup>5</sup> At the same time, the approved set of measures was not intended to fully compensate for the negative impact of sanctions on the industry. The provided financial assistance, in fact, represented a redistribution of funds from future periods, which is clearly seen in the level of budget execution of the Federal Medical Insurance Fund.

If in Q1 subventions to the territorial MHI funds amounted to 35.7% of the planned expenses instead of 25%<sup>6</sup>, the excess reduced to 7.1%<sup>7</sup> in Q2, and at the end of three quarters to 3.5%<sup>8</sup>. Proposal on indexation of MHI tariffs taking into account growth of prices for consumables was not supported.<sup>9</sup>

Similarly, no systemic decisions were made to increase financing of major investment programs. Instead, regions of the Russian Federation are released from liability for failure to comply with obligations on use of inter-budgetary transfers till January 2024. It is allowed to retain the unused balance of funds

1 RF Government Decree of 12.03.2022 No. 346.

2 A. Ryabova. Murashko: regions received Rb240 bn of advance money to purchase drugs at the MHI expense // Vademecum. 18.04.2022. URL: <https://vademec.ru/news/2022/04/18/murashko-regiony-poluchili-240-mlrd-rublej-avansov-na-zakupku-lekarstv-za-schet-oms/>

3 RF Government Decree of 29.12.2022 No. 2497 "On the program of state guarantees of free medical care for people for 2023 and for the planning period of 2024 and 2025."

4 RF Government Decree of 29.04.2022 No. 776 "On changes in deadline for paying insurance premiums in 2022".

5 T. Beskaravajjnaya. The Rogachev Center transferred patients who received CAR-T therapy to other types of treatment // Medvestnik. 23.05.2022. URL: <https://medvestnik.ru/content/news/Centr-Rogacheva-perevel-poluchavshih-CAR-T-terapiu-pacientov-na-drugie-vidy-lecheniya.html>

6 Operative report on the execution of the MHIF budget for January-June 2022 // Accounts Chamber. 29.08.2022. URL: <https://ach.gov.ru/audit/35102>

7 Operative report on the execution of the MHIF budget for January-March 2022 // Accounts Chamber. 07.06.2022. URL: <https://ach.gov.ru/audit/31790>

8 Operational report on the execution of the MHIF budget for January-September 2022. // Accounts Chamber. 02.12.2022. URL: <https://ach.gov.ru/audit/36086>

9 Governor of Chelyabinsk region announced that MHI tariffs should be indexed in Russia// TASS. 11.03.2022. URL: <https://tass.ru/ekonomika/14041863>



under the programs suggested for return to the federal budget.<sup>1</sup> Since April, RF regions were authorized to incur changes to the earlier approved programs in a simplified way<sup>2</sup>, and since October the Ministry of Health of Russia could redistribute funds under federal project “Modernization of primary care setting” between RF regions depending on the current funding need.<sup>3</sup>

### *3. Simplification of government procurement.*

To further accelerate reserves of medical products, a number of requirements of the legislation on public procurement were relaxed. The maximum contract price, which gives the right to conduct procurement by electronic request for quotations for medical equipment and consumables, was raised from Rb3 mn to Rb50 mn for a single purchase and from Rb100 mn to Rb750 mn for a cumulative volume during the year.<sup>4</sup>

The limit volume of purchase from a single supplier was increased to Rb50 mn for medicines and Rb250 mn for medical products (knowing that the sole supplier represents Russia or a country that has not sanctioned Russia).

For only suppliers of drugs and medical products without Russian counterparts, the maximum amount of purchase for one patient was increased from Rb1 mn to Rb1.5 mn.<sup>5</sup> Requirements for the division of purchases into separate lots for each type of medical products were suspended until September 1, 2022.<sup>6</sup>

### *4. Special rules regulating turnover of medical devices and medicines with high risk of shortages.*

The latest set of measures applied to critical medicines, equipment and consumables that could not be purchased on general terms because suppliers left or exceeded the established ceiling price due to reasons beyond control.

The first package of anti-crisis measures for the procurement of such drugs introduced mandatory consideration of the exchange rate of national currencies in setting the ceiling price for drugs from the list of VEDs, as well as the possibility to change the contract essential conditions for the supply of such drugs by agreement of the parties in the event of circumstances beyond their control.<sup>7</sup> Later, this measure was supplemented by a simplified mechanism aimed at re-registration of maximum selling prices in case of the medicines’ shortage<sup>8</sup> or if risk occurs.

1 RF Government Decree of 09.06.2022 №. 1056 “On suspension of certain provisions of certain acts of the Government of the Russian Federation.”

2 *Tatiana Golikova*: Vital and essential drugs are sufficient for the activities of medical institutions and the provision of our people // Government of Russia. 04.04.2022. URL: <http://government.ru/news/45042/>

3 RF Government Decree of 10.10.2022 No. 1805 “On amendments to Appendix No. 10 to the State Program of the Russian Federation “Development of Healthcare.”

4 RF Government Decree of 06.03.2022 No. 297 “On establishing the size of initial (maximum) contract price and annual volume of purchases aimed to buy certain types of medical devices using electronic request for quotations.”

5 Federal law of 08.03.2022 No. 46-FZ “On amendments to certain legal acts of the Russian Federation.”

6 RF Government Decree of 16.03.2022 No. 374 “On suspension of RF Government Decree of 19.04.2021 No. 620.”

7 Federal Law of 08.03.2022 No. 46-FZ “On amendments to particular legal acts of the Russian Federation”

8 In pharmaceuticals, the term “inventory shortages” is used to refer to shortages of drugs (i.e., inability to meet demand due to lack of necessary quantities of drugs on the market).



The risk threshold for shortages was lowered from 30 to 10% deviation of supply volumes.<sup>1</sup> For other drugs, where risk of deficit exists, a simplified procedure of state registration was introduced<sup>2</sup> and amendments to the registration dossiers.<sup>3</sup> Until January 1, 2024, it is allowed to import and circulate scarce medicines in non-Russified packaging.<sup>4</sup>

According to year-end, it should be noted that coordinated actions of the Ministry of Health of Russia, the Ministry of Industry and Trade, FAS and pharmaceutical companies prevented the deficit of most vital drugs, and the deficit of medicines observed at the beginning of the year was overcome for most positions.

However, changes in the actions and plans of pharmaceutical manufacturers may be more significant in the medium and long term. In particular, registration of most medicines in Russia is possible only if clinical trials have been conducted on the territory of this country with their plans significantly reduced.

Moreover, experience shows that priority is given in Russia to drugs with localized production and the deeper the localization, the better their market penetration (especially in the state segment). At the same time, termination of capital investments by international pharmaceutical manufacturers jeopardizes the possibility of localizing new drugs. Thus, in the future, the availability of modern drugs for patients in this country may decrease.

A simplified registration procedure was also introduced for medical devices with a risk of shortage. The list of medical devices subject to accelerated registration is formed by an interdepartmental commission, which includes the Ministry of Health, Roszdravnadzor, the Ministry of Industry and Trade, the Ministry of Finance, and the Ministry of Economic Development, and is published by Roszdravnadzor. As of December 2022, the list included almost 1900 product codes.<sup>5</sup>

At the end of the year the Russian government allowed non-original spare parts and components in the absence of corresponding supplies from foreign

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1 RF Government Decree of 23.03.2022 No. 444 "On amendments to nature of state regulation of maximum selling prices of the medicines' manufacturers included in the list of vital and most important medicines."

2 RF Government Decree of 05.04.2022 No. 593 "On characteristics of medicines' circulation for medical use in case of inventory shortages or risk of inventory shortages of medicines due to introduction of restrictive economic measures in respect of the Russian Federation."

3 RF Government Decree of 23.03.2022 No. 440 "On approval of the nature of amending documents contained in the registration dossier for a registered medicinal product for medical use in case of inventory shortages or risk of drug inventory shortages due to introduction of restrictive economic measures in respect of the Russian Federation."

4 Federal Law of 26.03.2022 No. 64-FZ "On amendments to particular legal acts of the Russian Federation"; Federal Law of 19.12.2022 No. 519-FZ "On amendments to particular legal acts of the Russian Federation and termination of particular provisions of legal acts of the Russian Federation."

5 List of type codes of 01.12.2022 according to results of the interdisciplinary commission meeting on establishing list of medical products subjected for circulation in compliance with "Characteristics of circulation, including specifics of state registration of medical items in case of their inventory shortages or risk of inventory shortages due to introduction of restrictive economic measures in respect of the Russian Federation approved by RF Government Decree of 01.04.2022 No. 552 // Roszdravnadzor. 2022. URL: <https://www.rozdravnadzor.gov.ru/documents/79223>

manufacturers and obtaining a confirmation of compatibility from Roszdravnadzor to maintain servicing of medical equipment.<sup>1</sup>

As the most radical measure, the Government of the Russian Federation was empowered to choose goods, where exclusive rights to results of intellectual activity are suspended, but in practice this power has not been used.<sup>2</sup>

#### 4.4.2. Pandemic of a new coronavirus infection

The most important feature of the third year of the pandemic was the reduction in the severity of the new coronavirus infection. According to Ministry of Health of Russia, during incidence of “Omicron” strain hospitalization was required for only 8% of patients, which resulted in a visible reduction in peak inpatient load: from almost 250,000 patients at one time in the fall of 2021 to less than 150,000 at the peak of the disease in January-February 2022.<sup>3</sup> Reduction in lethality of new strains became even more noticeable. By July 2022, mortality from COVID-19 has reduced in annual terms more than by 90% compared to the same period of 2021, resulting in removing this cause beyond the top 5 causes of mortality. Since August 2022, the Rosstat stopped publishing operative data on mortality from a new coronavirus infection.<sup>4</sup>

Nevertheless, pandemic continued to negatively impact on the health care activities and public health. At a lower risk, the new strains demonstrated an increased infection rate, resulting in a further growth in the burden on primary health care and a partial suspension of routine health care. In January-February 2022, formal restrictions on provision of individual outpatient polyclinic services (most often preventive examinations and medical examinations of adults) were in force in 54 of 85 regions of the Russian Federation.<sup>5</sup> In February, special procedure for implementing MHI program was introduced amid the threat of new coronavirus infection, authorizing RF regions to limit provision of planned medical care for outpatients and to extend the waiting period for planned medical care in hospitals until the end of 2023.<sup>6</sup> In the medium term, these limitations may become an additional factor of mortality growth from chronic non-infectious diseases along with the results of a new coronavirus infection. According to 2021 data, an increase in maternal mortality was recorded, and in the next 2–3 years

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1 RF Government Decree of 01.04.2022 No. 552 “On approval of nature of circulation, including specifics of state registration, of medical devices in case of their inventory shortages or risk of inventory shortages due to introduction of restrictive economic measures in respect of the Russian Federation.”

2 Federal Law of 08.03.2022 No. 46-FZ “On amendments to particular legal acts of the Russian Federation”.

3 Almost two thirds of Russian regions limited planned medical care due to “Omicron” // TASS. 03.02.2022. URL: <https://tass.ru/obschestvo/13609369>

4 Rosstat stopped publishing mortality data resulted from COVID-19 //RIA “Novosti”. 07.10.2022. URL: <https://ria.ru/20221007/covid-19-1822353601.html?ysclid=lefh30zslt809736226>

5 Almost two thirds of Russian regions limited planned medical care due to “Omicron” // TASS. 03.02.2022. URL: <https://tass.ru/obschestvo/13609369>

6 RF Government Decree of 04.02.2022 No. 107 “On specifics of the MHI basic program implementation amid threat of spreading diseases caused by a new coronavirus infection (COVID-19)”.

experts predict an increase in mortality from circulatory system diseases and malignant neoplasms.<sup>1</sup>

Another negative result of the pandemic was the continued deficit in financing of the MHI program. Despite refinement of mechanisms to provide for emergency expenses (in particular, permission to send funds of the rationed insurance reserve of MHI for these purposes and remove restrictions on its size<sup>2</sup>, allocation as part of the rationed insurance reserve of the Federal Fund of MHI a special reserve of funds for these purposes<sup>3</sup>), MHI own reserves again were not enough to fully cover the excess costs associated with COVID-19. Nevertheless, refinement of mechanisms to ensure provision of extraordinary expenses and reduced requirements of COVID-19 patients in a more expensive outpatient treatment allowed to significantly decrease the demand in the external funding compared to the most severe 2021 (Table 5).

*Table 5*

**Main parameters of financial provision for treating COVID-19 patients in 2021 and 2022<sup>1</sup>**

	<b>H1 2022</b>	<b>H2 2021</b>
Total amount of financial provision for treating COVID-19 patients, billions of rubles	150.2	218.1
Including in-patient, billions of rubles	124.2	208.8
Additional financial provision according to decisions of the RF Government, billions of rubles	47.1	28.92
Number of hospitalized COVID-19 patients, millions of people	1.1	1.5
Share of COVID-19 hospitalizations in the total number of hospitalizations for the period, %	9.9	15.6

**Note.**

1. Data on financial provision of medical care to COVID-19 patients in H2 2022 has not been published.  
2. A relatively low share of co-financing from Reserve fund can be explained by allocation of a major part of funds in H2 2021. In total, in 2021 51.8% of expenses aimed at payment of medical care to COVID-19 patients was provided from Reserve fund (Rb288,700 bn from Rb 557,100 bn). Refer: Operational report on the execution of the budget of the MHIF. January-December 2021. // Accounts Chamber. 22.02.2022. URL: <https://ach.gov.ru/audit/19869>

Sources: Operational report on the MHIF budget execution. January-June 2022. // Accounts Chamber. 29.08.2022. URL: <https://ach.gov.ru/audit/35102>; Operational report on the execution of federal budget and budgets of state extrabudgetary funds. January-June 2021 // Accounts Chamber, 25.08.2021. URL: <https://ach.gov.ru/audit/13372>; Government Edict of 13.02.2021 No. 348-p; Government Edict of 23.03.2021 No. 728-r.

In 2022, funds from the RF Government Reserve Fund were allocated three times: in January Rb7.3 bn to support primary health care (in particular, for purchase of medicines for patients treated for COVID-19 outpatiently; in April

1 V. Kogalovsky. Experts forecast five years of high mortality in Russia after COVID-19 pandemic // Medvestnik. 18.02.2022. URL: <https://medvestnik.ru/content/news/Eksperty-prognoziruyut-pyat-let-vysokoi-smertnosti-v-Rossii-posle-pandemii-COVID-19.html?ysclid=lefgz571pa113653402>

2 Order of MHI Federal Fund No. 149n of 29.12.2021 "On approving procedure for using the rationed insurance reserve of the mandatory health insurance territorial fund"

3 Explanatory note to Federal Law draft "On the budget of MHI Federal Fund for 2022 and for the planned period of 2023 and 2024" // System of legislative support "Law making." 30.09.2021. URL: <https://sozd.duma.gov.ru/bill/1258297-7>

Rb35.1 bn to pay for outpatient and inpatient care provided to COVID-19 patients in 2021–2022<sup>1</sup>, in October Rb58.6 bn to pay for medical care provided in 2021–2022 by the MHI.<sup>2</sup> Funds of the latter transfer were officially intended to support the target indicators of remuneration of certain categories of medical employees in the organizations established by the “May” Executive Order of the President of the Russian Federation, but the reference to 2021 indicates that there are more general goals to reduce arrears in payment for medical care. Particular RF regions (ref. for instance, Sverdlovsk region<sup>3</sup>, Yaroslavl region<sup>4</sup>) reported that they still owed money to medical institutions even after receiving this transfer, but noted a significant decrease compared to the beginning of the year. With further reduction of the virus severity one can expect that next year medical organizations will receive funding as usual.

#### 4.4.3. National project “Health care” and public health

Results of the implementation of the national project “Health Care” in 2022 were not summarized publicly. In the absence of official information, main data sources of achieved results are represented by public announcements made by representatives of the RF Ministry of Health and operative data of Rosstat on the natural movement of the population.

The RF Ministry of Health reported a reduction in mortality below the pre-pandemic 2019 and a projected over-fulfillment of the life expectancy target (71.0 years). The increase relative to last year was expected to be 1.8 years, which corresponds to a life expectancy of 71.9 years. It was assumed that growth relative to the previous year would be 1.8 years, which corresponds to a life expectancy of 71.9 years.<sup>5</sup> In this case, the indicator will surpass the level of 2020 (71.5 years), but remain below the maximum reached in 2019 (73.34 years).<sup>6</sup> Operational data from Rosstat on the natural movement of the population also show an improvement over 2020–2021, but a higher mortality rate relative to the period before the spread of the new coronavirus infection (*Fig. 21*).

Until detailed statistics on the causes of death are published, it remains unclear to what extent the observed reduction in the number of deaths is due to the reduced risk of new coronavirus infection, and what contribution development projects have made to the improvement of indicators.

The results of individual federal projects have repeatedly voiced the success of the federal project “Combating Cancer”. In particular, it was reported that the plan

1 Operational report on MHIF execution for January-June 2022. // Accounts Chamber. 29.08.2022. – URL: <https://ach.gov.ru/audit/35102>

2 RF Government Edict of 24.09.2022 No. 3147-r.

3 MHIF did not pay Rb300 mn to Yaroslavl hospitals // YarNews. 14.11.2022. URL: <https://yarsmi.ru/2022/11/14/fond-mediczinskogo-strahovaniya-ne-oplatil-yaroslavskim-bolniczam-300-millionov-rublej/>

4 Sverdlovsk TMHIF owed hospitals over Rb1bn // New day. 06.12.2022. URL: <https://newdaynews.ru/ekaterinburg/780239.html>

5 *Murashko*: plan to increase life expectancy in Russia will be exceeded by the end of the year // TASS. 22.11.2022. URL: <https://tass.ru/obschestvo/16392551>

6 Life expectancy at birth // EMISS. 2022. URL: <https://www.fedstat.ru/indicator/31293>

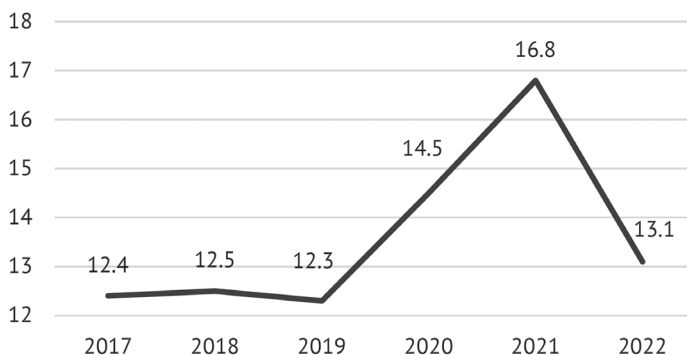


Fig. 21. Number of deaths per 1000 people, operative data for January-December of the respective year

Source: Federal Service of State Statistics. Natural movement of the population across RF regions for December 2022 // Rosstat, 2023. URL: [https://rosstat.gov.ru/storage/mediabank/Edn\\_11-2022.htm](https://rosstat.gov.ru/storage/mediabank/Edn_11-2022.htm)

to build centers for outpatient cancer care is 90% complete (original plan – 86%)<sup>1</sup>, the reduction in mortality from cancer diseases since 2019 reached 4.4% (original plan – 5.2%), one-year mortality reduced by 13.5% (original plan – 9.5%), five-year survival rate increased by 6.6% (original plan – 3.0%), the proportion of diseases detected at an early stage evidenced 5.1% (original plan – 2.9%).<sup>2</sup>

Cash execution of the budget of the national project “Health care” in 2022 was slightly higher than in the previous year (Table 6).

Table 6

**Cash execution of the national project “Health care” budget on expenditures, %**

	2022	2021
National project “Health care”	96.3	95.2
Federal project “Primary health care”	97.7	96.2
Federal project “Combatting cardio-vascular diseases”	94.7	91.5
Federal project “Combatting cancer”	98.2	97.4
Federal project “Development of health care for children, including creation of a modern infrastructure of medical care for children”	94.8	75.5
Federal project “Providing health care organizations with qualified personnel”	100.0	100.0
Federal project “Development of network of national medical research centers and introduction of innovative medical technologies”	100.0	100.0

1 About 90% of outpatient cancer care centers built in Russia. // TASS. 12.12.2022. URL: <https://tass.ru/obschestvo/16567505>; Passport of national project “Health care” (approved by the presidium of the Council for strategic development and national projects under the President of the Russian Federation by protocol of 24.12.2018 No.16).

2 L. Shamardina. Ministry of health records 600.000 new cancer cases annually // Medvestnik. 03.02.2023. URL: <https://medvestnik.ru/content/news/Minzdrav-registriruet-600-tys-novyh-sluhaev-raka-ejagodno.html>; passport of the federal project “Combatting cancer” (approved by protocol of the meeting of the project committee on national project “Health care” of 14.12.2018 № 3).

	2022	2021
Federal project “Creating a unique digital circuit in health care based on uniform state health information system (USHIS)”	90.8	85.3
Federal project “Development of medical services export”	100.0	100.0
Federal project “Modernization of primary health chain in the Russian Federation”	93.6	88.0

Sources: RF Ministry of Finance. Execution of federal budget aimed at implementation of national projects. URL: [https://minfin.gov.ru/ru/press-center/?id\\_4=38341-ispolnenie\\_raskhodov\\_federalnogo\\_byudzheta\\_na\\_realizatsiyu\\_natsionalnykh\\_proektov](https://minfin.gov.ru/ru/press-center/?id_4=38341-ispolnenie_raskhodov_federalnogo_byudzheta_na_realizatsiyu_natsionalnykh_proektov); M. Mylnikov. Cash execution of primary chain modernization program reached 69% in 2022 // Vademecum. 08.12.2022. URL: <https://vademec.ru/news/2022/12/08/kassovoe-ispolnenie-programmy-modernizatsii-pervichnogo-zvena-v-2022-godu-dostiglo-69/?ysclid=ldwyw2efcm880133696>

Thus, the deterioration of the foreign economic situation did not result in a complete stop of investments in the industry, but with a high probability entailed their redistribution between activities and in time. The information about the scale and content of the changes made to the regional projects has not been published.

#### 4.4.4. Human resources

A difficult situation persisting in the staffing of the industry has once again placed this topic among the priorities of state policy in the field of health care. According to the RF Ministry of Health, the shortage of doctors in 2020–2022 increased from more than 21.000 to 26.500. The deficit of nursing staff has reduced more than half over the same period: from 122.000 to 58.200.

Increased outflow of doctors from state medicine is associated with the overload of workers during the pandemic and lower size of salaries in the public sector of health care compared to the offers of private medical organizations.<sup>1</sup> At the end of 2022, a new reason for the reduction in the supply of doctors in civic medical organizations was partial mobilization. Some regions faced shortages of surgeons and intensive care anesthesiologists.<sup>2</sup>

The main instruments for solving staffing issues remain the expansion of targeted training of doctors for state health care organizations and improvement of labor remuneration. In 2022 new features were added, such as accelerated training of mid-level medical personnel and doctors of the most deficient specialties under professional retraining and admission to work in medical organizations of students who continue their studies under specialty or residency programs.

As part of the regulation of targeted training, the list of specialties for which residency training is conducted exclusively on a targeted basis has again been expanded from 33 to 49 specialties.<sup>3</sup> A new control measure for graduates was to be a ban on the admission to residency of those who have not fulfilled their

1 RF Government Decree of 26.12.2017 No. 1640 “On approval of state program of the Russian Federation “Development of health care”

2 RF Ministry of Health supported proposal of the People’s front to allow employment of interns as trainee doctors // All-Russia People’s front. 09.11.2022. URL: <https://onf.ru/2022/11/09/minzdrav-rossii-podderzhal-predlozhenie-narodnogo-fronta-razreshit-trudoustroystvo/>

3 RF Government Edict of 17.11.2022 No. 3502-r; RF Government Edict of 23.11.2021 No. 3303-r.

obligations under the contracts on targeted training<sup>1</sup>, but respective edict was contested by the Prosecutor-General's Office<sup>2</sup>. To solve the issue of poor quality of training, the customers of targeted training will have the right starting from next year to establish requirements for student performance and early termination of the contract in case of failure to comply.<sup>3</sup> In order to further support graduates going to work in small towns and rural areas, programs "Country doctor" and "Country paramedic" were expanded. Graduates of medical professions returning to their home communities were authorized to receive a lump sum payment under these programs.<sup>4</sup>

It was suggested to solve the issues of low salaries in the budget sector of health care and flows of medical employees to the wealthiest regions by launching a unified sectoral remuneration system designed to regulate the marginal scale of differences in the level of wages of workers occupying the same position in the system of medical care. According to initial plan, testing of a new labor remuneration system should have started in November 2021, then, the pilot project was postponed to July 2022 and finally to 2025.<sup>5</sup> The most likely reason for the postponement seems to be the refusal to allocate the additional funding needed to equalize the differences in wages.<sup>6</sup>

In the middle of the year, salaries of a large part of primary care workers were further reduced due to early cancellation of so-called "coronavirus" payments to workers in direct contact with patients with a diagnosed new coronavirus infection. As of July 15, 2022, the differential shift payment system was replaced by a single compensation payment of 25% of the salary.<sup>7</sup> To mitigate the negative effect, starting next year, primary care workers will receive additional social payments with their size to be approved at a fixed rate depending on the position they hold.<sup>8</sup>

At the end of the year, a set of measures was adopted to enable the rapid training of the most needed specialists, if necessary. Starting next year, it is planned to introduce in medical organizations positions of doctor-trainees allowing to work in the specific specialty, starting from the second year of residency.<sup>9</sup> Moreover, students receiving the first higher education in the

1 RF Ministry of Health letter of 12.08.2022 No. 16-2/2358; RF Ministry of health letter of 11.08.2022 No. 16-2/1/2-13202.

2 Letter of the RF Prosecutor-General's Office of 31.10.2022 No. 74/2-452-2022.

3 RF Government Decree of 23.11.2022 No. 2115 "On amendments to the RF Government Decree of October 13, 2020 No. 1681".

4 RF Government Decree of 22.04.2022 No. 739 "On amendments to Annex No.5 to the state program of the Russian Federation "Development of Health care".

5 RF Government Decree of 05.07.2022 No. 1205 "On suspension of RF Government Decree of 01.06.2021 No. 847".

6 From announcement to paycheck: The launch of the new system of payment for medical workers has been postponed until 2025. Mnenia//Vademecum. 2022. No. 2.

7 RF Government Decree of 15.07.2022 No. 1268 "On the procedure for providing compensation to certain individual categories at risk of contracting a new coronavirus infection"; Executive order of the RF President of 15.07.2022 No. 464 "On the invalidation of certain Executive orders of the President of the Russian Federation".

8 Meeting of the Council on development of civic society and human rights" // President of Russia. 07.12.2022. URL: <http://www.kremlin.ru/events/president/transcripts/>

9 List of instructions following the meeting of the Council on strategic development and national projects. Instruction of 26.01.2023 No. Pr-144, p. 8v) // President of Russia. 26.01.2023. URL: <http://kremlin.ru/acts/assignments/orders/70412>



specialties “General medicine”, “Pediatrics” and “Dentistry”, will be authorized to work as nurses<sup>1</sup> after 3 years of education, emergency paramedics after 4 years of education and short re-training, while graduates of a specialist program will be able to work as emergency physicians guided by a mentor.<sup>2</sup> The list of specialties allowing employment of other after professional re-training included surgeons, anesthesiologists-rheumatologists and orthopedic traumatologists.<sup>3</sup>

#### 4.4.5. Drugs supply

At the end of the year the Russian Government approved lists of VEDs and high-cost nosologies programs (hereinafter HCN) for 2023. In previous years, the RF Government Edict corresponded to the draft submitted by the Ministry of Health of Russia based on decisions of the Commission on approval of drug lists.

However, this year only 5 drugs of the 21 approved drugs were included in the VED list, while none of the 3 drugs recommended for HCN program was included in the final list.

The decisions of the Commission on approval of drug lists are taken based on clinical and economic data on use of the drugs compared to available alternatives. Thus, drugs recommended for inclusion have proven their clinical and economic advantages over existing analogues. Failure to include these drugs in the lists would not allow to use these advantages. A possible reason for such action was the lack of guarantee of supplies from foreign countries for most of the drugs recommended for inclusion in the list. However, consequently, the availability of these drugs for patients will remain at the same – relatively low – level, and their prices will not be reduced taking into account the current pricing methodology. It should also be noted that changes in the “rules of the game” in the process of forming the lists may in the future demotivate manufacturers to submit new applications and co-agree with their global offices on more favorable prices for Russia.

At the end of 2022 it was also decided to transfer financing of drug therapy for children from the HCN program to the Fund “Krug Dobra.” According to expert estimates, this measure will reduce the costs of the HCN program by about R20 bn a year, which is comparable with the estimated need for additional financing of the HCN program, taking into account the commitments made earlier.

At the same time budget of the Fund “Krug Dobra” shows a considerable surplus: while the income of the Fund in 2022 amounted to Rb78 bn, the expenditures for 2022 were Rb63.2 bn (the similar values for 2021 were Rb60 bn and Rb30.8 bn).

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1 Order of RF Ministry of Health of 01.11.2022 No. 715n “On approval of the procedure for authorizing those who have not completed educational programs of higher medical or higher pharmaceutical education in Russian or foreign organizations engaged in educational activities, as well as those with higher medical or higher pharmaceutical education received in Russian or foreign organizations engaged in educational activities to the implementation of medical practice or pharmaceutical practice as specialists with a secondary medical or secondary pharmaceutical education”.

2 RF Government Decree of 19.08.2022 No. 1448 “On identification of cases and conditions of admission of those who have not completed educational programs of higher medical education to perform medical activity as specialists with secondary medical education, as well as those with higher medical education to perform medical activity as specialists with secondary medical education and higher medical education in the emergency team.”

3 RF Government Decree of 20.12.2022 No. 2351.



Thus, the measures taken made it possible to effectively redistribute the available funds between the various channels of drug provision and to guarantee its accessibility to people. In the future it seems reasonable to extend this experience to other drug supply programs.

Finally, an important innovation for the Krug Dobra Fund in late 2022 was an increase in the age limit for those assisted by the Fund from 18 to 19 years old. This will allow to solve during next year the challenges in financing the purchase of drugs for children who come of age, and continue providing them with uninterrupted medicines supply. At the same time, temporary nature of this measure is obvious, and in the near future it will be necessary to develop fundamentally new approaches to solving the issue of drug provision for adults with orphan diseases.

#### 4.5. Education system<sup>1</sup>

In 2022, all pandemic restrictions were lifted from the Russian education system as it switched to full-time mode. At the same time, the outcomes that emerged during the periods of prolonged lockdowns remained, especially distance learning. In the new environment, they are used partially but allow to work remotely, for example, university lecturers (to give lectures remotely, being on business trip, etc.) or researchers can remotely participate in scientific conferences and seminars. As a result, the audiences outreach for various seminars and webinars has increased dramatically.

Simultaneously, in 2022, the Russian education system faced new challenges associated with the special military operation (SMO) in Ukraine and the sanctions pressure on Russia caused by the SMO. This led to substantive, structural, organizational and economic changes in the functioning of different levels of the education system.

##### 4.5.1. Preschool education

In pre-school education, the main organizational and economic task has been to reach children between the ages of 1.5 and 3 by pre-school institutions (nurseries). This is due to the need to ensure that mothers return to work quickly after the birth of their children. There is a growing shortage of staff on Russian labor market due to demographic reasons – a decrease in the number of young people and an aging population. Raising retirement age is not a solution to the growing shortage of workers and so there is a need to get mothers back to work more quickly. SMO can both strengthen this trend (replacement by women of men mobilized in RF Armed Forces) and weaken it on the back of the decline of economic activity in many sectors and growth of unemployment.

Executive Order of the RF President No. 809 dated November 9, 2022 “On Approval of the Basic State Policy to Preserve and Strengthen Traditional Russian Spiritual and Moral Values” sets new educational tasks for the system of pre-school

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education. Accordingly, in 2023, content of educational work with children aged 3–6 (7) will change in the first instance, which will require mass advanced training for teachers in pre-school educational institutions.

#### 4.5.2. General (school) education

In 2022, the exclusion of Russian students from international comparative study of the quality of education PISA (the ability to apply acquired knowledge) regularly conducted by the OECD can be highlighted as a rather serious issue for school education. Russia is also excluded from other studies of the quality of education, which are conducted by the OECD: TIMSS (quality of mathematics and science education in elementary and secondary schools), PIRLS (quality of reading and reading comprehension in elementary schools), ICILS (quality of computer and information literacy, including information security).

In 2022, Russia's participation in the PISA Process was crucial in revealing the effects of COVID-19 pandemic on Russian general education system. However, this did not happen. Meanwhile, from October 10 to 28, 2022, Rosobrnadzor conducted a study of the quality of education without participation of the OECD. It used entirely Russian assessment materials and research technology was also local although it was noted that assessment was conducted according to the PISA Process. It is quite clear that the findings of this study will not be recognized by the international educational community, and any positive progression of Russian students will be called in question. Meanwhile, Russian results of PISA, TIMSS and PIRLS are the basis of our country getting into the leaders (top 10) by quality of general education. This is one of the main indicators of the national project "Education". In 2018, the World Bank in its Human Capital Development Project ranked Russia 9th among the top countries regarding general education.<sup>1</sup> However, pandemic could have seriously affected PISA scores of students in all countries with PISA results also revealing shortages in knowledge and ability to apply it by students due to lockdowns and the emergency transition to distance learning.

In 2021, the only study of above mentioned deficits was conducted in Krasnoyarsk Krai,<sup>2</sup> It showed that the most affected by the transition to distance learning were natural science knowledge of the 8th grade students in Krasnoyarsk Krai schools, however, when reading literacy tests were conducted in the 4<sup>th</sup> grade the students' knowledge was unaffected at all and the 6th grade students' knowledge suffered insignificantly. Meanwhile, this study cannot provide an ideal picture of what happened in other Russian regions because they vary greatly in their socio-economic status. It should also be noted that so far little attention has been paid to the causes of above-mentioned deficits, methods and techniques

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1 HumanCapitalDevelopmentProject. 2018. International Bank for Reconstruction and Development. World Bank. URL: <https://documents1.worldbank.org/curated/en/772591566979744762/pdf/The-Human-Capital-Project.pdf>

2 Chaban, Tatyana, Roza Rameeva, Ilya Denisov, Yuliya Kersha, and Roman Zvyagintsev. 2022. "Russian schools during the COVID-19 pandemic: Impact of the first two waves on the quality of education". *Voprosy Obrazovaniya / Educational Studies*, No. 1 (March), 160-88. <https://doi.org/10.17323/1814-9545-2022-1-160-188>.

that are needed to overcome them. In particular, in the Krasnoyarsk study it was recorded that children from families where at least one parent has higher education generally passed the pandemic better in terms of educational results and what influenced this was the help by parents; higher family income and, accordingly, the possibility to hire tutors; higher family income and availability of a good computer or tablet, high-speed internet and necessary software; a combination of all the above factors; a child attending a better school and teachers' higher skill of distance teaching methods, etc., – unfortunately, not specified or not identified.

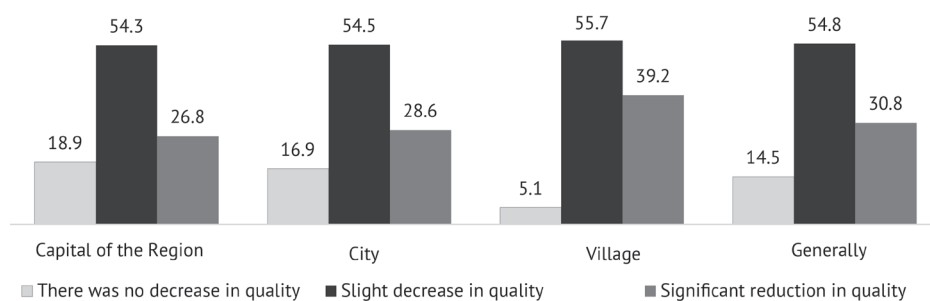
Based on the 2021-2022 BSE and USE results, the Federal Service for Supervision of Education and Science (Rosobrnadzor) noted no decrease in passing exams, but the average score of those entering higher educational institutions in 2022, nevertheless, declined noticeably.<sup>1</sup>

In the meantime, the survey conducted by the CECE IAES RANEPa in the fall of 2022<sup>2</sup> showed that, according to teachers, changes in teaching formats that took place during the pandemic had a serious impact on the quality of education in schools. Rural schools were hit the hardest (*Fig. 22*).

In terms of parents' opinion, more than one-third of them felt that their children had some gaps in their knowledge, with 2.6% noting significant gaps (*Fig. 23*).

In addition, 5.6% of parents of ninth-graders indicated that distance learning during the pandemic led to academic problems for their children and determined family's choice to continue education in secondary vocational education system.

Thus, we can conclude that the pandemic and 2020 urgent transition to distance learning led to emergence of gaps in knowledge in a rather significant number of students and this factor determined, including in 2022, these students' choice of their future educational trajectory.

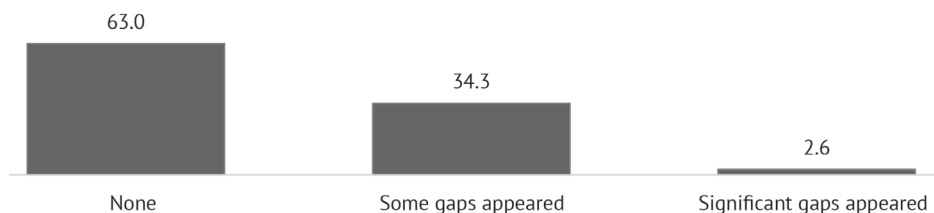


*Fig. 22.* Distribution of answers of teachers to the question: “In your opinion, has there been a decrease in the quality of education during the last two years (during the pandemic, since spring 2020)?”, %

Source: Monitoring of CECE IAES RANEPa 2022.

1 URL: <https://4ege.ru/ege-gia/65396-srednie-bally-ege-2022.html> and <https://4ege.ru/ege-gia/62402-srednie-bally-ege-2021.html>

2 The study was conducted in October 2022, 2,057 teachers and 2008 parents were interviewed in 3 regions with different levels of socio-economic development.



*Fig. 23.* Distribution of parents' answers to the question: "Have any gaps in knowledge appeared since the beginning of the pandemic?", %

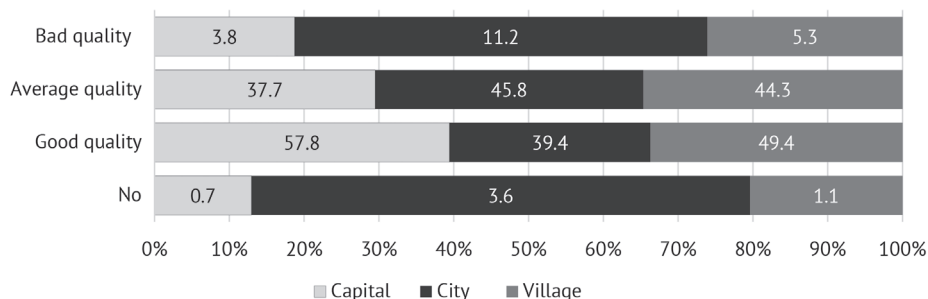
*Source:* Monitoring of CECE IAES RANEPА 2022.

Non-participation of Russian students in the TIMSS study, i.e. the assessment of mathematical and natural science literacy of 4th and 8th graders will also negatively affect objective representation of Russian society concerning the mastering of mathematics and natural science subjects in Russian schools. Also, decrease in the number of school leavers choosing physics and profile mathematics for Unified State Exam indicates that there are certain issues with teaching of these subjects at school. This leads to difficulties in recruiting students to universities for engineering and technical training and specialties and even for state-funded places.

In addition to substantive issues, schools in 2022 faced the need to switch to domestic software and equipment due to sanctions, which, in principle, may complicate digitalization of this level of education. Again, this will affect the solution of the task set in the national project "Education" to create a developed digital educational environment in general education organizations. In addition, decrease in the supply and the rise in price of corresponding equipment will lead to the reduction of opportunities to connect rural schools, as well as schools in small and medium-sized cities to broadband internet, which will inevitably affect digitalization of their activities. Moreover, situation for small and medium-sized cities is even worse than for the countryside, as the CECE IAES RANEPА survey shows (*Fig. 24*).

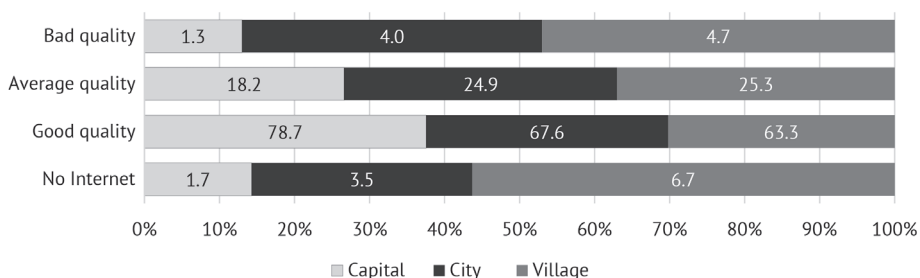
If we take into account availability of internet in schools of not only poor (low), but also average quality, issues with digitalization of school education affect to a greater or lesser extent and significantly 49.6% of rural general educational institutions, 57.0% of urban schools and 41.5% of schools of regional capitals. And, apparently, resolution of this issue will become more complicated in the near future. It means that access to modern methods (techniques) of teaching and ultimately to quality education will be limited for almost 7 million children. It should be noted, however, that households are better equipped with broadband internet access than schools, which alleviates the issues to a certain extent (*Fig. 25*). Meanwhile in the near future, there may appear differences between software used by students' families and software that will be used in schools.

In 2022, another challenge for schools was education of children displaced from territories where SMO was underway, primarily from Donbass (refugees and



*Fig. 24.* Distribution of respondents' answers to the question: "Is there an internet connection available in your school, and if so, what is the quality of connection?" by type of settlement, %

Source: Monitoring of CECE IAES RANEPА 2022.



*Fig. 25.* Distribution of parents' answers to the question: "Do you have internet connection at home, and if so, what is the quality of the connection?" taking into account the type of settlement, %

Source: Monitoring of CECE IAES RANEPА 2022.

displaced persons). Number of this contingent is more than 330,000 school-age children. As a rule, such students need certain rehabilitation, since they have been torn out of their familiar environment including school environment and have found themselves in completely new conditions. In addition, most of them have witnessed combat operations. School psychologists work with these children in Russian general educational institutions and teachers must pay them more attention, which often causes dissatisfaction among those students who study in schools where the newcomers arrive. Overall, however, situation remains calm, and schools are coping with their new activities.

On the whole, Russian schools passed 2022 without any major disruptions, and no new financial issues were identified but a climate of heightened anxiety persisted.

### 4.5.3. Additional education for children

In 2022, additional education for children saw a recovery from the pandemic (2020–2021) in the volume of provided services (Fig. 26).

The share of children who attended extracurricular activities in pre-pandemic year of 2019 was about the same (68.9%), but in 2021 it dropped to 54%. Simultaneously, recovery in 2022 of the coverage of children with supplementary education was accompanied by an increase in the share of paid services relative to 2019, despite introduction of the system of personalized budget certificates issued to families for their children to attend additional education institutions. However, it should be noted that the largest share of paid services in additional education of children was observed in 2021, i.e. during the pandemic (Fig. 27).

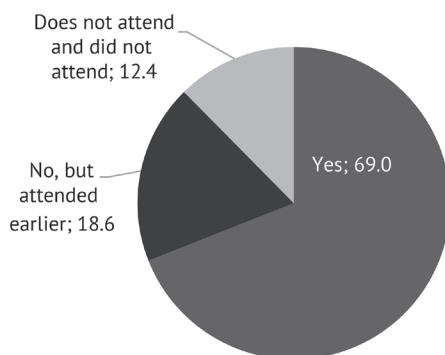


Fig. 26. Distribution of answers to the question: “Does your child attend additional classes?”, %

Source: Monitoring of CECE IAES RANEPА 2022.

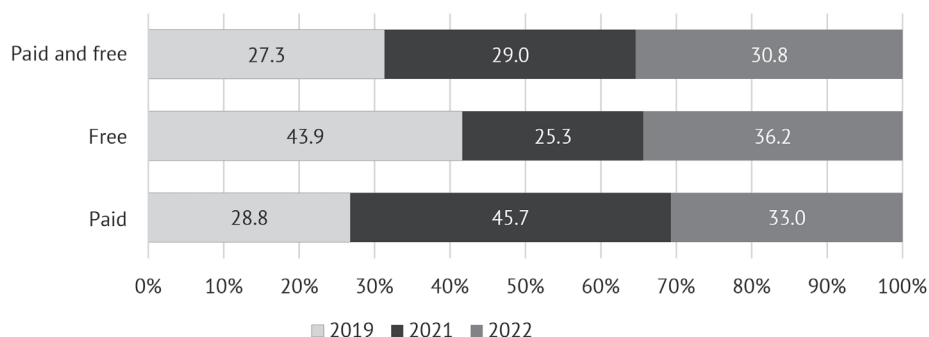


Fig. 27. Distribution of answers to the question: “What additional activities does your child attend?”, %

Source: Monitoring of CECE IAES RANEPА 2019, 2021 and 2022. In 2020, Monitoring was conducted in early March, which did not cover the impact of pandemic on children’s additional education.

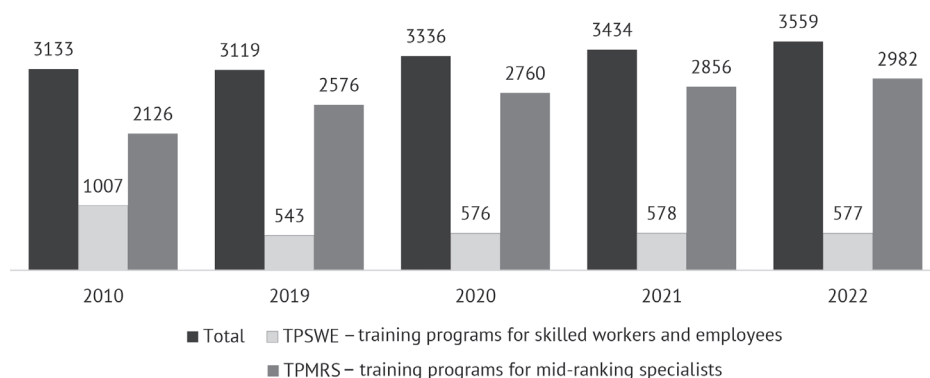
Generally, children’s additional education serves as a platform for tuning the national project “Education” target model, which assumes involvement of a significant number of private institutions in this sphere, but so far, no serious breakthroughs have been achieved (the Russian average participation of private institutions in the additional education is below 5%). Moreover, complicated financial situation in the regions can lead to an even greater reduction in additional education in the private sector and “simplification” of additional classes in state institutions.

#### 4.5.4. Secondary vocational education

The secondary vocational education shows an increase in enrolment growth over recent years (*Fig. 28*).

In 2022, the number of SVE students in general went up by 3.9%, while the number of students enrolled in blue-collar training programs remained virtually unchanged for the last 3 years, and growth is provided by an increase in the number of students in mid-level specialist training programs where the number of students grew by 4.4% in 2022. Moreover, enrolment in professional training programs is also stable with a slight upward trend in 2022, while in the TPMRS programs it dropped in 2021 (by 3.2%), and then surged in 2022 (by 8.2%) (*Fig. 29*).

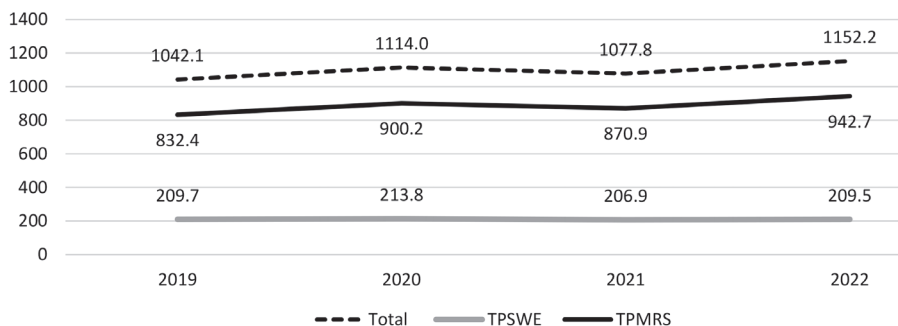
It should be noted that admission to programs of mid-ranking specialists exceeds admission to universities for bachelor’s and specialist’s programs



**Note.** Total TPSWE – training programs for skilled workers and employees; TPMRS – training programs for mid-ranking specialists.

*Fig. 28.* The number of students of SVE institutions in 2010 and 2019–2022, thousand persons

Source: FSM SVE-1 form for 2019–2022.



*Fig. 29. Enrolment of students in SVE institutions in 2019–2022, thousand persons*

*Source:* Calculations based on SVE-1 data (2019–2022).

since 2019. Increase in demand of young people for training in SVE system is due to several reasons:

- children from low-income families strive to enter labor market more quickly (almost two-thirds of students in secondary vocational education institutions are children from low-income families<sup>1</sup>);
- schools’ tendency to “get rid” of ninth-grade graduates who poorly master the school curriculum;
- lack of money for tutors for families of 11th graders to pass the USE with high grades, and inability to pay tuition if they do not fall into budgetary places.

It should be noted that in recent years Russian society has formed a fairly stable belief that without tutors or, at most, without training at university courses, it is impossible to qualify for free tuition. Moreover, the choice in favor of SVE from 2020 is connected, as it was mentioned above, with gaps in acquiring of knowledge due to transition of schools to distance learning during the pandemic. A significant part of student fail to eliminate these gaps without the assistance of tutors, so they decide to terminate their education in in the 10th grade and enter SVE institutions. Furthermore, transition to SVE institutions attached to universities allows them to enter “their” institution of higher education without taking the Unified State Exam if the profiles of training in SVE and the university are the same.

Sanctions imposed on Russia led to curtailment of Worldkills Russia activities. Meanwhile, it was the development of this movement in Russia that boosted the prestige of modern trades among young people. Withdrawal of Worldkills from our country may have a negative impact on young people’s attitudes toward training in vocational education.

In 2022, an experiment was launched to introduce a new level of professional education, which was called “Professionalism. National project “Education”

<sup>1</sup> Data from the Monitoring of Youth Employment CECE IAES RANEPА.



includes the federal project “Professionalism”. This level of education is designed to cut time required to acquire a profession by approximately two-fold and to ensure greater training capacity, first of all, of skilled workers and office workers. Moreover, it is supposed to actively involve employers in training of these personnel who should supply equipment to the organizations of SVE institutions while receiving an investment deduction. As Ministry of Education points out, “among the key initiatives of the project is creation of educational and production centers (clusters). They represent integration of colleges and institutions of real sector of the economy. In a cluster a college is singled out, which is being modernized on a turn-key basis. In this college a new management structure, new teaching staff, new content and structure of educational programs, training and production complexes are formed with the direct participation of the supporting employer. At the same time, the cluster can include colleges that have workshops in the cluster profile and employers who have chosen the appropriate level of participation”.<sup>1</sup> Furthermore, it seems that this program cannot be fully implemented since modern production with complex equipment requires socially mature and responsible employees. As it seems, first of all, “Professionalism” will work for training personnel for the service sector and to a much lesser extent for industrial and agricultural production enterprises.

The announced change of conscription age into Armed Forces of the Russian Federation and possible increase of term of conscription up to two years may cause changes in the employers’ positions: two years of army service, as a rule, leads to loss of some professional skills by young workers, as well as to their moving to other regions of Russia. Accordingly, employers stop investing in training of this personnel. In addition, sanction pressure on Russian economy may lead to liquidation of some businesses or reluctance of employers to financially support SVE institutions. This being said, regional budgets will also reduce funding for this sphere if their deficits grow. Therefore, it is fair to assume that implementation of the “Professionalism” program will either be sharply slowed down or will be of a “cellular” nature. Furthermore, delaying of the special military operation and doubling of the terms of conscription can lead to a decrease of families’ interest in secondary vocational education and increase in aiming to enroll their children in universities for full-time education.

#### 4.5.5. Higher education

Sanctions imposed on Russia could not help but affect higher education creating new challenges for this sphere different from those posed by coronavirus pandemic in 2020–2021. Overall, it can be stated that it is the higher education system that is most likely to be affected by sanctions regime, although it was not directly targeted.

First of all, Russia was excluded from the Bologna System (Russia itself also announced its withdrawal from it). Due to rejection of Bologna System, Russia began developing a national system of higher education in 2022. Basically, it was a question of increasing the share of specialist training in higher education. Rector

1 URL: [https://edu.gov.ru/activity/main\\_activities/additional\\_vocational\\_education/](https://edu.gov.ru/activity/main_activities/additional_vocational_education/)

of Moscow State University Viktor Sadovnichy insists that admission to specialist training program should make up 70–80% of admissions to Russian universities.<sup>1</sup> However, he does not specify: will it be admission on a state-subsidized education or is it a share of the total (state-subsidized and fee-based) admission? Currently, admission on a state-subsidized education to the specialty is up to 15% and is conducted primarily in “heavy”, i.e. stock-intensive specialties that require complex teaching and laboratory equipment. Transfer of a significant number of areas of training that do not involve large amounts of class time for laboratory work (psychologists, economists, managers, sociologists, culturologists, political scientists, etc.) is hardly justified and, more significantly, unlikely to be possible. The main limitation for admission to specialty will be financial: in the coming years the federal budget expenditures on higher education, most likely, will not grow in real terms (their reduction is also possible), so admission to engineering and technical (expensive) specialties will increasingly move to regional universities, where the standard costs per student are much lower than in Moscow, Saint Petersburg and other major cities of the country. Furthermore, of course, leading technical universities in Moscow and St. Petersburg will get admission quotas they need. Currently the share of budget financing of such universities as the Bauman Moscow State Technical University is 4.2% of the total budget financing of the state universities in Moscow, MAI National Research University – 2.7%, the MIPT – 2.7%, the MISIS University of Science and Technology – 2.2%, the MEPHI National Research Nuclear University – 2,0%. Share of other state technical universities in Moscow in the budget financing of their activities is much lower.<sup>2</sup>

Rejection of the Bologna system is also not beneficial for Russia in terms of attracting foreign students to the Russian universities. In Russia, foreign nationals from unfriendly states – United States, United Kingdom, European Union, Australia and Canada – are less than 1% of total number of foreign students. Most foreign nationals come from CIS countries (51.6%), Asian countries (23.7%, especially from China and India), and Africa (8.6%). Most foreign students go to Russia to study at the undergraduate level. In addition, in recent years there has been a growing flow of foreigners enrolling in Russian master’s programs. CIS countries, China, India have long ago adjusted their higher education systems to the principles of the Bologna system, which allows them to effectively interact with universities of Western countries. Therefore, Russia’s transition to a 70–80% specialization instead of a balanced tiered system of the higher education would lead to the loss of most foreign students. This means that wishes of Rector of Moscow State University are likely to remain wishes. It seems that admission to specialty can at best be raised to 20–25%. And the main constraints here will be not only financial, but also a reduction in the number of high school graduates taking physics and other science subjects at the Unified State Exam.

Political and economic issues arising from sanctions may reduce the flow of students from abroad for other reasons. This may have a particularly strong impact

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1 URL: [https://vopazeta.ru/articles/2023/1/24/quality\\_of\\_education/21894-viktor\\_sadovnichy\\_traektoriyu\\_priema\\_v\\_vuzy\\_stoit\\_izmenit\\_chtoby\\_spetsialistov\\_bylo\\_7080](https://vopazeta.ru/articles/2023/1/24/quality_of_education/21894-viktor_sadovnichy_traektoriyu_priema_v_vuzy_stoit_izmenit_chtoby_spetsialistov_bylo_7080)

2 Monitoring the activities of universities. 2022.

on education of foreign students in medical, engineering, and IT specialties, since many graduates of Russian universities went either to continue their studies (for example, to residency at medical institutions) or to find employment in the EU, USA or Canada (especially IT specialists) with Russian diplomas. In the new environment, Russian diplomas may not be recognized by many countries, which will reduce foreigners' interest to study in Russian universities. Another obstacle will be the lack of opportunities to receive money from abroad in connection with withdrawal from Russia of Visa and MasterCard payment systems, which makes it difficult for foreign students' financial support from their families to pay for education and subsistence in Russia (86–90% of foreign students receive this help). Another factor reducing the interest of foreign students in Russian universities may be the difficulties with employment in the Russian Federation after graduation, which was a powerful incentive for students from CIS countries.

Retention of master's programs and possibility of exchanging master's students with CIS countries, primarily Kazakhstan as well as China and India, is important for Russia for another reason: Western countries have closed access to scientific databases to Russian universities (researchers). Consequently, the flow of undergraduates to universities in friendly countries can be used to obtain information from these databases and to exchange scientific information. Interaction at level of undergraduate and graduate (doctoral) programs with universities of friendly countries, in addition, will allow Russian researchers to publish (in co-authorship) in leading international journals indexed by Web of Science and Scopus which will contribute to maintaining current level of research and presence in world science.

Sanctions pressure on higher education also manifested itself in refusal of the world's leading university rankings to rank Russian institutions of higher education which largely devalued their work within the framework of the "Project 5-100". Thus, at the beginning of March 2022 QS agency refused Russian universities to participate in its rating. Due to the fact that academic staff of Russian universities can no longer publish except through cooperation with universities of friendly countries in leading foreign journals indexed in the international Web of Science and Scopus databases; it has also become problematic for universities to be included in other international ratings including subject-specific ones. Thus, Russian universities have actually ceased to be part of the pool of global universities since 2022. Moreover, there has been an outflow of foreign teachers and international laboratory staff from Russian universities which is also taken into account in these ratings.

Until the end of 2022, the made public Russia's national system of higher education had not been worked out. As for the publication activity of university professors and researchers, VAK began to rank Russian scientific journals approved by it, dividing them into quartiles. The publication in the 1st and 2nd quartiles of VAK journals will be considered necessary for the defense of candidate and doctoral dissertations and will be equated to publications in the 1st and 2nd quartiles of journals indexed in international bases Web of Science and Scopus. It is obvious that this process will quickly succumb to corruption risks as the

achievements of universities included in Priority 2030 Program, especially in its academic track, will be evaluated on the basis of these publications. In general, Russian universities lose an objective assessment of their position in the world higher education space, which can lead to a decrease in the quality of higher education.

#### **4.6. The development of domestic tourism: the example of the Republic of Dagestan<sup>1</sup>**

The year 2022 saw continued growth in the domestic tourism volume in Russia. Though coronavirus restrictions were lifted in most countries last year, with many international borders closed and Russian banks cut off from international payment systems, holidays abroad became rather complicated for the Russians. At the same time, according to Maya Lomidze,<sup>2</sup> Executive Director of the Association of Russian Tour Operators the growth rates of the domestic tour flow became lower than expected owing to the closure of some airports in the Southern Federal Okrug (the Rostov region, the Krasnodar Krai and the Crimea) and restrictions on the transit to the Kaliningrad Region. The regional authorities' data on the number of tourist arrivals – the highest growth is observed where no transport restrictions were introduced – prove it (*Table 7*).

*Table 7*

#### **The statistics on tourist flows inside Russia**

<b>Region</b>	<b>Tourist flow volume in 2022, million persons</b>	<b>Tourist flow per 1000 residents of region, persons</b>	<b>Increase relative to 2021, %</b>
Republic of Dagestan	2.0	627.6	100
Moscow region	22.0	2575.4	57
St. Petersburg	8.1	1444.4	32
Irkutsk region	1.5	634.7	30
Stavropol Krai	1.5	516.8	20
Tula region	1.52	1015.6	16
Tyumen region	3.3	862.1	13
Sverdlovsk region	1.8	422.2	12
Republic of Tatarstan	3.3	825.0	11
Moscow	18	1383.0	7
Maritime Krai	3	1628.7	7
Republic of Altai	2.1	9961.7	7
Krasnodar Krai	17	2914.9	3
Kaliningrad region	1.8	1745.9	-5
Republic of Crimea	6.5	3366.0	-32

*Source:* The Association of Russian Tour Operators based on regional authorities' data. URL: <https://www.atorus.ru/node/50839>

1 Author: *D.A. Sitkevich*, Candidate of Economic Sciences, Researcher of the Center for Regional Studies and Urbanism, IAES RANEPА.  
2 URL: <https://tass.ru/ekonomika/16415131>

Despite the fact that one should assess critically the tourist flow data in absolute terms presented in *Table 7* owing to inadequacies of the data collection procedures (business trip travelers and summer residents are often taken for tourists and there is also a problem related with a repetition of the same data), the growth rates, with the methodology remaining the same, allow us to judge about the processes that take place in regions. Further, the data on tourist flow dynamics are partially proved by other estimates, as well. So, the representatives of Dagestan's tourist industry gave comparable figures of the increase in tourist flow.

The example of Dagestan in terms of the development of domestic tourism in Russia is interesting for several reasons. First, unlike most regions attracting over a million holiday-makers, tourism is a relatively new phenomenon for Dagestan. Most sightseeing tour organizers currently operating in the region, with sightseeing being the main tourist product there, were founded in 2020–2021; according to the opinion of tourist industry participants, tours to Dagestan attracted the mass audience only in 2022. Second, Dagestan carried out a costly government policy (though not quite effective in terms of creation of new resorts) on the development of tourism, primarily ski and beach resorts. However, the main tourist boom in the region is based on sightseeing tourism which received virtually no assistance from the government.

It is noteworthy that sightseeing tour operators are currently the key players in the development of a tourist product in Dagestan. They are mainly micro-enterprises and individual entrepreneurs which hire other market participants (transportation companies, hotels, guest houses, cafes and restaurants and agrotourism complexes) as contractors. Dagestan's tourist sector is characterized by a high competition and a low market concentration. Most companies render services maximum to 200 customers a year; 3 relatively large companies on the market receive annually several thousand tourists each (about 0.5% of the overall tourist flow). Barriers for entering the market are not high: to start the business one needs only a certain level of human capital (experience in working with tourists or a good knowledge of the region) or social capital (ties in the business community) or the customer base. The comparison of companies which entered this market in 2020 and 2022 leads us to the conclusion that as the tourist industry develops it becomes more complicated to enter the market.

Despite the economic crisis, lack of entrepreneurs' experience in the tourist business and insignificant government support of the sightseeing business, Dagestan's tourist sector succeeded in receiving not only millions of tourists, but also coped singlehandedly with multiple challenges. So, Dagestan saw growth in competition and diversification of the tourist product. Over 2.5 years, a distinctly segmented market of tourist services for various groups of tourists emerged in the region: it varies from "economy class" tours meant for the least wealthy tourists to an author's tours with a unique program and VIP-tours for wealthy holiday-makers. In 2022, this diversification deepened: specialized products were created for specific audiences (for example, for representatives of certain professions) and unique tourist products were developed by numerous tourist firms. However, it

is noteworthy that with increased diversity of the tourist product the territorial multiplier in Dagestan does not work well enough: lots of Dagestan's districts (for example in its the southern part) famous for their sights failed to become popular with tourists because of an insufficient tourist infrastructure.

Another challenge, which used to be at the beginning a serious risk for the development of Dagestan's tourist industry, but now is more likely to be overcome, is opportunism of counterparties which may take advantage of the prevalence of informal contracts to cheat tour operators. The business coped successfully with this challenge owing to business networks formed around chats in messengers where entrepreneurs could exchange not only resources (customers, hotel bookings), but also disseminate information on unscrupulous partners. As seen from the practice, if such information emerged other companies stopped working with unreliable counterparties. At the same time, in 2022 as the tourist flow increased some companies switched over to hierarchic mechanisms of cooperation and started to integrate partners into firms, which situation also solved the problem related with opportunism.

Also, Dagestan's tourist industry encountered some problems with the exit from the Russian market of foreign IT giants which used to be convenient sites for selling tourist products. According to businessmen, as the experience of using the Russian social media and aggregators turned out to be not quite successful, most companies rely on word-of-mouth marketing (that is, marketing through their former customers). Though on the growing market this sales instrument is quite effective for selling tours, in future, in case of a fall in demand, it may become less effective. Further, lack of other effective methods of attracting customers leads to growth in barriers for entering the market because a start-up business needs its own customer base from the very beginning.

Another risk which has not materialized so far, but may create certain problems for the development of Dagestan's tourist industry in future is Dagestanis' relations with tourists. At present, the tourist boom did not lead to serious conflicts between holiday-makers and local residents, while those conflicts related with alcohol consumption and violation of the informal "dress code" were resolved mostly peacefully. It can be largely explained by the fact that the business looks after the behavior of holiday-makers to avoid such conflicts. However, growth in the number of independent tourists who are not familiar enough with local informal norms may create potentially additional risks.

Also, there are problems which hinder the development of the tourist sector and the business cannot cope with them singlehandedly. At present, a major barrier is a lack of skilled personnel, particularly beyond large cities. Though entrepreneurs try to solve this problem by means of a constant staff rotation, introduction of retraining programs and engagement of professionals from other regions, the issue of quality of the workforce remains unsolved for most companies. A huge shortage of personnel is observed in Dagestan's rural areas where local residents regard some professions in the hospitality sector as "shameful." This results in low quality of services offered by the local hospitality industry (particularly in the mountain areas) and tour operators make no secret of it. Further, entrepreneurs

note that there is a clear lack of the sanitary and transport infrastructure which situation makes it difficult to take a full advantage of Dagestan's tourism market potential.

Dagestan's current government policy aimed at developing the republic's tourist sector is still more focused on implementing large-scale investment projects, rather than meeting challenges and reducing barriers which prevent to implement to a full extent the potential of small and mid-sized tourist businesses and solve the problems facing the tourist industry as a whole. For example, the existing personnel training system does not meet the market requirements. As there is no regulation of the anthropogenic impact on local attractions, some of them began to collapse. A substantial risk for Dagestan's tourist industry in future is a delay in building treatment facilities in cities situated on the Caspian coast. This leads to the pollution of sea water and makes the coast unsuitable for the development of beach resorts.

#### **4.7. The housing market in Russian cities and housing construction<sup>1</sup>**

Last year, the Russian real estate market was fully affected by the shocks that hit the domestic economy, passing through several phases.

The first months were marked by the continued growth of real estate prices with a shortage of supply. The mechanism of government mortgage support worked out in the previous years stimulated the demand ensuring the prevalence of mortgage transactions in the total volume of deals in Russian cities.

The changes in socio-economic situation that took place at the turn of winter and spring amid the aggravation of geopolitical tensions caused panic among buyers and sellers on the real estate market and a significant drop in the volume of transactions. A sharp increase of the key rate by the central bank to 20% led to a collapse of mortgage lending by the banks. The rapid buying up of "cheap" supply was carried out by means of withdrawal of cash from bank accounts by the population.

Having passed several stages, the level of the key rate in September 2022 returned to its pre-crisis value. Demand by reducing mortgage rates, following the dynamics of the key rate, was recovering at a slower pace and did not reach indicators of the winter of 2022. Households began to lean toward the savings model of consumer behavior, refraining from investing in real estate or financial assets, which, however, did not apply to the construction of individual houses. Investment deals, which had been an important catalyst for the primary residential real estate market in 2020–2021, declined.

With a slight decline in GDP and real disposable incomes of the population, the volume of housing construction, including the commissioning of apartment buildings, increased. The industry began to face the problem of selling finished

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housing. In parallel, the volume of supply on the secondary market went up, so that by autumn there was no shortage of proposals in this segment in most cities. The growth of supply prices slowed down and in some places even stopped. However, in most towns there was no decline. Overall, at year-end 2022 the volume of sales on the housing market fell by about a third, and, unlike in previous years, the traditional growth in demand in the pre-New Year period was very curtailed, which may indicate the onset of stagnation.

#### 4.7.1. Housing market prices

Before analyzing the price situation, we should note that there are various sources of information on the movement of prices for residential real estate. On the one hand, these are the official reports of the Federal State Statistics Service, and on the other hand, data from real estate agencies.

To begin with, let us turn to the Rosstat data. As stated on the departmental portal,<sup>1</sup> price indices on the primary and secondary housing markets are calculated by Rosstat experts on the basis of registered prices for newly built apartments and for apartments of the functioning housing stock in ownership, if they are the objects of market transactions. Observations are made on a sample of organizations engaged in real estate transactions in territorial centers and individual cities of the subjects of the Russian Federation. When registering prices for apartments their quantitative and qualitative characteristics are taken into account. Average prices in Russia are calculated on the basis of average prices prevailing in the regions. Data on the size of the total area of apartments sold separately on the primary and secondary housing markets accumulated over the previous year are used as scales.

Let us consider the Rosstat data for the past year in more detail starting with the quarterly dynamics of prices in the country as a whole (*Table 8*).

*Table 8*

#### **Price indexes on the housing market in 2022 r. (at quarter-end in % to the end of the previous quarter, across all types of apartments)**

<b>Period</b>	<b>Secondary market</b>	<b>Primary market</b>
Q1	106.5	108.0
Q2	102.0	106.5
Q3	101.4	104.3
Q4	101.6	100.9

*Sources:* Price indices on the housing market by subjects of the Russian Federation in 2022, data on the primary market: URL: [https://rosstat.gov.ru/storage/mediabank/ind\\_perv\\_4kv-2022.xlsx](https://rosstat.gov.ru/storage/mediabank/ind_perv_4kv-2022.xlsx); data on the secondary market: URL: [https://rosstat.gov.ru/storage/mediabank/ind\\_vtor\\_4kv-2022.xlsx](https://rosstat.gov.ru/storage/mediabank/ind_vtor_4kv-2022.xlsx)

Prices grew most strongly in Q1 2022, when the market was affected by the shock associated with changes in the economic and political environment. Later there was a quarterly fading of growth rates, which, in principle, was typical of

<sup>1</sup> URL: [https://rosstat.gov.ru/storage/mediabank/pr\\_572\\_12082022.pdf](https://rosstat.gov.ru/storage/mediabank/pr_572_12082022.pdf).



both segments of the market, not counting Q4 on the secondary market, according to the results of which prices rose slightly more than in Q3.

Throughout most of the year, the primary market outpaced the secondary market in terms of price growth rate, most noticeably in Q2. The only exception was Q4, when the growth of prices on the primary market was less than 1%. However, this could not cardinaly affect the results of the year as a whole (*Table 9*).

*Table 9*

**Price indexes on the market and average prices of living quarters  
in 2022 across categories of facilities (Q4-end)**

Category of facility	Secondary market		Primary market	
	in % to Q4 2021	Rb thousand per 1 sq. m of floor arear	in % to Q4 2021	Rb thousand per 1 sq. m of floor arear
All types of apartments	111.8	94.4	121.0	122.3
Low quality	107.4	72.3	–	–
Average quality (standard)	110.4	86.8	120.0	122.9
Better quality	113.3	102.9	122.1	112.4
Elite apartment	118.3	162.8	119.4	262.7

*Source:* Socio-economic situation of Russia – 2022. P. 132. URL: <http://rosstat.gov.ru/>.

The rise in prices on the primary segment (21%) was approximately 1.8 times higher than on the secondary segment (less than 12%). Such a picture was observed for all categories of apartments, to the greatest extent for standard apartments, while for elite housing the rates of price growth were comparable. For the secondary market the main regularity was a higher rate of price growth while the primary market showed moderate variations by the housing categories with some leadership in apartments of better quality. That said, it should be noted that the data on the primary market raise questions about their reliability, as, unlike on the secondary segment, when differentiating the dwelling by the three main categories, the standard apartments appear to be more expensive than the improved ones. However, this fact probably reflects the increased demand for housing of average quality on the part of the population.

An overview of the dynamics of prices in the territorial context confirms that the primary market is everywhere ahead of the secondary market in terms of the price growth rate (*Table 10*). It is most clearly manifested in the North-Western and Far Eastern Federal Districts, where the growth of prices on the primary segment exceeded the same value on the secondary segment by more than 6 and 2 times, respectively.

Housing prices in the Volga, Urals and Siberian federal districts grew at a higher pace than the national average. The Volga region became a leader in the price movement on the primary (27.6%) and secondary (18%) segments. The North-Western (3.4% on the secondary market) and Southern (14.1% on the primary market) districts are at the other end of the spectrum, while the Far East (14.7%) is close to them.

Table 10

**Price indexes on the housing market in 2022 across federal districts  
(at Q4-end relative to Q4 2021, across all types of apartments), %**

	Secondary market	Primary market
<b>Russia</b>	<b>111.8</b>	<b>121.0</b>
<b>Federal district (FD)</b>		
Central	111.1	120.8
North-Western	103.4	120.9
Southern	111.5	114.1
North-Caucasus	107.0	116.6
Volga	118.0	127.6
Urals	112.7	118.7
Siberian	118.0	124.0
Far Eastern	106.3	114.7

Sources: Price indices on the housing market by subjects of the Russian Federation in 2022, data on the primary market: URL: [https://rosstat.gov.ru/storage/mediabank/ind\\_perv\\_4kv-2022.xlsx](https://rosstat.gov.ru/storage/mediabank/ind_perv_4kv-2022.xlsx); data on the secondary market: URL: [https://rosstat.gov.ru/storage/mediabank/ind\\_vtor\\_4kv-2022.xlsx](https://rosstat.gov.ru/storage/mediabank/ind_vtor_4kv-2022.xlsx).

If we examine the price movement in more detail at the level of regions of the Federation,<sup>1</sup> we will see a picture presented in *Table 11*.

Table 11

**Price indexes on the housing market in 2022 across regions  
(at Q4-end relative to Q4 2021, across all types of apartment), %**

	Secondary market	Primary market
<b>Russia</b>	<b>111.8</b>	<b>121.0</b>
<b>Federal district / region</b>		
<b>Central FD</b>	<b>111.1</b>	<b>120.8</b>
Moscow	107.1	115.9
Moscow region	117.4	119.6
Voronezh region	127.6	125.8
<b>North-Western FD</b>	<b>103.4</b>	<b>120.9</b>
St Petersburg	95.7	120.6
Leningrad region	106.9	157.8
<b>Southern FD</b>	<b>111.5</b>	<b>114.1</b>
Krasnodar krai	106.2	107.7
Volgograd region	114.6	126.2
Rostov region	116.1	129.9
<b>North-Caucasus FD</b>	<b>107.0</b>	<b>116.6</b>
Dagestan	112.7	125.8
Stavropol krai	121.1	116.2
<b>Volga FD</b>	<b>118.0</b>	<b>127.6</b>
Bashkortostan	115.9	134.3

1 The sample was drawn from regions with the largest populations in their respective federal districts, including all regions that have cities with populations of more than 1 million.

	Secondary market	Primary market
Tatarstan	120.0	128.0
Perm krai	111.4	124.8
Nizhniy Novgorod region	114.3	129.6
Samara region	110.1	126.6
<b>Urals FD</b>	<b>112.7</b>	<b>118.7</b>
Sverdlovsk region	113.4	119.8
Tyumen region*	105.8	114.2
Chelyabinsk region	138.6	131.5
<b>Siberian FD</b>	<b>118.0</b>	<b>124.0</b>
Krasnoyarsk krai	113.5	115.7
Novosibirsk region	113.2	121.2
Omsk region	123.2	131.5
<b>Far-Eastern FD</b>	<b>106.3</b>	<b>114.7</b>
Primorsky krai	106.5	113.2
Khabarovsk krai	102.1	107.1

\* Including autonomous okrugs.

Sources: Price indices on the housing market by subjects of the Russian Federation in 2022, data on the primary market: URL: [https://rosstat.gov.ru/storage/mediabank/ind\\_perv\\_4kv-2022.xlsx](https://rosstat.gov.ru/storage/mediabank/ind_perv_4kv-2022.xlsx); data on the secondary market: URL: [https://rosstat.gov.ru/storage/mediabank/ind\\_vtor\\_4kv-2022.xlsx](https://rosstat.gov.ru/storage/mediabank/ind_vtor_4kv-2022.xlsx)

On the primary housing market, the group of regions with the highest price growth (over 30%) included the Leningrad region (57.8%), Bashkortostan (34.3%), Chelyabinsk region (31.5%), and Omsk region (31.5%). The outsiders by this indicator (less than 15%) were the Tyumen region (including autonomous okrugs) (14.2%), Primorsky krai (13.2%), Krasnodar (7.7%), and Khabarovsk (7.1%). In St. Petersburg (20.6%), Moscow region (19.6%) and Moscow (15.9%) price growth rates were also lower than the national average.

On the secondary market, the group of regions with the highest price growth (over 20%) includes Chelyabinsk (38.6%), Voronezh (27.6%), Omsk (23.2%), Stavropol krai (21.1%), Tatarstan (20%). At the opposite pole were Moscow (7.1%), the Leningrad region (6.9%), Primorsky krai (6.5%), Krasnodar (6.2%) and Khabarovsk (2.1%), Tyumen region (including autonomous okrugs) (5.8%), as well as St. Petersburg, where a 4.3% drop in prices was registered. Apart from the northern capital, such a rare phenomenon was observed only in Adygea and Tyumen region (without autonomous okrugs), as well as in Chechnya (on the primary market).<sup>1</sup>

Price growth on the primary market in most regions exceeded the same value in the secondary market. Leningrad region, Dagestan, Bashkortostan, Perm krai, Nizhny Novgorod, Samara, Tyumen regions (including autonomous okrugs) and Primorsky krai stand out in this respect, where price growth on the primary market exceeded the same value in the secondary market by more than 2 times. In the Leningrad region the difference was 7-fold. The Stavropol krai, Voronezh and Chelyabinsk regions are an exception to the general rule that the primary market is leading over the secondary one in terms of price growth rates.

1 Of the regions missing from the sample.

To characterize the price level in absolute terms, let us consider the data of professional market analysts from a number of well-known companies, united by the Russian Guild of Realtors (RGR) (*Table 12*).

*Table 12*

**Prices on apartment buildings in Russian cities at year-end 2022**

Federal district/city	Secondary market	Primary market	Price difference, %
	thousand Rb/m <sup>2</sup>	thousand Rb/m <sup>2</sup>	
<b>Central FD</b>			
Moscow	266.6*	305.3	14.5 in favor of new buildings
Ramenskoe (Moscow region)	136.0	No data	
Zhukovsky (Moscow region)	130.0	120.0	8.3 in favor of secondary market
Istra (Moscow region)	125.0	No data	
Sergiev Posad (Moscow region)	117.0	Absent	
Voronezh**	100.0**	90.0**	11.1 in favor of secondary market
Staryi Oskol (Belgorod region)	86.0	No data	
Ryazan	80.0	94.0	17.5 in favor of new buildings
Tambov	80.0	80.0	Close case
Kostroma	72.0	81.0	12.5 in favor of new buildings
<b>North-Western FD</b>			
Saint Petersburg	172.0	214.0	24.4 in favor of new buildings
Kaliningrad	95.0	106.0	11.6 in favor of new buildings
<b>Sothern FD</b>			
Novorossiysk	107.0	115.0	7.5 in favor of new buildings
Yalta (Crimea)	100.0	150.0	50.0 in favor of new buildings
Krasnodar	87.0	110.0	26.4 in favor of new buildings
Volgograd	80.0	80.0	Close case
<b>Privolzhsky FD</b>			
Samara	140.0	120.0	16.7 in favor of secondary market
Nizhniy Novgorod	103.0	130.0	26.2 in favor of new buildings
Perm	84.4	105.5	25.0 in favor of new buildings
Tolyatti (Samara region)	65.0	80.0	23.1 in favor of new buildings

Federal district/city	Secondary market	Primary market	Price difference, %
	thousand Rb/m <sup>2</sup>	thousand Rb/m <sup>2</sup>	
Orsk (Orenburg region)	28.0	No data	
<b>Urals FD</b>			
Tyumen***	110.0***	120.0***	9.1 in favor of new buildings
Ekaterinburg	102.0	120.0	17.6 in favor of new buildings
Chelyabinsk	75.0	90.0	20.0 in favor of new buildings
Magnitogorsk (Chelyabinsk region)	55.3	60.5	9.1 in favor of new buildings
Chebarkul (Chelyabinsk region)	46.0	56.0	21.7 in favor of new buildings
<b>Siberian FD</b>			
Novosibirsk	100.0	110.0	10.0 in favor of new buildings
Krasnoyarsk	95.0	109.0	14.7 in favor of new buildings
Tomsk	85.0	98.0	15.3 in favor of new buildings
Abakan	80.0	90.0	12.5 in favor of new buildings
<b>Far-Eastern FD</b>			
Yuzhno-Sakhalinsk	160.0	170.0	6.25 in favor of new buildings
Khabarovsk****	112.3	130.9	16.6 in favor of new buildings

\* According to data of the statistics and analytics committee of Moscow Guild of Realtors (GRM), the average offer price on the secondary market on December, 30 2022 amounted to 264,800 Rb/sq. m.

\*\* According to AKG "InvestOtsenka", the weighted average price of housing (apartments) in the city at the end of December was Rb82,300 per square meter on the secondary market and Rb89,900 per square meter on the primary market.

\*\*\* According to certified analyst and real estate market consultant A.A. Ryaposova, in December the average bid price was Rb106,100 per sq. m on the secondary market and Rb108,100 per sq. m on the primary one.

\*\*\*\* According to the Property Law Center LLC at the end of December.

Sources: Analytical report. Preliminary results of 2022 on the residential real estate market from the experts of the Russian Guild of Realtors (RGR). 2022. P. 11-13; other above-mentioned organizations and experts; own calculations.

In terms of absolute price level in both segments Moscow was followed by St. Petersburg and Yuzhno-Sakhalinsk (over 150,000 Rb/sq. m). Beyond the first three segments (in the price range between Rb100,000 and Rb150,000 per sq. m.) one could observe differences. In the secondary segment Samara, cities near Moscow (Ramenskoe, Zhukovsky, Istra, Sergiev Posad), Tyumen, Novorossiysk, Nizhny Novgorod, and Yekaterinburg followed the first three. In the primary segment – Yalta, Nizhny Novgorod, Zhukovsky (Moscow region), Samara, Tyumen, Yekaterinburg, Novorossiysk, Krasnodar, Novosibirsk, Krasnoyarsk, Perm.

In the overwhelming majority of cities, the prices of new buildings were higher than on the secondary market. The opposite ratio was observed only in

Samara, Voronezh<sup>1</sup> and Zhukovsky. Approximate equality of prices was observed in Volgograd and Tambov.

The prices of new buildings were more than 20% higher than those on the secondary market in Yalta, Krasnodar, Nizhny Novgorod, Perm, St. Petersburg, Togliatti, Chebarkul (Chelyabinsk oblast), and Chelyabinsk. In Yuzhno-Sakhalinsk, Novorossiysk, Tyumen, and Magnitogorsk, the advance was less than 10%.

#### 4.7.2. Construction and commissioning of new housing

According to Rosstat preliminary data, 102.7 mn sq. m. of housing was commissioned in Russia in 2022, 11% more than in 2021, when the previous maximum was recorded (*Table 13*). This value was a record in the entire national history.

*Table 13*

### Commissioning of residential buildings in 1999–2022

Year	Million sq. m of total area	Growth rates, %	
		to the previous year	to 2000
1999	32.0	104.2	105.6
2000	30.3	94.7	100.0
2001	31.7	104.6	104.6
2002	33.8	106.6	111.5
2003	36.4	107.7	120.1
2004	41.0	112.6	135.3
2005	43.6	106.3	143.9
2006	50.6	116.0	167.0
2007	61.2	120.9	202.0
2008	64.1	104.7	211.5
2009	59.9	93.4	197.7
2010	58.4	97.5	192.7
2011	62.3	106.6	205.6
2012	65.7	104.7	216.8
2013	70.5	107.3	232.7
2014	84.2	119.4	277.9
2015	85.3	101.3	281.5
2016	80.2	94.0	264.7
2017	79.2	98.8	261.4
2018	75.7	95.1	248.5
2019	82.0/81.0*	108.3/107.0*	270.6/267.3*
2020	82.2/77.1*	100.2/95.2*	271.3/254.5*

1 According to AKG "InvestOtsenka", weighted average offer price of housing (apartments) in the city at the end of December was 82,300 rubles per sq. m on the secondary market, and 89,900 rubles per sq. m on the primary market. Calculation of average prices per 1 sq. m of total floor area was carried out without taking into account elite objects in accordance with the methodology of the chief analyst of RGR (before 2014) G. M. Sternik (Voronezh. Residential Property Review for December 2022, p. 1). Thus, with this data in Voronezh, as in most cities, prices for new buildings are 9.2% higher than prices on the secondary market.

Year	Million sq. m of total area	Growth rates, %	
		to the previous year	to 2000
2021	92.6	112.7	305.6
2022	102.7	111.0	338.9

\* Excluding the commissioning of houses on garden plots, the volume of which is given according to the original Rosstat data (2019 – 1.0 mn sq. m., 2020 – 5.1 mn sq. m., there is no such data for 2021–2022).

Sources: Rosstat; own calculations.

Positive dynamics of commissioning was observed in the vast majority of territories, including almost all the regions with a total volume of housing more than 1 mn sq. m. (Table 14).

*Table 14*

### Dynamics of housing commissioning in Russian regions in 2022 (graded along commissioning rates)

Region	Housing commissioning rates, in % to 2021
Chechnya*	196.8
Moscow region*	153.9
Perm krai*	150.9
Vladimir region	142.8
Udmurtia	139.8
Krasnodar krai*	120.8
Tyumen region (with autonomous okrugs)*	119.3
Primorsky krai	117.9
Leningrad region*	117.2
Novosibirsk region	111.9
Stavropol krai*	110.9
Chelyabinsk region*	108.3
Nizhniy Novgorod region*	107.0
Bashkortostan*	105.4
Samara region*	104.4
Irkutsk region	104.0
Krasnoyarsk krai	103.8
Kaliningrad region	103.7
Voronezh region	103.1
Tatarstan*	102.7
Sverdlovsk region*	101.9
Rostov region*	100.7
Saint Petersburg	100.3
Dagestan	97.5
Moscow	87.1
Saratov region	85.6

\* Regions with housing commissioning over 1 mn sq. m

Source: Rosstat.

The increase in housing commissioning was noted in Chechnya, the Moscow and Vladimir regions, the Perm and Krasnodar krai, and Udmurtia. In the Tyumen region, Primorsky krai, Leningrad and Novosibirsk regions and Stavropol krai, the value of this indicator was in the range from 11 to 20%, i.e., it exceeded the average Russian figure or approximately matched it (Stavropol krai). Twelve other regions displayed positive dynamics of housing commissioning, but less than the aforesaid value. Three regions, including Moscow, saw a slump in housing commissioning.

Compared to the previous year, there were noticeable changes within the traditional group of leading regions caused by the reduction of housing construction in Moscow and its actual stagnation in St. Petersburg. The Moscow region with the second highest growth rate in the country (around 54%) enhanced its leadership in the absolute volume of commissioned living space (14.1 mn sq. m). Due to a drop by 13% Moscow is the third leading region (6.8 mn sq. m), leaving behind Krasnodar krai (around 7.6 mn sq. m). The five leading regions also include the Leningrad region (around 4.0 mn sq. m) and Saint Petersburg (around 3.5 mn sq. m), and for the first time the northern capital was behind the neighboring region. The share of the metropolitan region in the total volume of housing construction in the country amounted to 20.3% (including Moscow region – 13.7% and Moscow – 6.6%) going up by 2 p.p. in comparison with 2021 due to the Moscow region (in 2021 – around 10%).

Total housing commissioning data include both apartment block construction by professional developers and the results of individual housing construction (residential housing, i.e. built by private individuals themselves on their own plots of land).

For the second year in a row, the share of housing built by households at their own expense or with the help of borrowed funds exceeded half of the total amount (55.7%). Accordingly, the share of apartment blocks, which steadily decreased after 2016, amounted to 44.3% (*Table 15*).

*Table 15*

**Structure of housing commissioning in the Russian Federation  
in 2010–2022**

Year	Total, Mn sq. m	Apartment block construction		Individual housing construction from own and borrowed funds	
		Mn sq. m.	Share in total commissioning, %	Mn sq. m	Share in total commissioning, %
2010	58.4	32.9	56.3	25.5	43.7
2011	62.3	35.5	57.0	26.8	43.0
2012	65.7	37.3	56.8	28.4	43.2
2013	70.5	39.8	56.5	30.7	43.5
2014	84.2	48.0	57.0	36.2	43.0
2015	85.3	50.1	58.7	35.2	41.3
2016	80.2	48.4	60.3	31.8	39.7



Year	Total, Mn sq. m	Apartment block construction		Individual housing construction from own and borrowed funds	
		Mn sq. m.	Share in total commissioning, %	Mn sq. m	Share in total commissioning, %
2017	79.2	46.2	58.3	33.0	41.7
2018	75.7	43.3	57.2	32.4	42.8
2019	82.0	43.5	53.0	38.5	47.0
2020	82.2	42.4	51.6	39.8	48.4
2021	92.6	43.5	47.0	49.1	53.0
2022	102.7	45.5	44.3	57.2	55.7

Source: Rosstat; own calculations.

According to Rosstat, the area of individual housing construction projects commissioned in Russia at the end of 2022 was 57.2 mn sq. m, which is 16.5% more than in the previous year. The five leading regions by the absolute value of commissioned housing were the Moscow region (around 9.5 mn sq. m), the Krasnodar krai (around 4.5 mn sq. m), the Leningrad region (around 2.6 mn sq. m), Tatarstan (2.2 mn sq. m), and Bashkortostan (1.9 mn sq. m).

If we take a closer look at all the regions with a total volume of commissioned housing more than 1 mn sq. m, a rather mixed picture emerges (*Table 16*).

*Table 16*

**Share of housing commissioned by the population in Russian regions  
with a total volume of housing commissioned  
over 1 mn sq. m in 2022**

Region	%
Chechnya	93.8
Tatarstan	71.3
Moscow region	67.1
Irkutsk region	67.0
Leningrad region	65.3
Udmurtia	66.0
Nizhniy Novgorod region	65.2
Stavropol Krai	64.9
Samara region	64.4
Vladimir region	63.8
Bashkortostan	62.7
Perm krai	61.0
Krasnodar krai	58.8
Chelyabinsk region	57.6
Saratov region	55.4
Rostov regions	52.9
Dagestan	51.7
Voronezh region	48.6
Kaliningrad region	46.6
Primorsky krai	44.9

Region	%
Sverdlovsk region	44.0
Krasnoyarsk krai	38.8
Tyumen region (with autonomous okrugs)	37.3
Novosibirsk region	37.2
Moscow	11.7
Saint Petersburg	7.5

Sources: Rosstat; own calculations

The individual housing construction sector accounted for over 90% of the volume of commissioned housing in Chechnya, over 70% in Tatarstan, 60–70% in Moscow, Irkutsk, Leningrad regions, Udmurtia, Nizhny Novgorod region, Stavropol krai, Samara and Vladimir regions, Bashkortostan and Perm krai, and from 50 to 60% in Krasnodar krai, Chelyabinsk, Saratov, Rostov regions and Dagestan.

As expected, Moscow and Saint Petersburg found themselves at the other pole where the contribution of housing and communal services amounted to 11.7% and 7.5%, respectively. The intermediate positions were taken by the Voronezh and Kaliningrad regions, Primorsky krai, Sverdlovsk region, where the residential housing construction accounted for 40 to 50% of the input, as well as Krasnoyarsk krai, Tyumen region (with autonomous okrugs) and Novosibirsk region, where the contribution of residential housing construction amounted to 37–39%.

Against this background, successes in the construction of apartment blocks looked more modest.

The volume of commissioned apartment blocks in 2022 moved up by 4.6% compared to 2021, surpassing the pre-pandemic level of 2018–2019, however, conceding to the indicators of the previous 4 years (2014–2017). More than half (57%) of the volume of commissioned housing (excluding housing built by the households)<sup>1</sup> was commissioned in 10 regions (with a commissioning volume of at least 1 mn sq. m in each of them), and the share of the top five (Moscow and the Moscow region, St Petersburg, Krasnodar krai and the Tyumen region with autonomous okrugs) was about 42% of the total volume of commissioned apartment blocks.<sup>2</sup>

Although for the first time in the national history, the total volume of commissioned housing exceeded 100 mn sq. m and approached the value envisaged in the passport of the national project (NP) “Housing and Urban Environment”, one can state that this result was achieved with obvious deviations from the planned indicators in the structure due to the outrunning dynamics of the housing construction. There is an ongoing losing momentum of the NP in the construction of apartment blocks. Despite an increase in commissioning of about 2 mn sq. m and the maximum in 5 years (2018–2022), it was about 2/3 of the envisaged level.

1 There is no such indicator in the official reports of the Federal State Statistics Service. However, it can be calculated as the difference between the total volume of housing commissioned and housing commissioned by households at the expense of their own and borrowed funds.

2 Socio-economic situation in Russia – 2022. Pp. 283–286. URL: <http://rosstat.gov.ru/>; own calculation.

### 4.7.3. The situation in the construction sector

According to the survey “Main trends in development in 2022”, conducted by portal EP3.PФ<sup>1</sup> with participation of School of Developers,<sup>2</sup> GMK<sup>3</sup> and RBG,<sup>4</sup> the key trend of the last year developers named the beginning of developers’ exit from the local markets (45%). The five main trends in the development also included: the emergence of developers of apartment blocks on the residential housing segment (38%); increase in the share of online sales (34%); growth of importance of developer’s reputation (30%); reduction in the living space of apartments (27%).<sup>5</sup>

According to experts of the Russian Guild of Realtors, an active revision of residential projects in terms of their quality class has started. The volume of “standard” class projects has increased, including the subclass of small-scale housing, along with the share of small-scale housing in projects of higher quality class has increased.<sup>6</sup>

Speaking about the mechanism of housing sector financing, we can state that the transition to the new system with the use of project financing instruments is generally completed. At the beginning of 2023, almost 89% of the apartment blocks under construction were being built using escrow accounts, versus 51.5% and 76.8% at the end of 2020 and 2021, respectively. The latter is confirmed by a steady rise in the volume of loans with the use of the relevant instruments. The amount of approved credit lines rose by 84% to Rb12.1 trillion. The negative factor is the lag between the amount of escrow accounts (a 1/3 increase to Rb4.1 trillion by the beginning of 2023) and the dynamics of bank crediting of developers.<sup>7</sup> The financing system made it possible to maintain and increase the volume of construction in the context of real stress both during the COVID-19 pandemic and the subsequent shock associated with significant sanction restrictions. Subsequent development and sustainability of the housing finance system will depend not only on short-term factors of appropriate liquidity availability, but also on long-term parameters related to a stable balance of supply and demand on the market.

The real construction activity in the housing sector and the prospects of the industry are characterized by the following indicators.

1 URL: <https://profi.erzrf.ru/poll/trands-2022-development/>

2 URL: <https://www.development-school.com/about>; Specialized competence center and educational platform for developers and builders of Russia and CIS.

3 URL: <https://gmk.ru/>. GMK Consulting Agency is one of the top 100 largest consulting groups and companies in Russia, in the marketing and PR segment it ranks first (RAEX rating). The agency specializes in complex consulting in development since 2005, helping developers to create the best micro districts and residential complexes.

4 URL: <https://rrg.ru/>. RRG is a professional player on the commercial real estate market since 2005. It is a center of professional expertise in real estate with a knowledge base professional connections and expert partners, which allows to customize products and services to the client's needs and project features.

5 URL: [https://erzrf.ru/news/eksperty-reputatsiya-zastroyschika--osnovnoy-trend-ukhodyashchegododa-kotoryy-sokhranitsya-i-v-novom-godu?utm\\_tg=true](https://erzrf.ru/news/eksperty-reputatsiya-zastroyschika--osnovnoy-trend-ukhodyashchegododa-kotoryy-sokhranitsya-i-v-novom-godu?utm_tg=true)

6 ITS Analytical report. Preliminary results of 2022 on the residential real estate market from the experts of the Russian Guild of Realtors. 2022. Pp. 15.

7 Review of apartment block construction in the Russian Federation. DOM.RF. March 2023. Pp. 2–3, 6.

On the whole, with the positive results of 2022 a negative factor is a waning quarter-by-quarter dynamics of the volume of housing commissioned. While in Q1 and Q2, the volumes of housing commissioned exceeded the figure of the corresponding period in 2021 by nearly 65% and 25%, respectively, in Q3 – only by 1.5%, and in Q4 the volume was down by more than 21%.

According to the Unified Information System for Housing Construction, the total area of housing built taking into account all funding mechanisms, amounted to December 22, 2022, 100.8 mn sq. m. The bulk of the total area (89.3 mn sq. m) fell on the housing built in accordance with Federal Law No. 214-FZ of December 30, 2004, which envisages signing by individuals of co-investment agreements (CIA). The specified value is more than 1/5 higher than the value of this indicator a year earlier.<sup>1</sup>

At the beginning of 2023, there were 98.7 mn sq. m of apartment blocks under construction, the volume of which was about 92% of the value by the beginning of 2020, increased for the year by 2.4%. At the same time, the volume of housing that was not sold out was growing. By the beginning of 2023, the entire country had 67.9 mn sq. m (or more than 2/3 of the total housing stock under construction), including 40.6 mn sq. m of apartments available for sale. This is the highest figure in recent years, exceeding the minimum at the end of 2020 (28.7 mn sq. m) by 41.5%. The growth of unsold housing in new buildings for the year exceeded 16% (in 2021 – 21.6%). More than 27 mn sq. m of housing under construction are accounted for by projects in which sales are not yet open (there are no co-investment agreements).<sup>2</sup>

According to the WCIOM study “Administrative barriers in construction: a survey of Moscow developers,” the most important factors limiting the growth of current construction were the following:

- High cost of materials, structures, products (84%);
- Difficulties in obtaining permits (78%);
- Constantly changing rules and legislation (71%);
- Shortage of skilled workers (62%);
- Pandemic-induced crises (58%);
- Cost increase (51%).<sup>3</sup>

Amid the shortage of about 1/4 of the workers needed by the industry at the end of the year, the output of a number of main kinds of products for construction decreased.

Excavators (more than twice as much), glass (sheet cast, rolled, drawn or blown, but not otherwise processed, around 43%) and elevators (more than 30%) were among the leaders of the drop. There was a 10-15% reduction in the production of ceramic tiles for interior wall cladding and facade, sanitary ware products made of ceramics, silicate wall blocks, roll roofing and waterproofing materials, chipboard

1 Analytical report. 2022 preliminary results on the housing market of Russian Guild of Realtors experts. 2022. P. 5.

2 Review of apartment blocks construction in the Russian Federation. 2022. DOM.RF. March 2023. Pp. 3–4.

3 URL: <https://wciom.ru/analytical-reviews/analiticheskii-obzor/moskovskaja-stroika-ehkonomicheskaja-konjunktura-i-administrativnye-barery>

and fiberboard. The output of a number of items, including cement, bricks and concrete increased. With all the ambiguity of the situation with the production of products for the construction industry, the price growth for their purchase by construction companies was observed for the vast majority of materials. A rare exception was reinforcing steel, although the output of finished steel (all types) in the country decreased by a total of 8.1%<sup>1</sup> The situation when the simultaneous reduction in output and price growth has a negative impact on the margins of development of various housing classes. The decline in prices on the background of falling output of other types of construction products also introduces excessive uncertainty in the need to increase the volume of construction.

Sanction restrictions also affect the construction industry. According to Sberbank's<sup>2</sup> customer survey, up to 70% of respondents believe that changes in the supply chain of imported materials and equipment can increase the realization time of existing projects up to six months and raise their cost. It is noted that the greatest risks are associated not so much with building materials for standard housing, but with more high-tech equipment (for example, elevator equipment, spare parts for certain types of equipment, electrical equipment, switchboards, ventilation systems). Therefore, to a greater extent, this feature affects elite housing, where the share of such costs can amount to 50% of the cost price or even more. Since the import substitution of the most technologically complex solutions can be a fairly lengthy process, requiring not only additional investment, but also long-term formed competencies, we should expect a negative impact of this factor on both the construction period and on its costs, especially in the elite segment.

Another trend that developed last year was the exit of a number of foreign players from the market of apartment blocks construction. The impact of this factor had an uneven effect on local markets due to the varying degree of foreign developers' presence. To the greatest extent, it affected the regions of the North-Western Federal District, where the presence of Scandinavian companies was traditionally observed. The redistribution of the vacated market share was mainly in favor of Russian developers. For instance, YIT, a Finnish company, which was active in industrial enterprises<sup>3</sup> during the Soviet times, sold its assets to Etalon Group, one of the leaders of the North-Western region. At the same time, due to the exit of Western companies, more active expansion of Chinese developers is possible in the future.

The sale by Bank Trust of the developer Inteko to Sminex for Rb38 bn was also a notable event on the merger-acquisition market in 2022. This fact may be regarded as rather positive for the market in general, as it confirms a rather high valuation of the asset and therefore certain prospects for the market. Trust Bank, being a non-core player in the segment of apartment blocks development, cedes the asset to the participant with considerable experience on the real estate

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1 Socio-economic situation in Russia – 2022. Pp. 43, 56–59, 66, 142–143.

2 URL: <https://realty.rbc.ru/news/627ca82a9a7947e7150513b6>

3 URL: <https://www.yitgroup.com/en/news-repository/stock-exchange-releases/yit-sells-its-businesses-in-russia>

market. The purchaser is Sminex, a company specializing in construction of high price housing in Moscow, which has completed 25 projects in 15 years.

For a better understanding of the processes taking place on the housing market last year, let us consider the situation in the capital city whose housing market is a benchmark for regional markets, i.e. this situation may be typical for other major cities (possibly with a certain time lag).

#### 4.7.4. Moscow's housing market

##### *Primary market*

In Q1 2022, the number of transactions exceeded indicators of the record year 2021. 38,500 transactions were registered in the capital that exceeded results of Q1 2021 by 21,8% and almost by 1.6-fold indicators of the same period of 2020. The rush of demand at the market of new buildings was caused by fluctuations of the ruble exchange rate, general uncertainty on the market after changes in the geopolitical situation and growth of the key rate of the Central Bank of Russia. However, sales then began to decline.

Overall, the year-end dynamics of the housing and mortgage market were the worst since 2015. In December 2022, a record volume of apartments and suites was offered for sale on the market of new buildings. According to “Metrium”, more than 70,300 lots were exposed, including about 18,100 (about 1/4) in New Moscow. Projects that were postponed due to the pandemic of 2020–2021 actively entered the market. Developers were counting on the realization of high deferred demand, but faced a noticeable decline in buying activity. Since spring, the growth rate of supply has been exceeding demand indicators on a monthly basis.

This became especially evident in H1 2022. In response, developers in October without waiting for the traditional pre-New Year's period began launching various promotions, offering customers housing with record discounts. Discounts hit unprecedented levels (up to 1/3), whereas previously the maximum discount amounted to 15% (in some projects – 20%). The share of apartments offered at discounts also increased. According to CIAN, at the end of 2022 on Moscow's primary market around 28% of all lots were offered at discount, while at the end of 2021 they accounted for only 6%. The share of such proposals in Old Moscow was about 39%, in New Moscow – 24%, in the Moscow region – 15%. In addition to discounts, developers also used loans with near-zero interest rates, tranche mortgages<sup>1</sup> and interest-free installment programs to stimulate demand.<sup>2</sup>

Some of these instruments (primarily loans with near-zero interest rates) were criticized by the Bank of Russia due to the fact that, according to the central bank, the sale of apartments was carried out at inflated prices. However, the

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1 Tranche mortgage is a new form of housing loan, which involves its division into several parts (tranches). As a rule, there are two (before the housing commissioning and after its delivery), and formally tranches are often different loans. The first is usually 15–30% of the total amount needed so the financial burden on the borrower at this stage is small. These loans are mortgages, while the object of pledge is different: at the early stage - the rights to the future object, after commissioning – ready-made housing.

2 URL: <https://realty.rbc.ru/news/63c6ec7b9a79476978f73129>

development of additional financing instruments in the current environment may be a way not only to raise sales, but also to maintain housing affordability and sufficient flexibility in a rapidly changing environment. In this regard, the development of tranche mortgages, which are gradually replacing loans with near-zero interest rates, is a promising trend, as it involves the division of the credit load depending on the stage of construction.

In December the activity of buyers in the primary segment has increased markedly, because there were fears of the end of preferential mortgages. The number of transactions compared to November surged by 32% at once, and in New Moscow – by 68%. Nevertheless, at the end of the year, apartment sales in the capital's new buildings slumped by 15.2%.<sup>1</sup>

The most acute imbalance manifested itself in the segment of elite housing, where the least number of transactions was concluded in 5 years (around 860 units). At the same time, the number of offers soared by 42% compared to 2021, amounting to 4,700 lots. The feature of the year is a situation when the average price of a meter grows while the average budget of a transaction decreases. The most popular were small-sized apartments. In some locations, there is a direct correlation between the purchase budget growth and the growth of the price per square meter, but this is rather an exception.

In addition to the drop in demand for luxury housing, it is also worth noting the reduction of investment demand on the capital market. In December 2022, the share of buyers of apartments in new buildings with a view to possible further sale was around 10%, which was the lowest indicator since 2017 (in 2015–2017 – 5%), especially against the background of the peak values of Q2 2021 (30–35%). Prior to 2020, the share of investment sales did not rise above 20%, increasing to 21-25% after the launch of the preferential mortgage program. The decline in the share of sales to this group of buyers is explained by: 1) a general decline in demand for housing in the capital; 2) a reduction in the potential yield from the potential resale of newly acquired housing in new buildings due to sharp rise in prices.

### ***Secondary market***

In 2022, a rush of demand commenced on the secondary housing market in Mosco. In Q1, there were registered 40,950 transactions. This was a record high for the entire history of Rosreestr's statistics. As in the market of new buildings, demand sharply decreased in Q2. As a result, Moscow secondary housing market for 2022 fell by 22,4% and 11% compared to 2021 and 2020, respectively. Moreover, at the end of the year, in contrast to the primary market, the decline was deeper than for the year as a whole. Last December, there were 14,030 transactions on the secondary market, down 31.1% from December 2021.<sup>2</sup>

At the end of 2022, there were 45,400 apartments and suites on the secondary housing market of the Old Moscow, which is 47.8% more than at the beginning

1 URL: <https://realty.ria.ru/20230216/rosreestr-1852320104.html>

2 URL: <https://rosreestr.gov.ru/press/archive/reg/rosreestr-v-dekambre-chislo-zaregistrovannykh-prav-na-vtorichnom-rynke-zhilya-v-moskve-vyroslo-na-t/>



of the year and is a record high in the history. The number of apartments for sale increased at the expense of low realized demand. The growth in the volume of supply was based on the psychology of sellers seeking to have time to sell at a profit before the fall of the markets, while buyers are focused on buying more modern and spacious housing, especially for families with children. Additional growth in supply was provided by investment properties in newly commissioned new buildings, which are usually put up for sale shortly after the facility is commissioned.

The demand for elite apartments suffered particularly badly. At the end of 2022, a total of 324 contracts were concluded in the high-end segment, which is 55.4% lower than the year before. At the same time, buyers of high-budget real estate are less likely to attract mortgage funds: the share of contracts with mortgage encumbrance was 13%, while in 2021 at least a quarter of contracts on the primary market were concluded with the use of mortgage.

In 2022, the number of urgent sales of apartments on the secondary market hit maximum. According to the results of the last year, the share of such transactions reached 3% of the total volume, while usually it is less than 2%. Last year, there were two waves of urgent sales against the backdrop of migration and decreased demand. However, despite the record share of such listings, sellers were not ready to make big discounts.

The events of 2022 led to an adjustment in the cost of secondary housing in Moscow, contrary to the specific approach to pricing inherent in the sellers of housing in the capital. As a rule, apartment owners are extremely reluctant to reduce prices when demand drops, but respond quickly to its growth. After a spike in demand in March, the average cost of 1 sq. m in the offer, according to CIAN data, went up from Rb307,100 to Rb312,700, and in April, when the maximum nominal offer prices were fixed on the secondary market, the value of this indicator was Rb320,200.

However, the price of 1 sq. m no longer corresponded to the real demand and starting from May prices went down, demonstrating a constant fall (if we count month on month) during eight 30-day intervals until the end of the year. However, in none of the months did it exceed 1%. According to CIAN, the depth of the fall from April to December 2022 was less than 5% – from 3Rb19,000 to Rb305,000 per 1 sq. m (excluding luxury real estate). Prices of real transactions with high probability sagged even more: by 10–12% relative to spring of the previous year (according to RBC expert estimate).

Prices for apartments fell for eight months in a row and became a distinctive feature of the capital market in 2022. However, so far this statistical series cannot be called an absolute record, CIAN analysts note. In 1998–1999 and in 2008–2009, the cost of apartments on the secondary market declined longer (about 15 months after the default and 10 months against the backdrop of the global financial crisis) and more noticeable to the buyer (in both cases – by 35–40%).

So far, the market dynamic is most similar to the 2015 indicators. Back then, the length of the price decline cycle was about 15 months (from January 2015 to March 2016), and the average price of 1 sq. m in supply fell by about 15% (from



Rb225,000 to Rb188,000). It is true that there were months when the price of apartments fell by 3% with occasional periods of recovery, while now the average prices are going down all the time.<sup>1</sup>

#### 4.7.5. Mortgage lending dynamic and state support measures

In order to overcome the difficulties arising from the new socio-economic situation, the state implemented programs to support the construction sector.

The main role in this was played by the extension of various programs of preferential mortgages, which constitute an increasing share of financing for the purchase of housing. The events associated with the sanction shocks and the geopolitical situation acted as a catalyst for growth of the share of concessional mortgages in the structure of financing and, consequently, the role of state support in the development of the housing market financing system.

The past year commenced with active growth in the mortgage portfolio. Thus, according to DOM.RF,<sup>2</sup> in Q1 2022, there were 393,000 mortgage loans for a total amount of Rb1.325 trillion against 418,000 loans for Rb1.164 trillion in Q1 2021, which meant a growth of almost 14% (in terms of the amount of loans).

However, already in Q2 the active growth gave way to a considerable decline due to the general uncertainty and sharp increase in the key interest rate, which naturally resulted in a rapid increase in the average weighted rates for different categories of mortgage loans (Fig. 30).

The volume of originated loans was approximately three times less than a year earlier: only 151,000 loans worth Rb555 bn (in Q2 2021 there were 519,000 loans,

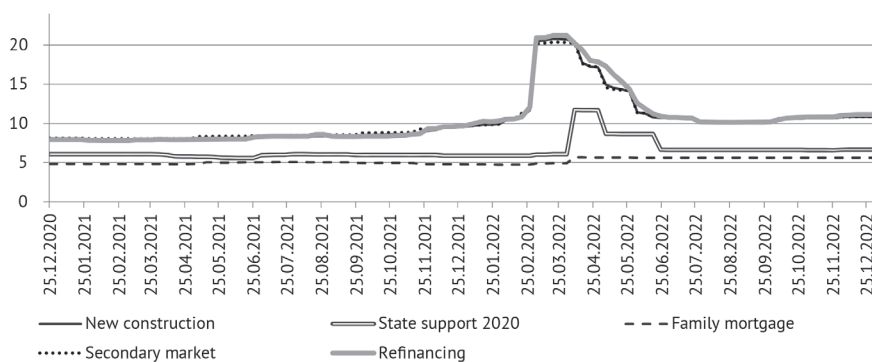


Fig. 30. Dynamics of the average weighted rate of main types of mortgage loans in top-20 banks in 2020–2022

Source: DOM.RF. URL: <https://www.xn--d1aqf.xn--p1ai/analytics/mortgage/>

1 URL: <https://realty.rbc.ru/news/63c6ec7b9a79476978f73129>

2 URL: <https://www.xn--d1aqf.xn--p1ai/upload/iblock/3ec/khhrccf6wzzbu157urm5vwk5b8oj1jo1.pdf>

or approximately Rb1.53 trillion). This situation was logical taking into account the almost two-fold growth of interest rates on loans during the quarter alone.

However, gradually, due to the normalization of the key rate and the extension of the concessional lending program, its volume also stabilized and at the end of Q3 2022, there was no sharp decline. The amount (Rb1.317 trillion) was almost equal to the amount for the same period of 2021 (Rb1.349 trillion), although the number was almost by 1/4 of a quarter lower. There were issued 350,000 loans as compared to 460,000 loans in Q3 of the previous year.

In general, there was an evident decline following the record performance in the housing mortgage lending (HML) in 2021.

According to the statements of DOM.RF and the Central Bank of Russia, the total number of mortgage loans extended in 2022 was estimated at 1,327,000 for the amount of Rb4.8 trillion. Thus, the origination of mortgages decreased by more than 30% by the number of loans and by more than 15% by value (*Table 17*).

*Table 17*
**Mortgage lending in 2021–2022 (minus rural mortgage)**

Credit category	Number of loans				Total amount			
	thousand		%		Rb bn		%	
	2021	2022	2021	2022	2021	2022	2021	2022
Mortgage loans, total	1909	1327	100	100	5700	4813	100	100
Secondary market (new loans)	1075	730	56.3	55.0	2904	2126	50.95	44.2
Primary market (collateral CSC)	476	410	24.9	30.9	1881	2063	33.0	42.85
Secondary market (refinancing)	211	28	11.1	2.1	506	85	8.9	1.75
IHC and new buildings*	147	160	7.7	12.05	408	539	7.15	11.2

\* Data across top-30 banks.

Source: Review of the mortgage lending market in 2022. DOM.RF. February 2023. P. 3; own calculations.

In fact, individual housing construction (IHC) was set back by 2–3 years, as the number of loans issued was comparable to the pre-pandemic year of 2019 (1,312,000) and their volume was only 8% higher than in 2020 (Rb4.45 trillion). However, the cardinal difference from 2019 is that back then, the role of concessional programs was little noticeable (3–4% by the number of loans and their volume). In 2020, they already had a significant impact on the housing market, but not to the same extent as 2 years later.

The main shift in the structure of IHC was an increase in the share of primary market (collateral by co-investment agreements (CIA)). In terms of the amount, which increased by almost 10% compared to 2021, this category of loans came close to the new loans on the secondary market (about 43–44%). However, this category, despite the reduction of its share by the amount of loans by almost 7 p.p., has kept close to the previous position by the share in their number (55%). According to its absolute values, the new secondary market was below the figures of 2021 (by the number of loans – by 32%, by the amount – 27%), i.e. the decline was deeper than that of IHC in general (especially by the amount).

The record-breaker in this regard was refinancing on the secondary market, the scale of which decreased by 7.5-fold in number and almost 6-fold in value. As a result, the share of such loans dropped to symbolic 2.1% (in 2021 – more than 11%) and 1.8% (in 2021 – about 9%), respectively, and their place was taken by loans for IHC and ready-made houses. They were the only category, which at the end of 2022 showed an increase both in the number of loans (almost 9%), and their amount (32%). The share of loans for individual housing construction and ready-made buildings hit 11–12%, compared to just over 7% in 2021.

In general, mortgage debt for the year surged by Rb2 trillion (or more than 17%). As of the beginning of 2023, its value exceeded Rb14 trillion (taking into account the acquired by credit institutions claims, excluding securitization). Moreover, mortgages accounted for 86% of the growth in all retail loans, and their share for the first time exceeded a half of the total debt of individuals. The share of overdue debt in the mortgage portfolio on banks' balance sheets at the beginning of 2023 decreased to 0.4% vs. 0.5% a year earlier (vs. 1% at the beginning of 2020).

The level of mortgage interest rates fluctuated throughout the year under the influence of macroeconomic dynamics and the prevalence of subsidized programs. Thanks to these programs and mortgages with developer subsidies, weighted average rates on the primary market fell to 4.3% per annum compared to 5.9% in 2021, while on the secondary market, on the contrary, they rose by 1 p.p. to 9.3%. As a result, the weighted average rate on mortgages in 2022 (7.2%) was still lower than in 2021 (7.5%).<sup>1</sup>

The growth of the difference between the rates at the primary and secondary markets by 2-fold to 5.0 p.p. made the primary segment attractive and shifted the demand towards new buildings. While in 2021 mortgage bonds registered by individuals accounted for 1/4 of all mortgage loans issued, in 2022 they accounted for almost 31%. The total number of signed CIA dropped by 19.5%, but the importance of mortgages in the structure of sales in new buildings went up (*Table 18*).

*Table 18*

**Dynamics and structure of sales in new buildings in 2020–2022 (by the number of registered by the population CIA for housing)**

Category of transaction	2020		2021		2022	
	thousand	%	thousand	%	thousand	%
CIA, total	609	100.0	676	100.0	544	100.0
Mortgage transactions, total	484	79.5	476	70.4	410	75.4
– concession mortgage programs	355	58.3	383	56.65	360	66.2
– market mortgage programs	129	21.2	93	13.75	50	9.2
Mortgage free	125	20.5	200	29.6	134	24.6

*Source:* Review of apartment blocks construction in the Russian Federation. 2022 r. DOM.RF. March 2023. P. 4; own calculations.

<sup>1</sup> Review of the mortgage lending market in 2022. DOM.RF. February 2023. Pp. 2–4.

Such transactions accounted for over 3/4 of all the CIAs concluded in 2022 (in 2021 – 70,4%, in 2020 – 79,5%). Their absolute number decreased by almost 14% as compared to 2021, including more than 46% on the market terms. The share of market mortgages was at its lowest (9.2%), being 1.5 times lower than in 2021 and more than twice as low as in 2020. The year-on-year decline in the number of market term mortgages was less than 40% of the level recorded back then. The share of mortgage-free apartments (24.6%) was lower than in 2021 (29.6%), but higher than in 2020 (20.5%). The absolute number of such transactions is also close (134,000 and 125,000, respectively).

However, the issuance of mortgages under concessional programs slumped by only 6% (approximately to the level of 2020). As a result, the share of concessional mortgages was the highest in 3 years (2/3). Concessional mortgage programs, which were used by households to buy housing through a home mortgage deed, form the core of all concessional mortgage lending. In 2022, they accounted for more than 74% of the total number of concessional loans, compared to 78% the year before (excluding rural mortgages).

The total volume of mortgage loans with state support remained high: around 485,000 loans worth more than Rb2.2 trillion (*Table 19*).

*Table 19*

**Concessional mortgage lending in 2021–2022 (minus rural mortgage)**

Category of loans and programs	Number of loans				Total amount			
	thousand		%		Rb bn		%	
	2021	2022	2021	2022	2021	2022	2021	2022
Mortgage loans, total	1909	1327	100	100	5700	4813	100	100
Concessional mortgage for new building	340	285	17.8	21.5	1054	1276	18.5	26.5
Family mortgage	134	169	7.0	12.7	460	792	8.1	16.5
Far Eastern mortgage	17	24.4	0.9	1.8	70.0	110.0	1.2	2.3
IT-mortgage	–	6.0	–	0.5	–	52.0	–	1.1
Preferential loans (total on 4 programs)	491	484.4	25.7/ 24*	36.5	1584.0	2230	27.8/ 27*	46.3

\* According to review data of DOM.RF 2023 without supplement agreements to existing loans within family mortgage.

Source: Review of the mortgage lending market in 2022 DOM.RF. February 2023. Pp. 2, 5; own calculations.

The share of concessional mortgages hit its maximum values: over 36% of the total number of loans (in 2021 – less than 26%) and over 46% by volume (in 2021 – less than 28%).

Among them, the program of issuing loans for new buildings with the rates ranging from 7 to 12% (57.3% of the total volume of concessional lending against 66.5% a year earlier) dominated. The Family Mortgage program accounted for 35.5% against 29% a year earlier. The Far Eastern Mortgage program was complementary (around 5% and 4.4%, respectively). The volume of lending increased for all programs: to the greatest extent – for the Family Mortgage (by

72%), to the least extent – for Privileged Mortgage (by 21%). The growth under the Far Eastern Mortgage program amounted to more than 57%. Overall, the volume of concessional lending soared by almost 41%.

In contrast to lending volumes, the total number of loans slumped slightly (by less than 1.5%). This was due to the Preferential Mortgage program, the issuance of which declined by more than 16%, while the Family Mortgage program surged by more than 26% and the Far Eastern Mortgage program – by 43.5%.

A significant increase in the issuance of family mortgages can be regarded as the result of the extension of the program from the middle of 2021 to families with one child born after 2018, while the rate remained stable throughout the year (6%).

As far as other programs with state support are concerned, in addition to fluctuations in the interest rate, it should be noted that the concessional loan amount was increased to Rb12 mn in the capital regions and to Rb6 mn in other regions with the program extending to the independent construction of private houses (by self-support). The Far Eastern mortgage program was extended to teachers and medical workers, as well as to rural settlements with extension until the end of 2030.

RF Government Decree of December 28, 2022 No. 2485 extended the Preferential mortgage program till July 1, 2024 at an interest rate of 8% with the possibility of obtaining a loan for the purchase of apartment in a new building, house building or purchase of land. The Family Mortgage program, which has the same time horizon, was extended to families with two children under the age of 18. Previously, only families where at least one child was born after January 1, 2018 could participate in the program.

For both programs the maximum size of state-subsidized loan will be Rb12 mn in Moscow, St. Petersburg, Moscow and Leningrad regions and Rb6 mn in other regions. The total maximum value of such loans may not exceed Rb30 mn and Rb15 mn, respectively, while the remaining amount exceeding the threshold subsidized by the state, can be granted at market or other subsidized rate.<sup>1</sup>

The Rural Mortgage program with a 3% interest rate on a soft loan has been extended indefinitely. It applies to all settlements with a population of no more than 30,000 people, except for urban districts and municipalities of Moscow, St. Petersburg and the Moscow region. By the time the relevant Government Decree No. 1437 of August 18, 2022 was published, over 97,000 loans worth Rb187.1 bn were originated under the program since 2020. Thanks to that, citizens were able to buy or build 5.2 mn sq. m of housing.<sup>2</sup> The main role in this process was played by Rosselkhozbank, which within two years (from the spring of 2020) extended Rb123.1 bn in rural mortgages that helped improve living conditions of over 63,000 families.<sup>3</sup>

1 URL: <https://www.banki.ru/news/lenta/?id=10978065>

2 URL: <http://government.ru/news/46282/>

3 The program resumed at the end of April 2022 after the allocation of subsidies by the Ministry of Agriculture. Rural mortgage is implemented as part of the program Comprehensive development of rural areas.

An important innovation in the package of concessional programs that appeared last year was the mortgage program for IT specialists introduced by the RF Government Decree No. 805 of April 30, 2022. This program with the validity term till the end of 2024 is aimed at mitigating the consequences of their exit from the country and facilitate the solution of the industry's staffing problems.

Its basic condition is the rate of 5% with a possibility to obtain a loan for the purchase of housing in new buildings and facilities for individual housing construction with the maximum amount of the state-subsidized loan of Rb18 mn for RF subjects with the population of over 1 mn people, and Rb9 mn for the rest.

So far this program has not become a significant segment in terms of the total size of the mortgage portfolio, however, is promising for its further growth, especially after the softening of requirements in the new edition of the RF Government Decree No. 72 of January 23, 2023. The main changes of the new edition are the following:

- Expanding the age range of potential borrowers to 50 years instead of 22 to 44 years;
- Expanding the list of organizations, places of work of IT-specialists: previously it concerned only the recipients of relevant benefits for the payment of insurance premiums, in the new version – all accredited IT-companies;
- Reducing the salary threshold for potential borrowers. It was reduced from Rb150,000 to Rb120,000 in cities with populations over 1 mn people, and from Rb100,000 to Rb70,000 in other cities. The only exception is Moscow, where in order to participate in the state program, one should get at least Rb150,000 a month.

The development institute – the company DOM.RF promoted the mortgage market in 2022:

- A record-breaking number of mortgage bonds were issued (15 placements), the volume of which (almost Rb400 bn) remained approximately at the level of the previous two years (Rb403 bn in 2021 and Rb371 bn in 2020);
- Russia's first issue of "green" mortgage loan stock secured by mortgage loans for the purchase of apartments in buildings with high energy efficiency classes from A to A++;
- A unique repo market of over Rb4 trillion<sup>1</sup> was created thanks to the inclusion of mortgage bonds of DOM.RF in the Lombard list of the Bank of Russia, the launch of repo transactions with the Federal Treasury on the Moscow Exchange and the reduction of stock exchange risk rates on mortgage bonds of DOM.RF.<sup>2</sup>

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1 The amount of transactions with mortgage-backed securities of DOM.RF on the Moscow Stock Exchange in 2021 amounted to slightly more than Rb1 trillion.

2 URL: <https://DOM.RF>

#### 4.7.6. Prospects for the housing market in 2023

In the current economic environment has significantly expanded *the range of risks to the construction and sale of housing*, which can be classified as follows:

- *Sanctioned* (under their impact, transparency is greatly reduced, as the disclosure of information helps in the introduction of the sanctions themselves, which in turn makes it difficult to third-party and conditionally independent evaluation and examination of business, such as IPOs and bond offerings of major developers);
- *Technological* (especially for critical technologies/goods if the company is highly dependent on their continuous supply, e.g., the need to replace OTIS elevators that have become unavailable in high-class residential complexes with domestically produced elevators);
- *Risks of Russian jurisdiction* (stemming from the very fact of doing business in a country “toxic” to the Western world, which makes it likely that access to settlement services, insurance, etc. will be denied, regardless of the existence of sanctions as such and the sources of origin of funds, this complicates market financial turnover);
- *Security risks* (cyberattacks, data leaks, the associated additional regulatory burden, etc., such as the ban by Rosreestr to obtain extracts indicating the owner by third parties, the main interested parties are realtors and banks);
- *Market risks* (the consequence of exit from Russia of a large part of foreign business was a decrease in demand for rental and purchase of housing, i.e. in 2023 the subjects of this market will have to work in significantly deteriorated environment).

The presence of the above risks and uncertainty does not allow market participants to adequately assess their prospects and count on market growth without government support. Therefore, today the forecasting of any industry comes down to the assessment of the possibilities and scale of such measures on its part.

In the absence of new geopolitical shocks in 2023, we should expect the industry to be sufficiently supported to ensure a proper supply of housing. The exit of developers outside “their” regions will take on a mass scale. After the regulatory introduction of mandatory use of building information modeling and construction monitoring technologies in the very process of development, a leap in digitalization is real. Therefore, we cannot rule out another record in the annual volume of commissioned housing due to the extensive development of the industry (taking into account the results in new regions) and the growing contribution of individual housing.

At the same time, solvent demand is more likely to stagnate even if mortgage loans remain at the 2022 level and the share of concessional programs is high (over 35% by number and 45% by volume). The strongest countercyclical support to the market will be provided by the extension of concessional mortgage lending and especially by the expansion of family mortgages through their extension to families with two children up to 18 years of age. Thus, a sharp recovery in demand for apartments is not expected, the consequence of which will be a decline in

sales rates with stagnating prices followed by a decline in the average price level of the market in all segments of apartment housing, including elite.

Furthermore, the general background in the field of housing will be the formation of a trend towards the development of various economic models and financial mechanisms of public-private partnerships at all levels of public authority in the implementation of programs for the integrated development of territories. The multiple expansion of their application will mean the weakening of the market mechanisms functioning in all regions, markets and clusters.



## Section 5. Institutional changes

### 5.1. Public sector and privatization<sup>1</sup>

#### 5.1.1. Scale of state ownership

Publication of data according to the System of indicators to assess the effectiveness of state property management began in 2016 in compliance with the RF Government Decree of 29.01.2015 No. 72. This system has replaced monitoring of indicators of the public sector of the economy, conducted by Rosstat since the early 2000s based on the RF Government Decree of 4.01.1999 No. 1 (subsequently revised on 30.12.2002). It contains information about the number of federal state unitary enterprises (FSUE) and joint-stock companies (JSCs) with the RF participation in the capital, which are also published in the privatization programs for the next term.

The new edition of the “Forecast plan (program) of federal property privatization and focal points of federal property privatization” with shifting of its time limits from 2022–2024 to 2023–2025 allows to describe the processes that took place in the previous year (*Table 1*).

As of July 1, 2022, the Russian Federation was a shareholder in 578 JSCs, and the owner of the property of 352 FGUPs, 41 federal treasury enterprises (FTE) and 12,197 federal state institutions (FSI).

Compared to the similar data a year earlier, there was a reduction in the number of FSUE by 187 units (or 34.7%), JSC with state participation by 100 units (or 14.7%) and FSI by 952 units (or 7.2%). At the same time, the number of FTE and JSCs, where there is a special right to participate in the management of the “golden share” has increased by 1 unit. With regard to the latter category of business entities, growth was observed in H1 2022. It should be noted that this

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was preceded by a sharp decline in the use of this instrument of state participation in the corporate sector in 2021.

*Table 1*

**Entities and organizations in federal ownership accounted in the register of federal property and the System of indicators to assess the effectiveness of state property management in 2010–2022**

Date	Business entities with federal participation, units		Other owners of federal property accounting, units		
	stocks package (share) in the capital / of which JSC	special right to participate in the management of the “golden share” in the absence of a share <sup>a</sup>	FSUE	FTE	FSI
On January 1, 2010	3 066/2 950 <sup>b</sup>		3 517 <sup>b</sup>		
On January 1, 2013	2 356/2 337 <sup>b</sup>		1 800/1 795 <sup>b</sup>	72	20 458
On January 1, 2016	1 557/1 704 <sup>b</sup>	88/64 <sup>c</sup>	1 488/1 247 <sup>b</sup>	48	16 194
On April 7, 2016	1 683/1 620 <sup>d</sup>		1 236	48	16 726
On July 1, 2016	1 571	82	1 378	47	16 990
On January 1, 2017	1 356/1 416 <sup>e</sup>	81	1 245/1 108 <sup>e</sup>	48	16 846
On July 1, 2017	1 247	78	1 058	53	16 244
On January 1, 2018	1 189	77	984	50	15 985
On July 1, 2018	1 060	77	868	50	15 520
On January 1, 2019	1 084/1 130 <sup>b</sup>	76	792/700 <sup>b</sup>	48 <sup>f</sup>	15 140
On July 1, 2019	1 059	73	712	48	14 942
On January 1, 2020	989	67	672	48	14 576
On July 1, 2020	948	67	640	46	13 915
On January 1, 2021	756	67	581	44	13 681
On July 1, 2021	678	29	539	40	13 149
On November 25, 2021	691 <sup>g</sup>		498 <sup>g</sup>		
On January 1, 2022	646	25	409	41	12 300
On July 1, 2022	578	26	352	41	1 2197
On September 5, 2022	591 <sup>h</sup>		295 <sup>h</sup>		

<sup>a</sup> Special right is not an accounting entity in the registry, but is mentioned in various materials of the Federal Property Management Agency;

<sup>b</sup> Number of JSCs and FSUE according to privatization programs for the years 2010–2013, 2014–2016, 2017–2019 (the data on the distribution by OKVED refers to companies whose shares (interests) are in federal ownership) and 2020–2022 (the number of business entities).

<sup>c</sup> According to report on the activity of the Federal Property Management Agency (Rosimushchestvo) for 2015.

<sup>d</sup> In the numerator – the total number of legal entities, including CJSC and LLC, in the denominator – the number of blocks of shares and stakes (we can assume that the difference represents the number of JSCs where the “golden share” is used, but there is no direct indication).

<sup>e</sup> According to report on the implementation of the forecast plan (programs) of privatization of the federal property for 2017–2019 in 2017.

<sup>f</sup> According to the System of indicators to assess the effectiveness of state property management on the number of business entities owned by the state by organizational-legal forms (OLF) (792 companies on the right of economic management and 48 companies on the right of operational management (state-owned), while the distribution of economic activities (OKVED) and federal authorities in charge of FSUE (OKOGU), their total number is 821 units.

<sup>g</sup> Number of business entities and FSUE according to privatization program for 2022–2024.

<sup>h</sup> Number of business entities and FSUE according to privatization program for 2023–2025.

*Sources:* The forecast plan (program) of privatization of the federal property and the focal points of privatization of the federal property for 2011–2013; the forecast plan (program) of privatization of the federal property and the focal points of privatization of the federal property for 2014–2016; URL: [www.economy.gov.ru](http://www.economy.gov.ru) (April 23, 2013); Report on the activity of the Federal Property Management Agency for 2015; The forecast plan (program) of privatization of the federal property and the focal points of privatization of the federal property for 2017–2019; The forecast plan (program) of privatization of the federal property and the focal points of privatization of the federal property for 2020–2022; The forecast plan (program) of privatization of the federal property and the focal points of privatization of the federal property for 2022–2024; The forecast plan (program) of privatization of the federal property and the focal points of privatization of the federal property for 2023–2025; Statistical data on the System of indicators to assess effectiveness of management of the state property; URL: <http://rosstat.gov.ru/> (March 20, 2016, September 5, 2016, March 20, 2017, September 5, 2017, March 20, 2018, September 5, 2018, March 20, 2019, September 5, 2019, March 20, 2020, September 7, 2020, March 22, 2021, September 6, 2021, March 21, 2022, September 7, 2022).

Given that dynamics of the number of subjects of the main organizational-legal forms of federal property, on a shorter time interval in H1 of 2022 it was as follows: the number of unitary enterprises dropped by 13.9%, JSC with state participation fell by 10.5%, state institutions reduced by 0.8%.

As of September 5, 2022, the Russian Federation owned property of 295 FSUE and was a shareholder (participant) in 591 economic entities. Comparing these values with the data on November 25, 2021, reflected in the privatization program for 2022–2024, it can be stated that in less than a year the number of FSUE decreased by more than 40%. When compared with the value on January 1, 2019 (700 FSUE), i.e. with the data of the initial version of the privatization program for 2020–2022, the reduction was 58%. The reduction of state participation in the corporate sector at the federal level has been more moderate over the previous year. By early fall 2022, it had declined by less than 15% in a partial year, although it was down nearly 48% from the beginning of 2019 (1,130 companies).

Refer now to a more significant category of economic companies with varying degrees of state participation<sup>1</sup> (*Table 2*).

Analysis of the Rosstat's data on the System of indicators for evaluation of state property management effectiveness shows that in the period between the middle of 2021 and the middle of 2022 a trend, which appeared about a year earlier, continued to emerge towards an increase in the proportion of JSCs, where the state as a shareholder could exercise full corporate control.<sup>2</sup> Their specific weight as of July 1, 2022 increased by more than 4.5 p.p. and amounted to 47.2% against 42.6% a year ago. The share of JSCs with federal blocking stakes dropped from 9 to almost 8%. In contrast, specific weight of all other companies whose shares are in federal ownership dropped almost by 4 p.p. (from 48.4% to 44.6%).

1 Previously, this group of companies could be more fully characterized by reports on management of federally owned shares of OJSC and use of a special right of participation of the RF in management of OJSC ("golden share") on the results of the next year, published from 2012 until recent years by the Federal Property Management Agency.

2 Based on the total number of JSCs with full and majority state-owned stakes.

Table 2

**Dynamics in the number and structure of business entities (JSC and LLC) by size of the state's share in the capital (excluding JSCs using special golden share" right in the absence of a share) in 2016–2022**

Date and source	Business entities (AO и ООО), where RF is a shareholder (participant)									
	total, units	share, %	Including with the size of the state share in the authorized capital							
			100%		50–100%		25–50%		less than 25%	
			units	%	units	%	units	%	units	%
<b>RF Government (forecast privatization plans, FPP)</b>										
On January 1, 2016 (FPP for 2017–2019)	1704 <sup>a</sup>	100.0	765	44.9	93	5.4	172	10.1	674	39.6
On January 1, 2019 (FPP for 2020–2022)	1130 <sup>b</sup>	100.0	368	32.55	30	2.65	95	8.4	637	56.4
On November 25 2021 (FPP for 2022–2024)	691 <sup>b</sup>	100.0	269	38.9	29	4.2	59	8.5	334	48.3
On September 5, 2022 (FPP for 2023–2025)	591 <sup>b</sup>	100.0	256	43.3	22	3.7	36	6.1	277	46.9
<b>Rosstat (System of indicators to assess efficiency of management of the state property, only JSC)</b>										
On January 1, 2016	1557	100.0	816 <sup>c</sup>		52.4 <sup>c</sup>		174	11.2	567 <sup>d</sup>	36.4 <sup>d</sup>
On July 1, 2016	1571	100.0	711 <sup>c</sup>		45.3 <sup>c</sup>		189	12.0	671 <sup>d</sup>	42.7 <sup>d</sup>
On January 1, 2017	1356	100.0	575 <sup>c</sup>		42.4 <sup>c</sup>		128	9.4	653 <sup>d</sup>	48.2 <sup>d</sup>
On July 1, 2017	1247	100.0	514 <sup>c</sup>		41.2 <sup>c</sup>		108	8.7	625 <sup>d</sup>	50.1 <sup>d</sup>
On January 1, 2018	1189	100.0	488 <sup>c</sup>		41.0 <sup>c</sup>		102	8.6	599 <sup>d</sup>	50.4 <sup>d</sup>
On July 1, 2018	1060	100.0	448 <sup>c</sup>		42.3 <sup>c</sup>		87	8.2	525 <sup>d</sup>	49.5 <sup>d</sup>
On January 1, 2019	1084	100.0	442 <sup>c</sup>		40.8 <sup>c</sup>		85	7.8	557 <sup>d</sup>	51.4 <sup>d</sup>
On July 1, 2019	1059	100.0	429 <sup>c</sup>		40.5 <sup>c</sup>		85	8.0	545 <sup>d</sup>	51.5 <sup>d</sup>
On January 1, 2020	989	100.0	387 <sup>c</sup>		39.1 <sup>c</sup>		74	7.5	528 <sup>d</sup>	53.4 <sup>d</sup>
On July 1, 2020	948	100.0	362 <sup>c</sup>		38.2 <sup>c</sup>		66	7.0	520 <sup>d</sup>	54.9 <sup>d</sup>
On January 1, 2021	756	100.0	318 <sup>c</sup>		42.1 <sup>c</sup>		60	7.9	378 <sup>d</sup>	50.0 <sup>d</sup>
On July 1, 2021	678	100.0	289 <sup>c</sup>		42.6 <sup>c</sup>		61	9.0	328 <sup>d</sup>	48.4 <sup>d</sup>
On January 1, 2022	646	100.0	299 <sup>c</sup>		46.3 <sup>c</sup>		54	8.4	293 <sup>d</sup>	45.3 <sup>d</sup>
On July 1, 2022	578	100.0	273 <sup>c</sup>		47.2 <sup>c</sup>		47	8.1	258 <sup>d</sup>	44.6 <sup>d</sup>

<sup>a</sup> The number of JSCs according to FPP for 2017–2019 (the data on the distribution by OKVED refers to the number of companies whose shares (interests) are in federal ownership).

<sup>b</sup> Number of business companies.

<sup>c</sup> Total number of JSCs with a federal shareholding of over 50% (without singling out JSCs with full (100%) federal shareholdings) and their specific weight.

<sup>d</sup> Estimated value based on the total number of JSCs data whose shares are in federal ownership and

the number of such JSCs by other categories based on the share in the authorized capital.

*Sources:* The forecast plan (program) of privatization of the federal property and the focal points of privatization of the federal property for 2017–2019; The forecast plan (program) of privatization of the federal property and the focal points of privatization of the federal property for 2020–2022; The forecast plan (program) of privatization of the federal property and the focal points of privatization of the federal property for 2022–2024; The forecast plan (program) of privatization of the federal property and the focal points of privatization of the federal property for 2023–2025; statistical data according to the System of indicators to assess effectiveness of the federal property management; URL: <http://rosstat.gov.ru/> (March 20, 2016, September 5, 2016, March 20, 2017, September 5, 2017, March 20, 2018, September 5, 2018, March 20, 2019, September 5, 2019, March 20, 2020, September 7, 2020, March 22, 2021, September 6, 2021, March 21, 2022, September 7, 2022); own calculations.

When comparing data for September 2022 from the privatization program 2023–2025 with November 2021, one can state a slight reduction in the proportion of business entities with the state share in the capital of less than 25% (by 1.4 p.p.). Nevertheless, this group remains very numerous, accounting for about 47% of all companies with federal stakes. The same is the share of companies where the state as a shareholder could exercise full corporate control. Their share increased by almost 4 p.p., mainly due to the share of companies with a full (100%) federal block of shares. The intermediate position was occupied by a small group of companies with a blocking (from 25 to 50% of the capital) state-owned stake, whose share decreased by 2.4 p.p. to 6.1%.

When considering the data on the System of indicators to assess the effectiveness of the state property management, not limited to the federal level, we get the following picture (*Table 3*).

*Table 3*

**Number of organizations in the public sector of economy accounted by the Federal Property Management Agency, its territorial directorates and state property management agencies of the Russian Federation in 2013–2014 and the number of economic entities in the state sector of economy in 2016–2022 (based on data from state registration) by organizational/legal forms**

Date	Total	State Unitary Enterprises including treasury enterprises	Government institutions	Business entities with the authorized capital more than 50% of shares (stakes) are in the ownership of business entities belonging to the state sector of the economy	
				in the state ownership	in the ownership of business entities belonging to the state sector of economy
On January 1, 2013	67 003 <sup>a</sup>	4 891	5 6247	3 501	2 364
On July 1, 2013	66 131 <sup>a</sup>	4 589	5 6100	3 201	2 241
On January 1, 2014	64 616 <sup>a</sup>	4 408	5 4699	3 097	2 412
On July 1, 2014	63 635 <sup>a</sup>	4 236	5 4173	2 988	2 238
On January 1, 2016	65 587 <sup>b</sup>	4 284	56 693/56 649 <sup>c</sup>	3 888 <sup>d</sup>	...
On July 1, 2016	65 218 <sup>b</sup>	3 982	56 893/56 856 <sup>c</sup>	3 673 <sup>d</sup>	...
On January 1, 2017	64 457 <sup>b</sup>	3 719	56 548/56 507 <sup>c</sup>	3 532 <sup>d</sup>	...

Date	Total	State Unitary Enterprises including treasury enterprises	Government institutions	Business entities with the authorized capital more than 50% of shares (stakes) are in the ownership of business entities belonging to the state sector of the economy	
				in the state ownership	in the ownership of business entities belonging to the state sector of economy
On July 1, 2017	62 655 <sup>b</sup>	3 294	55 414/55 361 <sup>c</sup>	3 353 <sup>d</sup>	...
On January 1, 2018	61 734 <sup>b</sup>	3 053	54 851/54 814 <sup>c</sup>	3 239 <sup>d</sup>	...
On July 1, 2018	60 391 <sup>b</sup>	2 763	53 933/53 899 <sup>c</sup>	3 125 <sup>d</sup>	...
On January 1, 2019	59 608 <sup>b</sup>	2 608	53 394/53 360 <sup>c</sup>	3 054 <sup>d</sup>	...
On July 1, 2019	58 839 <sup>b</sup>	2 366	52 901/52 870 <sup>c</sup>	2 972 <sup>d</sup>	...
On January 1, 2020	57 903 <sup>b</sup>	2 225	52 207/52 176 <sup>c</sup>	2 864 <sup>d</sup>	...
On July 1, 2020	56 909 <sup>b</sup>	2 050	51 474/51 445 <sup>c</sup>	2 787 <sup>d</sup>	...
On January 1, 2021	56 288 <sup>b</sup>	1 917	51 076/51 026 <sup>c</sup>	2 713 <sup>d</sup>	...
On July 1, 2021	55 204 <sup>b</sup>	1 792	50 138/50 110 <sup>c</sup>	2 672 <sup>d</sup>	...
On January 1, 2022	53 763 <sup>b</sup>	1 610	48 939/48 912 <sup>c</sup>	2 627 <sup>d</sup>	...
On July 1, 2022	53 013 <sup>b</sup>	1 426	48 433/48 407 <sup>c</sup>	2 583 <sup>d</sup>	...

<sup>a</sup> Including organizations lacking specific types in their founding documents, which have passed state registration, but without joint stock companies with more than 50% of their shares (stakes) in joint state and foreign ownership.

<sup>b</sup> Including business entities with an organizational-legal form other than unitary enterprises, state institutions and business companies (production (artels) and consumer cooperatives, associations (unions), associations of property owners, foundations, public-law companies, etc.).

<sup>c</sup> Number of institutions set up by the Russian Federation and RF regions (excluding state academies of sciences and private institutions, which in the new System are attributed to institutions, but should be excluded;

<sup>d</sup> Total number of business entities irrespective of the size of the state-owned stake (share), data on the number of business entities with a controlling block of shares owned by the state are available only for JSCs whose shares are in federal ownership.

*Sources:* On the development of the public sector of the economy of the Russian Federation in 2012 (p. 7–11) in H1 2013 (p. 7–11), 2013 (p. 7–11) in H1 2014 (p. 7–11). M.: Rosstat, 2013–2014; Statistical information on the indicators of effectiveness of the federal property management; URL: <http://rosstat.gov.ru/> (March 20, 2016, September 5, 2016, March 20, 2017, September 5, 2017, March 20, 2018, September 5, 2018, March 20, 2019, September 5, 2019, March 20, 2020, September 7, 2020, March 22, 2021, September 6, 2021, March 21, 2022, September 7, 2022).

The total number of state-owned business entities, according to the new system, was 53.000 units by mid-2022, down about 2.200 units (or 4%) from a year earlier and about 10.600 units from mid-2014.<sup>1</sup>

A reduction can be noted in the number of unitary enterprises by 366 units (or more than 1/5), business associations – by 89 units (or 3.3%), government agencies – about 1.700 units (or 3.4%) for certain categories of business entities compared to the middle of 2021.

<sup>1</sup> The latest bulletin on the development of the public sector of the economy was issued for January–September 2014, but the semiannual data as of July 1, 2014 are also good enough for the medium-term analysis.

Considering dynamics on a shorter time interval, in H1 2022, there was a reduction in the number of unitary enterprises by 11.4%, business companies by 1.7%, state institutions by 1%.

### 5.1.2. Privatization policy

The implementation of the Forecast Plan (Program) of privatization of the federal property and focal points of privatization of the federal property in 2022-2024 approved by the RF Government Edict No. 3993-r of 31.12.2021 was launched in the previous year. It should be reminded that this document resulted from amendments introduced into the Rules of elaboration of forecast plans (programs) of privatization by RF Government Decree No. 1401 of 23.08.2021. It stated that in 2022 the terms of the start and the end of realization of the three-year privatization program of 2020–2022 in force at that time were shifted by 2 years, i.e. de facto its new time interval shall be the period of 2022–2024.

As with the previous privatization program, numerous amendments and additions were made to the current document. In total, from the moment of approval of the Forecast Plan (program) of federal property privatization and the focal points of federal property privatization for 2022–2024 there were 27 respective normative legal acts against 22 in 2021 and 15 in 2020.

Among the changes worth mentioning are those approved by the RF Government Edict of 24.08.2022 No. 2417-r.

In the context of improving the efficiency of the privatization program implementation a personal responsibility of officials of federal executive bodies (FEBs) was established for the activities on the completion of registration with regard to property rights of FSUE. For this purpose, the Federal Property Management Agency based on proposals of its territorial offices and FEBs should approve action plans and schedules and ensure their implementation in respect of their subordinate enterprises.

There was a mention that not less than two bidding procedures have to be organized within a calendar year in respect of shares (stakes) of the companies included in the list of JSCs and LLCs with shares (stakes) in federal ownership are to be sold in 2022–2024, and in respect of property items included in the list of other property to be privatized during this period, as well as personal responsibility of officials of the Federal Property Management Agency for implementation of the above measures to be approved.

As a result of changes introduced in late summer 2022, the text of the document does not contain references to the achievement of key goals and objectives set out in the State Program of the Russian Federation “Public Finance Management and Regulation of Financial Markets”, approved by the RF Government Decree No. 320 of April 15, 2014 (Subprogram 6 “Federal Property Management”), as well as to improvement of federal property management mechanisms in accordance with Section XII of the Concept for Improving Efficiency of Budget Spending in 2019–2024 approved by the RF Government Edict No. 117-r of 31.01.2019.

In reality, by the end of 2022 only Makhachkala Commercial Seaport remained in the list of major companies to be privatized based on special decisions of the

RF President and the RF Government with regard to the market situation and recommendations of leading investment consultants (Section I of the privatization program) after excluding Almazylirexport Foreign Economic Association and VTB Bank (PAO) and transferring it to the next privatization program.

Thus, in 2022 privatization was conducted only in accordance with standard procedures. Finally, stocks of shares (shares in authorized capitals) of 54 economic entities, including one privatized by a special government decision of 2020 were sold and decisions on conditions of privatization of 62 FSUE approved (*Table 4*).

*Table 4*

**Comparative data on dynamics of the privatization of federal state unitary enterprises, federal blocks of shares and objects of the state treasury of the Russian Federation in 2008–2022**

Period	Number of privatized enterprises (objects) of federal property (according to Rosimushchestvo)		
	Privatized FSUE <sup>a</sup> , units	Sold blocks of shares of JSC, units.	Sold treasury facilities, units
2008	213	209 <sup>b</sup>	...
2009	316+256 <sup>c</sup>	52 <sup>b</sup>	...
2010	62	134 <sup>b</sup>	...
2008–2010	591+25 <sup>c</sup>	395 <sup>b</sup>	... <sup>f</sup>
2011	143	317 <sup>e</sup> /359 <sup>b</sup>	3
2012	47 <sup>f</sup>	265 <sup>e</sup>	40
2013	26	148 <sup>e</sup>	22
2011–2013	216	730 <sup>e</sup>	65
2014	33	107 <sup>e</sup>	12
2015	35 <sup>g</sup>	103 <sup>e</sup>	38
2016	60 <sup>g</sup>	179 <sup>e</sup>	282
2014–2016	125 <sup>g</sup>	389 <sup>e</sup>	332
2017	69	47	77
2018	4	46	173
2019	8	51	171
2017–2019	81	144	421
2020	16	23 <sup>h</sup>	312 <sup>h</sup>
2021	64	55	393
2022	62	54	223
2020–2022	142	132	928

<sup>a</sup> All preparatory activities have been completed and decisions on the conditions of privatization made.

<sup>b</sup> Taking into account blocks of shares including the announcement of their sale that took place in the previous year.

<sup>c</sup> Number of FSUE for which the decision on corporatization was taken by the RF Ministry of Defense in addition to those where a similar decision was taken by the Federal Property Management Agency.

<sup>d</sup> Available information on the sale of the facilities of other property in the specified period comes down to the sale of 4 facilities of the released immovable military property from October 2008 till January 2009, and also on the adoption of decisions on conditions of privatization and publication of information reports on the sale of facilities at the end of 2010 with results of their auctions made in 2011.



<sup>e</sup> Excluding stock sales using help of investment advisors.

<sup>f</sup> Calculated value is based on the report of the Federal Property Management Agency on fulfillment of the forecast plan (Program) of federal property privatization of 2011–2013 on the total number of FSUE, for which in 2011–2013 orders were issued on the conditions of privatization through conversion into JSC (216 units) and the data on the results of 2011 and 2013.

<sup>g</sup> In respect of several enterprises decisions on privatization conditions were cancelled in 2015–2016 and adopted repeatedly, so the total number of FSUE, for which privatization decisions were adopted over 3 years separately, is somewhat higher than in the table data on results of 2014–2016 (125 units).

<sup>h</sup> Taking into account blocks of JSCs and treasury facilities sold under the previous privatization program.

*Sources:* Report on the Rosimuschestvo activity in 2008; Report on the implementation of the forecast plan (program) of privatization of the federal property for 2009. M., 2010; Report of the Ministry of economic development on results of privatization of the federal property in 2010; Report of the Ministry of economic development on results of privatization of the federal property in 2011; Report on the implementation of the forecast plan (program) of privatization of the federal property for 2011–2013; The Rosimuschestvo reports on implementation of the forecast plan (program) of the federal property privatization for 2014–2016 in 2014, in 2015, in 2016; The Rosimuschestvo reports on implementation of the forecast plan (program) of the federal property privatization for 2017–2019 in 2017, in 2018, in 2019; The Rosimuschestvo report on implementation of the forecast plan (program) of the federal property privatization for 2020–2022 in 2020; The Rosimuschestvo report on implementation of the forecast plan (program) of the federal property privatization for 2020–2022 in 2021; The Rosimuschestvo report on implementation of the forecast plan (program) of the federal property privatization for 2022–2024 in 2022; URL: <http://rosim.gov.ru>.

Number of privatized unitary enterprises and sold blocks of shares (stakes in authorized capitals) of economic entities remained practically at the level of 2021, when after the failure in the first pandemic year it was possible to reach values exceeding or comparable to those relating to the period of the privatization program in 2017–2019.

Financial results were also exceedingly favorable. According to the Federal Treasury, the proceeds from sale of shares and other forms of participation in the capital owned by the federal government amounted to Rb7.8 bn at the end of the previous year, which exceeded twice the set budget target and the forecast of revenues in the privatization program for 2020–2022. Compared with 2021, the revenues increased by Rb2.53 bn. It was the maximum for the whole period of 2017–2022 leaving behind the results of the previous crisis years (2008 – about Rb6.7 bn, 2009 – about Rb2.0 bn, 2015 – about Rb6.3 bn).

The top three largest assets sold in 2022 included blocks of shares of JSC “Industrial Park Odintsovo-1” (Moscow Region)<sup>1</sup> (100%, Rb1,428.5 mn), “Zvezda Reductor” (St. Petersburg, mechanical engineering) (93.7%, Rb1,238.5 mn), “Electronic Trading and Security” (ETB, St. Petersburg) (100%, Rb401 mn).

Blocks of shares of 4 other JSCs were sold for no less than Rb200 mn, 4 out of 7 mentioned assets were sold by JSC “Auction House of the Russian Federation” (hereinafter JSC “RAD”), 1 by JSC “Direct Investments Agency.”<sup>2</sup> In total, independent sellers conducted 143 out of 185 bidding procedures for business entities (or more than 77%).

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1 The main type of activity is leasing own space (production buildings, office premises, industrial warehouses).

2 Another 2 assets were sold by the Central Office of the Federal Property Management Agency, including the sale of JSC Pro-industrial Park Odintsovo-1.

The terms of agency agreements concluded between the Federal Property Management Agency and agents based on the results of selecting legal entities, which in accordance with the RF Government Edict perform functions of a seller in respect of blocks of shares (stakes) of economic companies included in the privatization program, have expired last year. Due to the expiration of the contracts and additional agreements it is logical to evaluate the performance of sellers of federal property in the previous two years.

JSC "RAD" played the main role. It conducted the alienation of shares (stakes) of 164 economic entities from the federal property under 3 agreements. However, only 71 entities (about 43%) actually managed to complete the transfer of ownership rights. Even taking into account 8 companies whose information notices on their sale have been published until December 31, 2022 and the ongoing privatization procedures in 2023, it can be stated that less than a half of the assets intended for this purpose have been sold.

With respect to 32 companies (19.5%), taking into account the expiration of the agency agreement, privatization activities are conducted by the Federal Property Management Agency, while with respect to 6 companies (3.7%) privatization activities have been canceled or suspended. However, a larger number of companies (46 units, or 28%) turned out to be unavailable for sale due to exclusion from the privatization program or preparatory measures for exclusion. If they are not accounted, the RAD JSC managed to sell about 60% of the entire array of assets intended for alienation.

The activity of other sellers complemented the efforts of the JSC "RAD" only to a small extent. The Agency of Direct Investments JSC succeeded in transferring the rights in respect of 10 out of 16 business entities (or 62.5%). One more company was sold by Rosimushchestvo. Taking into account the expiration of the agency contracts, the agency conducts privatization measures in respect of another 10 companies (5 companies from the number intended for sale to JSC Direct Investments Agency and Investment and Financial Company Solid, which has not realized any transactions).

New geopolitical situation forced to radically revise the access of independent agents to the organization of privatization process. By RF Government Edict No. 1100-r of May 4, 2022, the organizations possessing the share of direct or indirect participation of foreign investors in capital exceeding 50%, were excluded from the list of legal entities approved in 2010 for organizing sales on behalf of the Russian Federation of the privatized federal property and (or) acting as a seller. Finally, only 7 organizations remained out of 23, including Arowana Capital JSC which replaced VTB Capital. However, at the same time they got a wider range of activities, because in the new wording it concerns the list of legal entities for sale of all privatized state or municipal property, not only federal property.

Returning to the most significant transactions of the previous year, it can be noted that with regard to alienation of full (100%) block of shares of JSC "ETB" the Russian government issued a separate Decree dated 06.04.2022 No. 767-p, which was due to its specialization (sale of property in bankruptcy proceedings and seized property on the electronic platform), as well as management of real estate.

The sale was conducted by RAD JSC. The sale and purchase agreement concluded with Automated Information System of Trading LLC (AIST LLC) obliges it to fulfill the obligations listed in the document within 3 (three) years from the date of transfer of the property right to the shares of ETB JSC: (1) modernization of fixed assets and software used by the company to support its activities, namely an increase in the company's server capacity by at least 20% of the existing ones; (2) ensuring growth in the company's revenue from its activities related to the sale of debtors' property in the course of electronic procedures used in bankruptcy and (or) the sale of seized property by at least 10% annually compared to the previous year's figure; (3) maintaining business profile for the sale of debtors' property in electronic procedures applied in bankruptcy and (or) for the sale of seized property. It is not only the control of the Federal Property Management Agency (up to the termination of the contract), which is the guarantee to fulfill the conditions, but also payment of a fine in favor of the state in the amount of 10% of the share for each fact of violation of the obligations by the purchaser.

Similar government edicts were adopted in relation to the full (100%) shares of JSC "Publishing House "High School" and "Order of the October Revolution, the Order of the Red Banner of Labor "First Exemplary Printing House" (hereinafter – JSC "POT").

According to the first one, RAD takes measures to assess the market value of the block of shares and prepare a report on the material conditions of the transaction, including, inter alia, maintaining the profile of the said company, containing the proposals of JSC RAD on possible buyers of shares and their proposals regarding the price and other conditions of the transaction for the alienation of shares. With regard to the POT JSC block of shares, evaluation was completed aimed to conduct an auction for sale of the block of shares of this business entity.

Meanwhile, in reality there are negative examples of fulfilling the conditions stipulated by the decisions of the government by buyers of privatized property.

Thus, in the course of controlling measures after alienation of the full (100%) federal block of shares of JSC "Publishing house "Detskaya literatura" for 2021, Rosimushchestvo has revealed systematic violations by the buyer LLC "IKomInvest" of essential conditions established by the RF Government Edict of 6.02.2018 No. 169-r. In this respect, Rosimuschestvo filed a legal claim to the Arbitration Court of Moscow demanding to oblige the purchaser to return the block of shares of JSC "Publishing House "Detskaya Literatura" into federal ownership.<sup>1</sup>

At present, Rosimuschestvo continues to exercise control over the compliance of Yug-Businesspartner LLC (the buyer) with the terms and conditions of the RF Government Edict dated 31.08.2020 No. 2211-r on alienation of the federally owned block of shares of Adler Stud Trout Breeding Farm JSC. However, the Government Edict does not provide for Rosimuschestvo even the right to demand termination of the contract, as in the cases of JSC ETB and POT.<sup>2</sup>

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1 The main activity is the provision of own space for rent (production buildings, office space, industrial warehouses).

2 Another 2 assets were sold by the Central Office of the Federal Property Management Agency, including the sale of Odintsovo-1 Industrial Park JSC.

In contrast to the privatization of JSC companies (economic entities) and results of the two previous years, more modest results were achieved by selling the property of the state treasury of the Russian Federation. As regards this category of assets, the powers to conduct privatization measures were fully delegated to the territorial bodies of Rosimushchestvo.

The number of facilities sold constituted 223 units vs 393 and 312 in 2021 and 2020, respectively. Despite the reduction by more than 43% compared to 2021, it exceeded the number of sold blocks of shares (stakes) by more than 4 times. According to the operative data of the Federal Treasury, the amount of transfers to the federal budget was about Rb0.94 bn comparable to results of 2020 (Rb0.9 bn.) and 2021 (Rb1.03 bn.). In accordance with the Rosimushchestvo Order No. 258 dated December 17, 2021 on measures to implement the law on the federal budget for 2022–2024, the revenues under this item were planned in the amount of Rb168,175,700. Thus, the percentage of the implementation of the plan task at the end of the year amounted to 560%.<sup>1</sup>

Negative dynamics in the sale of assets under construction (hereinafter – AUC) can serve as a vivid illustration of the situation with the privatization of treasury property.

Out of 32 objects of federal property (board lots) comprising 52 AUC included in the privatization program, 16 facilities (half) comprising 33 AUC (63.5%) were sold, which is 3–4 times less than a year before. For comparison: in 2021 it was possible to sell 47 facilities (about 84% of the total number included in the FPP) within 121 AUC (more than 90%).

Another feature of privatization of the treasury property in 2022 was the active work of Rosimushchestvo in respect of confiscated property resulted from corruption offenses and transferred into federal ownership in accordance with court decisions. In November-December 2022, 10 out of 41 board lots with such real estate facilities (land plots and non-residential premises) were sold at open auctions. According to abstract 3, item 17, Article 46 of the RF Budget Code, the income from the sale of corrupted property shall be credited to the budget of the Pension Fund of the Russian Federation.

As in previous years, only part of the privatized federal property is of interest to potential investors. Nevertheless, the sales success rate in terms of the ratio of number of sold assets and conducted tenders, was comparable to the indicators of the previous year and amounted to 28.6% for blocks of shares (stakes) and 30.1% for treasury facilities against 30.7% and 28.4% respectively for 2021.

When comparing results achieved within three-year interval of 2020–2022 with results of implementation of the privatization program in 2017–2019, a 2.2-fold increase in the number of sold treasury facilities and privatized FSUEs by more than 1.7 times can be noted, whereas the number of sold blocks of shares (stakes) in economic entities was somewhat lower (by about 8%). In 2023 results

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1 Report of Rosimushchestvo on fulfillment of the Forecast Plan (Program) of federal property privatization for 2022–2024 in 2022; Report of Rosimushchestvo on fulfillment of the Forecast Plan (Program) of federal property privatization for 2020–2022 in 2021; Report of Rosimushchestvo on fulfillment of the Forecast Plan (Program) of federal property privatization for 2020–2022 in 2020.

on announced sales in respect of 17 business entities and 65 treasury facilities should be summed up.

In order to expand informing of potential buyers under implementation of changes introduced into Section I of the Privatization Program by RF Government Edict No. 2417-r of 24.08.2022, Rosimuschestvo created departmental pages on Avito, CYAN and Domklik websites.

Links are posted on the official website of Rosimushchestvo in the section “Current sales of federal property”. The departmental web site was improved to provide more user friendly access to the information on the federal property to be privatized by means of transition on current sales to the official website of the Russian Federation on the Internet (URL: [www.torgi.gov.ru](http://www.torgi.gov.ru)) and placement of the list of the treasury property, for which privatization measures are conducted and which are planned for privatization, in the section “Other Property Planned for Privatization” of the section “Privatization”.

Likewise, to increase the efficiency of realization of the privatization program, to improve transparency of privatization procedures and additional marketing of privatized property, Rosimushchestvo and its territorial bodies hold “investment hours” to inform potential buyers about current and planned sales of federal property.

In 2022 in the course of implementation of 23 Executive Orders of the President of the Russian Federation and 27 RF Government Edicts on establishment/expansion of vertically integrated structures (VIS) the Rosimuschestvo took measures to form 12 VIS. By the end of the year the respective decisions on conditions of privatization were taken in respect of two FSUE, 52 JSC and 403 treasury facilities. Among the integrated structures expanded in 2022, there are state corporations (SC) Rostec and Roscosmos, Almaz-Antey Aerospace Defense Corporate Group JSC, Tactical Rocket Arms Corporation, United Shipbuilding Corporation, Marine Instrumentation Corporation, Krymenergo, RusHydro, Main Center for Reproduction of Agricultural Animals, Russian Railways, Russian Post, Kavkaz. RF”, VTB Bank (PAO), JSC “Transinzhtstroy.”

The RF Government Edict No. 3718-r of 2.12.2022 approved a new version of the forecast privatization plan (program). De facto it is a new privatization program for 2023–2025.

Compared with a similar document for 2022–2024, the text has undergone minimal adjustments. Now it does not mention the FSUE inclusion in the privatization plan, marked currently by restrictions on privatization, so as to transform these enterprises into joint stock companies after removing restrictions on their privatization in the prescribed manner. However, it should be noted that changes approved by RF Government Edict No. 2417-r of 24.08.2022 remained in force.

In terms of the quantity, in 2023–2025 it is planned to complete privatization of 23 FSUE and government enterprises, 160 business entities (including stakes in 9 limited liability companies), as well as 28443 objects of other property of the RF Treasury. These values differ significantly from those contained in the privatization program for 2022–2024.

However, if the number of commercial organizations included in the program was visibly reduced (FGUP by 3.6 times, business associations by 28%), the number of privatized facilities of other RF treasury facilities in FPP 2023–2025 was 25 times more. As it follows from the report of Rosimuschestvo on fulfillment of the forecast plan (program) of privatization of federal property in 2022–2024, their major part (27 887 units or 98%) is to be contributed to the authorized capital of integrated structures, and in respect of 27 455 units the Ministry of Defense of the Russian Federation is responsible for contribution of the state to the authorized capital of JSC Oboronenergo.<sup>1</sup> Thus, it is possible to sell only about 550 state treasury facilities of the Russian Federation. Taking into account the dynamics of privatized assets in other categories, it can be assumed that the content of the new privatization program reflected the need to use the property owned by the state on a larger scale than it was imagined before the spring of 2022.

As for the revenues to the federal budget from privatization of federal property excluding the cost of shares of the largest companies holding leading positions in respective sectors of economy, they will amount in 2023–2025 to Rb1.5 bn annually.

The projected annual volume of revenues is about 1.7 times as much as the amount stated in the Forecast Plan (Program) of privatization for 2022–2024 (approved by RF Government Edict No. 3993-r of 30.12.2021), i.e. Rb0.9 bn for 2023. For comparison: the initial version of the privatization program 2020–2022 provided for annual revenues of Rb3.6 bn (the later version for 2022 amounted to Rb3.9 bn).

It is difficult to assess the feasibility of the forecast of privatization revenues under the new economic and political situation, especially beyond the year 2023. It should be taken into consideration that the specified annual amount of budget revenues does not include the funds potentially obtained in the course of transactions with shares of major companies privatized applying special decisions of the RF President and the RF Government with regard to the market conditions and recommendations of the leading investment consultants.

Like in the previous privatization program, in 2023–2025 it is planned to terminate the state participation in the authorized capital of JSC Makhachkala Commercial Seaport, while in relation to JSC Almazyuvelirexport Foreign Economic Association such perspective was not mentioned anymore,<sup>2</sup> as well as the reduction of state participation in the authorized capital of VTB Bank (PAO) to 50% plus one ordinary registered share. If the FPP 2022–2024 in the context of major companies occupying a leading position in the relevant industries, allowed to transform 3 FSUE and state-owned enterprises (“National Fishery Resources”,

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1 The RF Government Edict of 20.05.2022 No. 1265-r determines the list of property planned to be contributed to the charter capital of Oboronenergo JSC as payment for additional shares placed by this JSC in connection with growth in its charter capital. These shares are transferred into federal ownership as part of the property of the Russian Armed Forces, which is managed by the Russian Ministry of Defense.

2 The possibility of the state withdrawal from Almazyuvelirexport in FPP 2022–2024 was allowed after the transfer of its authority to export precious metals and gems and sell representative batches of rough diamonds to another authorized agency.

Amur Plant “Vympel”, “Space Communications”) into JSCs if the RF President takes a decision on their exclusion from the list of strategic organizations, the new privatization program until 2025 planned corporatization only of the enterprise “National Fish Resources”.

This year, substantial changes were made to the current Privatization Law of 2001. First of all, the possibility to privatize property beyond the privatization program, which had been discussed for a long time, was finally implemented.

With the aim to accelerate the speed of involvement in economic turnover of immovable and movable property of the state treasury not demanded by the state for the performance of its functions, the RF Government received the right to establish the procedure for formation and approval of the list of federal property not included in the forecast plan (program) of privatization for a planned period, as well as introduction of changes to the above list.

The list of federal property to be privatized without inclusion in the privatization program shall be approved by the federal executive authority (FBEA) authorized by the Government of the Russian Federation for a period from 1 to 3 years. Such list specifies the characteristics of federal property subject to privatization and its expected timing. However, this authority cannot be delegated to the FBEA empowered to exercise the functions of privatization of federal property.

The criterion for including property (except for shares and stakes in charter capitals of business companies as well as property to be contributed to charter capitals of JSCs) in the above list is its market value determined in accordance with legislation of the Russian Federation on appraisal activities. It shall not exceed Rb100 mn. In this respect, the principle of integrity and unity of facilities is established and division (splitting) is not allowed.

The introduction of the mentioned cost criterion (Rb100 mn) caused the differentiation of requirements to the deposit for participation in the main privatization procedures.

When selling at auction, by tender and through public offering the bidder pays a deposit of 20% of the initial price specified in the information message on the sale of state or municipal property, amounting to Rb100 mn or more. If the starting price is less than Rb100 mn, the amount of the deposit is reduced by half to 10%. In the previous version this value was the same, amounting to 20% of the initial price. A document record serves as a document confirming the receipt of the deposit specified in the information notice.

With regard to selling at auction, it is established that bids on the price of state or municipal property are declared by participants of the auction openly in the course of bidding. According to results of the auction an agreement is concluded with the winner of the auction. If only one person, recognized as the only participant of the auction, applied for participation, the contract is concluded with him/her at the starting price. Previously, an auction where only one participant participated was recognized as failed. Now this becomes possible only if the person recognized as the only participant of the auction refuses to conclude a contract. Notification on recognizing a participant of the auction the winner or the only participant of the auction shall be sent on the auction closing day.



Introduction of such categories as property privatized beyond the privatization program and the person recognized as the sole participant in the auction in the new version, resulted in addition of several rules to the law on privatization (the content of the report on results of privatization of federal property submitted to Parliament, information support of privatization, specifics of privatization of the concession facilities and river ports, payment of remuneration to legal entities organizing sales or performing the functions of the seller. For the latter, it becomes possible to sell not only at auction or by public offering, but also at a competition, as well as through the implementation of the prerogative right to purchase in cases prescribed by law.

Another innovation concerning privatization in electronic form was the obligation of the seller and the electronic platform operator to ensure the confidentiality of information about bidders and participants of the sale, except for information posted for the privatization information support.

Development of innovations related to privatization beyond the privatization program, the RF Government Decree of 22.09.2022 No. 1673 adopted the Formation and Approval Rules of the list of federal property privatized without including in the forecast plan (program) of privatization of federal property for a planned period, as well as changes to this list.

The Ministry of Finance of the RF has been approved as the authorized FEB, which assigns the Rosimushchestvo a task to draw up a draft list of respective property to be privatized according to a new scheme.

By analogy with the rules of forming the privatization programs to be approved by the Government of the Russian Federation, the draft of the above list includes proposals for amendments to the current list in part:

- a 1-year shift in the start and end dates of its planning period;
- exclusion of property which privatization has been completed;
- addition of facilities, which privatization is possible in the planned period mentioned in the list.

In the course of its formation, the proposals of federal executive bodies, public authorities of the federal territory Sirius, legal entities and individuals received by Rosimushchestvo are taken into account.

The Agency should present a draft of the list to the Ministry of Finance of the Russian Federation in a special form not later than November 15 of the year preceding the scheduled period of the list, attaching extracts from the Unified State Register of Real Estate (USRN) and the register of federal property in respect of its facilities to be included in the list, as well as other documents in accordance with the task to prepare a project.

To confirm the market value of the facilities to be included in the list, the link to the Internet for access to the report on the assessment of its market value, prepared in accordance with the legislation of RF on valuation activities, is posted on the information resource specified for posting the information contained in the Unified State Register of Real Estate on the facts of legal entities activities, in accordance with the Valuation Act in RF of 1998 (No. 135-FZ).



The list shall be approved by the Ministry of Finance of the Russian Federation not later than 10 working days before the beginning of the planned period of its validity. Further, within 7 working days from the date of signing of the respective order of the Ministry of Finance the Federal Property Management Agency places the list on the official website in the Internet to inform on privatization of state and municipal property in accordance with the law on privatization as well as on the official website of the Agency.

The report on the results of privatization of the federal property included in the list for the accounting year shall be placed on the same information resources no later than 10 working days from the date of its submission to the Ministry of Finance (before February 1). The Agency in its turn should submit to the government of the Russian Federation a report on the results of privatization of the above property in the accounting year not later than February 15. It should be reminded that according to the law on privatization, the government shall submit to parliament a report on the results of privatization of federal property for the previous year annually not later than May 1, including facilities privatized beyond the forecast plan (program).

A special form of the report specifying the number of facilities included in the list, proceeds to the federal budget, number of facilities for which the auction was held, have been approved. The number of actually privatized facilities should be given in a breakdown of the 5 main methods of privatization with an indication of the amount of sales prices, and for auctions, tenders and through public offering also the amount of initial bidding prices should be indicated.<sup>1</sup>

Evaluating the considered innovations regarding privatization beyond the privatization program, one can note the following.

*First*, prerequisites for simplification and acceleration of sale of a large number of low value and limited liquidity facilities without regard to their inclusion in the forecast privatization plan were established due to: (1) halving the size of the deposit for the sale of property with a market value of up to Rb100 mn, (2) exclusion of the regulation on the failure of the auction if there was one participant and the property was sold to him at initial cost. Regional investors, including representatives of small business and individual entrepreneurs are usually called addressee of such measures. However due to the universal nature of innovations their role as an additional incentive to participate in the tenders is not obvious for the mentioned economic entities.

*Second*, selection of the value threshold the amount of Rb100 mn for the sale of federal property beyond privatization program raises questions.

Proceeding from the data of the budget reporting on revenues of the federal budget from privatization of property owned by the RF in the part of non-financial assets of the Treasury and Rosimushchestvo information on its sale, the average price of one treasury facility sold in 2020–2021 was in the range of Rb2.5–3.0 mn, having slightly increased in 2022 (Rb4.2 mn). It seems that the application of a new scheme, at least at the initial stage, requires a certain approbation, and

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1 The amount of initial prices is not specified for the sale without a price announcement and in the order of the preferential right (including small and medium-sized businesses).

this, based on the practice of the last 3 years, implies the use of a value much smaller than the established bar with its gradual increase, taking into account the accumulation of real experience and the current inflation.

*Third*, it is quite logical that the possibility of privatizing beyond the forecast plan (program) of privatization is still limited to the federal level, excluding shares and stakes in the charter capitals of business companies, as well as property to be contributed to the charter capitals of JSCs. At the same time, it looks rather controversial to allow privatization beyond the privatization program of such categories of property as facilities of the concession agreement, a river port.

*Fourth*, it should be noted that introduction of a regulation providing possibility to conclude a contract for the sale of property with a person recognized as the only bidder inevitably weakens the competitive basis of privatization.

In the previous format, the offer to sell the facility proposed for sale by public offering was the result of a failed auction, which potentially allowed the expansion of the circle of participants in a new cycle of trading with the theoretical possibility of increasing the price. However, in reality it happened very seldom.<sup>1</sup> The budget, on the other hand, faced a loss of profit, since the basic scheme of this method of privatization represents bidding on the lowering of the initial offer price with a cut-off price, i.e. the minimum bid price at which state or municipal property can be sold equal to 50% of the initial price of the failed auction.

The possibility of concluding an agreement for the sale of property with a person recognized as the only bidder at the auction, naturally gives priority to this method of privatization<sup>2</sup>, which makes the secondary methods marginal (sales through public offering and without an announced price).

*Fifth*, the role of the Ministry of Finance in the implementation of privatization policy continued to grow. However, despite the formal exclusion of FEB empowered to exercise the functions of privatization of the federal property from the approval of the list of property to be privatized outside the privatization program, in practice the role of the Rosimuschestvo under the new scheme turns out to be more than visible. In turn, this reduces the burden on the Government of the Russian Federation, contributing to the concentration of its efforts to address more significant issues.

The list of federal property to be privatized without being included in the privatization program for the years 2023–2025 approved for the first time by the Ministry of Finance Order of 15.12.2022 No. 553 contains 151 board lots (273 facilities), including 18 board lots (about 12%) of confiscated property acquired through corruption offenses, converted into federal ownership in accordance with court decisions.

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1 If several participants in the sale through public offering confirm the price of the initial offer or the offer price formed on one of the "steps of decrease", the auction is held with all participants under the established rules of its conduct, which provide for an open form of submitting proposals for the price of property. The initial price of state or municipal property in such an auction is the initial bid price or the bid price formed at this "step down".

2 For the first time the auction was recognized as valid with the presence of a single participant in the sale of 100% of shares of JSC "Gimetpostavka" for Rb395.000 by JSC "Russian Auction House" at the auction. URL: <http://rosim.gov.ru> (28.09.2022).

Another block of innovations in the law on privatization relates to the state participation in joint-stock companies (JSC).

There was a modification of the format of using the special right of participation in the management (“golden share”) in relation to JSCs.

Previously, such a decision could be made to ensure the national defense capability and state security, protection of morals, health, rights and legitimate interests of citizens during the privatization of property complexes of unitary enterprises, the decision to exclude JSC from the list of strategic organizations regardless of the number of shares owned by the state.

The new version supplements the range of such situations with a case when the RF Government made a decision on alienation of federally owned shares of JSCs of strategic importance for national defense and state security in accordance with the Law of 2008 “On Procedures for Foreign Investment in Business Entities of Strategic Importance for National Defense and State Security” (No. 57-FZ), if the federal block of shares in such companies will be less than 25% plus 1 share as a result of such alienation.

The changes governing the contribution of property to the share capital of joint stock companies are critical.

Now 100% of shares of another JSC may be contributed by the Russian Federation to the charter capital of a JSC with 100% of shares in federal ownership. Previously this was not possible, as the Law on joint-stock companies 1995 (No. 208-FZ) prohibited a company from having as its sole founder (shareholder) another business company consisting of one person, unless otherwise established by federal law. During the construction of integrated structures, this norm contributed to preserving single shares in federal ownership, which assisted to excessive dispersion of capital, creating an illusory impression of the capacity of federal agencies to influence the management processes by means of a single share.

It has also been established that privatization of 100% of federally owned shares of the main JSC, which owns 100% of shares of the subsidiary JSC, may be conducted only where the main company terminates its participation in the subsidiary or ceases to be its sole shareholder. This new norm is designed to ensure proper management of integrated structures by the state, contributing to coordination of property and industrial policy.

Moreover, the abundant list of property categories, alienation of which is not covered by the law on privatization is supplemented by weapons, ammunition, military and special equipment, spare parts, components and devices, explosives, blasting supplies, powders, all kinds of rocket fuel, as well as special materials and special equipment for their production, special equipment of paramilitary organizations, normative and technical supplies for their production. In this case the influence of the involvement of the country in the armed conflict is quite obvious.

### 5.1.3. The state participation in the economy and issues of public sector management

Changes in the list of strategic enterprises and joint-stock companies were relatively few.

In 2022 it included 5 FSUE and 2 JSC. At the same time, 13 FSUE and 2 JSC were excluded from the list of strategic organizations. Almost all of the excluded enterprises (except for one)<sup>1</sup> are to be transformed into joint-stock companies followed by transfer of 100% of their shares to Rostec State Corporation as an asset contribution from the state.

It should be noted that along with 2 FSUE it also concerns the transformation of 10 federal treasury enterprises into joint-stock companies, which seems to be quite radical, because having a specific industry affiliation (the ammunition and special chemistry industry), they bypass the stage of being in the organizational and legal form of a unitary enterprise on the right of economic management.

In a pair of excluded JSCs there is “Roskartografia”, which after the merger of 22 JSCs is subject to accession to the public-law company (PLC) “Roskadastr”. Another JSC included in the list of strategic organizations quite recently (in the spring of 2022) is excluded due to the inclusion of all of its shares in the charter capital of Transinzstroy JSC. Accordingly, the threshold of state corporate control in this organization is increased from 38% to 50.3%.

Throughout the year, the expansion of a number of integrated structures continued, including the United Shipbuilding Corporation (USC), Center for Livestock Reproduction (CLR), Russian Railways, Oboronenergo, Russian Post, KAVKAZ.RF and Rostec State Corporation.

The majority of the blocks of shares contributed to their authorized capitals are minority ones (in a number of cases these are single shares). Examples of few exceptions are the transfer of 100% of shares of 1 JSC to Rostec State Corporation in addition to the above unitary and state enterprises subject to corporatization, and the contribution to the charter capital of the CLR of all (except one) shares of JSC “Training and experimental dairy plant” of the Vologda State Dairy Academy named after N.V. Vereshchagin (trademark – “Vologda butter”).

It should be recalled that corporatization of this enterprise with attempts to sell it in 2015–2016 was the subject of serious friction between the federal center and the regional administration relying on the negative public perception of its privatization.

Strengthening of the state’s position in the banking sector should be underlined.

Initially, it is about concentration of assets in VTB Bank (PAO), the second most important bank in Russia.

First, all 100% shares of the Russian National Commercial Bank (RNKB, Simferopol), which after 2014 was the main link of the domestic banking system in Crimea after its reunification with Russia, will be contributed to its authorized capital when most Russian banks refuse to operate in the region due to the sanctions pressure. The prerequisite is that the RNCB retains its status as a legal entity.

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<sup>1</sup> Transferred into FSUE.

Second, at the end of the year, the VTB completed its acquisition of 100% of Otkrytie Bank, which has been rehabilitated since 2017 by the Central Bank of Russia. The transaction amounted to Rb340 bn with more than a third (about Rb107 bn) being paid in federal loan bonds (OFZ).<sup>1</sup>

Also, in connection with growth of Promsvyazbank share capital, 100% of the shares of JSC Moscow Industrial Bank have been accepted into the treasury of the Russian Federation from the State Corporation (SC) “Deposit Insurance Agency” by reducing to that amount the property contribution of the Russian Federation, made into the property of SC “Deposit Insurance Agency” in accordance with the budget law for 2008–2010, are transferred as the state contribution.

Withdrawal of foreign companies from Russia resulted in strengthening of the state position in the automotive industry as well. The share of French company “Renault” in CJSC “Renault Russia” (100%) was transferred to the Moscow Government and renamed from CJSC “Renault Russia” to JSC “Moscow Automobile Plant “Moskvich”. The recipient of Renault’s stake in AvtoVAZ (67.7%) was the Central Automotive and Motor Vehicle Research Institute NAMI. In both cases it is about selling assets at a symbolic price with a buy-back option, allowing the former owners of the assets to get them back within 5–6 years.<sup>2</sup>

Mentioning the management mechanism of public sector organizations, one can note the following innovations.

The RF Government Decree of 10.04.2002 No. 228, which regulates the procedure for approval of FSUE activity programs, was amended covering the transfer of profits to the federal budget.

By analogy with innovations in dividend policy for JSC having federal shareholdings adopted in 2021, the definition of net profit is differentiated depending on the application of International Financial Reporting Standards (IFRS).

If the legislation of the Russian Federation does not require the company to prepare consolidated financial statements in accordance with IFRS, aimed to identify part of the profit of the enterprise to be transferred to the federal budget, the net profit for the previous year calculated according to the accounting (financial) statements prepared in accordance with the Federal Law “On Accounting” is accepted without the profit recognized as:

- incomes and expenses associated with the recognition (recovery) of losses from the depreciation of fixed and intangible assets, as well as their write-offs (except for write-offs associated with the sale);
- the difference between the valuation of financial investments at current market value at the reporting date and their previous valuation;
- incomes and expenses associated with difference in the rate of exchange.

If the legislation of the Russian Federation does require the company to prepare consolidated financial statements in accordance with IFRS aimed to identify part of the profit of the enterprise to be transferred to the federal budget, profit for the previous year calculated according to the consolidated accounting (financial)

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1 URL: [www.rbc.ru](http://www.rbc.ru)

2 Ibid.

statements prepared in accordance with the Federal Law “On Accounting” is accepted without the profit recognized as:

- incomes and expenses associated with the recognition (recovery) of losses from the depreciation of fixed and intangible assets, as well as their write-offs (except for write-offs associated with the sale);
- incomes and expenses associated with the change of fair cost of financial assets determined according to IFRS;
- incomes and expenses associated with the difference in the rate of exchange;
- profits or losses that have been allocated to non-controlling interests in a business entity determined in accordance with IFRS, during the reporting period.

A similar approach is used when an entity prepares consolidated financial statements in accordance with IFRS in the absence of a respective obligation.

For all these situations, if the amount to be transferred to the federal budget exceeds the amount of net profit as determined by the accounting (financial) statements of such enterprise, retained earnings are used for the transfer.

The minimum rate approved in 2018 for transferring profit remaining at the enterprise after payment of taxes (mandatory payments), financing the implementation of activities to develop the enterprise approved as part of its program for the current fiscal year, and mandatory contributions to the enterprise funds (at least half of the adjusted profit of the enterprise for the previous year, unless otherwise established by acts of the RF Government).

However, there is a direct indication that transfer to the federal budget less than 50% of the adjusted profit of the enterprise, which has obtained the status of a state scientific center of the Russian Federation with proper justification, possibly based on the acts of the RF Government providing for reduction of the calculated profit by the amount of actual documented expenses connected with updating of the material and technical base and formation of the scientific-technical reserve for creation of new competitive technologies.

Likewise, the RF Government Decree of 03.12.2004 No. 739 dedicated to powers of federal executive bodies (FBEA) in exercising rights of the owner of the FSUE property, was amended with regard to decisions that provide for the transfer to the federal budget of part of the enterprise's profit.

A laconic wording appeared that this refers to the authority of the federal executive bodies in respect of subordinate FEB, including those under the privatization program.

The previous edition in this part was more verbose, describing profit (excluding income and expenses from the revaluation of companies' shares traded on the securities market and corporate income tax related to these income and expenses), to which the minimum bar of transfer (not less than 50%) was applied after reduction by the amount of costs for the implementation of measures to develop the company approved in the program of its activities.

For enterprises obliged to prepare financial statements, including consolidated one, the same threshold applied under IFRS indicating that this is the net profit

determined according to such statements (without indicating the items of expenses that reduce its value).

Another small innovation concerns attestation of the FSUE executives. Previously, setting up the attestation commissions for enterprises subordinate to federal executive bodies (FBEA) under jurisdiction of federal ministries was the exclusive prerogative of the ministries. The new version stipulates that the respective commissions may be set up by FEB on their own, however, agreed with the ministries.<sup>1</sup>

In the context of management of economic entities with state participation, the Ministry of Finance of Russia was authorized to exercise on behalf of the state (by agreement with the Ministry of Construction of Russia) the rights of a shareholder in ordinary registered uncertified shares of JSC DOM.RF acquired at the expense of the National Welfare Fund (NWF). As in the case of Aeroflot (since 2021), the general Regulation on the procedure for management of federally owned shares in JSCs and use of the special right of the Russian Federation to participate in management of Joint Stock Companies (“golden share”) approved by the RF Government Decree No. 738 dated December 3, 2004 does not apply to management of the above shares.

#### 5.1.4. Budgetary effect of state property policy

In 2022, in contrast to the previous year, federal budget revenues, in one way or another related to state property, showed obvious growth, especially in terms of revenues from the use of state property (from renewable sources). Payment of dividends by companies with state participation as a derivative of profit growth played principal role, which, in turn, was largely determined by increased revenues from energy exports due to rising energy prices and the impact of domestic inflation. Revenues from privatization and property sales (from non-renewable sources) grew insignificantly.

Below (*Tables 5, 6*) are the data on revenues from the reporting on the execution of the federal budget in terms of using state property and its sale only for a certain range of material objects.<sup>2</sup>

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1 It does not apply to attestation of the FSUE executives subordinate to FBEA, whose activities are managed by the President of the RF or the Government of the RF. For this group of companies, the attestation commissions are formed by these bodies.

2 Revenues from the federal budget received as payments for natural resources (including water biological resources, income from the use of forests and subsoil use), compensation for agricultural production losses associated with the removal of agricultural land, as a result of financial operations (income from the placement of budget funds (income from the federal budget balances and from their placement, since 2006 also income from the management of the Stabilization Fund of Russia) are not considered (Reserve Fund and National Welfare Fund since 2009), income from placement of amounts accumulated in the course of auctions for the sale of shares owned by the Russian Federation), interest received from granting budget loans within the country at the expense of the federal budget, interest on state loans (receipts from foreign governments and their legal entities in payment of interest on loans extended by the Russian Federation, receipts from legal entities, (enterprises and organizations), RF regions, municipal structures in payment of interest and guarantees on credits received by RF from governments of foreign countries and international financial organizations)), from provision of paid services or compensation of state expenditures, transfer of profit to the Central Bank, some payments from state and municipal enterprises and organizations (patent duties and registration fees for



In contrast to previous years, the laws on the execution of the federal budget for 2015–2020 do not contain aggregate data on the codes of types, subtypes of revenues, classification of operations of the public administration sector related to budget revenues (they are given only by classification codes in the context of administrators of revenues). Therefore, we used data from the annual reports on the execution of the federal budget as of January 1, 2016, 2017, 2018, 2019, 2020, 2021 and operational as of January 1, 2022.

Table 5

**Federal budget revenues from using state property (renewable sources)  
in 2000–2022, Rb mn**

Year	Total	Share dividends (2000–2022) and other equity income (2005–2022)	Rent for state-owned land	Income from renting out state-owned property	Income from transferring part of the profit remaining after taxes and other obligatory payments of FSUE	Revenues from other sources (2000–2007 and 2011) – from joint venture Vietsovpetro activities and 2018–2022 – from transfer of property in pledge, trust management
2000	23 244.5	5 676.5	–	5 880.7	–	11 687.3 <sup>a</sup>
2001	29 241.9	6 478.0	3 916.7 <sup>b</sup>	5 015.7 <sup>c</sup>	209.6 <sup>d</sup>	13 621.9
2002	36 362.4	10 402.3	3 588.1	8 073.2	910.0	13 388.8
2003	41 261.1	12 395.8		10 276.8 <sup>e</sup>	2 387.6	16 200.9
2004	50 249.9	17 228.2	908.1 <sup>f</sup>	12 374.5 <sup>g</sup>	2 539.6	17 199.5
2005	56 103.2	19 291.9	1 769.2 <sup>h</sup>	14 521.2 <sup>i</sup>	2 445.9	18 075.0
2006	69 173.4	25 181.8	3 508.0 <sup>h</sup>	16 809.9 <sup>j</sup>	2 556.0	21 117.7
2007	80 331.85	43 542.7	4 841.4 <sup>h</sup>	18 195.2 <sup>i</sup>	3 231.7	10 520.85
2008	76 266.7	53 155.9	6 042.8 <sup>h</sup>	14 587.7 <sup>i</sup>	2 480.3	–
2009	31 849.6	10 114.2	6 470.5 <sup>h</sup>	13 507.6 <sup>i</sup>	1757.3	–
2010	69 728.8	45 163.8	7 451.7 <sup>h</sup>	12 349.2 <sup>i</sup>	4 764.1	–
2011	104 304.0	79 441.0	8 210.5 <sup>h</sup>	11 241.25 <sup>j</sup>	4 637.85	773.4

official registration of computer programs, databases and integrated circuit topologies and other income, which until 2004 inclusively were part of payments from state organizations (except income from joint venture Vietsovpetro since 2001 and transfer of profit of FSUE since 2002)), income from the sale of production sharing agreements (PSAs), income from the disposal and sale of confiscated and other property converted to state ownership (including that transferred to state ownership through inheritance or donation, or treasures), income from lotteries, other income from using property and rights in federal ownership (income from the disposal of rights to intellectual property (R&D and technological works) of military, special and dual-use purposes, income from the disposal of rights to the results of scientific and technical activities owned by the Russian Federation, income from the operation and use of road property, a fee from the passage of motor vehicles registered in other states, the exclusive right of the Russian Federation to the results of intellectual property in the field of geodesy and cartography, payment for the use of spatial data and materials that are not objects of copyright contained in the federal fund of spatial data and other receipts from the use of property owned by the Russian Federation), as well as from the permitted activities of organizations, credited to the federal budget, receipts from the sale of state reserves of precious metals and precious stones.



Year	Total	Share dividends (2000–2022) and other equity income (2005–2022)	Rent for state-owned land	Income from renting out state-owned property	Income from transferring part of the profit remaining after taxes and other obligatory payments of FSUE	Revenues from other sources (2000–2007 and 2011) – from joint venture Vietsovpetro activities and 2018–2022 – from transfer of property in pledge, trust management
2012	228 964.5	212 571.5	7 660.7 <sup>k</sup>	3 730.3 <sup>l</sup>	5 002.0	–
2013	153 826.25	134 832.0	7 739.7 <sup>k</sup>	4 042.7 <sup>l</sup> + 1 015.75 <sup>n</sup>	6 196.1	–
2014	241 170.6	220 204.8	7 838.7 <sup>k</sup>	3 961.6 <sup>l</sup> + 1 348.5 <sup>n</sup>	7 817.0	–
2015	285 371.1	259 772.0	9 032.3 <sup>k</sup>	5 593.8 <sup>l</sup> + 1 687.8 <sup>n</sup>	9 285.2	–
2016	946 723.35/ 254 328.3 <sup>n</sup>	918 969.1 226 574.1 <sup>o</sup>	9 412.4 <sup>k</sup>	5 843.25 <sup>o</sup> + 3 026.7	9 471.9	–
2017	275 168.2	251 327.0	9 825.1 <sup>k</sup>	5 318.4 <sup>q</sup> + 2 857.7 <sup>m</sup>	5 840.0	–
2018	333 396.13	312 565.8	9 783.0 <sup>k</sup>	1 988.6 <sup>q</sup> + 2 922.6 <sup>m</sup>	6 136.0	0.13
2019	465 974.25	441 620.4	12 051.65 <sup>k</sup>	1 290.4 <sup>q</sup> + 3 239.2 <sup>m</sup>	7 616.9	155.7
2020	451 764.45	422 667.6	10 498.7 <sup>k</sup>	7 655.3 <sup>o</sup> + 2 509.2 <sup>m</sup> + + 28.8 <sup>p</sup>	8 404.7	0.145
2021	36 4721.3	339 493.2	12 806 <sup>k</sup>	1 207.7 <sup>o</sup> + 3 615.4 <sup>m</sup> + + 24.1 <sup>p</sup>	7 572.4	2.481
2022	777988.7	753 471.6	13 827.3 <sup>k</sup>	1 209.3 <sup>o</sup> + 3 494.8 <sup>m</sup> + + 876.4 <sup>p</sup>	5 077.9	31.4

<sup>a</sup> According to the Ministry of property relations of the Russian Federation, the law on the execution of the federal budget for the year 2000 did not specify a separate column, while it was the amount of payments from state enterprises (Rb 9887.1 mn) (without any specific components).

<sup>b</sup> The amount of rent (i) for agricultural land and (ii) for urban and settlement land.

<sup>c</sup> The amount of incomes from lease of property assigned to (i) research organizations, (ii) educational institutions, (iii) healthcare institutions, (iiii) state museums, state cultural and art institutions, (iiiii) archival institutions, (iiiii) Ministry of Defense of the Russian Federation, (iiiii) organizations of the Ministry of Railways of the Russian Federation, (iiiii) research service organizations of academies of sciences with the state status, and (iiiii) other incomes from lease of state-owned property.

<sup>d</sup> According to the Ministry of property relations of the Russian Federation, the law on the execution of the federal budget for the year 2001 did not specify a separate column, the value coincided with the value of other income in payments from state and municipal organizations.

<sup>e</sup> Total amount of incomes from leasing out state-owned property (without the allocation of land rents).

<sup>f</sup> Amount of rent (i) for urban and settlement lands and (ii) for federally owned lands after the delimitation of state land ownership.

<sup>g</sup> Amount of incomes from leasing out property assigned to (i) scientific organizations, (ii) educational institutions, (iii) health care institutions, (iiii) state cultural and art institutions, (iiiii) state archival institutions, (iiiii) postal institutions of federal postal service of the RF Ministry of digital development, communications and mass media of the Russian Federation and (iiiii) other incomes from leasing out federally owned property.

<sup>h</sup> Lease payment after the delimitation of state ownership of land and funds from sale of the right to conclude lease agreements for federally owned land (excluding land plots of federal autonomous (2008–2011) and budget (2011) institutions).

<sup>i</sup> Incomes from renting out property in the operational management of federal government bodies and relatively established institutions and in the economic management of FSUE: transferred for operational management to (i) research institutions having state status, (ii) institutions of research service of the Russian Academy of sciences and sectoral Academies of sciences, (iii) educational institutions, (iiii) healthcare institutions, (iiiii) federal postal institutions of the Federal

Communications Agency, (iiiiii) state cultural and art institutions, (iiiiiii) state archival institutions, and (iiiiiiii) other income from renting out property located in the operational management of federal government bodies and respectively established institutions and in the economic management of FSUE<sup>1</sup> (for 2006–2009 without income from permitted activities and use of federal property located outside the RF territory, received abroad, which were not specified in the previous years<sup>2</sup>).

<sup>j</sup> Incomes from renting out property in the operational management of federal government bodies and relatively established institutions (except for autonomous and budgetary institutions): transferred for operative management to (i) research institutions, (ii) institutions of research service of the Russian Academy of sciences and sectoral academies of sciences, (iii) educational institutions, (iiii) healthcare institutions, (iiiii) state cultural and art institutions, (iiiiiii) state archival institutions; (iiiiiiiiiii) in the operational management of the Ministry of Defense and its subordinate institutions (2010), (iiiiiiiiiii) in federal ownership managed by the Presidential Affairs Department (2010) according to the Edict, and (iiiiiiiiiii) other incomes from renting out property in the operational management of federal government bodies and their established institutions (without income from permitted activities and use of federal property located outside the RF territory, received from abroad).

<sup>k</sup> Rent after the demarcation of state ownership of land and funds from sale of the right to conclude lease agreements for federally owned land (except for land plots of federal budget and autonomous institutions), as well as (i) rent for land plots located within the right-of-way of federally owned public highways (2012–2022),

(ii) payment from the implementation of agreements on establishment of easements over the land within the right-of-way of public highways of federal importance for the construction (reconstruction), overhaul and operation of road service facilities, laying, relocation, rebuilding and operation of utilities, installation and use of advertising structures (2012 and 2014–2022), (iii) payment under agreements to establish easements over federally owned land plots (2015–2022), (iiii) amount of unreasonable gains for using federally owned land with the right to dispose them is granted to federal government agencies in accordance with Russian legislation (2020–2022), (iiiiii) payment for public easement, as provided for by the decision of the authorized body to establish public easement over land plots owned by federal government agencies (2020–2022), (iiiiiii) payment received under the agreement for granting the right to locate and operate a non-stationary trading facility, install and use advertising structures on federally owned land or land plots whose state ownership is not demarcated (2022).

<sup>l</sup> Incomes from renting out property under the operational management of federal government bodies and their relatively established institutions (except for budgetary and autonomous institutions): transferred under the operational management of: (i) research institutions, (ii) educational institutions, (iii) healthcare institutions, (iiii) state institutions of culture and art, (iiiii) state archival institutions; (iiiiiii) other income from renting out property operationally managed by federal government agencies, (iiiiiiii) federal government agencies, the Bank of Russia and authorities managing state non-budgetary funds of the Russian Federation, (iiiiiiiiiii) federal government agencies (2015 only) (without income from use of federal property located outside the Russian Federation received abroad).

<sup>m</sup> Income from leasing out property constituting part of the treasury of the Russian Federation (excluding land plots).

<sup>n</sup> Excluding funds received from the sale of Rosneft shares (Rb692.395 bn) (excluding payment of interim dividends).

<sup>o</sup> Data for 2016–2022 are presented in aggregated form without distinguishing groups of institutions by industry. The generalized classification includes only 2 categories of income depending on the recipient of income from leasing (federal government agencies, the Bank of Russia and management bodies of state non-budgetary funds of the Russian Federation and federal treasury institutions).

<sup>p</sup> Amount of unreasonable gains for using property (excluding land plots) in federal ownership with the right to dispose in accordance with Russian law is granted to federal government agencies.

*Sources:* Federal budget execution laws for 2000–2014; Federal budget execution reports as of January 1, 2016, January 1, 2017, January 1, 2018, January 1, 2019, January 1, 2020, and January 1, 2021 annual); URL: <http://roskazna.gov.ru>; Report on the execution of the RF consolidated budget

1 In 2008–2009, FSUE are not mentioned as a source of income from renting out property in their economic management, and renting out property in the operational management of federal government bodies and their relatively established institutions excludes the property of federal autonomous institutions.

2 In the years 2008–2009, FGUPs are not mentioned as a source of income from renting out property in their economic management, and renting out property in the operational management of federal government bodies and institutions created by them excludes the property of federal autonomous institutions.

and budgets of state extra-budgetary funds as of January 1, 2022; URL: <http://budget.gov.ru>; Preliminary report on the execution of the federal budget as of January 1, 2023; Federal Treasury; own calculations.

Cumulative income from renewable sources more than doubled in 2022 compared with the previous year, amounting to about Rb778 bn.

This was mainly due to the payment of dividends to the budget (Rb753.5 bn), which rose 2.2-fold against the indicator of 2020 (Rb339.5 bn), exceeding the previous maximum of 2019 (Rb441.6 bn). At the same time, transfers of part of profits by unitary enterprises decreased by 1/3. In terms of their absolute value (Rb5.1 bn), they were comparable to the 2012 level.

The cumulative revenues from leasing out federal property increased by more than 15% (up to Rb5.6 bn). This was mainly due to a radical increase in payments of amounts of unreasonable gains for using property (excluding land plots) in federal ownership with the right to manage in accordance with RF legislation is vested in federal government bodies (from Rb24.1 mn to Rb876.4 mn or more than 36 times). Revenues from renting out property owned by the treasury of the Russian Federation (excluding land plots) decreased by 3.3% (to Rb3.5 bn), while revenues from renting out property located in the operational management of federal government bodies and their established institutions (excluding budget and autonomous institutions) remained at the level of 2021 (Rb1.2 bn). The amount of budget revenues from land lease increased by nearly 8% (about Rb13.8 bn).<sup>1</sup>

Dividends accounted for the lion's share (about 97%) in the overall structure of federal budget revenues from renewable sources, the same as a year earlier, increasing by 4 p.p. as compared with 2021. Due to this, the specific weight of all other sources decreased by 2–3 times: the share of land lease payments was 1.8% (3.5% a year ago), property lease payments – 0.7% (1.3% a year ago), profits transferred by FSUE – 0.6% (2.1% a year ago).<sup>2</sup>

1 As in the previous year, the amount of income from land rent includes income received in the form of rent for land located in the right-of-way of public highways of federal importance, which are in federal ownership (Rb7.5 mn), payment from the implementation of agreements on the establishment of servitudes in respect of land in the borders of the right-of-way of public highways of federal importance for the purposes of construction (reconstruction), overhaul and operation of road service facilities, laying, transfer, rebuilding and operation of utilities, installation and operation of advertising structures (Rb38.6 mn), payment under agreements on establishment of easements concluded by federal executive authorities, state enterprises or institutions in respect of land plots owned by the federal government (Rb160.7 mn), as well as payment for public easements to be allocated from 2021, stipulated by the decision of the authorized body to establish a public easement with regard to land plots owned federally (except for land plots that are owned federally and the exercise of the powers of the Russian Federation to manage and dispose of which is delegated to state authorities of RF regions) and not granted to individuals and legal entities (except for state authorities (state bodies), local governments (municipal bodies), management bodies of state extra-budgetary funds and government agencies) (Rb0.5 mn), the amount of unreasonable gains for using federally owned land plots with the right to manage in accordance with Russian legislation was granted to federal government bodies (Rb252.2 mn), as well as the fee received for the first time under the contract for the right to locate and operate a non-stationary trading facility, installation and operation of advertising structures on land or land plots owned by the federal government and on land or land plots whose state ownership is not demarcated (Rb22.9 mn). The data for 2020–2021 are recalculated taking into account amounts of unreasonable gains for using land plots.

2 In the classification of federal budget revenues from the use of property in recent years a new source has appeared – the funds received from the transfer of federally owned property (excluding

Referring to the analysis of federal budget revenues from privatization and sales of state property (*Table 6*), it should be noted that since 1999 revenues from sales of the main part of such assets (shares, and lands in 2003–2007)<sup>1</sup> have been treated as sources of financing of its deficit.

*Table 6*

**Federal budget revenues from the privatization and sale of property  
(non-renewable sources) in 2000–2022, million rubles**

Year	Total	Sale of shares in the federal ownership (2000–2022) and other forms of participation in the authorized capital (2005–2022) <sup>a</sup>	Sale of land plots	Sale of various property (excluding movable property of budgetary and autonomous enterprises, as well as property of state unitary enterprises, including treasury)
2000	27 167.8	26 983.5	–	184.3 <sup>b</sup>
2001	10 307.9	9 583.9	119.6 <sup>c</sup>	217.5 + 386.5 + 0.4 (HMA) <sup>d</sup>
2002	10 448.9	8 255.9 <sup>e</sup>	1967.0 <sup>f</sup>	226.0 <sup>g</sup>
2003	94 077.6	89 758.6	3 992.3 <sup>h</sup>	316.2 + 10.5 <sup>i</sup>
2004	70 548.1	65 726.9	3 259.3 <sup>j</sup>	197.3 + 1364.6 + 0.04 (HMA) <sup>k</sup>
2005	41 254.2	34 987.6	5 285.7 <sup>l</sup>	980.9 <sup>o</sup>
2006	24 726.4	17 567.9	5 874.2 <sup>l</sup>	1 284.3 <sup>p</sup>
2007	25 429.4	19 274.3	959.6 <sup>o</sup>	5 195.5 <sup>d</sup>
2008	12 395.0	6 665.2 + 29.6	1 202.0 <sup>q</sup>	4 498.2 + 0.025 (HMA) <sup>r</sup>
2009	4 544.1	1 952.9	1 152.5 <sup>q</sup>	1 438.7 <sup>r</sup>
2010	18 677.6	14 914.4	1 376.2 <sup>q</sup>	2 387.0 + 0.039 (HMA) <sup>r</sup>
2011	136 660.1	126 207.5	2 425.2 <sup>q</sup>	8 027.4 <sup>r</sup>
2012	80 978.7	43 862.9	16 443.8 <sup>q</sup>	20 671.7 + 0.338 (HMA) <sup>r</sup>
2013	55 288.6	41 633.3	1 212.75 <sup>q</sup>	12 442.2 + 0.310 (HMA) <sup>r</sup>
2014	41 155.35	29 724.0	1 912.6 <sup>q</sup>	9 517.7 + 1.048 (HMA) <sup>r</sup>
2015	18 604.1	6 304.0	1 634.55 <sup>q</sup>	10 665.5 + 0.062 (HMA) <sup>r</sup>
2016	416 470.5	406 795.2	2 112.7 <sup>q</sup>	7 562.6 + 0.012 (HMA) <sup>r</sup>
2017	21 906.7	14 284.5	1 199.6 <sup>q</sup>	6 421.3 + 1.3 (HMA) <sup>r</sup>
2018	28 252.0	12 787.5	1 660.6 <sup>q</sup>	13 803.7 + 0.2 (HMA) <sup>r</sup>
2019	20 129.3	11 527.5	1 647.5 <sup>q</sup>	6 954.3 <sup>r</sup>
2020	27 961.5	12 570.7	3 235.5 <sup>q</sup>	11 247.2 + 1.9 (HMA) <sup>r</sup> + 906.2 <sup>s</sup>
2021	20 265.85	5 272.0	2 455.6 <sup>q</sup>	11 492.4 <sup>r</sup> + 1 045.85 <sup>s</sup>
2022	20 642.7	7 792.5	1 733.9 <sup>q</sup>	10 173.5 <sup>r</sup> + 942.8 <sup>s</sup>

<sup>a</sup> The amount of Rb29.6 mn in 2008 (according to the data of the Report on the Federal Budget Execution as of January 1, 2009) is treated as a source of internal financing of the federal budget deficit, but is not included in the law on the Federal Budget Execution for 2008.

<sup>b</sup> Proceeds from the privatization of state-owned organizations attributable to the sources of internal financing of the federal budget deficit.

<sup>c</sup> Income from the sale of land plots and lease rights to state-owned land plots (with the allocation of those in which privatized enterprises are located), attributable to federal budget revenues.

the property of federal budgetary and autonomous institutions, as well as the property of federal state unitary enterprises, including state ones), in pledge, in trust management. However, its role in the structure of income from renewable sources was insignificant (Rb31.4 mn).

1 In 2003–2004 including the sale of right for rent.

<sup>d</sup> The amount of revenues from (1) the sale of federally owned property attributable to sources of internal financing of the federal budget deficit, (2) revenues from (i) the sale of apartments, (ii) the sale of state production and non-production funds, transport facilities, other equipment and other tangible assets, and (3) revenues from the sale of intangible assets (IA) attributable to federal budget revenues.

<sup>e</sup> Including Rb6 mn from sales of shares in the ownership of RF regions.

<sup>f</sup> Revenues from the sale of land and intangible assets, the amount of revenues from which was not separately allocated, attributable to federal budget revenues.a.

<sup>g</sup> Proceeds from the sale of state-owned property (including Rb1.5 mn from the sale of property owned by constituent entities of the Russian Federation) attributable to the sources of internal financing of the federal budget deficit.

<sup>h</sup> Includes proceeds: (1) from sale of land plots on which real estate located prior to alienation in federal ownership, credited to the federal budget, (2) from the sale of other land plots, as well as from the sale of the right to conclude lease contracts, (3) from the sale of land after the differentiation of land ownership, as well as from the sale of the right to conclude lease contracts, credited to the federal budget, referred to the sources of internal financing of the federal budget deficit.

<sup>i</sup> The amount of (1) proceeds from the sale of federally owned property attributable to sources of internal financing of the federal budget deficit, and (2) proceeds from the sale of intangible assets attributable to federal budget revenues.

<sup>j</sup> Includes proceeds: (1) from the sale of land plots prior to the delimitation of state ownership of land on which immovable property located prior to alienation in federal ownership, which are credited to the federal budget, (2) from sale of other land plots, as well as from sale of the right to conclude agreements on their lease, (3) from sale of land plots after demarcation of land ownership, as well as from sale of the right to conclude agreements on their lease, enrolled in the federal budget, attributable to the sources of internal financing of the federal budget deficit.

<sup>k</sup> The amount of (1) proceeds from the sale of federally owned property attributable to the sources of internal financing of the federal budget deficit, (2) proceeds (i) from the sale of apartments, (ii) from the sale of equipment, vehicles and other tangible assets credited to the federal budget, (iii) from the sale of ship recycling products, (iiii) from the sale of property of FSUE, institutions and military property, (iiiii) from the sale of weapons, military equipment and ammunition recycling products, (3) income from the sale of intangible assets (IA) attributable to the federal budget revenues.

<sup>l</sup> Includes proceeds: (1) from sale of land plots before division of state ownership of land on which real estate located before alienation in federal ownership, (2) from the sale of land plots after division of state ownership of land, credit to the federal budget, (3) from the sale of other land plots owned by the state before the delimitation of state ownership of land and not designated for housing construction (the latter clarification applies only to 2006), attributable to the sources of financing of the federal budget deficit.

<sup>m</sup> Revenues from sale of tangible and intangible assets (net of federal budget funds from the disposal and sale of confiscated and other property converted to state revenue) include revenues (i) from the sale of apartments, (ii) from the sale of FSUE property, (iii) from the sale of property in the operational management of federal institutions, (iiii) from the sale of military property (iiiii) from the sale of recycled products from weapons, military equipment and ammunition, (iiiii) from the sale of other federally owned property, (iiiii) from the sale of intangible assets, attributable to federal budget revenues

<sup>n</sup> Income from sale of tangible and intangible assets (excluding income in the form of the state's share of profitable production under production sharing agreements (PSAs) and federal budget funds from the disposal and sale of escheat, confiscated and other property turned over to the state) includes income (i) from the sale of apartments, (ii) from the sale of the FSUE property, (iii) from sale of property in the operational management of federal institutions, (iiii) from sale of military property, (iiiii) from sale of products of the utilization of weapons, military equipment and ammunition; (iiiii) income from sale of other property in federal ownership, attributable to federal budget revenues.

<sup>o</sup> Proceeds from sale of land plots after the delimitation of land ownership, which are in federal ownership, attributable to the sources of financing the federal budget deficit.

<sup>p</sup> Revenues from sale of tangible and intangible assets (excluding revenues in the form of the state's share of profitable production under production sharing agreements (PSAs) and federal budget funds from the disposal and sale of escheat, confiscated and other property converted to state revenue, funds from sale of sequestered wood) include income (i) from sale of apartments, (ii) from sale of the FSUE property, (iii) from sale of property in the operational management of federal institutions, (iiii) from sale of released tangible and intangible military and other property of federal executive bodies where military and equated to it service is provided, (iiiii) from sale of military products from reserves of federal executive bodies under military-technical cooperation, (iiiii) income from sale of

other property in federal ownership, referred to the income of the federal budget

<sup>q</sup> Income from sale of federally owned land plots (excluding land plots used by federal budgetary and autonomous institutions) (except for 2019–2022) attributable to federal budget revenues, as well as for 2015 and 2021–2022 also the payment for expanded in terms of area privately owned land plots as a result of the reallocation of such land plots and federally owned land plots.

<sup>r</sup> Revenues from sale of tangible and intangible assets (excluding revenues from the state's share of profit production in the performance of production sharing agreements (PSA), federal budget funds from the disposal and sale of escheat, confiscated and other property turned over to the state, funds from the sale of sequestered wood (2008–2011), income from the release of material assets from state reserves of special raw and fissile materials (in terms of revenues from their sale), from temporary lending and other use), as well as for the years 2012–2020 without funds from the sale of timber obtained during the protection, conservation, re-production of forests when placing state orders for their implementation without the sale of forest plantations for timber harvesting, as well as timber obtained from the use of forests located on lands of the forest fund, in accordance with Articles 43–46 of the Forest Code of the Russian Federation<sup>1</sup>, income from commodity interventions from the federal intervention fund of agricultural products, raw materials and foodstuffs, from release of tangible assets from the state reserve, from engaging prisoners in paid labor (in terms of selling finished products), from selling special storage products) include income from (i) sale of apartments, (ii) sale of property in the operational management of federal institutions (excluding autonomous and budget institutions (2011–2022)), minus funds coming from activities of foreign missions (2015–2022<sup>2</sup>), (iii) sale of released movable and immovable military and other property of federal executive bodies, in which military and equivalent service is stipulated, (iiii) sale of products of utilization of weapons, military equipment and ammunition, (iiiii) sale of military products from the federal executive bodies' reserves as part of military-technical cooperation (2008 and 2010–2022), (iiiii) sale of weapons and military equipment recycling products as part of the federal target program "Industrial disposal of weapons and military equipment" (2005–2010).) (up to and including 2017), (iiiii) sale of immovable property of budgetary and autonomous institutions (2014–2018 and 2020–2022), (iiiii) sale of other federally owned property, as well as income from sale of intangible assets (IA) attributed to the federal budget revenues.

<sup>s</sup> Revenues from privatization of property owned by the Russian Federation in terms of non-financial assets of the treasury.

*Sources:* Federal budget execution laws for 2000–2014; Federal budget execution reports for January 1, 2016, January 1, 2017, January 1, 2018, January 1, 2019, January 1, 2020, and January 1, 2021 (annual); URL: <http://roskazna.gov.ru>; Report on the execution of the RF consolidated budget and budgets of state extra-budgetary funds as of January 1, 2022; URL: <http://budget.gov.ru>; Preliminary report on the execution of the federal budget as of January 1, 2023; Federal Treasury; own calculations.

In absolute terms, federal property budget revenues from non-renewable sources increased by 1.9% in 2022 (to more than Rb20.6 bn), slightly exceeding the 2019 level.

Receipts from the sale of shares rose by almost 48% (to Rb7.8 bn), which for the entire period since 2000 is surpassed only by the indicators of the crisis years 2008–2009 and 2015. Income from the sale of land plots decreased by more than 29%, amounting to about Rb1.7 bn.<sup>3</sup> This was slightly higher than the level of 2018–2019. Revenues from the sale of various property also decreased (by more than 11%), and their absolute value amounted to more than Rb11.1 bn, including

1 This income article is missing from 2021 reports.

2 In the accounts for 2021, the funds received from activities carried out by foreign institutions were not singled out. Therefore, the total amount of revenues from the sale of property under the operational management of federal agencies is probably somewhat overstated.

3 Including revenues from the sale of land plots, the state ownership of which is demarcated, which are used by budgetary and autonomous institutions (Rb4.4 mn). A year earlier, according to budget reporting data, they amounted to Rb76.4 mn. Respective values of previous years presented in the Information of the Federal Treasury on the indicators characterizing the efficiency of state property management: 2015 – Rb0.433 mn, 2016 -Rb 2.381 mn, 2017 – Rb4.962 mn, 2018 – Rb0.1835 mn, 2019 – Rb40.1 mn, 2020 – Rb298.3 mn.

revenues from the privatization of property owned by the Russian Federation, in terms of non-financial assets of the Treasury (Rb942.8 mn).

As a result, the bulk of the proceeds provided by the sale of property (in aggregate) – about 54%<sup>1</sup> (in 2021 – 62%), the sale of shares accounted for about 38% (in 2021 – 26%), and the sale of land – 8.4% (in 2021 – about 12%).

However, the aggregate volume of federal budget revenues from privatization (sale) and use of state property in 2022 (*Table 7*) has more than doubled in comparison with the previous year (up to Rb798.6 bn).

*Table 7*

**Structure of federal budget material property revenues from various sources in 2000–2022**

Year	Aggregate revenues from privatization (sale) and use of state property		Revenues from privatization and sale of property (non-renewable sources)		Income from using state property (renewable sources)	
	Rb mn	% of total	Rb mn	% of total	Rb mn	% of total
2000	50 412.3	100.0	27 167.8	53.9	23 244.5	46.1
2001	39 549.8	100.0	10 307.9	26.1	29 241.9	73.9
2002	46 811.3	100.0	10 448.9	22.3	36 362.4	77.7
2003	135 338.7	100.0	94 077.6	69.5	41 261.1	30.5
2004	120 798.0	100.0	70 548.1	58.4	50 249.9	41.6
2005	97 357.4	100.0	41 254.2	42.4	56 103.2	57.6
2006	93 899.8	100.0	24 726.4	26.3	69 173.4	73.7
2007	105 761.25	100.0	25 429.4	24.0	80 331.85	76.0
2008	88 661.7	100.0	12 395.0	14.0	76 266.7	86.0
2009	36 393.7	100.0	4 544.1	12.5	31 849.6	87.5
2010	88 406.4	100.0	18 677.6	21.1	69 728.8	78.9
2011	240 964.1	100.0	136 660.1	56.7	104 304.0	43.3
2012	309 943.2/ 469 243.2*	100.0	80 978.7/ 240 278.7*	26.1/ 51.2*	228 964.5	73.9/ 48.8*
2013	209 114.85	100.0	55 288.6	26.4	153 826.25	73.6
2014	282 325.95	100.0	41 155.35	14.6	24 1170.6	85.4
2015	303 975.2	100.0	18 604.1	6.1	28 5371.1	93.9
2016	1363193.85/ 670798.85**	100.0	416470.5	30.6/ 62.1**	946723.35/ 254328.35	69.4/ 37.9**
2017	297074.9	100.0	21906.7	7.4	275168.2	92.6
2018	361648.13	100.0	28252.0	7.8	333396.13	92.2
2019	486103.55	100.0	20129.3	4.1	465974.25	95.9
2020	479725.95	100.0	27961.5	5.8	451764.45	94.2
2021	384987.15	100.0	20265.85	5.3	364721.3	94.7
2022	798631.4	100.0	20642.7	2.6	777988.7	97.4

\* Taking into account funds received by the Central Bank from sale of Sberbank shares (Rb159.3 bn), which probably slightly overestimates the total share of non-renewable sources, due to the fact that the budget did not receive these funds in full, but after deduction of their book value and the

1 Including revenues from the privatization of property owned by the Russian Federation in terms of non-financial assets of the treasury (4.6%).



amount of costs associated with the sale of these shares. Accordingly, the share of renewable sources is probably somewhat understated.

\*\* Excluding funds received from the sale of Rosneft shares (Rb692.395 bn) (net of the payment of interim dividends).

*Sources:* Federal budget execution laws for 2000-2014; Federal budget execution reports for January 1, 2016, January 1, 2017, January 1, 2018, January 1, 2019, January 1, 2020, and January 1, 2021 (annual); URL: <http://roskazna.gov.ru>; Report on the execution of the RF consolidated budget and budgets of state extra-budgetary funds as of January 1, 2022; URL: <http://budget.gov.ru>; Preliminary report on the execution of the federal budget as of January 1, 2023; Federal Treasury; own calculations.

It was the highest since the early 2000s with the exception of 2016, when the sale of shares in Rosneft took place with the proceeds sent to the federal budget in the form of dividends from Rosneftegaz.

The structure of total revenues from privatization (sale) and use of state property shifted even more towards the latter. Revenues from using state property amounted to about 97.4%, ranking second in absolute value, while revenues from privatization and sale of property amounted to about half the value of 2014, roughly corresponding to the level of 2019 and 2021.

#### 5.1.5. Reformatting state property policy

Over the past few years, the format of the fundamental document of state property policy has changed three times.

Just before the pandemic began, the state program (SP) “Federal Property Management”, which had been in effect since 2013 as a separate document, became a sub-program (SP) within the SP “Economic Development and Innovative Economy”. However, due to the increasing role of the financial department in the issues of property policy, at the very end of 2020 the PP “Management of Federal Property” was included in another SP “Public Finance Management and Regulation of Financial Markets”, operating since 2014 under the auspices of the Ministry of Finance.<sup>1</sup> This was the format of its implementation during 2021, which should be recognized as very successful.

Since the beginning of 2022, the abovementioned SP “Public Finance Management and Regulation of Financial Markets” with a component part is the PP “Federal Property Management”, acts in a new version, approved by RF Government Decree of 25.09.2021 No. 1613.

It became much more compact and laconic. The only target of the SP in this part is to ensure by 2030 growth of revenues from dividend payments of economic companies, the shareholder (participant) rights in which are exercised by Rosimushchestvo, by at least 2.5 times (as compared with 2021). Indicator 6 of the SP “Growth of income from dividend payments of economic companies where rights of the shareholder (participant) are exercised by Rosimushchestvo” corresponds to the declared objective.

In the previous version of the GP, it was the “Share of economic companies, where rights of a shareholder (participant) are exercised by the Federal Property

<sup>1</sup> For a detailed analysis of the reformatting of the “Federal Property Management” program, see *Malginov G., Radygin A. Privatization Dynamics and State of Property Relations: Actual Trends // Economic Development of Russia. 2021. No. 8, Pp. 47-57.*



Management Agency, which ensured transfer of dividend payments (distribution of profits among participants) of at least 50% of net profit, in the total number of such economic companies”. Besides, the PP had an extensive set of 7 indicators.<sup>1</sup>

Improving the federal property management quality and maximizing revenues from the use of federal property will be achieved by: (1) digital transformation of accounting processes of federal property, as well as property with special treatment, (2) formation of an optimal composition of federal real estate, (3) ensuring long-term sustainable growth of the value of assets and revenues from the management of state-owned companies and reducing state participation in the activities of companies in competitive markets. This toolkit is identical to the one declared in the previous version as of the yearend of the 2020 GP.

The expected results by 2030 in the area (subprogram) are as follows:

- growth in revenues from dividend payments of economic entities where rights of the shareholder (participant) exercised by Rosimushchestvo, not less than 2.5 times (against 2021);
- setting up a digital profile of federal property (including its overall data: area, cost characteristics, categorical affiliation, information on location, rights holders, actual use, investment potential, were translated into digital format);
- forming digital system based on artificial intelligence (AI), which allows the preparation of management solutions regarding federal property in an automated mode (a complete rejection of transactions with federal property using paper media);
- ensuring alienation of property not used by public authorities of the Russian Federation to perform state functions within a period not exceeding 6 months from the date of the relevant decision from federal property register;
- ensuring involvement in economic turnover for agricultural use of not less than 60% of the total number of agricultural land plots owned by the federal government;
- growth to 65% of the share of facilities belonging to state treasury of the Russian Federation involved in economic turnover against the total number of facilities of the state treasury of the Russian Federation at the end of the reporting year.

If this list is compared with what was stated in the previous version, one can note the following.

*First*, the trend towards digitalization of management processes has been maintained and strengthened. First of all, it is about digitization of processes related to accounting and disposition of federal property, as well as property under special treatment, and integration by 2024 of the federal state information and analytical system “Unified State Property Management System” (USPMS) with

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<sup>1</sup> In addition to those discussed above, these were the shares of sold property facilities of the RF state treasury and blocks of shares in JSCs (stakes in business companies) to be sold in accordance with the forecast plan (program) of privatization, as well as the coincidence of information in the register of federal property and other state information systems containing information on objects of federal property.

systems of federal executive bodies containing relevant information about all facilities of federal property (except for information constituting state secrets), based on primary data of other information systems containing data on such property.

In the new version the results relate to the creation of a digital profile of federal property (i.e., conversion of all information into digital format) and formation of a digital system based on AI, which allows to prepare management solutions in an automated mode and implies complete rejection of transactions with federal property using paper media.

*Second*, the set of results excludes the provision of safety (servicing and maintenance) of the RF state treasury property, identification of inefficiently used or misused federal property and its redistribution between users aiming to form an optimal composition of federal property, as well as the implementation of the forecast plan (program) of privatization of federal property.

Instead, of all this it is stated to ensure the alienation of property from federal property, not used by public authorities of the Russian Federation to perform state functions, within a period not exceeding 6 months from the date of the relevant decision.

*Third*, there was a partial modification of results describing the involvement of federal property in economic turnover and measured quantitatively.

With regard to the share of the RF state treasury facilities involved in economic turnover, at the end of the reporting year there was a mechanical growth in the planned values from 35% in 2024 to 65% in 2030 against their total number.

A close result (not less than 60%) is now declared separately for agricultural land plots owned by federal government (without specifying their belonging to the treasury), provided that their involvement is for agricultural use.

However, no mention was made of other results describing the work using land resources, namely formation and clarification of boundaries of land plots with an area of at least 415.000 hectares, as well as inclusion of their information in the USRIP by 2024, and Rosimushestvo providing more than 11.000 land plots for lease from 2021 to 2024.

*Fourth*, the same concerned results describing the activity of companies with state participation: growth to 95% of the share of business entities where shareholder (participant) rights are exercised by Rosimuschestvo, which ensured the transfer of dividend payments (distribution of profits among participants) in the amount of at least 50% of net profit, and growth to 55% of the share of business entities where the shareholder (participant) rights are exercised by Rosimuschestvo and FSUE ensuring a return on assets at least 85% of the industry's average level.

In this part the declared result in the new version coincides with the objective of the GP and its only indicator is growth in revenues from dividend payments of business entities, where rights of the shareholder (participant) are exercised by Rosimushchestvo, by at least 2.5 times (by the level of 2021).

At the same time, unlike previous editions, there are no annexes to this document, including those that previously indicated the total amount of allocations

from the federal budget with their annual distribution and intermediate values of indicators for the entire period of implementation.

The realities of the new economic and political situation resulted in the adjustment of the SP “Management of Public Finance and Regulation of Financial Markets” by RF Government Decree No. 2572 of 31.12.2022.

The SP “Management of federal property” means the following: the goal of the GP in this part is stated as “To ensure by 2030 the growth of income from management of federal property by at least 2 times (to 2021)” instead of growth from dividend payments of economic entities where rights of a shareholder (participant) are exercised by Rosimushestvo, by at least 2.5 times (to 2021). Growth of revenues from the management of federal property is also declared as an indicator of SP and the first of the expected results in this trend. At the same time another result began to look much less ambitious. The share of facilities of the RF state treasury involved in economic turnover against total number of facilities of the RF state treasury at the end of reporting year should increase to 44% (vs. 65% in the previous edition).

\* \* \*

The first year of implementation of the federal privatization program in the new format with an annual shift in the start and end dates of the forecast privatization plan, despite the new economic conditions, was marked by very decent results.

The number of privatized unitary enterprises and sold blocks of shares (stakes) in business companies remained at the level of 2021, although the number of sold treasury facilities dropped significantly. Despite the fact that transactions in respect of the largest assets intended for privatization according to individual schemes did not take place as expected, the proceeds from the sale of shares and other forms of participation in the capital owned by the federal government exceeded twice the value of the budgetary assignment and the forecast of proceeds contained in the privatization program, suddenly being the highest in recent years.

Further prospects of privatization process are connected with another shift of the terms of the beginning and the end of the current program for 2 years, i.e. for 2023–2025. Its quantitative parameters differ significantly from those of the previous program.

While the number of privatized commercial organizations has decreased (FSUE by 3.6 times, economic companies by 28%), the number of privatized facilities of other property of the RF treasury was 25 times higher. However, the vast majority are to be contributed to the authorized capital of integrated structures. The group of companies for privatization according to individual schemes shrank to a minimum, including the corporatization of large FSUEs. Taking this into account it can be assumed that the content of the new privatization program reflected the

need to use property owned by the state on a larger scale than it was imagined before the spring of 2022.

Important changes were made to the law on privatization. They permit to carry out privatization of property with initial cost of less than Rb100 mn without its inclusion into the privatization program according to the list approved by the Ministry of Finance.

To stimulate privatization process, the size of the deposit for the sale of property in accordance with this value threshold was reduced twice (from 20 to 10%) and the possibility to conclude an agreement with a person recognized as the sole bidder at auction introduced. At the same time there is an additional reason for the Government of the Russian Federation to make a decision on the use of a special right (“golden share”) in relation to JSCs.

The number of economic entities classified as federal property continued to decrease. A comparison of values as of November 2021 and September 2022 from the forecast privatization plans shows that the number of unitary enterprises over this period decreased by more than 40%, and the number of economic societies fell by about 15%. At the same time, the data analysis from various sources (system of indicators for assessing the effectiveness of state property management and privatization programs) shows further development of the trend to increase the share of companies where the state could exercise full corporate control. Nevertheless, the group of companies with minority-sized federal blocks of shares remains quite large and is almost equal in number.

The balance of changes in the list of strategic organizations has developed towards its reduction mainly due to unitary enterprises. It is natural for the new economic and political situation to continue forming vertically integrated structures by the state, complemented by the activation in the market of mergers and acquisitions, including the acquisition of assets previously owned by foreign companies. This was most evident in the banking sector and the automobile industry.

Among the innovations in the management of economic entities of the public sector is the transition to a differentiated definition of net profit of FSUE depending on how they apply IFRS (similar to JSC, which have federal stakes), while confirming the previous standard of profit transfer to the budget (at least 1/2).

Revenues from renewable sources dominated (more than 97%) in the structure of federal budget revenues from privatization (sale) and use of state property as in the previous year. Their main part still consisted of dividends transferred to the budget with their amount more than doubled. To a large extent, this was the result of a favorable pricing environment on global energy markets.

However, a drop in the absolute value of revenues was the case for most of the sources. Significant exceptions were the income from the sale of shares, income from the lease of land and payment of amounts of unreasonable gains for using property (except for land plots) owned by the federal government with the right to manage them granted to federal government bodies in accordance with the legislation of the Russian Federation.

The realities of the new economic and political situation resulted in the adjustment of the SP “Management of public finances and regulation of financial markets” at the very end of 2022. In the direction “Management of the federal property” the focus on the growth of income from dividend payments of economic companies, where rights of shareholder (participant) are exercised by Rosimushchestvo, is replaced by growth of income from management of the federal property on the whole by 2030 by at least 2 times (by the level of 2021). At the same time the degree of involvement of the RF state treasury property facilities into economic turnover becomes much less as compared with the previous edition.

## **5.2. Corporate governance 2022: new regulation and practice<sup>1</sup>**

The COVID-19 pandemic boosted such areas of corporate governance development as the drive to sustainability and digitalization, however, no significant changes were expected at this point.<sup>2</sup> However, the events of 2022 resulted, and are likely to continue to result in notable changes in the management of Russian companies at both the regulatory and practical level. Interestingly, the management experience gained during the pandemic has largely prepared Russian companies to new adaptation challenges.

### **5.2.1. Major changes in the policy management of corporate governance**

At present, six major changes can be distinguished in Russian corporate governance.<sup>3</sup>

#### *1. Non-disclosure and limitation of information*

As a general rule, to enable investors to make informed decisions, a public company must disclose information about the company and its activities as specified in the law (Article 92 of Federal Law dated December 26, 1995 No. 208-FZ “On Joint-Stock Companies” (hereinafter – JSC Law); Clause. 6.2 of the Corporate Governance Code (hereinafter – CGC).<sup>4</sup>

Back in 2018 the Government of the Russian Federation was granted the right to determine the cases when public companies are authorized to disclose limited information and the list of information that the company has the right not to disclose (Article 92.2 of the JSC Law; clause 6 of Article 30.1 of the Federal Law dated 22.04.1996 No. 39-FZ “On Securities Market” (hereinafter referred to as the SM Law).<sup>5</sup>

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2 *E.A.Apevalova, N.A.Polezhaeva*. Corporate governance during coronavirus crisis: focus on the diversity of interests and slow implementation of principles // Russian economy in 2021. Tendencies and prospects. Edition 43. M.: Gaidar Institute Publishing house, 2022. p. 460–473.

3 *N.A.Polezhaeva*. Main changes in corporate governance of Russia caused by sanctions // *Hozyaistvo i pravo*. 2023. No. p. 46–53.

4 Ref.: Letter of the RF Bank dated 10.04.2014 No. 06-52/2463 “On corporate governance code” // Bank of Russia Vestnik. No. 40. 18.04.2014.

5 Federal law of 31.12.2017 No. 481-FZ “On amendments to certain legal acts of the Russian Federation.”

In 2022, in order to avoid the introduction of restrictive measures, Russian issuers were granted a temporary (until July 2023) right to disclose information to a limited extent or refuse to disclose it.<sup>1</sup> Thus, the issuer is not obliged to justify such a decision or to get permission for its implementation, therefore it is not always possible to determine whether sanctions really provided a pretext. All this negatively affects trading of securities, because it is blindfolded for investors.<sup>2</sup>

If prior to 2022 the decision on limited information disclosure was made by the Government of the Russian Federation, implying certain mechanisms of restraint with regard to strengthening the degree of secrecy, now this right belongs to companies. Thus, 15 major companies stopped publishing their financial results, including 4 banks (Sberbank, VTB, Bank Saint Petersburg and TCS Group) and six state-owned companies (Mosenergo, Aeroflot, Rostelecom, among others). Moreover, companies representing chemical, oil, fishing and construction sectors (NKNKh, Russian Aquaculture, Surgutneftegaz, PIK, etc.) have not published any information.<sup>3</sup>

### *2. Restrictions on access to information and rights of recourse for minority shareholders*

The threshold of voting shares owned by shareholders for the right to access information specified by law was raised from 1 to 5% (e.g., the list of those entitled to participate in general meetings of shareholders, non-agreed interested-party transactions), as well as the right to sue the company management on such issues as, for example, compensation for damages caused to the company, invalidation of non-agreed interested-party transactions.<sup>4</sup> Changes will be valid until 2024.

On the one hand, sanctions cannot justify unlawful actions by company management. Shareholders should not be deprived of a tool for protection from such activities. On the other hand, experts explain this measure as a struggle against the so-called shareholder activism, the excessive use (up to abuse) by owners of small blocks of shares of their right to sue for damages. Such behavior amid economic instability may have a more negative impact on the company's activity compared to the usual situation.<sup>5</sup>

### *3. Restrictions on the rights of foreign investors to dispose of Russian securities*

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1 RF Government Decree of 12.03.2022 No. 351 "On specifics of disclosure and provision in 2022 of information to be disclosed and provided in accordance with the requirements of the Federal Law "On Joint-Stock Companies" and the Federal Law "On the Securities Market" and specifics of disclosure of insider information in accordance with the requirements of the Federal Law "On Counteraction of Illegal Use of Insider Information and Market Manipulation and on Amendments to Some Legislative Acts of the Russian Federation."

2 P.Kokorev. Russian corporate governance at the crossroads: what tomorrow brings? // Joint Stock Company: corporate governance. 2022. No. 6 (217). URL: <https://ao-journal.ru/rossiyskoe-korporativnoe-upravlenie-na-perepute-chto-den-gryadushchiy-nam-gotovit>

3 Which companies stopped disclosing results. URL: <https://journal.tinkoff.ru/news/review-cancel-info/>

4 Article 3 of the Federal law of 14.03.2022 No. 55-FZ "On amendments to Articles 6 and 7 of the Federal law "On amendments to Federal law "On the Central Bank of the Russian Federation (Bank of Russia)" and specific legal acts of the Russian Federation in terms of the specifics of changing the terms of the borrow agreement, loan agreement" and Article 21 of the Federal law "On amendments to specific legal acts of the Russian Federation."

5 Anti-crisis corporate legislation – 2022. URL: <https://www.garant.ru/article/1570526/>

Sanctions resulted in significant differences in the position of residents and foreign shareholders in Russian companies.

In February 2022, in response to freezing of some Russian reserves and to maintain the stability of the financial system, a ban was imposed on the sale of securities of Russian issuers by foreign investors from unfriendly countries and on the transfer of their dividends.<sup>1</sup> Later, a temporary procedure was established for payment of dividends, when the issuer opens a ruble “C” account in a Russian credit institution to transfer funds, if the amount of his liability to foreigners is more than Rb10 mn per calendar month.<sup>2</sup> Trading in the stock section of the Moscow Stock Exchange suspended in the same month, have soon resumed for residents and gradually for non-residents from friendly countries, however, not for unfriendly individuals.

At present, sale of securities by a foreign person from an unfriendly state to a Russian resident can take place only with the permission of the Government Commission for Control of Foreign Investment in the Russian Federation.<sup>3</sup> Until 2024, without a special resolution of the President of the Russian Federation, the above-mentioned individuals can't sell or make other transactions with securities of strategic companies involved in the fuel and energy sector and credit Russian companies.<sup>4</sup> Until 2025, the court can suspend the rights (voting, receiving dividends, etc.) of foreign investors who dispose in aggregate of more than 25% of a Russian notable company and commit unfriendly acts in relation to this company.<sup>5</sup> However, the list of such actions is interpreted broadly.

If a foreign company registered in a hostile country which has a controlling person who is recognized as a tax resident of the Russian Federation commits acts violating the rights of the Russian company in which it is a shareholder or the rights of that controlling person, the controlling person may apply to the Russian FTS until 2024 to exercise shareholder rights in relation to that Russian company instead of its controlled foreign company. Thus, the controlling person is not entitled to vote for decisions on the reorganization of the Russian company, early termination of the powers of its board of directors, etc. It is prohibited to alienate shares.<sup>6</sup>

Also, in April 2022, a ban was introduced on the circulation of shares of Russian issuers outside the Russian Federation in the form of depositary receipts<sup>7</sup>

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1 The Bank of Russia Instruction of 28.02.2022 No. 018-34-3/1202 “On securities” (became invalid).

2 Executive Order of the RF President of 05.03.2022 No. 95 “On interim obligations to some foreign creditors.”

3 Executive Order of the RF President of 01.03.2022 No. 81 “On additional temporary economic measures aimed at financial stability of the Russian Federation.”

4 Executive Order of the RF President of 05.08.2022 No. 520 “On use of special economic measures in financial and fuel-energy sectors due to unfriendly acts of some foreign states and international organizations.”

5 Item 8 Article 18 of the Federal law of 14.07.2022 No. 320-FZ “ON amendments to Federal law “On privatization of state and municipal property”, specific legal acts of the Russian Federation and on identification of specifics for regulating property relations.”

6 Article 3 Federal law of 14.07.2022 No. 323-FZ “On amendments to Part 2 of the RF Tax Code.”

7 Depositary receipts are securities that certify ownership of other securities (shares) traded abroad; they are issued so that an investor, investing on his country's stock exchange, could invest in shares traded on another country's stock exchange.



due to their collapse at Western stock exchanges.<sup>1</sup> Thus, the company can get a permission from the Government of the Russian Federation to keep its depositary receipts at the foreign stock exchange. Depositary receipts are automatically converted into local shares, creating challenges for foreign investors (from both unfriendly and friendly countries) who are not allowed by law or bylaws to invest in local shares in other jurisdictions.

It should be noted that due to the abundance of often fragmentary and overlapping documents of the regulatory bodies on the relevant subject, it is difficult to identify a holistic picture, as well as the nuances of the current situation related to foreign investors.

#### *4. General meeting of shareholders through absentee voting*

As a matter of principle, the General Meeting of Shareholders (GMS) cannot be held through absentee voting, if the agenda includes the election of the Board of Directors and the Audit Commission, approval of the auditor, annual report and financial statements (Article 50 of the JSC Law).

Due to the current epidemiological situation, the legislator suspended this provision in 2020 and 2021. Despite the return to normalcy, the possibility of conducting GMS through absentee voting was extended until 2024, this time as an anti-sanctions measure.<sup>2</sup> Although absentee voting has its advantages (the procedure is relatively simple and cheap), this form can provoke corporate conflicts, negatively impact on the interests of some shareholders. The Corporate Governance Code recommends holding GMS on any issues in person (clause 1.1.3), and the jurisdictions that are popular with investors have not resorted to absentee voting even in the midst of the pandemic, preferring an in-person (remote) format. In this regard, the justification for such a prolongation by sanctions is not always sufficiently reasoned.

Although absentee voting was a right and not an obligation for GMS in 2020 and 2021, most companies particularly preferred absentee voting.

Opponents of absentee voting consider this form as an infringement of minority shareholders' rights, because such voting does not in fact present a meeting, and shareholders cannot ask questions to management and board members or communicate with each other. The basic principle of corporate governance is the shareholder's right to participate in the activities of the company through participation in the GMS.<sup>3</sup>

Supporters of absentee voting refer to the fact that joint attendance is not the only form of shareholder communication (online venues, webinars, investor days, etc.). In practice, in-person GMS only give the impression of informational transparency and the readiness of company management to answer any shareholder

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1 Article 6 Federal law of 16.04.2022 No. 114-FZ "On amendments to Federal law "On Joint Stock Companies" and some legal acts of the Russian Federation."

2 Article 2 Federal law of 25.02.2022 No. 25-FZ "On amendments to Federal law "On Joint Stock Companies" and on suspending some provisions of legal acts of the Russian Federation."

3 Absentee voting infringes this principle, which may have an impact on the companies' positions in the international ESG-ranking in standard situations as well. Ref.: You won't be cute in absentia – minorities' rights were lost between reality and virtuality. URL: <https://www.interfax.ru/business/812380>



questions and, indeed, they are archaic. Moreover, the binding effect of the meetings in person is not compatible with availability of controlling shareholders in most large Russian companies (the issue of high concentration of capital), who make the final decision regardless of the votes of minority shareholders.<sup>1</sup>

Remote meetings using electronic or other technical means could be a successful alternative, and the Civil Code of the Russian Federation (Art. 181.2) stipulates this possibility. However, this procedure is insufficiently regulated and the relevant provisions have not yet been introduced into the JSC Law.

#### *5. Down-sized board of directors and its absence*

With the start of the sanctions policy, many foreign board members had to leave Russian companies ahead of time. To ensure the quality of decisions made by the board, it was necessary to quickly redistribute authority among the remaining members and search for experienced candidates.

Boards of directors of non-sanctioned companies have been allowed to work in truncated form until 2024, allowing the board to retain its powers if more than half of its members have left. The sanctioned companies may not elect a board of directors until 2024 if the shareholders so decide. In this case, its functions will be performed by the collegial or the sole executive body. At the same time, decisions on the priority areas of the company's activity, increasing its charter capital and approving its financial statements shall be made by the general meeting of shareholders.<sup>2</sup> It is important that this measure should not be abused to reduce the independence of the board of directors.

In 2023, it will be possible to elect the board of directors for a longer term (3 years). Shareholders will be able to elect board members for up to the third annual general meeting of shareholders from the date of election.<sup>3</sup> Prior to that decision, board members were elected for the period until the next such meeting (Item 1, Article 66 of the JSC Law). The period for shareholders to nominate candidates for election to the board of directors was legally extended.<sup>4</sup>

There are also some changes related to the tasks faced by corporate directors<sup>5</sup>:

a) increasing the efficiency of problem solving and rapid adaptation of practices to new conditions to ensure economic and legal security of business (active study of a large number of new and adopted regulations, negotiation of new contracts with new counterparties resulted from supply and sales disruption, etc.)

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1 O.V. Osipenko. Corporate conflict management: monograph. M.: Statut, 2022.

2 Item 1.1.4 Article 7 Federal law of 14.07.2022 No. 292-FZ "On amendments to some legislative acts of the Russian Federation, recognizing as invalid the sixth paragraph of the first part of Article 7 of the Law of the Russian Federation "On State Secrets," suspension of certain provisions of legislative acts of the Russian Federation and establishment of special regulation of corporate relations in 2022 and 2023."

3 Article 27 Federal law of 19.12.2022 No. 519-FZ "On amendments to some legislative acts of the Russian Federation and suspension of some provisions of the legislative acts of the Russian Federation."

4 Article 17 Federal law of 08.03.2022 No. 46-FZ "On amendments to some legislative acts of the Russian Federation." This law also allows not to reduce the authorized capital to the level not exceeding the value of assets and not to liquidate the company, if at the end of 2022 and 2023 the value of net assets of the company will be below the authorized capital.

5 Sanctions and corporate governance // Shareholding company: issues of corporate governance. 2022. No. 5 (216). URL: <https://ao-journal.ru/sanktsii-i-korporativnoe-upravlenie>

b) search for an acceptable volume of disclosed information;  
c) additional attention to interaction with stakeholders (consultations, explanations), including the company's management and shareholders facing restrictions in transactions with securities, reduction of the volume of disclosed information, etc.

#### *6. Companies refusing to pay dividends*

In the context of sanctions, a number of decisions have been made not to pay dividends. Although shareholders should be given an opportunity to participate in the profits of the company by receiving dividends, the non-payment of dividends does not violate their corporate rights if it is economically justified (Article 43 of the JSC Law; Clause 1.2.2 of the CGC). However, the legality of such a decision does not mean that it will be a reason for dissatisfaction among investors and will not result in a decrease in the value of the company's shares.

The Government of the Russian Federation made a decision, when preparing draft directives for representatives of the state interests to participate in Supervisory Board meetings and when forming attitude of the state shareholder in Sberbank to prevent paying dividends for 2021. This decision was based on the need to ensure sustainable lending to corporate clients and financial organizations.<sup>1</sup> The Bank of Russia recommended to other credit and non-credit financial institutions to refuse paying dividends.<sup>2</sup> The respective decision was taken by the general meeting of Sberbank shareholders. The total of dividends could reach Rb623 bn at the 2021 yearend.<sup>3</sup> Despite difficult economic situation leading to this decision, the investors' reaction resulted in a collapse of Sberbank shares at the Moscow stock exchange by 7%.<sup>4</sup>

Gazprom's shares also fell by 32.32% after the general meeting decided not to pay dividends, despite the opposite recommendations of the board of directors. This decision was explained by the inexpediency of payments and the forthcoming payment of higher taxes by the company. Some experts attributed these actions to the intention of the state, which is the controlling shareholder, to receive a share of the company's profits in taxes.<sup>5</sup>

In other government edicts on non-payment of dividends in companies with state participation, justifications vary or are absent, which makes their dividend policies insufficiently predictable.<sup>6</sup>

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1 RF Government Edict of 20.05.2022 No. 1252-r "On preparing draft directives for representatives of the interests of the Russian Federation to participate in the meeting of the Supervisory Board of Sberbank of Russia Public Joint-Stock Company."

2 Information message of the Bank of Russia of 15.04.2022 "The Bank of Russia implements additional measures to support financial sector and lending to the economy" // Bank of Russia Vestnik. No. 23. 20.04.2022.

3 "Sber" shareholders decided to refuse paying dividends for 2021. URL: <https://quote.rbc.ru/news/article/62bd6dde9a7947787a4de72a>

4 "Sber" shares fell by 7% after decision not to pay dividends. URL: <https://www.forbes.ru/investicii/470231-akcii-sbera-upali-na-7-posle-resenie-ne-vyplacivat-dividendy>

5 It's a "rip-off" of the state, the middle class is the hardest hit: why Gazprom shattered investors' dreams? URL: <https://www.business-gazeta.ru/article/555446>

6 A.Y.Pavlov, I.A.Danilov. On dividend policy of companies with state participation // Financial law. 2022. No. 9. p. 33–37.

Other companies also refused to pay dividends (for example, X5 Group, GK “Mother and Child”, “Globaltrans”, LSR, Raspadskaya, Rusagro, Cherkizovo).<sup>1</sup>

It should be noted that some experts believe that growing sanctions pressure will strengthen such a trend in the Russian economy as the expansion of the public sector, which will affect the quality of corporate governance due to the specific position of the government shareholder (access to financial and other corporate documents, “golden shares,” legislative provisions protecting the government share from reduction, etc.)<sup>2</sup> In 2000–2021, the public sector growth has indeed been recorded in Russia from 31.2 to 56.2%<sup>3</sup>, however, there are currently no accurate data and estimates about the impact of sanctions on the expansion of the Russian public sector.

To a large extent, the retreat from certain corporate governance principles in terms of shareholder rights and information disclosure (equal conditions for all shareholders, the possibility of free and unencumbered alienation of their shares, transparency of the company and its operations, etc.) was a forced response. Although the toughest restrictions apply to foreign investors, non-disclosure of information and non-payment of dividends are unpopular decisions among domestic shareholders as well, which, in addition to Western sanctions, affects the value of Russian companies’ shares.

On the one hand, incorporation of relevant changes in particular laws, acts of the President, the Government of the Russian Federation and the Bank of Russia and non-inclusion in the basic laws allows reacting promptly to the rapidly changing situation and hoping for the temporary nature of these changes. On the other hand, the transfer of such regulation to the level of government acts may result in the instability of corporate relations. Such documents are easier to change than laws, which provide a certain guarantee of stability of legal relations for shareholders.<sup>4</sup> It should be noted that the Moscow Stock Exchange also did not adjust its listing and disclosure rules, having issued additional recommendations.<sup>5</sup>

### 5.2.2. IPO and delisting in Russian corporate practices. Heading East

The IPO market in Russia is not large, 2–5 offerings per year, whereas, for example, in the U.S. several hundreds of companies participate in the stock exchange every year. In 2020–2021, 11 new issuers appeared on the Moscow Stock Exchange, which is comparable with the total of the previous five years. The

1 9 Russian companies refused to pay dividends. URL: <https://journal.open-broker.ru/radar/otkaz-ot-vyplaty-dividendov/>

2 *Nurgozhayeva R.* Why do sanctions against Russia miss the target? A corporate governance perspective. URL: <https://ecgi.global/blog/why-do-sanctions-against-russia-miss-target-corporate-governance-perspective>

3 Index of public property IAES RANEPА 2020–2021. URL: <https://ipei.ranepa.ru/ru/kgu/indeksy> Certificate of state database registration No. 2022623208 Russian Federation. Index of the size of public sector 2022: No. 2022623200: applied 28.11.2022: published 02.12.2022 / *A.D.Radygin, A.E.Abramov, M.I.Chernova*; applicant: “Federal State Budgetary Educational Institution of Higher Education Russian Presidential Academy of National Economy and Public Administration.”

4 Corporate governance, or what is left of it. Report. URL: <https://www.interfax.ru/business/849830>

5 Recommendations on disclosure of information. URL: <https://www.moex.com/a8200>

2022 sanctions slowed down initial public offerings, but as the situation on the Russian stock market became less tense at the end of the year, several companies announced their intention to hold IPO on the Moscow Stock Exchange in the near future (for example, Whoosh and GK “Astra” from the IT sector). It should be noted that over the past 20 months, about 38 Russian non-public companies reported preparations for an IPO (“Delimobil”, Ivi, MTS Bank, “Samokat”, etc.).<sup>1</sup>

Russian companies (through holding companies established in foreign jurisdictions) resort to initial public offerings abroad even less frequently.<sup>2</sup> For example, the recruitment service HeadHunter placed its shares on the American stock exchange NASDAQ in 2019. HeadHunter abandoned its IPO on the Moscow Stock Exchange in favor of NASDAQ in order to raise more funds from American investors, as well as to expand into other countries.<sup>3</sup> NASDAQ has suspended trading in HeadHunter stock as from February 28, 2022.

Thus, in 2022 the pace of IPO has slightly slowed compared with the previous year, but Russian companies are still demonstrating interest in going public, planning or preparing to go public, which also means that they will be subject to the rules of corporate governance for public companies.

As for delisting, the sanctions policy did not result in a significant exclusion of Russian companies’ securities from the quotation lists of Russian stock exchanges. The planned delisting of the largest Russian retailer of children’s goods, Detsky Mir, is rather an exception and is connected with the large share of foreign funds in the company (60%). Since funds from unfriendly countries are not allowed to conduct transactions on the Moscow Stock Exchange under new rules, the removal of Detsky Mir shares from the quotation list will allow its foreign shareholders to vote, receive dividends and sell their baskets of shares.<sup>4</sup>

The example of SC “Mother and Child”, which was paying dividends again despite its Cypriot domicile, by contrast, indicates that companies involving foreign participation will sooner or later be able to cope with the obstacles that they encountered.

Four other Russian issuers may leave the Moscow Stock Exchange, but only in two cases the departure is associated with sanctions (Unipro and Polymetal). For example, the main owner of Unipro is the German concern Uniper, which owns 83.73% of the company. In 2022, Uniper announced its intention to leave Russia. However, talks about selling a stake in the majority-owned company stopped after Western investors in the fuel and energy sector were forbidden to exit Russian assets.<sup>5</sup>

In contrast to Russia, the delisting of Russian companies abroad in 2022 was on a larger scale. In late February – early March 2022 there was a collapse of

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1 Which Russian companies can conduct IPO. URL: <https://journal.tinkoff.ru/news/review-rus-ipo/>

2 At the London stock exchange: Mail.ru in 2010, “Megafon” in 2012, TCS Group in 2013, En+ in 2017. Ha NASDAQ: “Yandex” in 2011, Qiwi in 2013.

3 HeadHunter and other 5 Russian companies, which conducted IPO abroad. URL: <https://quote.rbc.ru/news/article/5cd93d409a794702b4a9e432>

4 Should we expect new delisting on the Moscow Exchange? URL: <https://fomag.ru/news/stoit-li-ozhidat-novykh-delistigov-na-mosbirzhe/>

5 What companies can leave Moscow Stock Exchange. URL: <https://journal.tinkoff.ru/news/review-leaving-moex/>

Russian depositary receipts on the London Stock Exchange (securities of Sberbank, Gazprom, Lukoil, etc.). The London Stock Exchange suspended trading in these securities (27 companies affiliated with Russia).

American Stock Exchanges NYSE and NASDAQ interrupted trading (including securities of HeadHunter, Ozon, Qiwi, “Yandex”).<sup>1</sup> In response, Russia banned Russian companies from placing receipts for their shares on foreign platforms since April 27, 2022 and ordered to delist the receipts which are already traded.<sup>2</sup> This decision was made to protect investors from the depreciation of their assets and reduce the risk of redistribution of corporate control due to the possibility of buying receipts abroad at prices that fell to near zero.<sup>3</sup>

The new law applies to companies that are registered in Russia and have placed their depositary receipts abroad (Sberbank, Gazprom, Nor Nickel, etc.).<sup>4</sup> Twenty seven Russian companies with an average of 15% of their authorized capital represented by receipts fell under the law. About half of the Russian companies having depositary receipts on foreign stock exchanges received permission from the Russian Government to keep them temporarily or indefinitely (for example, if more than 50% of the company is owned by a Russian resident): applications were received from 19 companies (Mechel, NLMK, Novatek, PhosAgro, Polyus, Severstal, Surgutneftegaz, Tatneft, AFK Sistema, Norilsk Nickel, Lenta and others). ), and only four of them were rejected (including Gazprom, MMK and Magnit).

As re-listing may well be possible after the recovery from crisis, Russian companies that have left foreign exchanges should maintain their corporate governance at the appropriate level to quickly return to the relevant platforms. Thus, following corporate governance standards exceeding domestic exchange requirements may make a company more attractive for investors.

Amid the interruption of trading of Russian securities on Western stock exchanges, Russian companies are considering alternative platforms and the possibility of changing the issuer to continue operating abroad (using a foreign holding company as an issuer to enter the relevant foreign exchange).

Choice for a particular exchange is based primarily on its liquidity rather than state of technology or quality of investor protection regulation.<sup>5</sup> Nevertheless, in case of listing on a foreign exchange, the company must comply with the listing rules of the relevant jurisdiction.

The differences in listing rules set by stock exchanges are largely due to country and cultural nature. While the requirements for auditing financial statements are almost the same everywhere, the financial criteria for going public differ, for example: \$910,000 of expected capitalization for premium venues on the London Stock Exchange and \$6.5 mn of profit over three years and \$65 mn

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1 Russian companies will have to delist the receipts from foreign exchanges. URL: <https://journal.tinkoff.ru/news/ru-dr-delist/>

2 Federal law of 16.04.2022 No. 114-FZ “On amendments to Federal law “On Joint Stock Companies” and some legislative acts of the Russian Federation.”

3 Receipts programs follow at the depot. Review. URL: <https://www.interfax.ru/business/844186>

4 The requirement does not apply to foreign, but essentially Russian companies that are registered in other countries whose shares are traded abroad (for instance, “Yandex”, HeadHunter and Ozon).

5 What is a stock listing. URL: <https://www.tinkoff.ru/invest/research/education/listing/>

of market capitalization at the time of listing on the Hong Kong Stock Exchange.<sup>1</sup> The listing in London and Hong Kong requires a sponsor (an investment bank coordinating the management of the IPO project), while in New York it is not required. Unlike London, in Hong Kong there is a requirement for a minimum number of shareholders.

Exchange requirements in terms of corporate governance are also marked by unique features. For example, compared to the Tokyo, New York, Frankfurt, Brazil and London stock exchanges, the Toronto Stock Exchange has the lowest corporate governance standards. The most detailed governance standards have been developed by the London Stock Exchange, but many are non-prescriptive (based on a “comply or explain” approach, when compliance with a rule and a proper explanation of the reason for non-compliance are forms of abidance by the rule).

The most prescriptive rules are those of the Brazilian exchange, but they do not embrace many universally recognized standards.<sup>2</sup> The Hong Kong Stock Exchange has some of the most stringent corporate governance requirements for listed companies.

The main options for Russian companies are the Hong Kong and Abu Dhabi stock exchanges, as well as special administrative regions (SARs), the so-called Russian offshore: Russky Island in the Primorsky Krai and Oktyabrsky Island in the Kaliningrad Region. A simplified registration procedure in these areas is envisaged until 2024.<sup>3</sup>

The most popular alternative is Hong Kong. Rusal's shares are already listed on the Hong Kong Stock Exchange. By the volume of stock capitalization, the Hong Kong Stock Exchange overtakes the London Stock Exchange. Several times it became the first by volume of IPO and raising investment funds. Trading floors in mainland China, one of the most regulated and closed to foreign capital, are complex options (Shanghai, one of the three largest exchanges in the world, Shenzhen and Beijing Stock Exchanges). The Abu Dhabi Stock Exchange is mainly focused on issuers from the Persian Gulf countries. The Astana International Exchange is also considered as an option.

Despite labor-intensive, the switch is possible. However, it does not eliminate risks. Major investors refrain from investing in Russian business because of the current and possible future sanctions restrictions. In turn, Russian issuers are not interested in receiving new investments at a “discount”. If the need for money arises, companies consider debt instruments, private placement, receiving investments from local investors with ruble liquidity. The most likely options for Russian companies in the current situation seem to be stock exchanges in Russia, where the issuer avoids the risk of asset freezing, and it is easier for investors to buy securities.

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1 Russian business began to look closely at the Eastern stock exchanges because of the sanctions. URL: <https://www.rbc.ru/finances/15/04/2022/625852369a7947d04adb84c8>

2 *Ching H., Tardelli R.* Corporate Governance Rules in Six Stock Exchanges: A Comparative Study // *Advances in Social Sciences Research Journal*. 2015. No. 2(2). P. 197–209.

3 Item 4 Article 18 Federal law of 03.08.2018 No. 291-FZ “On special administrative areas in the territories of the Kaliningrad region and Primorsky Krai.”

Thus, the sanctions policy made a contribution to the corporate governance in Russia. In order to support the Russian stock market, a number of unpopular decisions had to be made among investors: limiting information disclosure and access to information, curtailing the rights of foreign investors, providing for a truncated board of directors, abandoning in-person GMS and dividend payments.

It should be noted that it is difficult to determine the extent to which sanctions affect the quality of corporate governance in Russian public companies in isolation from other factors. Thus, for instance, in recent years, the pace of development of corporate governance, not only in Russia, but throughout the world is influenced by the ESG agenda<sup>1</sup>, among other things, spurred by the pandemic COVID-19, when its first two components, the environmental and the social received attention. Development of corporate governance according to some experts<sup>2</sup> has practically stopped. This conclusion is also confirmed by the minor dynamics of the average level of implementation of principles of the Russian CGC by listed companies in 2018–2021: from 76 to 78%.<sup>3</sup>

### 5.2.3. Trends abroad: environmental and social aspects are replacing management issues

Despite sanctions policy, the desire to be sustainable remains the main focus of corporate governance development for developed and many developing countries. Sustainable management, or corporate governance in the context of ESG, is aimed not only at achieving the financial sustainability of the company, but also at sustainability in all areas of the triple score (economy, ecology and society) and aims to provide value not only for shareholders, but for all stakeholders.<sup>4</sup>

Corporate governance in the ESG subject plays a dual role. Corporate governance is, on the one hand, an element of the ESG agenda, on the other hand, it is the driver of this agenda, helping all ESG factors, including “G”, i.e. governance, to integrate into the company.<sup>5</sup>

One may talk today about the prevalence of corporate governance systems including some elements of ESG, but more and more jurisdictions and companies

- 1 ESG (Environmental, Social, Governance) – a set of standards and criteria for investors and other stakeholders for assessment of environmental (E), social (S) and governance (G) results of the company activity. It is used to reflect more specifically how effectively the business is moving toward sustainability goals. The ESG goals are much more ambitious than those of corporate social responsibility. In turn, sustainable development is a philosophy, an economic growth that meets the needs of the present generation without depriving economic growth and meeting the needs of future generations. This concept is based on the idea of a balanced development of ecology, society and economy. Ref.: ESG-strategy: a fashion trend or a working tool? URL: <https://journal.ecostandardgroup.ru/esg/test/esg-strategiya-modnyy-trend-ili-rabotayushchiy-instrument-mneniya-ekspertov-i-uchastnikov-rynka/>
- 2 Fancy letters: why the ESG concept did not help to improve corporate governance in Russia. URL: <https://www.forbes.ru/biznes/420455-modnye-bukvy-pochemu-koncepciya-esg-ne-pomogla-uluchshit-korporativnoe-upravlenie-v>
- 3 Review of corporate governance practices in Russian public companies at the end of 2021. URL: [https://cbr.ru/Collection/Collection/File/43510/Review\\_corp\\_0112022.pdf](https://cbr.ru/Collection/Collection/File/43510/Review_corp_0112022.pdf)
- 4 Corporate governance in the context of ESG: new understanding of sustainability. URL: <http://corprtransparency.ru/documents/corporate-governance-in-the-context-of-esg.pdf>
- 5 Guidelines for the eminent. How to comply with sustainability best practices. URL: [https://fs.moex.com/f/15022/esg.pdf?fbclid=IwAR31CL8U9URcpLVPAUe5\\_NETUbZN4hIRkDy8JmbrxnOmoM2Rj23xTHaeH3Q](https://fs.moex.com/f/15022/esg.pdf?fbclid=IwAR31CL8U9URcpLVPAUe5_NETUbZN4hIRkDy8JmbrxnOmoM2Rj23xTHaeH3Q)



strive to comply with the maximum number of ESG principles and even exceed that number.

Although the main trends in corporate governance are aimed at implementing all three components of ESG at the global level, a certain preponderance is observed in the environmental and social governance; governance is receding into the background.

1. *Shareholders become more demanding.* If the company or individual directors fail to perform the expected actions, including disclosure obligations, shareholders will vote more vigorously against their proposals at the annual general meetings. Typically, this will involve environmental and social factors.<sup>1</sup>

2. *Efficiency of the board of directors is improving.* The increasing number of new issues requiring the board's attention necessitates better execution of the directors' fiduciary duties and their role as a sounding board for the company's management. Competent board composition, renewal and performance evaluation will improve corporate effectiveness and reduce exposure to risks.

3. *Standards for companies and their climate change disclosures are improving.* It should be noted that in terms of information disclosure, among the trends of corporate governance are also increasing requirements for the disclosure of information related to where and how the company pays taxes.<sup>2</sup>

4. *Equity, diversification (diversity), and inclusiveness on boards and in companies in general are improving.* Stakeholders demand constant progress on these indicators because corporations possessing these qualities are believed to outperform other companies.

5. *Digitalization* is also outlined as a separate trend of corporate governance. Corporate governance has long been familiar with such elements of new technologies as blockchain, electronic registries, electronic document management and e-voting. Companies are trying to include experts experienced and competent in innovation and digital technology on their boards, and to consider cyber risks as part of their risk management system.<sup>3</sup> Experiments using artificial intelligence in management are of particular interest.<sup>4</sup> Digitalization creates platform companies whose operations are based on new technologies (Apple, Alibaba, Sber, Yandex, etc.). Traditional pro-shareholder corporate governance conflicts with the needs of platform companies that promote collaboration between multiple stakeholders, seek to increase stakeholder engagement.<sup>5</sup> Managing a digital platform business

1 2022 Global and Regional Trends in Corporate Governance. URL: <https://www.russellreynolds.com/en/insights/reports-surveys/2022-global-and-regional-trends-in-corporate-governance>; Six Key Corporate Governance Trends For 2021. URL: <https://www.maalot.co.il/Publications/ESGA20210413113135.PDF>; Emerging Trends In Corporate Governance In 2022. <https://blog.corporateservices.euronext.com/en/governance/emerging-trends-corporate-governance/>

2 Six Key Corporate Governance Trends For 2021. URL: <https://www.maalot.co.il/Publications/ESGA20210413113135.PDF>

3 Corporate governance in the Covid era: cybersecurity and high-tech considerations. URL: <https://gaap.ru/articles/Corporativnoe-upravlenie-v-epohu-covida/>

4 E.A.Apevalova, N.A.Polezhaeva, A.D.Radygin. Corporate governance standards and practices: some current trends. Russian Economy in 2019 Trends and Prospects. Edition 41. M.: Gaidar Institute Publishing House, 2020. p. 486–498.

5 N.A.Polezhaeva. Platform Companies: Features of Business Model and Corporate Governance. Russian Economy in 2020. Trends and Prospects. Edition 42. M.: Gaidar Institute Publishing House,



is largely associated with expanding corporate goals toward stakeholders. Let us consider a few examples of the promotion of environmental and social agendas in management in different countries.

### ***The U.S. and Canada***

1. *Environmental control and company reporting.* Over the past few years, investors pay increasing attention to the environmental controls and reporting of portfolio companies. Voting rules are becoming stricter. For example, in 2022, proxy-voting guidelines at one of the world's largest investment firms, Vanguard, included the ability to vote against directors who made significant errors in risk management, including climate.<sup>1</sup> The annual letter from the CEO of asset management of the State Street Global Advisors ("SSGA") states that companies in major indexes in the U.S. and several other markets must align their disclosures with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), and that SSGA will vote against directors who do not meet such disclosure requirements.<sup>2</sup>

In December 2021, the Prime Minister of Canada sent out letters to members of the Cabinet proposing a whole-of-government approach to combating climate change.<sup>3</sup> The letters to the Secretary of the Environment and the Secretary of the Treasury required mandatory disclosure of climate-related financial information.

It is to be expected that many key stakeholders, including major shareholders, will demand additional disclosure from companies beyond what is mandatory.

2. *Diversification and inclusion.* Diversity of a company's board, board of directors, and employees continues to be promoted as an important factor in a company's efficiency and higher value.

Diversity requirements are increasingly being included in regulations and other acts, such as California's gender and racial diversity requirements for boards of directors. Board diversity disclosure is required by the NASDAQ stock exchange. The U.S. proxy voting guidelines of the world's largest investment company, BlackRock, indicate the need for a 30% diversity of board members.<sup>4</sup>

The COVID-19 pandemic has raised additional attention to relations with employees. The latter became more demanding, which contributes to a more competitive environment, encouraging companies to create conditions to attract the best employees.

3. *Demanding shareholders (forward-thinking companies will expand their shareholder engagement programs).* Shareholders more often insist at their general meetings on the need to change the tack of the company. The most striking example

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2021. p. 533–556.

1 Proxy voting policy for U.S. portfolio companies. URL: [https://corporate.vanguard.com/content/dam/corp/advocate/investment-stewardship/pdf/policies-and-reports/US\\_Proxy\\_Voting.pdf](https://corporate.vanguard.com/content/dam/corp/advocate/investment-stewardship/pdf/policies-and-reports/US_Proxy_Voting.pdf)

2 CEO's Letter on Our 2022 Proxy Voting Agenda. URL: <https://www.ssga.com/us/en/institutional/ic/insights/ceo-letter-2022-proxy-voting-agenda>

3 Full-court press on climate in mandate letters, but environmentalists will wait and see. URL: <https://www.thestar.com/news/canada/2021/12/22/full-court-press-on-climate-in-mandate-letters-but-environmentalists-will-wait-and-see.html>

4 BlackRock Investment Stewardship: Proxy voting guidelines for U.S. securities. URL: <https://www.blackrock.com/corporate/literature/fact-sheet/blk-responsible-investment-guidelines-us.pdf>

of 2021 is the oil giant ExxonMobil set a goal of achieving carbon neutrality by 2050 under pressure from hedge fund Engine No. 1, which has a small stake in the company, and other shareholders. ExxonMobil's board of directors included three directors from Engine No. 1.<sup>1</sup>

*4. Effectiveness of the board of directors, assessment of its performance and renewal of its composition.* Boards will be under pressure from stakeholders demanding to self-evaluate and renew their composition to meet ever-changing needs, to bring in new prospects and diversity. Some major investors and representatives (proxy advisors) call for robust board evaluation programs.

### ***European Union***

*1. Environmental responsible activity.* The Sustainable Financial Development Strategy adopted by the European Commission in July 2021 supporting the "European Green Deal", includes a number of measures to overcome environmental challenges and increase investment in the sustainable development of the economy. One of the measures, the Sustainability Taxonomy (or "Green Taxonomy"), a system for classifying sustainable economic environmental performance, has already entered into force.<sup>3</sup> Financial companies can now report based on technical criteria used to determine whether the activity of the company is environmentally sustainable.

Since January 2022, companies and investors subject to the Corporate Sustainability Reporting Directive (CSRD) are required to disclose information on climate change mitigation and adaptation.

The information to be disclosed will be minimal, and it is expected that some stakeholders, especially large investors, will demand more information to be disclosed.

*2. Linking executive compensation to ESG indicators.* Investor demands for compliance with ESG principles, especially environmental, are growing. In this regard, the possibility is being considered to establish a correlation between the remuneration of company executives and the degree of compliance with such principles. However, it has not yet been possible to identify common key indicators that could be used as a benchmark. For example, the Norwegian CGC attributes ESG (sustainability) issues to competence of the board of directors and recommends that size of remuneration should be transparent and strictly limited when linked to performance. Germany and Spain also recommend ESG criteria for remuneration.

*3. Diversification of the board of directors and director's "overboarding."* In some European countries, companies set mandatory targets for the number of women

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1 The Little Engine That Won an Environmental Victory Over Exxon. URL: <https://www.bloomberg.com/news/articles/2021-06-09/engine-no-1-proxy-campaign-against-exxon-xom-marks-win-for-esg-activists>

2 In 2021, the European Commission has released a package of proposals to reduce harmful emissions into the atmosphere, called the European Green Deal.

3 The European Union's sustainability taxonomy aims to attract private capital for long-term environmental projects. URL: <https://investinfra.ru/frontend/images/articles/2020-04-08/NAKDI-Ponomareva-jekspertnaja-statja-1-07.04.2020.pdf>

on their boards. In Denmark, corporate governance principles recommend diversity in terms of gender, age, education, and business experience. Ethnic diversity is somewhat more difficult, as it is not legal in Europe to collect data on ethnicity.

The “overboarding” of one director serving on several boards at the same time presents a particular concern to investors. The number of European companies having boards where these directors are members seems excessive. Limiting the number of boards to one director is not considered the only solution, and alternatives are still being sought.

*4. Strengthening the position of shareholders: likely revision of the Shareholder Rights Directive II.* Shareholder Rights Directive II is focused on:

- a) improving the quality of interaction between shareholders and managers with their companies;
- b) strengthening shareholder rights, including control over remuneration and related-party transactions;
- c) expanding information about investing.

Implementation of the Directive was scheduled for 2019–2020, but it has slowed due to the COVID-19 pandemic. Investors are particularly concerned about the insufficiently rapid tightening of disclosure requirements for executive compensation. As a result, a review of the Directive’s provisions is pending.

### ***The United Kingdom and Australia***

In the UK, investors pay special attention to climate change, and new environmental disclosure standards have been issued. Attention to the social element also continues. Investor demands grow for diversity (gender, ethnicity, sexual orientation, socio-economic background) on boards and leadership teams, and the role of boards in ensuring diversity and inclusiveness. These demands often exceed established standards.

In terms of governance in the ESG context, the first step toward restoring trust in corporate governance, as well as in auditing, is a series of proposals from the UK government, including the planned establishment of an Audit, Reporting and Governance Authority (ARGA) in 2023. The next step should be wide-ranging reforms, including a review of the roles of individual directors and the board as a whole.

In Australia, climate change remains the focus of many investors with many campaigns held by activist shareholders focused on the environment. At the national level, the climate issue is being addressed at a more conservative pace. Special attention is paid to diversification of the board of directors. Thus, in November 2021, all boards included at least 30% women.

### ***Brazil***

Despite the shortcomings of corporate governance in Brazil, the country is striving to develop all components of ESG. Some Brazilian companies started moving from greenwashing<sup>1</sup> to real climate initiatives. The dependence of a

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1 Greenwashing (or green camouflage) is a form of environmental marketing used by unscrupulous companies to give the appearance of an environmentally oriented organization.

company's management remuneration on its environmental performance is expected to grow, and this will require greater disclosure. The Brazilian Securities and Exchange Commission is expected to support increased transparency regarding ESG. There is also an increased demand for a more ESG-aware board of directors.

Shareholders demand more actively that boards provide effective health and social control for the well-being of employees (education, pay equity, etc.), customers, and other stakeholders. The COVID-19 pandemic has reinforced this trend.

However, the emphasis should be primarily on improving governance as a necessary driver for the development of the ESG agenda.

Brazilian public companies lack robust governance structures. Listing requirements, including corporate governance, are not sufficiently stringent, and there is little enforcement action against violators. With the introduction of super-voting shares and a respective departure from the "one share, one vote" approach, global investors are pessimistic about investing in Brazil.

The requirements of Novo Mercado, the listing segment of the São Paulo Stock Exchange, for an annual board evaluation are intended to stimulate the implementation of management functions. Advanced boards will use the evaluation as an opportunity to influence the efficiency of individual directors and the overall board culture. Nevertheless, there are concerns that such evaluations will be conducted just formally.

Shareholder control over the professionalism, independence of directors, and the process of their appointment is gradually increasing. However, in recent years much attention has been paid to the gender diversity of the board, largely due to pressure from global investors.

In Western countries, the understanding that companies should have other stakeholders in addition to shareholders as well as other goals in addition to maximizing shareholder value has mainly occurred in the last decade as a result of new challenges (climate change, the threat of key resource shortages, economic stratification of society, the economic crisis caused by the COVID-19 pandemic, etc.). At the same time, some jurisdictions already had a variety of corporate goals at the time the Western world realized their importance, and as the experience of some of Asia's largest economies shows, having such goals does not always ensure the quality of management and efficiency of the company.

### ***Japan***

Japan's postwar economic miracle was made possible in the context of corporate governance taking into account the interests of various stakeholders. Shareholder votes were not the only determinants of company policy. The Japanese model of governance was called the "company community," in which the boards of directors consisted mainly of lifetime employees. The difference in wages between top management and frontline employees was relatively small. Shares were owned by members of informal corporate keiretsu groups and their main banks (so-called cross-shareholding) as an unofficial symbol of commitment to keiretsu and for

protection against hostile takeovers, but not for profit by maximizing share value. It was the main bank, not the shareholders, who resolved problematic situations in the company.

However, this system, which functioned well during the period of rapid growth, led the country into a financial crisis in the early 1990s. The ensuing series of reforms aimed to extend to Japanese companies a pro-shareholder model of management along the American example (boards of directors consisting of independent directors, a Delaware-style regulatory framework for hostile takeovers), did not quite succeed. Until the 2010s, there were no independent directors in the most public companies. Although cross-shareholdings declined, while the number of foreign shareholders grew, Japan has long been the only major developed economy with no examples of successful hostile takeovers.

Since the early 2010s, Japan's governance system has been reoriented towards the interests of shareholders with the adoption of the 2012 Good Governance Code for Investors and the 2015 Corporate Governance Code. Meanwhile, other corporate goals remain in place, and the revised 2021 Corporate Governance Code defines compliance with ESG principles as one of the pillars of good corporate performance.<sup>1</sup>

The Tokyo Stock Exchange (TSE) was reorganized in 2022 with the aim to introduce stricter listing standards and attract foreign investment. Its four sections were transformed into three tiers marked by respective standards of trading liquidity and corporate governance, Prime, Standard and Growth. As part of the reform, the Companies Act and the Corporate Governance Code were revised. It should be noted that many analysts are pessimistic about the effectiveness of this reorganization.<sup>2</sup>

The revised Company Law specifies the need for outside directors for certain types of Japanese companies. In the Code for listed Prime level companies, the recommended minimum number of independent directors has been increased from two to one-third of the board. In the near future, companies may face a shortage of qualified independent directors due to the increased demand as a result of new requirements.

Japan is second only to the U.S. in shareholder activism, and such activism continues to grow. In 2015, shareholder-activist campaigns against Japanese corporations accounted for 6% of all such campaigns worldwide, excluding the US. At the beginning of 2022, this share was 26%.<sup>3</sup>

Still, despite the reforms, corporate performance in Japan remains low. Experts continue to call Japan's corporate governance problematic, pointing to the importance not only of legal and institutional changes, but also to the need for changes in mindset and behavior, which will be a long process.

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1 *Mielcarz P., Osiichuk D., Puławska K.* Increasing shareholder focus: the repercussions of the 2015 corporate governance reform in Japan // *Journal of Management and Governance*. 2021.

2 The Tokyo Stock Exchange has been reformed hoping to attract foreign investors. URL: <https://rossaprimavera.ru/news/212efea5>

3 H1 2021 Review of Shareholder Activism. URL: <https://www.lazard.com/media/451807/lazards-h1-2021-review-of-shareholder-activism-vf.pdf>

## *China and India*

Since 1994, China's Company Law calls for corporations to act ethically, to strengthen Chinese socialist society, and to be accountable to the public. The law recognizes company employees as important stakeholders. The draft amendments to the 2021 Company Law also point out the need to consider environmental and social interests and for the company to take on social responsibility.

In 2002, China adopted a European-style CGC. However, instead of proclaiming shareholder value maximization as the main goal of management, the code already called on listed companies to take care of welfare, protect the environment and public interests and focus on the company's social responsibility. The 2018 code went even further, calling, for example, for aid to poor regions and villages.

Thus, China has long had a variety of corporate goals. Nevertheless, much depends on the policies of the Chinese Communist Party, which can set company goals both for the public good and to increase its influence<sup>1</sup>, to achieve these seemingly good corporate goals, regardless of the company's form of ownership.

According to the Chinese Company Law, a party organization may be established in any company to conduct activities of the Communist Party (Art. 19), which in practice is one of the main participants in management, while the limits of this participant's influence remain unclear.

Moreover, despite the improvement in the quality of corporate governance in China in recent years, a large number of companies with concentrated ownership and controlling shareholders whose boards of directors are not transparent, is affecting investor activity. Questions remain about transparency of ownership structures and corporate governance. As a rule, independent directors in Chinese companies lack business experience, and they are not perceived as advocates of minority rights.<sup>2</sup>

India's corporate governance rules also take into account the interests of a wide range of stakeholders. For example, after independence in 1947, the Indian Companies Act was amended to require companies to act not only in the interests of their shareholders but also in the public interest. Updated in 2013, the Companies Act, requires directors to act in the best interests of the company, shareholders, employees, society, and the environment.

Nevertheless, although the principles of corporate governance adopted in India are of sufficient quality (the Asian Corporate Governance Association estimates the quality of governance rules in India at 69%, while a good indicator is more than 70%<sup>3</sup>), and the causes are noble, the country faces problems regarding their

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1 Puchniak D.W. No Need for Asia to be Woke: Contextualizing Anglo-America's 'Discovery' of Corporate Purpose. European Corporate Governance Institute – Law Working Paper No. 646/2022. URL: <https://ssrn.com/abstract=4122483>

2 Corporate governance in China: key takeaways for investors. URL: <https://www.unpri.org/pri-blog/corporate-governance-in-china-key-takeaways-for-investors/7398.article>

3 CG Watch 2020. Future promise: Aligning governance and ESG in Asia. URL: <https://www.acga-asia.org/files.php?aid=425&id=1345>

implementation at all levels (companies, regulators, society).<sup>1</sup> Existing social and environmental goals are no exception.

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The ESG agenda, which complicates the understanding of corporate governance, is being actively promoted in developed and many developing countries. Intensive work on environmental and social governance is underway. The governance is receding into the background. This is often explained by the high level of traditional pro-equity corporate governance in developed countries, which nevertheless does not mean that there are no weaknesses requiring improvement (e.g. strengthening the position of investors in the EU, reviewing the role of the board of directors in the UK). Without quality corporate governance, which is the driver of the ESG agenda, greenwashing and other imitations will be taking place.

Separately, such a positive trend as growth of shareholders' activity in the management of the company should be noted. At present, this activity is mainly related to environmental matters. Nevertheless, in the future we see the shareholders' attention spreading to other spheres as well.

Meanwhile, there are countries demonstrating that transition to sustainable management is premature due to weak corporate governance unable to provide proper level of the ESG aspects, or irrelevant, as extended range of corporate goals is not something new for them, as, for example, for Asian countries.

Corporate governance, like its shortcomings, is individual, but the governance rules established in these countries cannot be called substandard. A common problem for most of them is the lack of compliance with the rules, creating the appearance of compliance.

### **5.3. The state of science and innovation<sup>2</sup>**

Sanctions were the main factor influencing the sphere of science and innovation in 2022. Quick measures to solve the issues that arose were developed only to a certain extent. The first priority steps were made in such areas of science policy as changing the composition of reporting and accounting indicators and revising the partners and directions of international cooperation. In technological field the agenda was reoriented toward ensuring technological sovereignty. For this purpose, first of all, the following were planned: strengthening support of applied research; growth of financing of innovations from regional budgets; identification of "niches" where there is a potential for the development of necessary technologies and products.

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1 Revisit corporate governance laws for Central Public Sector Undertakings. URL: <https://www.financialexpress.com/opinion/revisit-corporate-governance-laws-for-cpsus/2059190/>

2 Author: *Dezhina I.G.*, Doctor of Economic Sciences, Leading Researcher, Gaidar Institute; Head of the Analytical Department on Science and Technology Development, Skolkovo Institute of Science and Technology.



### 5.3.1. Sanctions and their consequences

Main factor that brought changes in the field of science and technology was economic sanctions (which made it more difficult to buy high-tech equipment and materials and stopping of equipment servicing) and those aimed at isolating Russian science (breaking institutional ties and stopping joint projects, restrictions on participation in scientific conferences, publishing articles and sanctions against individual universities). Russian science has found itself under the pressure of an unprecedented number of sanctions if we compare, for example, with the situation in Iran where American sanctions are predominantly in effect.

Immediately after the start of special military operation institutional cooperation with Russian universities was terminated by Germany, France, the United States, Canada, Denmark, the Baltic States, the Netherlands, and Finland, as well as the European Union. Cooperation at a number of mega-science facilities including CERN<sup>1</sup> was curtailed. It suspended the observer status of Russian Federation and cooperation with Russian institutions despite the fact that Russian side provided part of funding and equipment for the Large Hadron Collider. Partnerships at Europe's ExoMars 2022 and joint projects at the largest X-ray laser XFEL in Germany were terminated although Russia made a significant financial contribution to its construction and made unique magnets for the facility. Work was also frozen on German Space Agency's eRosita X-ray telescope aboard Russian Spektr-RG observatory.<sup>2</sup>

In March, the U.S. suspended its participation in the Arctic Council chaired by Russia. In June, the U.S. and other Arctic Council countries announced resumption of some projects including scientific research on the condition that they do not involve Russian government.<sup>3</sup>

Countries that terminated cooperation with Russian scientific organizations and universities noted viability of maintaining individual ties. Possibility of maintaining such contacts is quite illusory as each scientist is associated with an organization. In addition, team science prevails today in almost all research fields and the average number of participants in scientific groups is growing. Therefore, it is possible to maintain individual connections in a fairly narrow range of disciplines where researchers work mostly independently rather than in groups.

A number of publishers have stopped accepting articles from Russian authors<sup>4</sup> including those from universities on U.S. Treasury Department's sanctions lists.<sup>5</sup> Moreover, Russian scientific organizations and universities have been

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1 Solidarity with Ukraine. URL: <https://home.cern/solidarity-ukraine>

2 *Leibin V.* Disconnecting from the scientific network // *Expert*. 9 may 2022. URL: <https://expert.ru/expert/2022/19/otklyucheniye-ot-nauchnoy-seti/>

3 *Ambrose M.* US Restricts Science Collaborations with Russia // *FYI Bulletin*, No. 47. 17 June 2022. URL: <https://www.aip.org/fyi/2022/us-restricts-science-collaborations-russia>

4 *Brainard J.* Few journals heed calls to boycott Russian papers // *Science*. 10 March 2022. doi: 10.1126/science.adb1981. URL: <https://www.science.org/content/article/few-journals-heed-calls-boycott-russian-papers>

5 In particular, MIT issued a circular according to which even informal communication with employees of Skoltech and Phystech, including the preparation of joint publications, should be stopped immediately. Zuber N. New U.S. Sanctions Prohibit Collaborations with Certain Russian Entities // MIT. 5 August 2022. URL: [https://orgchart.mit.edu/node/27/letters\\_to\\_community/new-us-sanctions-prohibit-collaborations-certain-russian-entities](https://orgchart.mit.edu/node/27/letters_to_community/new-us-sanctions-prohibit-collaborations-certain-russian-entities)



disconnected from the Web of Science database which has not been done, for example, in relation to Iran. Major scientific publishers (Elsevier, Springer/Nature, IOP Publishers, etc.) have officially announced<sup>1</sup> that Russian organizations have been cut off from access to their journals. Russian authors were deprived of the opportunity to publish articles in Open Access journals. Indexing of Russian publications in Crossref<sup>2</sup> was suspended. Since Russian journals account for about 3% of the world's scientific output cut off from most sources of information has drastically limited the ability of Russian researchers to keep up to date of current scientific achievements.

Opportunities to hold international conferences in Russia and to participate in foreign events have also declined. Moving an International Mathematical Congress which was to be held in July in St. Petersburg to an online format<sup>3</sup> was a landmark move after growing pressure from national mathematical societies and invited speakers. In terms of participation of Russian scientists in international conferences in addition to the political aspect there is also a financial one due to difficulty of transferring abroad payment for the organizational fee. One cannot also ignore the ban on flights by Russian airlines which has complicated and significantly increased the cost of personal attendance at conferences abroad.

A survey of 577 heads of scientific institutions and universities confirmed that sanctions mostly affected various types of international cooperation including commercialization of R&D results abroad and opportunities to obtain foreign funding or publication in international papers.<sup>4</sup> Furthermore, managers expect a drop in participation in international conferences, a decrease in the number of articles in foreign publications and a decline in access to foreign databases of scientific information in the future.

It is worth noting that in the field of international cooperation, sanctions have had a negative impact not only on Russian science. For example, termination of participation of Russian scientists in projects of the European Union in a number of cases led to inability of partners from other countries to continue research.<sup>5</sup> In turn, because of the withdrawal from JINR (Joint Institute for Nuclear Research in Dubna) projects, foreign partners cannot conduct joint experiments which predetermine retardation in development of a number of topics.<sup>6</sup>

1 Publishers condemn invasion of Ukraine by Russia. URL: <https://mailchi.mp/4851e2a74119/joint-publisher-statement>

2 *Rara-Avis A.* Academic boycott and political persecution: Russian science in the time of war. April 11, 2022. URL: <https://www.opendemocracy.net/ru/rossiyskaya-nauka-vo-vremya-voyny/>

3 *Gaind N., Else H.* Global research community condemns Russian invasion of Ukraine // *Nature*. 2022. No. 603. P. 209–210. doi: <https://doi.org/10.1038/d41586-022-00601-w>

4 The survey was conducted in November 2022. See.: *Vlasova V., Gershman M.* Making the science in Russia: moods and expectations // *Science. Technology. Innovation. Express-information*. 14 December 2022. URL: <https://issek.hse.ru/news/802297927.html>

5 *Lem P.* War forces post-Soviet scholars to choose between Russia and West // *Times Higher Education*. 19 March 2022. URL: <https://www.timeshighereducation.com/news/war-forces-post-soviet-scholars-choose-between-russia-and-west>

6 *Loshak V., Grigory Trubnikov,* General Director of the Joint Institute for Nuclear Research in Dubna, on who loses first to sanctions and the search for trust between scientists and the state // *Kommersant*. 29 October 2022. URL: <https://www.kommersant.ru/doc/5608815>

Impact of economic sanctions has been traumatic no less. Problems with updating scientific equipment and access to software and updating technical aids used in modern science have a direct impact on quality of findings. Sanctions limited the import of high-tech equipment and its maintenance while, according to estimates, 80% of tenders for supply of equipment to scientific organizations were won by foreign companies from unfriendly countries.<sup>1</sup> However, situation with software turned out to be even more complicated. If scientific equipment can be operated without replacement for 5–7 years and components and laboratory materials can last for a year, ban on the use of computer programs for scientific calculations had an immediate effect since any analogues of the programs are of poorer quality.<sup>2</sup>

Evaluation of medium-term effects of sanctions have shown that the greatest damage is done to the human resource potential of science mainly owing to the increased “brain drain”. New wave of departures included both strong scientists who received contracts and grants abroad and those who did not have invitations to work. In addition, not only guest foreign scientists began to leave the country<sup>3</sup> which became especially noticeable in universities<sup>4</sup> but also leading scientists who are fellow countrymen.<sup>5</sup> Number of researchers who left Russia is unknown. Moreover, there are not even tentative figures for “researchers” (or “scientists”). Moreover, it is not known how many of them have gone abroad temporarily – to wait it out, working on a grant or short-term contract or the number of those who have the opportunity to work remotely and decided to temporarily do so abroad.

In addition to the push factors, there were external “pull” factors of a selective nature. These include various foreign assistance programs for Ukrainian, Russian and Belarusian scientists who left the country<sup>6</sup> as well as initiatives to make it easier to obtain work visas. The U.S. is interested in selected specialists, primarily those with experience in semiconductors, cybersecurity, artificial intelligence, nuclear and space technologies and a number of other specialized scientific fields.<sup>7</sup> In general, the pool of potential beneficiaries is very limited and does not stimulate a serious exodus. However, information that further escalated things has begun to spread, such as that the U.S. intends to issue 100,000 visas to Russian scientists<sup>8</sup>.

1 Voronin N. The isolation of Russia would hit Russian science hard and affect world science. 10 March 2022. URL: <https://www.bbcussian.com/russian/features-60682102>

2 Give science freedom. Scientists talk about how to resist sanctions // RIA Novosti. 4 April 2022. URL: <https://ria.ru/20220316/nauka-1778138471.html>

3 Balashova A. «Skolkovo» и Skoltech: «We keep forgetting that we are not in the USSR» // RBK. 15 August 2022. URL: [https://www.rbc.ru/interview/technology\\_and\\_media/15/08/2022/62f2a5ca9a7947785cd167d1](https://www.rbc.ru/interview/technology_and_media/15/08/2022/62f2a5ca9a7947785cd167d1)

4 Foreign professors quit the Tyumen School of Advanced Studies – what will happen next? // 72.ru. 1 June 2022. <https://72.ru/text/education/2022/06/01/71369477/>

5 Tuyeva E. We do not observe a total flight of foreigners, although there are some sad losses // Kommersant. 22 May 2022. URL: <https://www.kommersant.ru/doc/5357614>

6 Funding Opportunities and Help for Scholars from Ukraine, Russia and Belarus. URL: <https://eapil.org/funding-opportunities-and-help-for-scholars-from-ukraine-russia-and-belarus/>

7 Popova T. Brain Drain as a New Global Weapon of the U.S. // Nezavisimaya Gazeta – Science. 5 May 2022. URL: [https://www.ng.ru/world/2022-05-05/100\\_usa050522.html](https://www.ng.ru/world/2022-05-05/100_usa050522.html)

8 Chumakov K. Monkeypox. Coronavirus is not defeated. War will kill Russian science. 24 May 2022. URL: <https://www.youtube.com/watch?v=THrHUEMjHrQ>

This is obviously impossible since there are fewer than 100,000 researchers with PhD and doctoral degrees working in the country.<sup>1</sup>

First sample surveys of emigrants demonstrated that the new wave of “brain drain” was prevailed by researchers who did not have invitation to work. Thus, from online interviews conducted in April 2022 with 60 highly educated emigrants<sup>2</sup> who left Russia after February 24,<sup>3</sup> it became known that the majority left for Armenia, Georgia, Israel, and Turkey. These countries were chosen for temporary residence while the search for work is mainly conducted in the U.S. and EU countries. The easiest way to find a job was for postgraduates and postdocs especially for those who already had partnership experience (internships) in foreign universities. It should be noted that this survey was conducted before the beginning of partial mobilization during which the flow of emigrants surged. There are estimates, the grounds for which are not given, that the total outflow of researchers in 2022 stood at around 10% of their total number, i.e. we are talking about 35,000 people and probably a high gender imbalance.

At about the same time in April-May 2022, a survey of 4,100 Russian researchers in the country was conducted which included an assessment of changes in emigration attitudes. They increased for 31.6% of respondents and did not change for 57%.<sup>4</sup> Those under 39 years of age (51%) were most willing to go abroad and it is this group that has the best chance of finding work abroad.

Experts also consider the growth of isolationist sentiments and corresponding rhetoric to be the effects of sanctions.<sup>5</sup> Meanwhile, history of the anti-German and anti-Soviet boycotts shows that if a country has a significant scientific complex, then the removal from world science has no serious consequences in the short term.<sup>6</sup> In historical record one can find different estimates of the average effectiveness of sanctions: on average, they are between 20%<sup>7</sup> and 40%.<sup>8</sup>

Characteristically, many scientists abroad supported sanctions against Russian science. Thus, an anonymous online survey of 240 scientists working in the EU (not of Russian or Ukrainian origin constituted about one-third of the sample) showed that 62% support sanctions and only 25% oppose them. Furthermore, 75% believe it is correct to terminate institutional relations and programs involving Russian state universities and scientific institutions and 37% believe it is necessary to

1 Science Indicators: 2022. Statistical Compendium. M.: NRU HSE, 2022. P. 54.

2 The respondents' ages ranged from 20-60 years old with the majority being 30-45 years old; the majority of respondents were residents of Moscow all with higher education and some with advanced degrees. However, this was not a professional cross-section of researchers.

3 *Borusyak L.* A New Wave of Highly Educated Emigrants: Why Are They Leaving Russia?// *Palladium*. 2022. No. 3 (2). P. 98–115. DOI: 10.55167/29b32cb46280

4 *Gusev A.B., Yerevich M.A.* Science policy of Russia – 2022: a profession is not dearer than the motherland. M.: OOO «Buki Vedi», 2022. P. 10.

5 *Baker S.* Do academic boycotts work? // *Times Higher Education*. 9 March 2022. URL: <https://www.timeshighereducation.com/depth/do-academic-boycotts-work>

6 *Gordin M.* A century of science boycotts // *Nature*. 2022. No. 606. P. 27–29. doi: <https://doi.org/10.1038/d41586-022-01475-8>

7 *Mulder N.* How America Learned to Love (Ineffective) Sanctions // *Foreign Policy*. 30 January 2022. URL: <https://foreignpolicy.com/2022/01/30/us-sanctions-reliance-results/>

8 *Morgan T.C., Bapat N., Kobayashi Y.* Threat and imposition of economic sanctions 1945–2005: Updating the TIES dataset // *Conflict Management and Peace Science*. 2014. No. 31 (5). P. 541–558. URL: <https://doi.org/10.1177/0738894213520379>

terminate individual cooperation as well. Finally, about a third of the respondents support the idea of not accepting articles by Russian authors for publication in international scientific journals.<sup>1</sup>

In response to sanctions government began to introduce response and countermeasures. They boiled down to the following main areas:

- abandonment of accounting principles for publications in journals indexed in the Web of Science and Scopus databases and developing a national system for assessing performance of science; strengthening the focus on development of Russian scientific journals;
- reorienting international scientific cooperation toward countries that have not imposed sanctions. Among other things, it is planned to modernize the megagrant program by expanding cooperation with representatives of the scientific diaspora from countries that have not imposed sanctions;<sup>2</sup>
- increased support for applied research that is important for regional development and for formation of technological sovereignty. Including increased attention to creation of the material base of science (and for this purpose initiation of the Federal project “Development of domestic instrumentation for civil purposes”<sup>3</sup>).

Let us elaborate on these areas.

### 5.3.2. Changing the system of assessment of science effectiveness

The system for assessing effectiveness of scientific research, which has been widely used in recent years was based on accounting publications indexed in the international scientific citation databases Web of Science and Scopus. In March<sup>4</sup> a discussion began of a new idea that is based on rejecting this principle and reorientating to inhouse system of ranked scientific journals while removing the requirement to publish in papers indexed in foreign databases. Intention to start actively developing open access<sup>5</sup> journals was also expressed, possibly in cooperation with the BRICS countries.

Second idea for forming a new evaluation system was to introduce indicators that would account works that didn't conclude with reports on R&D but instead concluded with practical results (for example, finished products).<sup>6</sup> If we look at Russian science in terms of types of research, then publications from only 20–25% of

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1 Science Business survey: Most European researchers support science sanctions on Russia. 27 October 2022. URL: <https://sciencebusiness.net/news/sciencebusiness-survey-most-european-researchers-support-science-sanctions-russia>

2 *Volchkova N.* When the thunder roared. Measures to support science under sanctions are outlined // Poisk. 15 April 2022 No. 16. P. 3. URL: <https://poisknews.ru/magazine/kogda-gryanul-grom/>

3 Developed in accordance with Executive Order of the President of the Russian Federation of February 10, 2022 No. Pr-290.

4 Experts discussed creation of the National System of Research and Development Performance Evaluation. 11 March 2022. URL: [https://www.minobrnauki.gov.ru/press-center/news/?ELEMENT\\_ID=48219](https://www.minobrnauki.gov.ru/press-center/news/?ELEMENT_ID=48219)

5 Ministry of Education and Science and the Russian Academy of Sciences are working on joint solutions for the development of Russian scientific journals. 29 July 2022. URL: <https://minobrnauki.gov.ru/press-center/news/novosti-ministerstva/55782/>

6 *Mikhailchenko N.* The Broken Mirror of Bibliometrics // Stimul online. 17 March 2022. URL: <https://stimul.online/articles/science-and-technology/razbitoe-zerkalo-bibliometrii/>

scientists can be considered relevant, as the rest are engaged in applied research and development<sup>1</sup> in one way or another.

As early as March 19 an RF Government Decree was published that prohibited the use of publication activity indicators in papers indexed in the international databases Web of Science and Scopus<sup>2</sup> until December 31, 2022 as well as abandonment of the following evaluations: effectiveness of scientific, scientific and technical and innovation programs and projects, provision of grants in form of subsidies as well as activity effectiveness of budget and autonomous institutions and other organizations and work of their managers. Requirement for participation in foreign scientific conferences was also cancelled along with publications on results of such conferences. Work of expert councils of Russian Science Foundation (RSPF) was restructured accordingly, increased attention being paid to quality of published articles rather than the place of their publication.<sup>3</sup> At the same time, requirements for preparation of articles in co-authorship with foreign colleagues<sup>4</sup> were alleviated. In addition, Russian Science Foundation expressed its intention to strengthen the evaluation of practical results of projects.

By August, it became clear that decisions made indicated the beginning of a long-term restructuring of the system in which science functions. Ministry of Science and Higher Education issued an order according to which, starting from 2025, points for articles written by scientific and pedagogical university staff will be awarded only for publications in scientific journals included in the list of the Higher Attestation Commission (HAC).<sup>5</sup> In the meantime, a transition period of two years is established. Scientific publications in WoS and Scopus in 2019–2020 will be taken into account in 2023, while those published in 2021 will be accounted for in 2024. In late September, the following requirements were extended until December 31, 2023:<sup>6</sup> requirement to publish in scientific journals indexed in the international databases Web of Science, Scopus, requirement to participate in foreign scientific conferences, as well as a requirement to consider these indicators in performance evaluation.

As National System of R&D Performance Assessment was being developed, a list of scientific publications was created, being published in which will now be taken into account when evaluating results. By November, two lists of publications

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1 Science Indicators: 2022. Statistical Compendium. M.: NRU HSE, 2022. P. 131.

2 RF Government Decree of 19.03.2022 No. 414 «On some issues of the application of requirements and target values of indicators related to publication activity». URL: <http://actual.pravo.gov.ru/text.html#pnum=0001202203210040>

3 Position of Expert Councils of Russian Science Foundation on the issue of accounting for publications // RSF Press-Service. 6 May 2022. URL: <https://rscf.ru/news/found/pozitsiya-ekspertnykh-sovetov-rnf-po-voprosu-ucheta-publikatsiy/>

4 *Mishenko E.* It is not worth pouring young wine into old bottles. Publications and Science Metrics in the Context of Sanctions // Indicator.ru. 23 May 2022. URL: <https://indicator.ru/humanitarian-science/ne-stoit-vlivat-molodoe-vino-v-starye-mekhi-publikacii-i-naukometriya-v-usloviyakh-sankcii.htm>

5 *Mishina V., Kurilova A.* Evaluation of university development will be revised to take into account the "new realities" // Vedomosti. 19 August 2022. URL: <https://www.vedomosti.ru/society/articles/2022/08/18/936683-razvitiya-vuzov>

6 RF Government Decree of 19.09.2022 No. 1655 «On amending the first paragraph of article 1 of Resolution of Government of the Russian Federation from 19.03.2022 No. 414». URL: <http://publication.pravo.gov.ru/Document/View/0001202209210014>

appeared – the White List and the VAK list. The VAK list included 2,593 Russian scientific publications, including the ones indexed in Web of Science and Scopus, as well as 944 journals of the RSCI (Russian Science Citation Index – “Russian shelf of Web of Science”),<sup>1</sup> which were divided into three categories by quartiles. The quality of some of the journals on the list was considered by a number of authoritative experts to be insufficiently high and VAK plans to consider all the comments.

In turn, the White List which was compiled by Interdepartmental Working Group of the Ministry of Science and Higher Education of the Russian Federation includes more than 30,000 titles. These are all publications indexed in Web of Science Core Collection and Scopus, as well as Russian journals included in RSCI (“RSCI Core”).<sup>2</sup> White List has not yet been sorted and some duplicates occur (for example, this applies to translated Russian-language journals). There is a plan to verify the list by a large number of experts and to make the selection system more transparent. The list has not yet been ranked and proportions of the VAK list will probably be used: 25% of journals will be placed in the first category and 25% in the third category and the rest will receive the second category. At the same time, there were no restrictions on publications of results in foreign journals. This will be a test of how effective the past experience has been and whether researchers will still seek to get into journals indexed in Web of Science and Scopus or will lower their bar of requirements.

According to optimistic expectations it is on the White List that scientometric part of the National System of Evaluation of Effectiveness of Scientific Research and Development will be based. However, if lobbyists of “full autonomy” from foreign bases win then the system of evaluation will be based on the VAK list. A way to mitigate negative consequences of such scenario could be a more active transition to the system of open access since it imposes higher requirements for the quality of initial scientific data<sup>3</sup> and, therefore, promotes scientific integrity which has declined<sup>4</sup> in recent years as a result of the publication race.

It should be noted that tendency to use bibliometric indicators to evaluate individuals and organizations is contrary to the changes taking place in countries with advanced science. Thus, in 2022 more than 300 European organizations signed an agreement to reform the evaluation of scientific research. Transition to using mainly qualitative indicators is announced as well as inclusion in the evaluation system activities such as teaching, expert and administrative work.<sup>5</sup> European Research Council is also changing the procedure of how grant applications are

1 Vasylyva A. Scientists will respond to articles // *Kommersant*. 3 November 2022. P. 4. URL: <https://www.kommersant.ru/doc/5650549>

2 «White list» of scientific journals. URL: <https://journalrank.rcsi.science/ru/>

3 *Dezhina I.G.* International scientific cooperation of Russian universities under new conditions: Constraints and opportunities // *EKO*. 2022. No. 11. P. 125–143. DOI: 10.30680/ECO0131-7652-2022-11-125-143.

4 *Trubnikova E.I.* The Exchange of gifts in the academic sphere: Predatory practices, false signal, and conflicts of interest in excellence programs // *Mir Rossii*. 2022. No 31 (1). P. 25–48. <https://doi.org/10.17323/1811-038X-2022-31-1-25-48>

5 *Upton B.* Centralised hiring a barrier to research assessment reform // *Times Higher Education*. 21 December 2022. URL: <https://www.timeshighereducation.com/news/centralised-hiring-barrier-research-assessment-reform>

evaluated in favor of paying more attention to applicants themselves rather than to their past achievements (the Hirsch index and other scientometric parameters).<sup>1</sup> In the context of sanctions restrictions in Russia, a similar revision of evaluation principles could help to increase the accuracy when measuring the results, which itself has become the task of prime importance.

Meanwhile, National Performance Assessment System being developed includes not only a journal policy but also a new approach to monitoring, which is based on a scale called “percentage of completion of a scientific result”. This approach is rightly criticized because not only the concept of “completion of scientific result” opposed to “technology completion” is an unclear measure, but it is also planned to be verified by involving business (apparently, in the area of applied research). However, business actors cannot always give an objective assessment of the result’s prospects. Finally, with regard to the social and humanitarian sciences this approach may be completely unworkable.

### 5.3.3. New focus of international cooperation

International scientific cooperation has been forced to restructure because of sanctions and completion of the unfriendly countries list. Unfriendly countries are the main scientific powers that account for about 65% of the world’s expenditure on research and development.<sup>2</sup> For many years main partners of Russian scientists were organizations and researchers from such countries (primarily the United States, Germany, Great Britain and France), although in the last decade cooperation with them has somewhat declined.

China with which scientific cooperation has been strengthening in recent years has turned out to be a promising partner among friendly countries.<sup>3</sup> In China international cooperation is expanding (not only with Russia) and the government has increased funding for the National Natural Science Foundation by about 7% per year over the past three years.<sup>4</sup> It is planned to work on global issues which creates preconditions for cooperation with Russia. Moreover, potential for developing relations is limited by the fact that in 2022 according to Clarivate, Russia was ranked 20th by the scale (and therefore significance) of cooperation with China.<sup>5</sup> In addition to China, there are plans to expand cooperation with other “world majority” countries including India and Iran. So far, friendly countries,

1 *Upton B.* ERC evaluation overhaul focuses on proposals over track record // Times Higher Education. 21 December 2022. URL: <https://www.timeshighereducation.com/news/erc-evaluation-overhaul-focuses-proposals-over-track-record>

2 Head of Russian Academy of Sciences Sergeev against the rupture of scientific cooperation with unfriendly countries // Interfax. 1 June 2022. URL: <https://academia.interfax.ru//ru/news/articles/8538>

3 *Gaind N., Abbott A., Witze A., Gibney E., Tollefson J., Irwin A., Van Noorden R.* Seven ways the war in Ukraine is changing global science // Nature. 2022. No. 607. P. 440–443. DOI: 10.1038/d41586-022-01960-0

4 *Williams T.* China’s dip in research collaboration ‘temporary’, funder insists // Times Higher Education. 12 October 2022. URL: <https://www.timeshighereducation.com/news/chinas-dip-research-collaboration-temporary-funder-insists>

5 *Johnson J., Adams J., Grant J., Murphy D.* Stumbling bear, soaring dragon. Russia, China and the geopolitics of global science. Harvard Kennedy School for Business and Government, Clarivate, The Policy Institute, King’s College London. July 2022.



primarily China and India account in total for less than 20% of the total number of international publications by Russian scientists.<sup>1</sup>

The pivot to the East was accompanied by identifying mutually beneficial areas and forms of cooperation. Thus, RAS has identified areas of mutual interest with Iran which include nanotechnology, biotechnology and information technology.<sup>2</sup> These areas are the most developed in Iran and they have long been supported by the government. In terms of potential forms of cooperation, creation of branches in universities and research institutes is considered in friendly countries, including CIS.

Meanwhile heads of Russian Academy of Sciences spoke in favor of finding ways to continue cooperation with unfriendly countries<sup>3</sup> including the fact that main breakthroughs are currently being made in international teams.<sup>4</sup> Such position is also supported by many representatives of the scientific community: according to the survey carried out in April-May 2022 among 4100 Russian scientists 76,3% of them consider cooperation with foreign scientists and their teams from unfriendly countries acceptable, at least on a personal level.<sup>5</sup>

Also, measures were taken to decrease cooperation primarily with the United States. Government Edict No. 1350-r of May 28, 2022 terminated the Memorandum of Understanding between the Government of the Russian Federation and the Government of the United States on principles of cooperation in culture, humanities and social sciences, education, and mass media, that was signed in Moscow on September 2, 1998.

In response the White House announced that in accordance with U.S. domestic and international law, institutional, administrative, financial, personnel, and S&T cooperation with Russian government research institutions and individuals who continue to work at or under the direction of those institutions will be terminated. Projects and programs initiated and/or funded prior to February 2022 may be completed but new ones will not be initiated.<sup>6</sup>

There remain areas of international cooperation where Russia, the United States, and a number of EU countries have continued to cooperate. This refers

1 *Pertsova V., Kirilochkina V.* Isolation from the global community and the brain drain: what the future holds for Russian science // *Forbes*. 21 march 2022. URL: <https://www.forbes.ru/forbeslife/459339-izolaciya-ot-mirovogo-soobstestva-i-utecka-mozgov-kakoe-budusee-zdet-rossijskuu-nauku>.

2 *Burmistrov A.* Russian scientists develop cooperation with Iran // *Scientific Russia*. 20 april 2022. URL: <https://scientificrussia.ru/articles/rossijskie-ucenye-razvivaut-sotrudnicestvo-s-iranom>

3 *Academician Alexei Khokhlov:* "Science in the new Russia is my peak Communism." // *Scientific Russia*. 2022. No. 5–6. URL: <https://scientificrussia.ru/articles/akademik-aleksej-hohlov-nauka-v-novoj-rossii-eto-moj-pik-kommunizma-v-mire-nauki-no5-6>.

4 *Alexander Sergeev:* Russia has always found a way out of hopeless situations // *RG – federal edition*. 15 марта 2022. No. 55 (8703). URL: <https://rg.ru/2022/03/15/aleksandr-sergeev-rossiya-vsegda-nahodila-vygod-iz-bezvyhodnyh-situacij.html>

5 *Gusev A.B., Yurevich M.A.* Science policy of Russia – 2022: a profession is not dearer than the motherland. M.: OOO «Buki Vedi», 2022. P. 26.

6 *Guidance On Scientific and Technological Cooperation with the Russian Federation for U.S. Government and U.S. Government Affiliated Organizations* // Press release. White House. 11 June 2022. URL: <https://www.whitehouse.gov/ostp/news-updates/2022/06/11/guidance-on-scientific-and-technological-cooperation-with-the-russian-federation-for-u-s-government-and-u-s-government-affiliated-organizations/>



exclusively to megascience facilities, i.e., joint scientific work in unique facilities. Cooperation at the ITER thermonuclear complex in France where Russia is one of the founding members has not been terminated. Partners' main contributions are manufacturing and supplying high-tech equipment for ITER. Europe provides about 45% to the cost of building the facility. Other countries including Russia provide 9.09% each. However, what is more important is that Russian specialists are involved in the production of 25 unique systems that involve more than 30 leading Russian scientific and technical organizations. Russia continues to manufacture and send appropriate technological elements and complexes to ITER.<sup>1</sup> Second area where U.S.–Russian cooperation continues is the joint operation of the International Space Station due to it being a legally binding partnership.<sup>2</sup> Third, Russia continues to participate in the European Synchrotron Radiation Facility (ESRF), an accelerator complex located in Grenoble.<sup>3</sup>

Finally, while developing an ideology in the field of international scientific cooperation, the Ministry of Education and Science together with the Ministry of Justice created a working team to protect national interests in science and higher education from external influence.<sup>4</sup> Special attention is supposed to be paid to the activity of NPOs as providers of “hidden influence”. The list of NPOs – undesirable organizations, is constantly being expanded including the Woodrow Wilson International Center for Scholars<sup>5</sup> located in the United States which after the collapse of the USSR implemented internship programs for Russian scholars in the social sciences.

#### 5.3.4. Turn to applied sciences

Reorientation to research that is important for the country's economy, along with changes in the management system became a separate direction of scientific policy. First Deputy Prime Minister Andrey Belousov suggested introducing the position of head of scientific and technological transformation in ministries with the rank of deputy minister.<sup>6</sup>

A loud resonance was caused by a statement of Ministry of Science and Higher Education of the Russian Federation that the subjects of works of fundamental research starting from 2023, should be coordinated with the governors<sup>7</sup>. Almost immediately it was explained that it concerns not all organizations engaged in

1 Polkanov V. Scientists tame fusion // *Nezavisimaya Gazeta – science*. 25 October 2022. URL: [https://www.ng.ru/nauka/2022-10-25/12\\_8574\\_synthesis.html](https://www.ng.ru/nauka/2022-10-25/12_8574_synthesis.html)

2 Ambrose M. US Restricts Science Collaborations with Russia // *FYI Bulletin*, No. 47. 17 June 2022. URL: <https://www.aip.org/fyi/2022/us-restricts-science-collaborations-russia>

3 Polkanov V. Scientists tame fusion // *Nezavisimaya Gazeta – science*. 25 October 2022. URL: [https://www.ng.ru/nauka/2022-10-25/12\\_8574\\_synthesis.html](https://www.ng.ru/nauka/2022-10-25/12_8574_synthesis.html)

4 The Ministry of Education and Science and the Ministry of Justice will protect Russia's scientific interests from external influence. 1 September 2022. URL: <https://minjust.gov.ru/ru/events/49057/>

5 The General Prosecutor's Office recognized the Wilson Center as an undesirable organization // *RIA Novosti*. 11 November 2022. URL: <https://ria.ru/20221111/genprokuratura-1830805842.html>

6 Belousov A. Positions of head of science and technology transformation should be introduced in ministries // *TASS*, 18 July 2022. URL: <https://tass.ru/ekonomika/15244967>

7 Zykina T. Ministry of Education and Science has bound scientists to approve research topics from regional heads // *RBK*. 11 April 2022. URL: <https://www.rbc.ru/society/11/04/2022/6253544f9a794784b517f0db>

fundamental research but only world-class research and educational centers (RECs) of which there are only 15 in the country. The governors will not decide whether or not to finance the declared works but will only evaluate their usefulness for the region<sup>1</sup>.

Since the development of regional economies under sanctions will have to be taken into account when choosing the topics of fundamental research, an increase in financing of such research from regional budgets is also possible. In April, a law was adopted expanding the powers of regions to support federal scientific and educational organizations.<sup>2</sup> Now subjects of the Russian Federation can finance R&D in federal state educational institutions of higher education, federal state scientific organizations and participate in formation of such organizations. Thus, there are more opportunities for RECs to receive funds from regional budgets. Strengthening of the role of governors is really important from the point of view of assessing the significance of the results but at the same time we are talking about fundamental research where the practical output is, in principle, not obvious.

Following the REC in May, there were plans to adjust the topics of projects within the framework of the state assignments implementation of which should contribute to technological development. In this case the priority will be given to complex scientific and technical programs of the full innovation cycle where the results should be in the form of pilot batches.

Reorientation of topics to meet the changed needs of the economy in the context of sanctions can be useful since the data of a large-scale survey of researchers conducted in April-May 2022<sup>3</sup> shows that only 18.4% of researchers believe that their work is relevant and will become even more important under the new conditions, and 34.8% recognized the decreasing importance of their research.

Increased focus on support of applied research has also affected research foundations. Last year the reform of the system of scientific foundations was completed leading to only one foundation that allocates grants for scientific research remaining – the Russian Science Foundation (RSF), its functionality adjusted as well. The Russian Foundation for Fundamental Research (RFFR) was renamed into the Russian Center of Scientific Information (RCSI)<sup>4</sup> with a corresponding change in functionality. Main purpose of RCSI is information and analytical activity in the sphere of science, international scientific and technical cooperation including scientific diplomacy and provision of access of Russian scientists to scientific information. Meanwhile initial version of the RCSI charter contained a number of tasks that are performed by the RAS, which raised worries

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1 *Vasilyeva A.* Science will not be given away to governors // *Kommersant*. 13 April 2022. URL: <https://www.kommersant.ru/doc/5305620>

2 Federal Law "On Amendments to Article 12 of the Federal Law "On Science and State Scientific and Technical Policy" and Article 8 of the Federal Law "On Education in the Russian Federation" from 16.04.2022 No. 108-FZ. URL: <https://docs.cntd.ru/document/350237363>

3 *Gusev A.B., Yurevich M.A.* Science policy of Russia – 2022: a profession is not dearer than the motherland. M.: OOO «Buki Vedi», 2022. P. 34.

4 The Ministry of Education and Science of Russian Federation intends to rename Russian Foundation for Basic Research into Russian Center for Scientific Information // *Science. TASS*. 15 April 2022. URL: <https://nauka.tass.ru/nauka/14389501>

in the Academy. In the final version of the RCSI charter duplication with the RAS was eliminated including in the part of the centres' expert activity. Organizational changes caused a sharp budget reduction of the RCSI and led to moving a share of funds to the Russian Science Foundation (*Table 8*).

*Table 8*

**Public allocations for Russian Science Foundation and RCSI**

Type of expense	2023	2024	2025
Russian Center of Scientific Information (former Russian Foundation for Basic Research), Rb bn	5.4	4.4	1.9
Russian Science Foundation, Rb bn	29.5	38.7	38.8

*Sources:* Appendix 10 to the explanatory note to Federal Law “On the Federal Budget for 2023 and for the Planning Period of 2024 and 2025”; annex 15 of the law.

A law was passed<sup>1</sup> in December under which RSF besides supporting fundamental research will also support experimental design and technological works (EDTW) “in order to facilitate the implementation of strategic initiatives of the President of the Russian Federation in the scientific and technological sphere”. According to that law RSF creates an expert Scientific and Technical Council which will evaluate experimental and development projects. This change in RSF’s functions means that closer interaction with development institutions that support the development and implementation of new technologies is more likely.

In general, an idea that there can be a subdivision within a foundation of basic scientific research that supports handling of applied issues is now being realized in several developed countries. For example, U.S. National Science Foundation (NSF) has established a separate directorate with the function of supporting transformational research. Similar processes are under way in Great Britain and Canada where it is being decided whether such a structure should be independent or be a part of existing foundations. In Russian version planned changes are dangerous because they increase monopolization of the RSF against the background of lack of alternatives in the form of private and non-profit research foundations, and regardless of where it is always means a decrease in quality. In USA besides the large public NSF there are many private philanthropic foundations that support science with total research funding of more than \$30 bn per year<sup>2</sup> which is 3 times more than the budget of the NSF itself. All in all, research in the USA is financed by more than 70 thousand organizations of various sizes.

1 Federal law from 19.12.2022 No. 531-FZ “On Amendments to the Federal Law “On the Russian Science Foundation and Amendments to Certain Legislative Acts of the Russian Federation”. URL: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_434568/](http://www.consultant.ru/document/cons_doc_LAW_434568/)

2 *Allen M.* US philanthropic organizations spend over \$30bn a year on science // *Physics World*. 3 July 2022. URL: <https://physicsworld.com/a/us-philanthropic-organisations-spend-over-30bn-a-year-on-science/>

New RSF functions caused few more specific questions. First one, is the choice of areas of support for experimental design and technological work. Priority areas are known<sup>1</sup> but it is difficult to cover them all at once. At the end of the year, a palliative decision was made to form a Scientific and Technical Council in the field of microelectronics.<sup>2</sup> Second one, is to identify a qualified customer<sup>3</sup> (which can be both state authorities and companies), who needs results of OCTD. In contrast to classical scientific projects which so far have been financed by the Russian Science Foundation new projects should give a clear economic result.

### 5.3.5. Academic and university science

#### ***New RAS Policy***

In 2022, there were regular elections of members of RAS as well as an election of new president of RAS after which a new course of development of the Academy was outlined.

In June, more than 300 new members of RAS were elected.<sup>4</sup> Data on formal scientific successes of the candidates (including their bibliometric indicators) was made public in advance which was a sign of a rather bold openness of the Academy. Bold, because many applicants' bibliometrically measured successes were more than modest. Most objective assessment was found to be the RSCI core percentile. This is a ranking of researchers from a particular field of science in order of decreasing number of citations of their papers from the RSCI core. The percentile can range from 1 to 100 where 1 is the group of researchers with the highest number of citations. To be considered for an academic applicant one must be in percentile 1 or 2. However, the median percentile among all RAS candidates was 5 and for colleagues elected to RAS it turned out to be 3<sup>5</sup> which in general raises questions about choice of the initial pool of candidates. Moreover, in the Department of Global Problems and International Relations of RAS the median percentile of candidates for membership was higher than that of the elected (4 vs. 6). For election of RAS academicians a similar phenomenon was observed in the Departments of Mathematical Sciences, Nanotechnology, as well as Historical and Philological Sciences.

Then President of the Russian Academy of Sciences Alexander Sergeyev outlined several priorities for the Academy:

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- 1 These include microelectronics, medicine, agro-technology, genetic technology, ecology, and scientific instrumentation.
  - 2 *Vedeneyeva N.* An official and academics discovered 135 billion of extra grant money // MKRU. 27 December 2022. URL: <https://www.mk.ru/science/2022/12/27/chinovnik-i-akademiki-obnaruzhili-lishnie-135-milliardov-grantovykh-deneg.html>
  - 3 It's a challenge. The head of the Russian Science Foundation spoke about the Foundation's new tasks // Poisk. 23 December 2022. No 52. P. 2.
  - 4 Live broadcast of the general meeting of members of Russian Academy of Sciences // Scientific Russia. 1 June 2022. URL: <https://scientificrussia.ru/articles/1062022-pramaa-translacia-obsego-sobrania-clenov-rossijskoj-akademii-nauk-2>
  - 5 *Hohlov A.* Scientometrical analysis confirms that the expert selection for the election was carried out qualitatively –// RAS. 5 July 2022. URL: <https://new.ras.ru/activities/news/naukometricheskiy-analiz-podtverzhdaet-cto-ekspertnyy-otbor-na-vyborakh-proveden-kachestvenno-aleks/>

- 1) changing status of RAS from FSBI to “state academy of sciences”, which will allow it to become a co-founder of scientific institutes and partake in scientific research;
- 2) initiating a program for research institutes similar to “Priority 2030” for universities;
- 3) strengthening ties with real economy and regions;
- 4) in international activities – to maintain contacts with foreign colleagues at the level of individual researchers and laboratories.

Thus, half of the agenda corresponded to the country’s national science policy and the other half reflected position of the president of Russian Academy of Sciences related to strengthening influence of the Academy and increasing funding of the former academic institutions.

Big intrigue in the academic community followed after the election of a new president of RAS in September. Alexander Sergeev who had nominated himself for the next term and had received considerable support from the academic community withdrew the candidacy on the first day of the General Meeting of RAS.<sup>1</sup> Two candidates remained - Gennady Krasnikov, an academician-entrepreneur and General Director of the JSC Scientific Research Institute of Molecular Electronics and Dmitry Markovich, Director of the S. S. Kutateladsky Institute of Thermophysic SB RAS. The choice was predetermined in favor of Gennady Krasnikov whose nomination was supported by most departments of RAS.

Withdrawal of Alexander Sergeev’s candidacy was followed by criticism of his activities. Main reproach to the former president was that RAS did not become the leading organization in goal-setting and implementation of the country’s S&T policy. A number of decisions, even those related to the competence of RAS were made without taking into account opinions of its members (for example, decision regarding the tools for evaluating the results of scientific activity). Latent goal of strengthening the Academy by restoring management of scientific institutes was not achieved either. Institutes remained under jurisdiction of Ministry of Science and Higher Education. Academy could still only approve appointments of directors and charters of RAS institutes and approve decisions on reorganization and liquidation of scientific organizations.

Before the election Alexander Sergeev and Gennady Krasnikov presented largely similar agendas. Among the tasks was highlighting the importance of conducting research in the interests of real sector with G. Krasnikov identifying areas that required special attention. The task was to overcome paternalistic attitude to the university science and a broader cooperation with universities because it can accelerate the solution of applied scientific issues. However, Sergeev did not set such a task and Krasnikov wrote in his program that “*RAS should provide real scientific and methodological leadership of academic institutions that have been transferred to the Ministry of Science and Higher Education of the Russian Federation and universities in order to form a unified approach to scientific research,*” thus putting RAS above the university science.

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1 RAS President Sergeev withdrew his candidacy from the election of academy’s head due to pressure // Kommersant. 19 September 2022. URL: <https://www.kommersant.ru/doc/5570400>

After his election Gennady Krasnikov significantly changed the formation of vice presidents and reduced their total number from 11 to 10.<sup>1</sup> In November during the meeting with President Putin<sup>2</sup> Gennady Krasnikov more clearly defined the priority areas of the Academy's work. First is the inclusion of RAS in the state system of decision-making, i.e. a new attempt to do what the two previous presidents of RAS who were elected after the reform of the Academy in 2013 failed to do. Gennady Krasnikov hopes to achieve this through the scientific and methodological management of scientific institutes with the help of commissions which until recently were created to analyze the work and evaluate institutes. These commissions are supposed to be used as a tool for coordinating new approaches in the work and evaluation of problems the institutes face. Gennady Krasnikov considers the second important task of the Presidium of RAS to be initiation of large-scale projects and then ensuring scientific and methodological management of such projects. The third direction assumes larger involvement in applied developments based on consortiums without company formation which would include representatives of fundamental, applied, university science and high-tech companies. According to the idea of new president of RAS such consortia can receive support at different stages from the Ministry of Science and Higher Education, the Ministry of Industry and Trade and a number of industry ministries as well as from production sector. Gennady Krasnikov called the areas that are related to solving problems of technological independence (microelectronics, electronic engineering, additive technologies, new materials)<sup>3</sup> the priority ones. Such projects should accelerate translation of fundamental knowledge into practically useful results. On one hand in current conditions such approach is relevant. On the other hand, it is based on a linear model of innovation suggesting that it begins with fundamental research which has long been recognized as an outdated concept.

Thus, in comparison with Alexander Sergeyev, the new president of RAS expands the area of the Academy's activity, strengthens the focus on applied results and at the same time concentrates mainly on internal tasks, paying much less attention to involvement in the international scientific agenda and not expressing a position on issues of cooperation with foreign partners.

### ***“Priority-2030”***

There were no significant changes in the sphere of university science. Main “Priority-2030” program in which 106 universities participate continued but due to new geopolitical circumstances the dynamics of its development somewhat slowed down and discussions began on changes to be made in the program.

First of all, the need for changes is connected with the fact that the creation of consortiums with international participation has become a popular form of

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1 *Bykova N.* RAS President of the Mobilization Era // *Ekspert*. 26 September 2022. No. 39. URL: <https://expert.ru/expert/2022/39/prezident-ran-epokhi-mobilizatsii/>

2 Meeting with Gennady Krasnikov, President of the Russian Academy of Sciences. 11 November 2022. URL: <http://kremlin.ru/events/president/news/69824>

3 *Mikhail Mishustin* meets with Gennady Krasnikov, President of the Russian Academy of Sciences. 29 December 2022. URL: <http://government.ru/news/47462/>

science development in the universities participating in the program. A number of such consortiums began to disintegrate due to sanctions. Secondly, the program was focused on considering publications indexed in Web of Science and Scopus databases but due to changes in the system of accounting of scientific results it was necessary to revise the approaches to evaluation in the program. A separate problem emerged for the universities of the research leadership track as their participation in world rankings (such as The Times Education and QS) became problematic. In the Shanghai ARWU ranking Russian universities are the weakest because it relies on the indicators of scientific achievements to a much greater extent than THE/QS including the number of Nobel laureates working at universities. That is why in 2022 ranking the best position is 501–600 among the universities participating in “Priority-2030” which is occupied by Moscow Institute of Physics and Technology<sup>1</sup>.

In addition, analysis of the interim achievements of the programs’ participants showed that a significant number of universities with high results in various fields were not included. A comparison between universities – participants of “Priority – 2030” and the ones that did not enter the programme showed that among top 20 Russian universities-leaders by integral indicators in the field of science and development of human resource only 13 participate in the program (65%). And this is the best result. Among the leaders in terms of educational activity the program participants account for 15% and in terms of financial activity – only 5%.<sup>2</sup>

In July, the Ministry of Science and Higher Education announced adjustments to the program<sup>3</sup> including an increased focus on bringing R&D to commercialization and scale as well as research important to the country’s technological sovereignty.

The most remarkable was the results of the implementation of the program for year 2021 by Russian Ministry of Science and Higher Education at the end of November. Universities which have not reached the target indicators were established (in all, 42 out of 106 participants of the program or about 40%) as well as universities which showed signs of presenting false reported data have been revealed (there were 73 universities or almost 70% of the total number).<sup>4</sup> Tough measures were supposed to be taken against the institutions of higher education which failed to achieve indicators of achievement by more than 5%: they were to return funds to the federal budget. Institutions of higher education that might have provided inaccurate information would be subject to a ‘documentary check’. It was not been made public exactly which characteristic had not been achieved and under what parameters inaccurate information had been uncovered.<sup>5</sup>

1 URL: <https://www.shanghairanking.com/rankings/arwu/2022>

2 New Leading Universities: An Analysis of the Contribution to the Development of Russian Higher Education. Analytical brochure / *E.G. Grishakina, V.L. Parkacheva* et al.; Moscow Financial-Industrial University “Synergy”. M.: Synergy University Publishing House, 2022. P. 89.

3 The “Priority-2030” program may be adjusted in the context of new reality. 26 July 2022. URL: <https://minobrnauki.gov.ru/press-center/news/novosti-ministerstva/55376/>

4 Minutes of meeting of the Commission of Ministry of Science and Higher Education of the Russian Federation on the selection of Russian educational institutions of higher education for participation in the program of strategic academic leadership “Priority-2030”. November 24, 2022.

5 *Vasileva A.* Universities have mislabelled priority // *Kommersant*. 1 December 2022. URL: <https://www.kommersant.ru/doc/5695686>



As universities of the “Project 5-100” were the most experienced and also were receiving the special part of the grant, results of the inspection of those 21 universities are worth looking at. Of these only 12 reached target parameters while at the same time among these 12 universities there were 8 with signs of unreliable data. Thus, only four universities – the former participants of the “Project 5-100” – actually reached target parameters: Tomsk State University and Tomsk Polytechnic University, Baltic Federal University and PFUR. The number of universities that fulfilled their obligations but provided unreliable data included Fiztech, National Research University Higher School of Economics, Novosibirsk State University, and St. Petersburg Polytechnic University, i.e. the leading research universities of the country.

Despite the obtained assessments Expert Council of the program actually left the entry list of the participants unchanged.<sup>1</sup> Rotation of HEIs participating in the program which had been planned a year earlier resulted in no changes<sup>2</sup> in the research leadership track while in the territorial or sectoral leadership track three more HEIs joined making it equal to 31. Rotation which implies withdrawal of some HEIs from the program and the influx of other HEIs into it did not take place.

#### 5.3.6. Science budgetary policy

Response to sanctions and acceleration of technological development require a significant increase in budget expenditures on R&D. Financing of the state program “Scientific and technological development of the Russian Federation” is planned to be increased but on a short-term basis. The maximum increase is planned for 2023 followed by a sharp decrease in allocations in 2025 (*Table 9*).

*Table 9*

### **Public allocations for civilian fundamental research 2023–2025**

<b>Indicator</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>
<b>Federal budget expenditures on civilian R&amp;D, overall, billion rubles</b>	<b>562.3</b>	<b>552.9</b>	<b>438.6</b>
Change to previous year, %	+21.7	-1.7	-20,7
Change compared to the bill in 2022–2024., every year, %	+18.0	+15.8	–
State program “Scientific and Technological Development of the Russian Federation”	553.5	543.9	427.9

*Sources:* Appendix 10 to the explanatory note of Federal Law “On the Federal Budget for 2023 and for the Planning Period of 2024 and 2025”; own calculations.

Moreover, Rb125.3 bn have been allocated to National Project “Science and Universities” in 2022 and in 2023 it is planned to slightly reduce appropriations in

1 Ministry of Science and Higher Education of the Russian Federation. Minutes of the meeting of Presidium of the Council for support of development programs of educational institutions of higher education within the framework of implementation of the Strategic Academic Leadership Program “Priority-2030” dated December 21, 2022.

2 Not counting the voluntary relinquishment of funds from the special part of the Mining University grant.



comparison with the Law No. 390-FZ<sup>1</sup>. In the National Project the most “expensive” are infrastructure projects (*Table 10*).

*Table 10*

**Amounts of funding for individual activities of the National Project  
“Science and Universities”, Rb bn**

Topic	2023	2024
Completion of a unique megascience-class scientific installation of the Siberian Ring Photon Source Collaborative Center with experimental stations	17.5	13.8
Updating the instrumentation base of the leading organizations performing research and development	16.4	12.4
Construction of new modern research vessels of unlimited area of navigation	9.5	4.0
Developing cooperation of Russian educational organizations of higher education, state scientific institutions and organizations of the real sector of the economy in order to implement complex projects to create high-tech industries	4.5	4.5
Creation of world-class science centers	4.2	4.2
Creation of new laboratories including those led by promising young researchers	4.0	3.6

*Sources:* Appendix 10 to the explanatory note of Federal Law “On the Federal Budget for 2023 and for the Planning Period of 2024 and 2025”; own calculations.

Sanctions restrictions put science in conditions when problems must be solved related to the development of necessary technologies against the background of sharply reduced access to modern devices, equipment and materials. Thus, following important areas of budgetary support are:

- 1) scientific instrumentation and infrastructure;
- 2) cooperation of science and business;
- 3) R&D in small innovative companies, including startups;
- 4) R&D in selected critical industries.

In the context of targeted areas budget support is inadequate at best, and in some cases, it is lacking.

Scientific instrumentation and infrastructure (improvement of material base of science) will be supported under two federal projects – “Development of Domestic Civil Instrumentation” (a new Federal project) and “Development of Infrastructure for Scientific Research and Personnel Training” of the “Science and Universities” National Project. Annual allocation for the Federal Project “Development of the National Civilian Instrument-Making Industry” amounts to about 4 billion rubles while annual requirement is estimated at Rb10–15 bn.<sup>2</sup> Under the Federal Project “Development of infrastructure for scientific research and personnel training” expenditures will fluctuate with a slight upward trend. It has become impossible to

1 Federal Law «On federal budget for 2022 and for the planning period of 2023 and 2024» from 06.12.2021 No. 390-FZ. URL: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_402647/](http://www.consultant.ru/document/cons_doc_LAW_402647/)

2 As of 2022, 93% of scientific equipment in Russia is imported. See.: *Bykova N.* Russia will build scientific instruments//Expert. 28 November 2022. No 48. URL: <https://expert.ru/expert/2022/48/v-rossii-budut-delat-nauchnyye-pribory/>

directly buy imported scientific equipment which is mainly produced in unfriendly countries, and buying it through third countries will be much more expensive which has not been taken into account in the budget projections.

Cooperation between science and business is supported via the framework of the federal project “Development of Integration Processes in Science, Higher Education, and Industry” which is a part of a National Project “Science and Universities”. Allocations for this project are planned to decrease in 2023–2024 in comparison with the level of financing in 2022. It would be necessary to at least keep the former level of financing because now it is necessary to strengthen and develop connections as complex projects on developing new technologies that are in progress are based on consortiums.

R&D that is supported by small innovative companies is important because they can promptly develop elements of technologies for medium and large businesses. Funds for R&D for small innovative companies and startups are allocated within the framework of the federal project “Takeoff – from Startup to IPO” and through the Fund for Assistance to Small Innovative Enterprises in Science and Technology. Reductions in allocations of both the project and the fund are planned. Federal Project is to be reduced by almost 10% annually as compared with the Law No. 390-FZ. In turn, budgetary allocations for R&D to Fund for Assistance to Small Innovative Enterprises in Science and Technology will be lower than previously planned and by 2025 they will be cut in half.

R&D in certain critically important industries can include research and development in civilian industries, electronics, IT and materials for the energy sector. The situation here is uneven: an increase in allocations is planned in a number of areas but even there the expenditures will be lower than the level of 2022.

As to the Federal project “Promotion of research and development in civilian industries” allocations will be reduced in comparison with the level of 2022 and in 2023 will amount to 70.6% of the last year’s level, in 2023 – 78.2% and in 2025 – 96.2%. Thus, only by 2025 can the level of 2022 be achieved (excluding inflation).

Support of the IT-industry will be carried out in the framework of the Federal project “Development of human resources in the IT-industry” which provides for a 10% reduction in funding annually in 2023–2024 and the termination of support in 2025. Maybe, it is predicted that in two years the staffing problem in the IT industry will be solved.

With total influx of allocations to the State program “Development of electronic and radio electronic industry” by Rb13 bn in 2023 and almost Rb95 bn in 2024 expenses on means of production and R&D will be reduced. For the “Artificial Intelligence» project, there is no financing allocated in the year 2025. Furthermore, for federal project “Scientific support of the development of electronic and radio electronic industry” 23 billion rubles was allocated in 2022 and only Rb17.5 bn is planned for 2023 with a subsequent reduction in funding.

By comparison, “Chips and Science Act” recently signed by the U.S. President provides \$52 bn over 5 years of which \$11 bn is allocated to the Department of Commerce for a number of new R&D programs. While the Department of Defense

gets \$2 bn for the National Microelectronics R&D Network.<sup>1</sup> If translated at the average exchange rate of 2022 (68.5 rubles per \$1) the costs are incomparable: \$13 bn for R&D (or \$2.6 bn per year) is Rb890 bn for 5 years or Rb178.1 bn annually. Moreover, in case of the U.S. – new program provides additional funds for the development of electronics.

Finally, federal project “Development of New Materials and Technologies for Advanced Energy Systems” is about to see a reduction in appropriations relative to 2022. In 2023 funding is assumed to be 51.6% of 2022, in 2024 – 42.2% and in 2025 – 39.4%. Thus, a number of critical industries will not have sufficient funds for the development of domestic technologies.

Room for redistribution of funds within the budget for civilian R&D is small. It can be mainly done by reducing financing of budget classification “fundamental scientific research” under which subsidies for fundamental research (state assignments) and grants from the Russian Science Foundation (*Table 11*) are allocated. Annually more funds are allocated to them in total than to the National Project “Science and Universities”. These funds can be partially redirected to applied research, all the more so because topics of state assignments and grants are self-motivated and often do not correspond to the real needs of the country.<sup>2</sup>

*Table 11*

**R&D funding under subsidies to public institutions and grants from the Russian Science Foundation, Rb bn**

	2023	2024	2025
Subsidies to federal state institutions for completing scientific research, information on which is placed in unified state information system of registration of research, experimental design and technological works of civil purposes	120.3	127.3	134.5
Property contribution of the Russian Federation to the Russian Science Foundation	29.5	38.7	38.8

*Sources:* Appendix 10 to the explanatory note of Federal Law “On the Federal Budget for 2023 and for the Planning Period of 2024 and 2025”; own calculations.

The Committee on Science and Higher Education of the Lower House of Parliament in its conclusion of the draft federal budget considered planned growth in civilian R&D insufficient and not big enough to complete tasks of technological breakthrough.<sup>3</sup> Indeed, at the macro level R&D expenditure continues to fall: according to the data for 2021 for the first time in the past ten years it has fallen

1 CHIPS Act Funding Sets Semiconductor Initiatives Into Motion. 24 August 2022. URL: <https://www.aip.org/fyi/2022/chips-act-funding-sets-semiconductor-initiatives-motion>

2 Moreover, according to estimates by RAS President Gennady Krasnikov by the time topics of work for state assignments are formed they are often already 70–80% completed. See.: Meeting of Science and Education Council. 8 February 2023. URL: <http://kremlin.ru/events/president/news/70473>

3 *Volchkova N.* Hardly enough. The science budget will continue to shrink // Poisk. 21 October 2022. No 43. P. 3. URL: <https://poisknews.ru/science-politic/vryad-li-dostatocno-nauchnyj-byudzh-et-prodolzhit-sezhivatsya/>

to 0.99% of GDP.<sup>1</sup> Therefore, it would be correct not to redistribute funds within the budget for R&D but to look for reserves in other budget items. Example of China is illustrative in this respect: after USA strengthened restrictions, funds are increasing annually and are allocated from the country's budget to R&D, and now the total investment in research and development has exceeded 2% of GDP.<sup>2</sup>

### 5.3.7. Development of technological innovation

The main task in the field of innovative development was the development of technologies necessary to ensure technological sovereignty. It was formulated by the president and the government.<sup>3</sup> First Deputy Prime Minister Andrey Belousov defined technological sovereignty as “*maintenance of technological parity with leading countries of the world, possession of key technologies that determine the ability to solve strategic, socioeconomic and defense tasks*”.<sup>4</sup> Concept of technological sovereignty has been operationalized differently at the ministerial level. Ministry of Industry and Trade defined it through the resource base as a set of measures aimed at ensuring, developing and retaining human, financial, technological and material potential within Russia aimed at the development of Russian industry.<sup>5</sup> Ministry of Education and Science has not given a clear definition of technological sovereignty but it can be concluded from various speeches of the Minister of Science and news sources that it refers to “cooperation between authorities, scientific and educational sector and the real sector of the economy to quickly put the results of scientific research into practice”.<sup>6</sup> Some business representatives interpret technological sovereignty more narrowly – as “ability to overcome dominance of the largest and strongest players”.<sup>7</sup> That is, they view it in terms of competition between companies. Thus, despite frequent repetition the concept of technological sovereignty is interpreted broadly and diversely.

If we consider technological sovereignty as “possession of key technologies” then it means development along two parallel tracks: borrowing necessary technologies including reverse-engineering and developing domestic ones

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1 Ratai T. Russian Science in 2021. // Science. Technologies. Innovation. Express information. 8 September 2022. URL: <https://issek.hse.ru/news/759541996.html>

2 China's spending on R&D expected to reach new high in 2023. URL: <https://www.ecns.cn/cns-wire/2022-09-01/detail-ihccsiks1357125.shtml>

3 Plenary session of St. Petersburg International Economic Forum // President of Russia. 17 June 2022. URL: <http://kremlin.ru/events/president/news/68669>; Meeting of the Council for Strategic Development and National Projects.. 15 December 2022. URL: <http://kremlin.ru/events/president/news/70086>

4 Speech by Andrey Belousov at a meeting of the Council for Strategic Development and National Projects. 18 July 2022. URL: <http://www.kremlin.ru/events/councils/by-council/1029/69019>

5 Grinkevich D., Kinyakin E., Boiko A., Sidorkova I. Ministry of Industry and Trade offered a way to achieve technological sovereignty // Vedomosti. 6 November 2022. URL: <https://www.vedomosti.ru/business/articles/2022/11/03/948680-minpromtorg-predlozhit-sposob-dostich-tehnologicheskogo-suvereniteta>

6 Ministry of Science and Higher Education of the Russian Federation. Breakthrough developments of Russian scientists will ensure the technological sovereignty of the country. 28 October 2022. URL: <https://minobrnauki.gov.ru/press-center/news/nauka/60896/>

7 Mechanick A. Lack of ideas means subordination// Stimul.online. 2 September 2022. URL: <https://stimul.online/articles/innovatsii/bezydeynost-oznachaet-podchinennost/>

based on the development of technological leap. Notion of technological leap implies that in a certain technology market the country is able to follow leaders at an accelerated pace and not only “catch up” with them,<sup>1</sup> but also find its own trajectory of technological development.<sup>2</sup> This gives the laggards an opportunity to avoid significant investments in preceding technological systems.

Complexity of the set task is not only in the need to overcome unprecedented number of sanctions but is also in the existing reliance on imports, including means of production. According to the 2021 data, dependence on imports for machinery and equipment was 58%, for drugs and medical products – 60%, for chips – more than 70%,<sup>3</sup> for computers and electronics – 87%, for auto parts – 95%.<sup>4</sup> In addition, country has virtually no clean materials<sup>5</sup> which creates additional obstacles to development of new technologies. A poll held in 2022 among companies-members of Russian Union of Industrialists and Entrepreneurs (RUIE)<sup>6</sup> has confirmed that domestic products are lacking most of all in the following categories: “equipment” (the share of domestic products there is only 8%) and “components” (the share of domestic products – 11%).

In this context, two lines of action become important: 1) increase of state investments, 2) minimization of bureaucratic procedures that slow down the process of development and approbation of new technologies. President of the Russian Academy of Sciences also mentioned the importance of overcoming bureaucratic barriers expressing the broad opinion of the scientific community that it is necessary to abolish the Federal Law No. 44 regulating state purchases<sup>7</sup> for scientific organizations. The move will speed up the process of purchasing necessary equipment, reagents, components for prototypes and small batches<sup>8</sup> which will accelerate R&D results built into production.

In addition to direct financing, indirect measures such as lower loan rates are also important for companies (*Table 12*).

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1 Intellectual Property Rights, Development, and Catch up: An International Comparative Study / Ed. by H. Odagiri, A. Goto, A. Sunami. R.R. Nelson. London: Oxford University Press, 2010.

2 *Malerba F., Lee K.* An evolutionary perspective on economic catch-up by latecomers // *Industrial and Corporate Change*. 2021. Vol. 30. No. 4. P. 986–1010. DOI: 10.1093/icc/dtab008.

3 Domestic microcircuits are used mainly in the military-industrial complex and space.

4 *Sokolov A.* Russia's import dependence reached its highest level since 2014 amid rising prices // *Vedomosti*. 1 February 2022. URL: <https://www.vedomosti.ru/economics/articles/2022/02/01/907191-importozavisimost-rossii>

5 *Mechanik A.* From science to the business on science and back again: The scientist's way // *Expert*. 14 November 2022. No. 46. URL: <https://expert.ru/expert/2022/46/ot-nauki-k-biznesu-na-nauke-i-obratno-put-uchenogo/>

6 *Shokhin A.N.* Speech at the Plenary Session of the National Industrial Congress: Development Priorities. 5 October 2022.

7 Federal Law “ On the contract system for procurement of goods, works and services for state and municipal needs ” from 05.04.2013 No. 44-FZ. URL: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_144624/](http://www.consultant.ru/document/cons_doc_LAW_144624/)

8 *Sergeyev A.* Russia has always found a way out of hopeless situations // *RG – federal edition*. 15 March 2022. No. 55 (8703). URL: <https://rg.ru/2022/03/15/aleksandr-sergeev-rossiia-vsegdannahodila-vyhod-iz-bezvyhodnyh-situacij.html>

**Demand for economic policy measures from RSPB member companies to achieve technological sovereignty**

Measure	Percentage of respondents who consider the measure relevant, %
Loans at a lower rate	65
Simplification of government procurement	42
Income tax reduction	40
Reducing the rate of insurance premiums	36
Reimbursement of part of the costs for the purchase of pilot batches of products	29
Creation of industrial clusters	29
Reducing the number of inspections	28
Granting the status of a single supplier	28
Support under industrial mortgages	12

Source: Shokhin A.N. Speech at the plenary session of the National Industrial Congress: Development Priorities (5 October 2022).

In July, at a meeting of the Council for Strategic Development and National Projects the President of Russia outlined the main areas of technological development (end-to-end technologies) under sanctions pressure as well as state companies that are responsible for their development: Sberbank (artificial intelligence), Russian Railways (quantum communications), Rosatom (new materials and quantum computing), Rostelecom (ICT), Rosneft (genetic technologies). Thus, main reliance is on big business which is also apparent from the list of main instruments that are planned to be used to ensure technological sovereignty:

- the most important innovation projects of national importance;
- technological programs of industry ministries and state corporations;
- beacon projects<sup>1</sup> in the implementation of which optimal conditions for business, including regulatory and financial models, are worked out;
- National Technology Initiative (dealing with regulatory aspects and cultivation of startups);
- for staffing technological sovereignty - support for advanced engineering schools.

Listed areas of support include direct financing and regulatory measures. First step was reverse-engineering and parallel import of components. With RF Government Decree No. 506 of 29.03.2022 the government legalized parallel imports to meet the demand for foreign devices and technologies.<sup>2</sup>

1 Currently, five beacon projects have been launched, three of which focus on the use of unmanned vehicles in different environments, one on the development of electric vehicles and another on the development of personal digital medical devices (medical assistants).

2 RF Government Decree from 29.03.2022 No. 506 «About goods (groups of goods) in relation to which certain provisions of the Civil Code of the Russian Federation on protection of exclusive rights to results of intellectual activity expressed in such goods and means of individualization with which such goods are marked cannot be applied». URL: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_413173/](http://www.consultant.ru/document/cons_doc_LAW_413173/)

Development institutions have not yet become serious players in ensuring technological sovereignty and in general last year they actually returned to their previous organizational forms of activity. RF Government Decree No. 459 dated March 24, 2022 canceled the transfer of development institutions to VEB.RF<sup>1</sup> as well as relevant road map and the VEB.RF functioning as the founder and owner of properties of the Agency for Technological Development, the SME Corporation, Rusnano, Skolkovo Foundation, FRE, the Foundation for Assistance to Innovations, RFRIT and the Foundation of Infrastructure and Educational Programs. Documents on development of these structures received the stamp of For Official Use Only. Among all the listed institutes of development special attention was attracted to Rusnano.

After former head of Rusnano A. Chubais left the country, the search for causes of inefficiency of this organization intensified. Among them was the low quality of project management, errors in estimating the volume of required investments for implementation of projects, too high costs of maintaining the very staff of Rusnano. In mid-April the new head of Rusnano Sergey Kulikov appealed to the Prosecutor General's Office with a request to check activities of this organization in the period when it was headed by Anatoly Chubais<sup>2</sup>. Later, in June, at a meeting with the President the head of Rusnano said that from the moment of establishment of the company and up to 2020 only Rb65 bn of extrabudgetary funding had been attracted and for the last year almost the same amount – Rb64 bn.<sup>3</sup> Nevertheless, in October there was information about possible liquidation of Rusnano<sup>4</sup>. Despite the efforts taken by new management of the company it remains unprofitable partly due to inability to service the debt because to sanctions. Meanwhile an alternative scenario of transferring Rusnano to one of the corporations while reducing its functionality and reorientating it to a specific technology stack (for example, related to hydrogen transport) was also considered. Rusnano itself suggested changing the model of financing projects by increasing the share of private investment<sup>5</sup>. Furthermore, over the past two years Rusnano sold 70% of its assets most of which were “problematic,”<sup>6</sup> at the expense of which it partially repaid its debts. Final decision on the fate of Rusnano will be made by the President of Russia.

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1 RF Government Decree from 02.03.2022 No. 459 «On the Annulment of Certain Acts of the Government of the Russian Federation and on Amendments to the Order of the Government of the Russian Federation from 31.12.2020 No. 3710-p». URL: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_413819/92d969e26a4326c5d02fa79b8f9cf4994ee5633b/](http://www.consultant.ru/document/cons_doc_LAW_413819/92d969e26a4326c5d02fa79b8f9cf4994ee5633b/)

2 *Tutina V.* Kovalchuk said that Chubais did not create anything at Rusnano // RBK. 17 June 2022. URL: <https://www.rbc.ru/politics/17/06/2022/62acb34b9a7947d9e6ff3035>

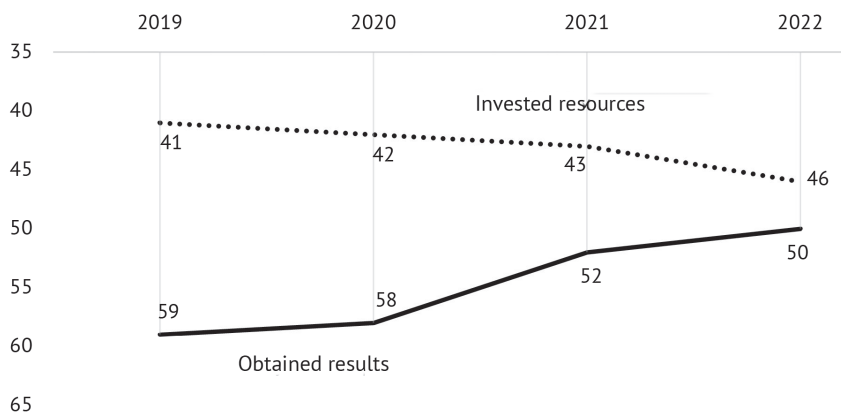
3 Meeting with Sergey Kulikov, head of Rusnano. 15 June 2022. URL: <http://kremlin.ru/events/president/news/68656>

4 *Chernyshova E., Kanaev P.* Authorities have begun discussing possible liquidation of Rusnano // RBK. 19 October 2022. URL: <https://www.rbc.ru/business/19/10/2022/634f559d9a79475b384c7d51>

5 *Dobrunov M.* Rusnano named an alternative to liquidation of the company // RBK. 20 October 2022. URL: <https://www.rbc.ru/business/20/10/2022/6350f2c59a79475ba2ab963f>

6 Rusnano sold out 70% of its historical assets in two years // TASS. 25 October 2022. URL: <https://tass.ru/ekonomika/16153479>





*Fig. 1.* Russia: indicators of invested resources and obtained results, the Global Innovation Index

Sources: Global Innovation Index, 2019; 2020; 2021; 2022.

At present, proprietary technologies on which production is based are created mostly by medium-sized technological companies-gasels,<sup>1</sup> often based on consortiums with organizations-developers (including universities and scientific institutes). According to the latest data about 2000 organizations<sup>2</sup> belong to the fast-growing innovation-active companies in the high-tech sphere. This is about half of the fast-growing high-tech companies and 7% of all fast-growing companies in the country with more than 10 employees. Examples of successfully implemented projects include creation of equipment for mobile communication networks, mobile energy sources based on metal-ion storage devices and hydrogen fuel cells; proprietary design systems; development of some groups of modern pharmaceuticals. Since beginning of the pandemic state support measures for such companies has been discussed and a number of resolutions have been passed but not all of them have come into force<sup>3</sup>. Special conditions were created only for companies in the ICT sector. They are exempt from profit tax for three years, inspections are cancelled for the same period and they can get loans at a rate of no more than 3%. For them procedures for employing foreigners and obtaining a residence permit are simplified<sup>4</sup>.

1 These are fast-growing companies with annual revenue growth of at least 20% for three years.

2 *Rozmirovich S.* Gazelles of Good Hope // *Expert*. 16 May 2022. URL: <https://expert.ru/2022/05/16/gazeli-dobroy-nadezhdy/>

3 Thus, RF Government Decree of 17.03.2022 № 392 «On approval of rules for granting subsidies from the federal budget to an autonomous non-profit organization» Engineering and Innovation Support Center «in order to create tools for finalizing products of technological companies to requirements of major corporations,» which determines allocation of funds to medium technology companies to finalize their products for guaranteed demand from major corporations, has not yet entered into force. URL: <https://www.garant.ru/products/ipo/prime/doc/403617556/>

4 Support measures for IT companies // *ConsultantPlus*. URL: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_411198/d47d63c1bd09b4f09b07d6278860e9673ca0f14f/](http://www.consultant.ru/document/cons_doc_LAW_411198/d47d63c1bd09b4f09b07d6278860e9673ca0f14f/)



It should be noted that medium-sized companies developing their own technologies often contradicts the experience and interests of large and state businesses and in some cases even relevant agencies which focus on the critical problems of import substitution. In such a situation acceleration of own promising developments requires introduction of a management scheme which should operate in parallel with existing system of civil industry regulation<sup>1</sup>.

Some optimism about the possibility of a technological leap is inspired by dynamics of Russia's position in the Global Innovation Index in terms of growing indicators of innovation performance, even with deteriorating indicators of invested resources (*Fig. 1*).

### 5.3.8. Conclusions

Sanctions have had a significant negative impact on sphere of science. They aimed to isolate Russian organizations while by 2022 Russian science was already deeply embedded in international cooperation. Russian organizations and researchers were actively working on mega-science installations; a number of programs were aimed at attracting leading foreign scientists to the country; system of evaluation and promotion of researchers and organizations was based on the use of international databases of scientific publications Web of Science and Scopus. Outflow of personnel from science created additional problems despite the fact that the flow of those who left was diverse and included not only demanded specialists. Nevertheless, it is hardly possible to quickly replace them with young scientists without losing time and quality of work. Therefore, all previous guidelines and models had to be reconsidered.

A new ideology was developed in the area of a national system for assessing the performance of scientific activities and with regard to international relations with refocusing on countries that have not imposed sanctions. Where possible participation in research at megascience sites was continued.

An important policy direction has become reorientation on supporting applied research in the interests of economic development and technological sovereignty but there are a number of complex problems here. First: for the sake of technological leap, it is important to radically increase investment which is not included in the budget for R&D over the next three years. Second: the country has few domestic production facilities needed to create new technologies and in science the lack of domestic instruments to carry out modern research is a separate problem. Federal project to develop scientific instrumentation, although it was initiated, was on the scale of a pilot project. Creation of domestic instrumentation requires not only more significant funds but also a long period of time.

Global experience including that of countries under sanctions shows that rapid development of technology is only possible with involvement of international expertise access to which is obtained indirectly through personal connections as well as interaction with scientific diaspora. Russia has yet to establish such links,

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<sup>1</sup> *Dezhina I.G., Ponomarev A.K. Approaches to ensuring technological independence of Russia // Science Management: Theory and Practice. 2022. V. 4. No. 3. P. 53–68. DOI: 10.19181/smt.2022.4.3.5. EDN: DGCVVI*

which is not easy in the atmosphere of sanctions imposed on the Russian science and technology sector.

#### **5.4. Russia in international institutes<sup>1</sup>**

In 2022, the process of gradual destruction of multilateralization gave way to an acute crisis. Multiple challenges, including a continued spread of new strains of coronavirus, disruptions in supply chains, appreciation of prices for food and energy, rising inflation, slowdown of economic growth rates, increased inequality and lagging behind in achieving sustainable development goals and targets of the Paris climate agreement required collective actions. However, after the recognition of the Donetsk People's Republic and the Lugansk People's Republic and the beginning of the special military operation (SMO) the USA and its allies took unprecedented efforts to isolate Russia in the system of multilateral institutes. The pressure put by G7 and their partners has led to an increased mistrust and tensions in the relations between the westerns countries and developing countries, as well as the risk of key international institutes' loss of functionality.

##### **5.4.1. The G20: a critical period**

The G20 presidency of Indonesia in 2022 started the chain of emerging market countries' presidencies, that is, India, Brazil and South Africa<sup>2</sup> in 2023, 2024 and 2025, respectively. This has become an important factor of a change in the balance of power in the context of the G7's mounting pressure on the G20 decision-making processes; this factor was already explicit as far back as 2021. Indonesia always sought to represent in the G20 the interests of the developing countries, particularly South Asian nations. The presidency agenda was based on the goal to develop the G20's collective decisions on the most topical global issues with the developing countries' priorities and national development goals taken into account. The three sectorial priorities included the strengthening of the global architecture of healthcare and its capacity to respond to crises; facilitation of an inclusive digital transformation as a source of economic growth; a switchover to low-carbon energy systems and achievement of energy security and "green" and sustainable future.

Geopolitical contradictions between the NATO and Russia became a challenge to the G20. The USA and its allies put an unprecedented pressure on the presidency demanding the exclusion of Russia from the work and threatening to boycott the meetings and approval of documents. The BRICS countries, as well as Indonesia, Mexico, Argentina, Saudi Arabia, Turkey and South Korea were against the exclusion of Russia.<sup>3</sup> Indonesia put a lot of effort and resources in the

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2 *R. Duttagupta and C. Pazarbasioglu*. Miles to Go. URL: <https://www.imf.org/external/pubs/ft/fandd/2021/06/the-future-of-emerging-markets-duttagupta-and-pazarbasioglu.htm>

3 G20 members' views on Russia diverge, making expulsion unlikely. URL: <https://ihsmarkit.com/research-analysis/g20-members-views-on-russia-diverge-making-expulsion-unlikely.html>

preparation of the presidency and was determined to achieve success in terms of preservation of the G20's unity and credibility with developing countries. During its presidency, Indonesia sought by all means to preserve the G20 as the main economic cooperation forum and catalyst for global economic recovery.<sup>1</sup> The main factors which defined Indonesia's actions were the following: its relations with Russia as a key trade partner and a source of investments,<sup>2</sup> historical perception of Russia as an ally,<sup>3</sup> public judgement of the US policy as hypocritical,<sup>4</sup> concern over the risks of appreciation of prices for energy commodities and food and responsibility for regional stability and security,<sup>5</sup> as well as the role of Ukraine as a major exporter of wheat to Indonesia.<sup>6</sup> Indonesia took intense diplomatic efforts at all levels seeking to adjust the agenda and procedures in order to facilitate the G20 to overcome economic implications of the conflict and embark on the trajectory of sustainable and inclusive growth.

Based on the results of the April G20 summit of finance ministers and central bank governors, Shri Mulyani, Indonesian Finance Minister noted that a demonstrative exit of some delegations from the hall during the speech of Russian participants did not disrupt the discussion and search for solutions and a consensus on substantive matters.<sup>7</sup> The following official position was declared: "The Presidency is obligated to invite all G20 members to all meetings in order to facilitate effective discussions and search for solutions."<sup>8</sup>

The pressure put by the USA and the G7 countries did not ease throughout the entire presidency, nor did Indonesia's diplomatic efforts. Joko Widodo, President of Indonesia took part in the expanded format of the G7 summit and the "BRICS plus" summit, held numerous bilateral meetings with heads of states and international organizations, visited Kiev and Moscow where he personally extended the invitation to the summit to Vladimir Zelensky, President of Ukraine and Vladimir Putin, President of the Russian Federation. Retno Marsudi, Indonesian Foreign Minister and G20 Sherpa worked with all G20 members in multilateral and bilateral formats in a search for compromises and a common platform

- 1 Minister Retno Marsudi Discusses Preparations for G20 Summit at Global Governance Group Forum. URL: <https://kemlu.go.id/portal/en/read/4004/berita/minister-retno-marsudi-discusses-preparations-for-g20-summit-at-global-governance-group-forum>
- 2 Indonesia-Russia Committed to Remove Trade Barriers Between Two Countries. URL: <https://kemlu.go.id/portal/en/read/2218/berita/indonesia-russia-committed-to-remove-trade-barriers-between-two-countries>
- 3 Indonesia: Looking Up to Russia, and Away from Europe. URL: <https://www.institutmontaigne.org/en/analysis/indonesia-looking-russia-and-away-europe>
- 4 Ukraine war highlights differences between Indonesian and US foreign policy frameworks. URL: <https://www.eastasiaforum.org/2022/08/05/ukraine-war-highlights-differences-between-indonesian-and-u-s-foreign-policy-frameworks/>
- 5 A.W. Mantong and G.Kembara. Indonesia's G20 Presidency and the War in Ukraine. URL: <https://www.iai.it/en/publicazioni/indonesias-g20-presidency-and-war-ukraine>
- 6 H.Manurung. Indonesia-Ukraine Bilateral Relations. URL: [https://www.researchgate.net/publication/353738760\\_INDONESIA\\_-\\_UKRAINE\\_BILATERAL\\_RELATIONS](https://www.researchgate.net/publication/353738760_INDONESIA_-_UKRAINE_BILATERAL_RELATIONS)
- 7 G20 Press Conference: the 2nd Finance Ministers and Central Bank Governors Meeting. URL: <https://www.youtube.com/watch?v=3CvsumWiX7Y>
- 8 Press release following the G20 Finance Ministers and Central Bank Governors April 4 meeting. URL: [https://www.ranepa.ru/images/media/g20/2022indoneziya/Ministers\\_of\\_Finance\\_and\\_Governors\\_of\\_Central\\_Banks\\_of\\_G20\\_Countries\\_Work\\_Together\\_on\\_Solutions\\_on\\_the\\_Current\\_Global\\_Economic\\_Challenges.pdf](https://www.ranepa.ru/images/media/g20/2022indoneziya/Ministers_of_Finance_and_Governors_of_Central_Banks_of_G20_Countries_Work_Together_on_Solutions_on_the_Current_Global_Economic_Challenges.pdf)

between the G7 and developing countries. The US and its partners demanded a condemnation of Russia, declaring that a rise in prices for food and resources, inflation and a slowdown of economic growth were the implications of “Russia’s war against Ukraine” and dismissed calls for a peaceful settlement and rejection of unilateral restrictive measures. As a result, none of 15 ministerial meetings held after the start of the SMO ended up with an approval of the final document. The differences and agreed decisions were reflected in the Chairman’s statement which first part highlighted the differences in opinions: some member-countries condemned Russia, while others expressed the opinion that the forum was not the place for discussion of geopolitical issues and still others called for the end of war and restoration of stability. The other part of the statement dealt with agreed decisions.<sup>1</sup>

Russia sought to reduce the level of confrontation and form a positive agenda on substantive issues and a reasoned dialogue though it was often infeasible. For example, in response to the assessment of the effect of sanctions on global food security, sanctioning countries consistently stated that these measures were not aimed at agricultural products and fertilizers, ignoring the impact of financial sanctions, insurance limitations and an economic uncertainty around exports from Russia, the fact that appreciation of prices for energy commodities and fertilizers transformed into increased costs of production and a rise in future prices for food,<sup>2</sup> as well as the UN’s warning that “an effective resolution of the food crisis was infeasible without reintegration of Ukraine’s food products, as well as Russia’s food products and fertilizers into global markets.”<sup>3</sup> The differences prevented from negotiating decisions for the sake of market stabilization.

The G7 moves often ran counter to the G20 decisions and presidency’s priorities. For example, in connection with the G7 decision to ban all services related with transportation of Russian oil and petrochemicals in case of an excess of the price cap<sup>4</sup> which was not established at that time many G20 members opposed unilateral restrictive measures at the meeting of G20 energy ministers.<sup>5</sup> However, despite the G20 statement that energy should never be used as an instrument of political pressure and the assessment of a prospective global production decline of 0.8% by 2023 owing to price rises caused by the ban on hydrocarbons from Russia<sup>6</sup> the G7 finance ministers declared on the same day their intent to complete

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1 For example, see: G20 Chair’s Summary: Trade, Investment and Industry Ministers Meeting. URL: <http://www.g20.utoronto.ca/2022/220923-trade-investment-industry.html>

2 The impacts and policy implications of Russia’s aggression against Ukraine on agricultural markets. URL: <https://www.oecd.org/ukraine-hub/policy-responses/the-impacts-and-policy-implications-of-russia-s-aggression-against-ukraine-on-agricultural-markets-0030a4cd/#figure-d1e267>

3 Also, they ignored the fact that the FAO food price index reached the record-high level in February 2022 before the start of the SMO and fell somewhat in April and May 2022. See: Global impact of the war in Ukraine: Billions of people face the greatest cost-of-living crisis in a generation. URL: [https://news.un.org/pages/wp-content/uploads/2022/06/GCRG\\_2nd-Brief\\_Jun8\\_2022\\_FINAL.pdf](https://news.un.org/pages/wp-content/uploads/2022/06/GCRG_2nd-Brief_Jun8_2022_FINAL.pdf)

4 G7 Leaders’ Communiqué, Elmau, 28 June 2022. URL: [http://www.g7.utoronto.ca/summit/2022elmau/FINAL\\_20220628\\_G7%20Statement%20Elmau%202022.pdf](http://www.g7.utoronto.ca/summit/2022elmau/FINAL_20220628_G7%20Statement%20Elmau%202022.pdf)

5 Chair’s Summary: Energy Transitions Ministers Meeting 2022. URL: <http://www.g20.utoronto.ca/2022/220902-energy-chair-summary.html>

6 Stagflation Risk Rises Amid Sharp Slowdown in Growth. URL: <https://www.worldbank.org/en/publication/global-economic-prospects>

preparations and implement a comprehensive ban on maritime transportation of Russian oil and petrochemicals in case of the price cap being surpassed.<sup>1</sup>

Amid the sanctions build-up and increased confrontation, the approval of the declaration on the results of the leaders' summit<sup>2</sup> became the presidency's achievement and demonstration of developing countries' capacity to consolidate positions. The declaration fixes the differences in the assessments of the situation in Ukraine and sanctions, the supremacy of the international law, the need of a peaceful settlement of conflicts and the inadmissibility of use of nuclear weapons. At the same time, the G20 reaffirmed "the joint responsibility and need of cooperation in order to facilitate global economic recovery".<sup>3</sup> It is noteworthy that 223 responsibilities were formulated with over a half of them aimed at preventing crisis phenomena impeding the achievement of the 2030 agenda and acceleration of the implementation of SDGs.

The key decisions concerned facilitation of food and energy security and building up of the potential to fight pandemics on the national, regional and global levels. The G20 countries committed themselves to take urgent actions to prevent famine and food and fertilizer shortages, enhance market predictability and speed up a switchover to sustainable agricultural and food systems and delivery chains. The G20 leaders reaffirmed their commitment to achieve SDG 7 (one of 17 goals in the field of sustainable development) to facilitate an access to energy, particularly by means of diversification of energy balances, transfer to low-emission energy systems, achievement of stability, transparency and accessibility of energy markets and acceleration of energy transition. The declaration introduced a system of measures aimed at achieving the Paris agreement and limiting the temperature rise to 1.5°C, including a new obligation on climate finance in the volume of at least \$100 bn annually to support developing countries. Leaders committed themselves to build up the developing countries' potential to fight pandemics via facilitation of a timely and comprehensive access to safe, inexpensive, high-quality and effective vaccines, therapeutics and diagnostics, deployment of local production and elimination of critical funding gaps by means of the World Bank's Pandemic Fund.

The G20 countries reaffirmed their commitment to promote cooperation in the field of the macroeconomic policy, ensure financial and long-term fiscal stability and protection from downside risks and adverse effects on developing countries as a result of the tightening of the monetary policy. The G20 reiterated the commitment to the quota review, the IMF governance reform, cooperation in the development of a comprehensive international approach to the regulatory activity in respect of crypto assets and upgrading of transborder payments. The leaders endorsed the speedy implementation of the decision by the G20 and the OECD on redistribution of 20%-30% of TNC's profit in excess of the established limit in

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1 G7 Finance Ministers' Statement on the United Response to Russia's War of Aggression against Ukraine. URL: <http://www.g7.utoronto.ca/finance/220902-ukraine.html>

2 Russia was represented at the summit by Sergei Lavrov, RF Foreign Minister and Anton Siluanov, RF Finance Minister.

3 The Bali Declaration of the G20 leaders. URL: <http://kremlin.ru/events/president/news/69844>

favor of jurisdictions on which markets TNC carried out their operations and the introduction of the minimum global tax of 15% on TNC and emphasized the need of the WTO reform, including the reform of the dispute settlement mechanism.

Indeed, the gap between the level of the declared decisions rhetoric and real actions remains considerable. However, the G20 has retained its role as a leading forum of international cooperation. Amid unfriendly countries' efforts to isolate Russia, the G20 has become an important mechanism of networking with partners and participating in the collective decision-making process.

#### 5.4.2. The BRICS: consolidation of the partnership

Amid large-scale sanctions and pressure to isolate Russia, the BRICS have become a substantial pillar of Russia. The solidarity of the BRICS partners did not mean the approval of the SMO, but reflected the understanding of the causes of Russia's actions<sup>1</sup> and possible consequences of the confrontation with the NATO in Ukraine,<sup>2</sup> concern over the NATO's intension to globalize its zone of responsibility and weariness of double standards of "the international order based on the US rules."<sup>3</sup> The BRICS have consistently stood for a peaceful settlement of the crisis. Though China alone opposed openly sanctions against Russia,<sup>4</sup> the freezing of the two-thirds out of \$630 bn worth of the Central Bank of Russia's reserves<sup>5</sup> and \$30 bn of individuals' funds<sup>6</sup>, the disconnection of Russian banks from the SWIFT<sup>7</sup> and other financial restrictions highlighted explicitly to all BRICS member countries the risks associated with a lack of progress in reforming the international currency and financial system, which reform the BRICS had consistently stood for since the 2008 financial and economic crisis, and the need to speed up the implementation of the BRICS's decisions on the use of national currencies in mutual settlements and cooperation in the field of payment systems.<sup>8</sup>

Peace and security, the reform of the global governance system, economic recovery and promotion of the BRICS cooperation became the key lines in the BRICS work within the frameworks of China's chairmanship. Over 160 events in a hybrid and virtual formats were held. Based on the results of the 14<sup>th</sup> BRICS summit under the motto "Forging High-Quality Partnership for a New Era of Global Development", 60 concrete decisions were approved. The BRICS member-

1 *Abelow B.* (2022) How the West Brought War to Ukraine: Understanding How U.S. and NATO Policies Led to Crisis, War, and the Risk of Nuclear Catastrophe. Siland Press.

2 *Mearshheimer J.J.* Playing with Fire in Ukraine. The Underappreciated Risks of Catastrophic Escalation. URL: <https://www.foreignaffairs.com/ukraine/playing-fire-ukraine>

3 *Robinson N.J., Chomsky N.* If We Want Humanity to Survive, We Must Cooperate with China. URL: <https://chomsky.info/20220815/>

4 Foreign Ministry Spokesperson Hua Chunying's Regular Press Conference on February 23, 2022. URL: [https://www.fmprc.gov.cn/mfa\\_eng/xwfw\\_665399/s2510\\_665401/2511\\_665403/202202/t20220223\\_10644886.html](https://www.fmprc.gov.cn/mfa_eng/xwfw_665399/s2510_665401/2511_665403/202202/t20220223_10644886.html)

5 Reserves freeze sends shivers through Moscow. URL: <https://www.omfif.org/2022/03/reserves-freeze-sends-shivers-through-moscow/>

6 A US-backed global task force says it has frozen more than \$330 billion of assets from Russian oligarchs and the country's central bank in 100 days. URL: <https://www.businessinsider.com/repo-global-task-force-freeze-330-billion-russia-oligarch-assets-2022-6>

7 An update to our message for the Swift Community. URL: <https://www.swift.com/ru/node/308383>

8 The BRICS economic partnership strategy till 2025. URL: <https://brics-russia2020.ru/images/114/81/1148133.pdf>

countries stated their commitment to the peaceful settlement of differences and support of negotiations between Russia and Ukraine, declared about the need to preserve the integrity of the G20 and promote the engagement of developing and emerging market countries in international decision-making on economic issues, particularly within the frameworks of international financial institutions (IFI) and called on the leading developed countries to carry out a responsible economic policy to avoid negative consequences for developing countries, risks of economic disintegration and fragmentation of the international monetary and financial system. The BRICS leaders endorsed the idea of raising the flexibility of the reserve currency pool mechanism, promoting information security cooperation in the financial and payment sectors, as well as expanding the New Bank for Development (NBD).

The BRICS reaffirmed their commitment to implement the agenda in the field of sustainable development in the period till 2030 and called for the implementation of the Paris agreement on the basis of the principle of the common but differentiated responsibility, including developed countries' meeting of their obligations to support developing countries' efforts to eliminate climate change implications through funding and technology transfer. The BRICS stood against "green" trade barriers (such as the EU transborder carbon tax), underlying that all measures to fight climate change should be in compliance with the WTO agreements and by no means an instrument of discrimination or disguised restriction on international trade.

Sustainable development was increasingly on the top of the BRICS agenda. The consolidation of multilateralism and partnership for development, as well as the implementation of Chinese President Xi Jinping's initiative on global development were in the focus of the "BRICS plus" summit attended by leaders of 18 countries. Apart from the main five BRICS member-countries, participants in the dialogue were Algeria, Argentina, Egypt, Indonesia, Iran, Kazakhstan, Cambodia, Malaysia, Senegal, Thailand, Uzbekistan, Fiji and Ethiopia.

The positive agenda, work on a consensus basis, support of the reform of international institutes in the interests of developing countries and own initiatives aimed at solving global issues determine the BRICS's attractiveness as a new center of influence. The desire to join the BRICS was expressed by Argentina, Iran, Saudi Arabia and Algeria.<sup>1</sup> The expansion of the BRICS meets Russia's interests. New members, particularly Argentina and Saudi Arabia which are both members of the G20, may strengthen a negotiating position in other international institutes to counter the influence of the G7 which puts considerable pressure on decision-making in multilateral institutes. The expansion of the BRICS may facilitate the achievement of their goals, particularly the de-dollarization of the international trade and reforming of the international monetary and financial sectors. Undoubtedly, expansion involves considerable risks. On one hand, with two influential Middle East players joining the BRICS, its prestige will grow, while, on the other hand, the differences between Iran and Saudi Arabia may complicate collective decision-making, particularly on

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1 The prospects of joining by Indonesia, Turkey, Nigeria, Egypt and a few other countries were discussed.



regional security issues. The BRICS has amassed positive experience in mediating problems between member-countries, for example, de-escalation of territorial conflicts between China and India. Russia has always played an important role in the negotiating process. Though there may be some difficulties in securing the unity and promoting institutional development, the association will gain through its expansion a serious political weight which is needed for the formation of a multipolar world order which Russia and its BRICS partners stand for.

#### 5.4.3. The International Monetary Fund: politization of relations and limitation of access to resources

In 2022, Russia retained the status of a full member of the Bretton Woods Institutions – the International Monetary Fund (IMF) and the World Bank – and kept fulfilling its financial obligations to the IMF for implementation by the latter of its goals.

The IMF's lending resources are formed primarily by means of member states' quotas. In 2022, Russia's quota remained unchanged since 2016 at the level of 12.9037 bn units of special drawing rights (SDR) (as of the beginning of December 2022: 1 SDR was equal to about \$1.3).<sup>1</sup> Also, Russia's obligations were in effect within the IMF's "second and third lines of defense" – new agreements on borrowings under which Russia's potential liabilities amounted to 8.88 bn SDRs in the period till the end of 2025 and bilateral agreements on borrowings with SDRs being in the equivalent of \$3.9 bn<sup>2</sup> (obligations are in effect till the end of 2023 and can be extended for another year). According to the data as of the end of November 2022, the IMF's borrowings from Russia were equal to a very small portion of the potential volume.<sup>3</sup> Russia's participation in the formation of the IMF's lending resources along with the IMF's other member states makes it feasible to maintain the IMF's funding potential at the level of about \$1 trillion.

Apart from financial relations, Russia used to hold consultations on a regular basis with the IMF on various aspects of the economy and its development. After the start of the SMO, Russia's contacts with the IMF were suspended in this field. Though in February 2021 the IMF and the World Bank started another Financial Sector Assessment Program for Russia (FSAP) – this program is carried out every five years to review systemic financial risks, regulatory policy institutes in the banking and the securities market sectors and crisis management mechanisms – no reports on the outputs of this program were presented.<sup>4</sup> No annual consultations with the IMF mission under Article IV of the IMF's Charter were held, either.

Global economic risks related with the consequences of the COVID-19 pandemic and the Ukrainian crisis were in the IMF's focus in 2022. In particular,

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1 The Russian Federation: Financial Position in the Fund as of November 30, 2022. URL: <https://www.imf.org/external/np/fin/tad/exfin2.aspx?memberKey1=819&date1key=2099-12-31>

2 The Russian Federation: Lending to the Fund. URL: <https://www.imf.org/external/np/fin/tad/extlend1.aspx?memberKey1=819&date1key=2022-11-30>

3 IMF Concludes Steps to Maintain its Lending Capacity. URL: <https://www.imf.org/en/News/Articles/2021/01/08/pr214-imf-concludes-steps-to-maintain-its-lending-capacity>

4 The information on participation of the Central Bank of Russia in the Financial Sector Assessment Program (FSAP) of the IMF and the World Bank in 2021. URL: [http://www.cbr.ru/press/pr/?file=24022021\\_191749pr.htm](http://www.cbr.ru/press/pr/?file=24022021_191749pr.htm)



in March 2022 the IMF approved an emergency funding for Ukraine in the sum of \$1.4 bn.<sup>1</sup> In April 2022, at the request of several IMF member states a special account was established to ensure a safe facility for providing donors' financial aid to Ukraine.<sup>2</sup> As of the end of November 2022, about \$2.2 bn were credited to this account by Germany and Belgium. The Netherlands and Canada are expected to take part in it, too.<sup>3</sup> On September 30, 2022, the IMF started a new temporary Food Shock Window within the scope of emergency funding instruments, that is, the Rapid Credit Facility (RCF) and the Rapid Financing Instrument (RFI). The new window is meant to assist countries which encountered problems with the balance of payments owing to food shortages, dramatic appreciation of prices for imported food or decreased export earnings. Such countries can receive funds in the amount of up to 50% of their quota in the IMF in addition to the existing limits set on RCF and RFI in the period till September 29, 2023.<sup>4</sup> Ukraine was the IMF's first member country which took advantage of this instrument; the relevant funding in the volume of \$1.3 bn was approved in October 2022.<sup>5</sup>

Amid active support of Ukraine, western countries took efforts to politicize the relations between the IMF and Russia. According to the Russian official statements, the IMF started to pay less attention to challenges "in the global development, financial sustainability of different countries, growing food and energy crises, as well as disruptions in traditional supply chains and sales markets."<sup>6</sup> Further, some European countries proposed to exclude Russia from the IMF<sup>7</sup> and the US Treasury issued instructions to the US representatives in the IMF to oppose the provision of a financial aid to Russia and Belarus, except for cases where the civilian populations' essential needs were to be met and this move was eventually formalized in a special law (it is noteworthy that after 1999 Russia has never borrowed from the IMF, however, in 2021 it received 12.3 bn SDRs (about \$17.5 bn) within the scope of special distribution to facilitate economic recovery amid the COVID-19 pandemic)<sup>8</sup>. Russia's use of the IMF resources turned out to be

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1 IMF Executive Board Approves US\$ 1.4 Billion in Emergency Financing Support to Ukraine. URL: <https://www.imf.org/en/News/Articles/2022/03/09/pr2269-ukraine-imf-executive-board-approves-usd-billion-in-emergency-financing-support-to-ukraine>

2 IMF Executive Board Approves the Establishment of a Multi-Donor Administered Account for Ukraine. URL: <https://www.imf.org/en/News/Articles/2022/04/08/pr22111-imf-executive-board-approves-establishment-of-a-multi-donor-administered-account-for-ukraine>

3 Frequently-Asked Questions on Ukraine. URL: [https://www.imf.org/en/About/FAQ/ukraine%20Why%20did%20Ukraine%20cancel%20its%20existing%20program,%20with%20\\$2.2%20billion%20left%20to%20be%20disbursed?](https://www.imf.org/en/About/FAQ/ukraine%20Why%20did%20Ukraine%20cancel%20its%20existing%20program,%20with%20$2.2%20billion%20left%20to%20be%20disbursed?)

4 IMF Executive Board Approves a new Food Shock Window and an Enhanced Staff-Monitored Program with Board Involvement. URL: <https://www.imf.org/en/News/Articles/2022/10/05/pr22335-imf-approves-a-new-food-shock-window-and-an-enhanced-staff-monitored-program>

5 IMF Executive Board Approves US\$ 1.3 Billion in Emergency Financing Support to Ukraine. URL: <https://www.imf.org/en/News/Articles/2022/10/07/pr22343-imf-approves-emergency-financing-support-to-ukraine>

6 The briefing of Maria Zakharova, Russian Foreign Ministry official spokesman, Moscow, April 28, 2022. URL: [https://mid.ru/ru/foreign\\_policy/news/1811231/#11](https://mid.ru/ru/foreign_policy/news/1811231/#11)

7 The Lithuanian Finance Minister proposed to discuss a suspension of Russia's membership with the IMF at the EU level. URL: <https://tass.ru/ekonomika/14282785>

8 Joe Biden banned the US Treasury from exchanging special drawing rights with Russia. URL: <https://rg.ru/2022/10/05/bajden-zapretit-minfinu-ssha-obmenivatsia-specialnymi-pravami-zaimstvovaniia-s-rossiej.html>

limited: as SDRs are not regarded as a physical asset, they need to be converted in order to be used for purposes different from transactions with the IMF, while with taking into account restrictions imposed against the Russian economy this process became rather complicated.

Overall, the cooperation between Russia and the IMF has shrunk considerably since 2014 and became increasingly limited in 2022. Though Russia fulfilled consistently its obligations defined by the status of the IMF' creditor country, it had actually no option of using its resources in case of need. Further, the IMF capital and governance reforms, which were in the interests of Russia, including an increase in the share of quotas and voices of emerging market and developing countries and revision of the quota calculation formula within the scope of the 16<sup>th</sup> overall quota revision remained unrealized as before. The implementation of relevant decisions cannot be expected until 2023.

#### 5.4.4. The World Bank Group: the expansion of the moratorium on cooperation with Russia

The cooperation between Russia and the World Bank Group (WBG) has been mainly limited to research and expert analytical work in the field of macroeconomic prediction and financial regulation upgrading<sup>1</sup> since 2014. However, on March 2, 2022 amid the beginning of the SMO the WBG suspended all its operations with Russia.<sup>2</sup>

Prior to the March decision, the moratorium introduced by the International Bank for Reconstruction and Development (IBRD) in 2014 on new projects in Russia was already in effect. As of the beginning of December 2022, two IBRD projects in Russia approved before the moratorium was imposed had an "active" status. Within the scope of the project (\$60 mn) on upgrading the hydro-meteorological service, the World Bank transferred about \$1.2 mn in May 2022 (the transfer of funds after the suspension of work in Russia can be explained by a time lag between the approval of the decision and its execution). At the same time, Russia repaid its obligation on this loan in the sum of about \$3 mn in October.<sup>3</sup> With no update of the information on the IBRD website on the other active project related with promotion of the young generation human capital in the North Caucasus regions since 2016, it means that the project was actually suspended, too.<sup>4</sup> Also, other WBG institutes preserved financial restrictions on cooperation with Russia that were in effect as far back as 2014.

The cooperation between Russia and the WBG in the field of expert analytical work came to a halt. It primarily concerns the suspension of the joint IMF-WBG Financial Sector Assessment Program in Russia and release of regular reports on the Russian economy (in 2021 they presented two reports with the findings and guidelines for upgrading the social and economic situation in the country).

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1 The World Bank Group. URL: <https://www.cbr.ru/today/ms/smo/wb/>

2 World Bank Group Statement on Russia and Belarus. URL: <https://www.worldbank.org/en/news/statement/2022/03/02/world-bank-group-statement-on-russia-and-belarus>

3 RUSSIA HYDROMETEOROLOGICAL SERVICES MODERNIZATION. URL: <https://projects.worldbank.org/en/projects-operations/project-detail/P127676>

4 Promoting Youth Inclusion in the North Caucasus. URL: <https://projects.worldbank.org/en/projects-operations/project-detail/P132660>

Along with the IMF, as far back as March 2022 the World Bank declared about the need of a large-scale emergency support of the Ukrainian economy.<sup>1</sup> So, they promptly allocated \$350 mn to reduce the budget deficit and by the end of November 2022 the overall volume of mobilized funds to support Ukraine amounted to over \$17.8 bn. Over two-thirds of this amount were contributed by the US (\$11.4 bn).<sup>2</sup> Specifically, the decision on the aid package for Ukraine was presented with a political tinge and invariably justified by “hostile actions against the Ukrainian people.”<sup>3</sup> The overall volume of funds for recovery of the Ukrainian economy was estimated at \$349 bn in September 2022.<sup>4</sup>

In summary, limitations which existed in the relations between Russia and the WBG for the past eight years increased considerably in 2022; in addition to the suspension of financial cooperation this led to a halt to the ongoing expert analytical work. The issue of the WBG charter capital and governance reforms in the interests of emerging market and developing countries remained unsolved.

#### 5.4.5. Multilateral development banks: building up sustainable financing and suspension of projects in Russia

In 2022, the activities of key multilateral development banks (MDB), including those which Russia is a member of, for example, the European Bank for Reconstruction and Development (EBRD), the New Development Bank (NDB) and the Asia Infrastructure Development Bank (AIDB) were characterized by increased attention to a climate change effect on the implementation of sustainable development goals. In November 2022, ten large MDBs issued a joint statement that target levels of the international climate financing which planned to be achieved only by 2025 were surpassed as far back as 2021. With taking into account the relevance of climate change challenges, MDBs approved further collective measures, including the development of the steps in implementation of the Paris agreement, facilitation of a socially just transition to low-carbon development, an increase in funding the adaptation measures and scaling-up of concessional financing and mobilization of private investments.<sup>5</sup>

In order to enhance MDBs’ capacity in solving their goals, the international community’s priority consists in upgrading the efficiency of utilization of MDBs’ financial resources. A report on the independent review of approaches to the evaluation of MDBs’ capital sufficiency was initiated during Italy’s G20 presidency and presented during Indonesia’s presidency. A more effective utilization of capital

1 Joint IMF-World Bank Group Statement on the War in Ukraine. URL: <https://www.worldbank.org/en/news/statement/2022/03/01/joint-imf-wbg-statement-on-the-war-in-ukraine>

2 World Bank Financing Support Mobilization to Ukraine since 24 February 2022. URL: <https://www.worldbank.org/en/country/ukraine/brief/world-bank-emergency-financing-package-for-ukraine>

3 World Bank Mobilizes Additional \$530 Million in Support to Ukraine. URL: <https://www.worldbank.org/en/news/press-release/2022/09/30/world-bank-mobilizes-additional-530-million-in-support-to-ukraine>

4 Ukraine Recovery and Reconstruction Needs Estimated \$349 Billion. URL: <https://www.worldbank.org/en/news/press-release/2022/09/09/ukraine-recovery-and-reconstruction-needs-estimated-349-billion>

5 COP27 MULTILATERAL DEVELOPMENT BANKS JOINT STATEMENT. URL: [https://www.ndb.int/press\\_release/cop27-multilateral-development-banks-joint-statement/](https://www.ndb.int/press_release/cop27-multilateral-development-banks-joint-statement/)

is proposed to be achieved by means of a proper risk management, increased utilization of financial innovations, further dialogue with credit rating agencies, promotion of transparency and disclosure of the information.<sup>1</sup> A report on MDBs' implementation of these guidelines is expected to be prepared in 2023.<sup>2</sup>

It is noteworthy that the NDB and the AIDB worked within the context of the specified trends of a special attention to the issues of motivation of sustainable development and scaling-up of financial resources. The NDB's portfolio includes over 90 projects worth over \$30 bn.<sup>3</sup> Also, the NDB completed the program of issuing 20 bn yuan worth of bonds<sup>4</sup>. According to the Bank's overall strategy of development in 2022–2026 – “The Scaling-Up of Financing for Development for the Sake of Sustainable Future” – \$30 bn worth of funds will be allocated in this period, cooperation with other MDBs will be actively promoted and projects related with elimination of climate change implications and adaptation will account for 40% of the new portfolio.<sup>5</sup> In 2022, the AIDB approved 35 new projects, most of which are co-financed with other MDBs or private investors, and the bank's overall portfolio was equal to over \$37 bn.<sup>6</sup> The AIDB is expected to allocate up to \$50 bn on projects to fight climate change until 2030.<sup>7</sup>

Technical limitations and risks associated with financial operations with Russia led to a suspension of project activities of the NDB<sup>8</sup> and the AIDB<sup>9</sup> in Russia. With no new projects in Russia approved since 2014, the EBRD made a decision to suspend Russia's access to funding and closed its office in Moscow in April 2022. However, as in other MDBs, which Russia is a member of, its status of a shareholder was preserved.<sup>10</sup> At the same time, the EBRD plans to allocate \$3 bn to Ukraine until the end of 2023<sup>11</sup> and raised around \$1.4 bn from donor countries (the US, Canada, Western European countries, Japan the Republic of Korea and Taiwan).<sup>12</sup>

1 Publication of the report of the Independent Review of MDBs' Capital Adequacy Frameworks: Boosting MDBs' investing capacity. URL: <https://www.southbgroup.com/publication-of-the-report-of-the-independent-review-of-mdbs-capital-adequacy-frameworks-boosting-mdbs-investing-capacity/>

2 G20 BALI LEADERS' DECLARATION. URL: <http://static.kremlin.ru/media/events/files/en/u82esHn vQFdHOjV25AJg73rnLGEe8cK6.pdf>

3 NDB Investor Presentation. URL: <https://www.ndb.int/wp-content/uploads/2022/11/Investor-Presentation-2022Nov.pdf>

4 New Development Bank Issued Cny 3 Billion Bond in The China Interbank Bond Market And Completed its Second Rmb Bond Programme. URL: [https://www.ndb.int/press\\_release/new-development-bank-issued-cny-3-billion-bond-in-the-china-interbank-bond-market-and-completed-its-second-rmb-bond-programme/](https://www.ndb.int/press_release/new-development-bank-issued-cny-3-billion-bond-in-the-china-interbank-bond-market-and-completed-its-second-rmb-bond-programme/)

5 NDB Board of Governors Approved The Bank's General Strategy for 2022–2026. URL: [https://www.ndb.int/press\\_release/ndb-board-of-governors-approved-the-banks-general-strategy-for-2022-2026/](https://www.ndb.int/press_release/ndb-board-of-governors-approved-the-banks-general-strategy-for-2022-2026/)

6 Project Summary. URL: <https://www.aiib.org/en/projects/summary/index.html>

7 Green Infrastructure. URL: <https://www.aiib.org/en/about-aiib/who-we-are/infrastructure-for-tomorrow/green-infrastructure/index.html>

8 A Statement by The New Development Bank. URL: [https://www.ndb.int/press\\_release/astatement-by-the-new-development-bank/](https://www.ndb.int/press_release/astatement-by-the-new-development-bank/)

9 AIIB Statement on war in Ukraine. URL: <https://www.aiib.org/en/news-events/news/2022/AIIBStatement-on-war-in-Ukraine.html>

10 The EBRD in Russia. URL: <https://www.ebrd.com/russia.html>

11 EBRD commits up to €3 billion to Ukraine. URL: <https://www.ebrd.com/news/2022/ebrd-commits-up-to-3-billion-to-ukraine.html>

12 The EBRD and the war on Ukraine. URL: <https://www.ebrd.com/what-we-do/war-on-ukraine>

#### 5.4.6. The United Nations: amid the growing confrontation

In 2022, a key issue on the agenda of the main UN bodies was the escalation of the conflict between Russia and Ukraine. The circumstances related to the armed confrontation were actively debated at the UN Security Council (SC) and the General Assembly (GA).

Russia's status as a permanent member of the UN Security Council and its veto power prevented the adoption of resolutions which did not meet the Russian priorities. On February 25, 2022, Russia voted against the draft resolution submitted by Albania and the US, condemning "the aggression ... against Ukraine in violation of Article 4.2 of the UN Charter."<sup>1</sup> China as a permanent Security Council member abstained from voting. India and the United Arab Emirates took the same position. Two days later, the UN Security Council passed a resolution on the convening of a special extraordinary session of the UN General Assembly<sup>2</sup> and a large portion of debates shifted to the General Assembly venue. On September 30, 2022, Russia vetoed the UN Security Council resolution condemning the holding of the referendums in the Donetsk, Lugansk, Kherson and Zaporozhye Regions and "the annexation of Ukraine's territories."<sup>3</sup>

Russia's initiatives at the UN Security Council were vetoed by western countries, permanent UN SC members. So, on November 2, 2022 the Russia-drafted resolution on a special commission's investigation into activities of US biolabs in Ukraine was voted against by France, the UK and the US.<sup>4</sup>

In March, the UN General Assembly adopted two resolutions condemning Russia's actions during the SMO in the territory of Ukraine (March 2, 2022)<sup>5</sup> and demanding an immediate cessation of hostilities.<sup>6</sup> Both the resolutions were passed by a majority of votes with China, Belarus, North Korea, Iran, Syria and Eritrea voting against these UN GA resolutions and 35 and 38 countries abstained from voting on the first and second resolutions, respectively. At the same time, the resolution initiated by South Africa, China and a number of other countries on cessation of hostilities *by all parties to the conflict* and protection of the civilian population and infrastructure was dismissed from discussion as a result of a procedural vote.<sup>7</sup> In April 2022, the UN GA suspended Russia's work in the UN Human Rights Council.<sup>8</sup>

1 Russia imposed a veto on the UN Security Council resolution condemning its actions in Ukraine's territory. URL: <https://news.un.org/ru/story/2022/02/1418872>

2 Resolution 2623 (2022), Security Council Report. URL: [https://www.securitycouncilreport.org/atf/cf/%7B65BFCF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/s\\_res\\_2623.pdf](https://www.securitycouncilreport.org/atf/cf/%7B65BFCF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/s_res_2623.pdf)

3 UN Security Council: Russia vetoed a resolution condemning the annexation of the territories of Ukraine. URL: <https://news.un.org/ru/story/2022/09/1432952>

4 The UN Security Council did not adopt the Russian resolution on biolabs in Ukraine. URL: <https://www.rbc.ru/politics/03/11/2022/6362db1e9a7947f01b253128>

5 Aggression against Ukraine. URL: [https://www.securitycouncilreport.org/atf/cf/%7B65BFCF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/a\\_res\\_es-11\\_1.pdf](https://www.securitycouncilreport.org/atf/cf/%7B65BFCF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/a_res_es-11_1.pdf)

6 Humanitarian consequences of the aggression against Ukraine. URL: [https://www.securitycouncilreport.org/atf/cf/%7B65BFCF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/a\\_res\\_es-11\\_2.pdf](https://www.securitycouncilreport.org/atf/cf/%7B65BFCF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/a_res_es-11_2.pdf)

7 Humanitarian situation emanating out of the conflict in Ukraine. URL: [https://www.securitycouncilreport.org/atf/cf/%7B65BFCF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/a\\_es-11\\_L3.pdf](https://www.securitycouncilreport.org/atf/cf/%7B65BFCF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/a_es-11_L3.pdf)

8 The UN General Assembly suspended Russia's membership in the UN Human Rights Council // The UN News. URL: <https://news.un.org/ru/story/2022/04/1421492>

China supported Russia by voting against the resolution initiated by the G7 countries, Australia and South Korea. India, South Africa and Brazil abstained from voting.

On Liechtenstein's initiative, the UN General Assembly adopted a procedural amendment and received a permanent mandate on holding of debates in case of a use of veto in the UN Security Council. None of the BRICS member countries became a co-sponsor of the resolution. The decision was passed without voting.<sup>1</sup> Following the updated procedure, on October 12, 2022 after Russia's veto on the UN Security Council resolution condemning the referendums held in Ukraine's former territories the UN General Assembly adopted on the basis of open voting results the Albania-submitted draft resolution on the non-recognition of the referendums. From among the BRICS member countries, China, India and South Africa abstained from voting, while Brazil voted for the resolution<sup>2</sup>. On November 14, 2022, the UN General Assembly adopted the resolution "Furtherance of Remedy and Repatriation for Aggression against Ukraine."<sup>3</sup> The initiators of the voting were permanent UN representatives of Guatemala, Canada, the Netherlands and Ukraine<sup>4</sup> with support of the G7 member states and Australia.<sup>5</sup> As a result, the resolution was adopted with 94 votes for it<sup>6</sup> with China voting against and Brazil, India and South Africa abstained.

UN Secretary-General Antonio Guterres played a major role as a mediator together with President Erdogan of Turkey in negotiating the Black Sea grain initiative defining the procedure for safe transportation of food through the Black Sea. Under the agreement signed on July 22, 2022 between the parties to the deal and the UN, the UN representative supervises directly the loading of grain in Ukraine's seaports and participates in the inspection of foreign ships bound for Ukraine in order to prevent arms deliveries.<sup>7</sup> Also, the three-year memorandum of understanding on promoting Russian food products and fertilizers to the world markets signed by Andrei Belousov, Deputy Chairman of the RF Government and Antonio Guterres, UN Secretary-General was approved; the memorandum envisaged the UN's facilitation in removal of restrictions in the financial sector, insurance and logistics.<sup>8</sup> After the

1 General Assembly official records, 76th session : 69th plenary meeting, Tuesday, 26 April 2022, New York. URL: <https://digitallibrary.un.org/record/3987582?ln=ru>

2 The UN GA passed an anti-Russian resolution on Ukraine // Main. URL: <https://iz.ru/1409448/2022-10-13/ga-oon-priniala-antirossiiskuiu-rezoliutsciiu-po-ukraine-glavnoe>

3 Furtherance of remedy and reparation for aggression against Ukraine. URL: [https://www.securitycouncilreport.org/atf/cf/%7B65BF9F9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/a\\_res\\_es\\_11\\_5.pdf](https://www.securitycouncilreport.org/atf/cf/%7B65BF9F9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/a_res_es_11_5.pdf)

4 The letter of November 7, 2022 of permanent representatives of Guatemala, Canada, the Netherlands and Ukraine at the UN to the President of the General Assembly. URL: <https://undocs.org/Home/Mobile?FinalSymbol=A%2FES-11%2F10&Language=E&DeviceType=Desktop&LangRequested=False>

5 Furtherance of remedy and reparation for aggression against Ukraine. URL: <https://undocs.org/Home/Mobile?FinalSymbol=A%2FRES%2FES-11%2F5&Language=E&DeviceType=Desktop&LangRequested=False>

6 General Assembly: Eleventh Emergency Special Session, 15th Plenary Meeting. URL: <https://media.un.org/en/asset/k1k/k1kmh0hy0v>

7 The governments of Russia, Ukraine, Turkey and the UN signed an agreement on grain exports. URL: <https://tass.ru/ekonomika/15288405>

8 The Memorandum of Understanding between the Russian Federation and the UN Secretariat on promoting Russian food products and fertilizers to the world markets was signed. URL: <http://government.ru/news/46092/>



escalation of the situation in the Black Sea region late in October 2022 as a result of attacks by the Ukrainian military on Russian seaport facilities putting at risk the implementation of the July grain deal, the mediation of the UN and Turkey ensured the return of Russia to the reached agreements.<sup>1</sup>

The UN General Assembly member states demonstrated a constructive approach to multilateral debates on international information security. On November 8, 2022, the UN General Assembly adopted the Russia-drafted resolution approving the results of the first year of operation of the Open-End Working Group on security issues in the field of ICT where Russia sought to ensure the formation of the international information security system based on universal legally binding agreements.<sup>2</sup> The UN General Assembly voting on the Russia-drafted resolution on combating glorification of Nazism ended with a positive decision: the document was voted for by 120 countries with 10 countries abstained and 50 countries, including Poland, the US, France, Ukraine, Japan, Canada and Germany voting against it. The resolution called for prevention of the revision of the results of WW II and denial of crimes against humanity.<sup>3</sup>

So, the US and the EU used all available mechanisms to limit Russia's ability to defend its positions in the UN. In most cases, Russia's BRICS partner countries distanced themselves from anti-Russian multilateral decisions or opposed them. The constructive position of United Nations member states and UN representatives on international information and food security issues is of undoubted importance.

#### 5.4.7. The World Health Organization: maintaining a dialogue to overcome common challenges

Despite the escalation of the geopolitical situation, Russia's cooperation with the World Health Organization (WHO) continued in 2022.

As far back as December 2021, a negotiating process was started on the conclusion of a legally binding Global Convention on pandemic prevention, preparedness and response; the World Health Assembly passed a decision on the establishment of the intergovernmental negotiating body (INB) for preparation and negotiation of the draft agreement.<sup>4</sup> The first session of this body started its work on February 24, 2022.<sup>5</sup> Conceptual provisions of the draft convention were

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1 Russia returned to the grain deal with Ukraine. URL: <https://www.gazeta.ru/politics/2022/11/02/15720481.shtml>

2 Achievements in the field of information and telecommunications in the context of international security. URL: <https://undocs.org/Home/Mobile?FinalSymbol=a%2F77%2F380&Language=E&DeviceType=Desktop&LangRequested=False>

3 General Assembly Adopts 51 Third Committee Drafts on Combating Glorification of Nazism, Refugees, Displaced Persons, Protecting Children from Sexual Exploitation. URL: <https://press.un.org/en/2022/ga12483.doc.htm>

4 The World Health Assembly resolved to begin the process of development of the historical global convention on pandemic prevention, preparedness and response. URL: <https://www.who.int/ru/news/item/01-12-2021-world-health-assembly-agrees-to-launch-process-to-develop-historic-global-accord-on-pandemic-prevention-preparedness-and-response>

5 WHO Director-General's opening remarks at first meeting of the Intergovernmental Negotiating Body to draft and negotiate a WHO convention, agreement or other international instrument on pandemic prevention, preparedness and response. 24 February 2022. URL: <https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-first-meeting-of-the-intergovernmental-negotiating-body-to-draft-and-negotiate-a-who-convention-agreement->

formulated by December 7, 2022.<sup>1</sup> Russia supported these efforts. In particular, Sergei Lavrov, Russian Foreign Minister declared about the need to step up work on “promotion of preparedness to infectious diseases, including those similar to the coronavirus pandemic.”

Russia supported the G20 initiative to establish the financial mediation fund for pandemic prevention under the World Bank (the Pandemic Fund).<sup>2</sup> The Fund was established in September 2022. It sees its goal in facilitating “an additional long-term financing for reinforcing the capacity to respond to pandemics in countries with a low or medium level of income and address critical gaps by means of investments and technical assistance at national, regional and global levels.” The Fund’s governing bodies, in particular the Secretariate and the Technical Advisory Board include WHO representatives. As of November 2022, donors’ declared liabilities were equal to \$1.4 bn.<sup>3</sup>

The 75<sup>th</sup> session of the World Health Assembly held in Geneva on May 22–28, 2022 became an important event of the year.<sup>4</sup> The Assembly’s key decision was the adoption of the resolution on strengthening the WTO preparedness for and response to health emergencies. In particular, it was envisaged to step up the work of the group on amendment of the International Health Regulations. The WHO Director General was instructed to assist this work and prepare the report on the progress in this line of operation.<sup>5</sup>

The 75<sup>th</sup> session of the World Health Assembly adopted resolution A75/A/CONF./6 on “Health emergency in Ukraine and in refugee receiving and hosting countries, stemming from the Russian Federation’s aggression against Ukraine.” The resolution condemns “the Russian Federation’s aggression against Ukraine” and calls on the WHO member countries to increase their contributions to aid Ukraine and refugee receiving and hosting countries.<sup>6</sup> Russia and Syria proposed their draft resolution free of political assessments.<sup>7</sup>

The WHO published several calls to provide emergency aid and support to Ukraine<sup>8</sup> and refugee receiving neighboring countries and reported its supply

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or-other-international-instrument-on-pandemic-prevention-preparedness-and-response-24-february-2022

- 1 Conceptual zero draft for the consideration of the Intergovernmental Negotiating Body at its third meeting. URL: [https://apps.who.int/gb/inb/pdf\\_files/inb3/A\\_INB3\\_3-en.pdf](https://apps.who.int/gb/inb/pdf_files/inb3/A_INB3_3-en.pdf)
- 2 Russian Foreign Minister Sergei Lavrov’s address and answers to media questions on the results of the G20 summit // Denpasar. November 15, 2022. URL: <https://www.mid.ru/ru/detail-material-page/1838803/>
- 3 New Fund for Pandemic Prevention, Preparedness and Response Formally Established. URL: <https://www.worldbank.org/en/news/press-release/2022/09/09/new-fund-for-pandemic-prevention-preparedness-and-response-formally-established>
- 4 Seventy-fifth World Health Assembly. URL: <https://www.who.int/about/governance/world-health-assembly/seventy-fifth-world-health-assembly>
- 5 Strengthening WHO preparedness for and response to health emergencies. URL: [https://apps.who.int/gb/ebwha/pdf\\_files/WHA75/A75\(9\)-en.pdf](https://apps.who.int/gb/ebwha/pdf_files/WHA75/A75(9)-en.pdf)
- 6 Health emergency in Ukraine and in refugee receiving and hosting countries, stemming from the Russian Federation’s aggression against Ukraine. URL: [https://apps.who.int/gb/ebwha/pdf\\_files/WHA75/A75\\_ACONF6-ru.pdf](https://apps.who.int/gb/ebwha/pdf_files/WHA75/A75_ACONF6-ru.pdf)
- 7 Health emergency in and around Ukraine and refugee receiving and hosting countries. URL: [https://apps.who.int/gb/ebwha/pdf\\_files/WHA75/A75\\_ACONF8-en.pdf](https://apps.who.int/gb/ebwha/pdf_files/WHA75/A75_ACONF8-en.pdf)
- 8 Ukraine and Neighboring Countries. URL: [https://cdn.who.int/media/docs/default-source/emergency-preparedness/jmo\\_who\\_ghea-2022\\_ukraine.pdf?sfvrsn=9c031bf8\\_3&download=true](https://cdn.who.int/media/docs/default-source/emergency-preparedness/jmo_who_ghea-2022_ukraine.pdf?sfvrsn=9c031bf8_3&download=true)



of 398 tons of medicines and medical equipment.<sup>1</sup> In March-October 2022, they raised \$135 mn in the emergency fund, that is, 80.8% of the required sum.<sup>2</sup>

Resolution EUR/RCSS/R1 on “Health emergency in Ukraine and neighboring countries, stemming from the Russian Federation’s aggression” of the special session of the WHO European Regional Committee called for a transfer of the WHO Regional Office for Prevention and Control of Noncommunicable Diseases beyond the territory of the Russian Federation and a temporary suspension of all regional meetings under the WHO auspices in the Russian Federation until peaceful settlement of the conflict.<sup>3</sup> In September 2022, the WHO regional office in Europe confirmed the suspension of the WHO bodies’ meetings and consultations in Europe. However, the transfer of the WHO Regional Office for Prevention and Control of Noncommunicable Diseases did not take place; it still performs its functions. The funding of its activities is carried out by means of the RF Government’s grants. In 2022, the Moscow Office for Prevention and Control of Noncommunicable Diseases implemented the following: subregional dialogues on the fight against obesity for Western Balkan and Central Asian countries; technical support within the scope of the WHO European initiative on epidemiological surveillance of child obesity; a training seminar and technical experts’ meeting on taxation in the interests of health protection (an anti-alcohol policy); a technical seminar on tobacco control; the meeting of the network of coordinators on physical activity issues for the EU; development of instruments to fight disinformation in the healthcare sector with a particular attention paid to noncommunicable diseases.<sup>4</sup>

Russia keeps working on promoting availability of vaccines against COVID-19. According to the statement of Sergei Lavrov, Russian Foreign Minister, “owing to the gap in approaches to vaccination, its level in developed countries amounted to 60%, while in poor countries, to the mere 5%.” To eliminate this imbalance, Russia stood for the vaccine registration process being free from politization. For example, Sergei Lavrov noted that the registration of the Russian “Sputnik-V” vaccine was artificially slowed down despite the fact that it proved its efficiency and was successfully supplied to 70 countries.<sup>5</sup>

Despite the worsening of the relations between Russia and the WHO, they keep maintaining contacts. Russia is committed to continue its work in the WHO

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1 WHO Foundation calls for additional support for Health Emergency Appeal for Ukraine. URL: <https://who.foundation/wp-content/uploads/2022/05/WHO-Foundation-Ukraine-second-appeal-press-release-12.05.22.pdf>

2 Contributions to WHO’s Ukraine emergency appeal and refugee-receiving and hosting countries. URL: <https://www.who.int/emergencies/situations/ukraine-emergency/funding>

3 WHA75: Health emergency in Ukraine and neighboring countries, stemming from the Russian Federation’s aggression. URL: <https://apps.who.int/iris/bitstream/handle/10665/354120/ssrs01e-HealthEmergency-220378.pdf>

4 Implementation of the resolution EUR/RCSS/R1. URL: <https://apps.who.int/iris/bitstream/handle/10665/362151/72wd20-r-Res-RCSS-R1-220666.pdf?sequence=1&isAllowed=y>

5 Russian Foreign Minister Sergei Lavrov’s address and answers to media questions on the results of the G20 summit // Denpasar. November 15, 2022. URL: <https://www.mid.ru/ru/detail-material-page/1838803/>

and take part in “solution of global healthcare issues.”<sup>1</sup> In November 2022, the RF Ministry of Health and the WHO Regional Office in Europe reached an agreement on maintaining a sustainable dialogue.<sup>2</sup>

#### 5.4.8. OPEC+: difficult decision amid high volatility on oil markets

A lack of compromise in negotiations in the OPEC+ format led to a collapse of prices for oil on global markets. After long negotiations, the OPEC+ member countries eventually succeeded in negotiating the reduction in oil production by the mid-year when the scope of decline in business activity because of COVID restrictions became clear. In 2021, the OPEC+ did not take any serious decisions to avoid an effect on the price for oil. In 2022, the geopolitical and energy crises led to a dramatic appreciation of prices for oil which amounted to \$120 per barrel in March.<sup>3</sup> In a situation where both market and non-market mechanisms had a direct effect on appreciation of oil prices, the OPEC and the OPEC+ left oil production volumes unchanged. However, by summer 2022 prices for oil started to go down. Further, the G7 countries announced their intention to refuse gradually from Russian oil, introduce restrictions on tanker transportation of Russian oil and set a certain price cap on it. In addition, the US delivered large volumes of oil from its national reserves to reduce the price.<sup>4</sup> The G7 efforts to influence the price by changing the volume of traded oil, as well as the possible testing of the mechanism of artificial price reduction caused concern of oil-exporting countries, the more so as the price cap in terms of sanctions had never been introduced before; in case of Iran and Venezuela they imposed restrictions on the volume of oil supplies.

In autumn, amid the economic crisis and China’s tough policy in respect of the spread of coronavirus infection – these two factors led to a decrease in demand for oil – the price for oil fell to about \$80 per barrel. For the first time in a long period, on October 5, 2022 OPEC+ representatives met personally and decided to reduce oil production by 2,000 barrels a day relative to the oil production levels as of August 2022 starting from November 2022 and extend the agreement on cooperation within the scope of the OPEC+ which was to expire by the end of the year.<sup>5</sup> The decision was meant to stop a fall in oil prices, facilitate their growth in the interests of oil-exporting countries and consolidate control over factors of pricing.

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1 The telephone conversation between Sergei Lavrov, Russian Foreign Minister and Tedros Adhanom, WHO Director General. URL: [https://www.mid.ru/ru/foreign\\_policy/news/1813903/#sel=8:35:Dij,9:5:ah8](https://www.mid.ru/ru/foreign_policy/news/1813903/#sel=8:35:Dij,9:5:ah8)

2 The RF Ministry of Health and WHO European Office agreed on maintaining regular contacts. URL: <https://tass.ru/obschestvo/16341083>

3 Closing price of Brent, OPEC basket, and WTI crude oil at the beginning of each week from March 2, 2020 to November 21, 2022. URL: <https://www.statista.com/statistics/326017/weekly-crude-oil-prices/>

4 DOE Announces Notice of Sale of Additional Crude Oil From the Strategic Petroleum Reserve. URL: <https://www.energy.gov/articles/doe-announces-notice-sale-additional-crude-oil-strategic-petroleum-reserve>

5 33rd OPEC and non-OPEC Ministerial Meeting. URL: [https://www.opec.org/opec\\_web/en/press\\_room/7021.htm](https://www.opec.org/opec_web/en/press_room/7021.htm)

It is well-known that during his visit to Saudi Arabia in summer 2022, US President Joe Biden tried to persuade it not to reduce oil production in order to prevent a further rise in inflation on the back of appreciation of prices for energy commodities on the eve of the US elections. The decision on reduction of oil production became a disappointment for the US, however, it is not yet clear whether retaliatory measures against Saudi Arabia will follow.

OPEC member countries are concerned about consumer-countries' efforts to influence the pricing by means of decision-making which is of a collusion nature. For many countries, the development of the situation with Russia is an illustration of how powerful such a pricing collusion may be, to what extent its implementation may be effective and what instruments they are going to use. OPEC member countries are aware of the fact that if a price cap on oil proves to be effective, they themselves may be subjected to similar restrictions and will face a fall in budget revenues. At the same time, Saudi Arabia which dominates in the OPEC may increase oil production in future to take niches which become available in case restrictions on Russian oil succeed.

At the regular meeting early in December, oil production levels were left unchanged and the OPEC member countries took a wait-and-see attitude.<sup>1</sup> With an overlap of economic interests between Russia and the OPEC+ member countries, in future it will be important to promote cooperation in this format (meetings are going to be held once in six months), discuss with partners possible responses to attempts to reduce the level of prices and impose extraterritorial restrictions on trade in oil from a certain country. At the same time, it is necessary to take into account the policies of all OPEC member countries and not Saudi Arabia alone because the G7 will exercise increasingly their influence on these countries by offering them various compensations for their non-compliance with the agreement on reduction in oil production.

#### 5.4.9. The Shanghai Cooperation Organization: shaping new multipolarity

The new geopolitical environment influenced the work of the Shanghai Cooperation Organization (SCO). At the Samarkand summit, the SCO member countries condemned unilateral economic restrictions and declared about the need to reform the SCO and develop and adapt it to the present-day economic realities. The SCO sees its goal in facilitating a gradual switchover to a free flow of goods, capital, services and technologies within a scope of cooperation with the "One Belt – One Road" project and the EAEU. The SCO is developing financial mechanisms and promotes cooperation to build up global supplies in the energy sector to respond to the changing political and economic situation on the oil and gas market.

The prospects of the SCO expansion became explicit in 2022. The procedure for Iran's joining the Organization was finalized; the SCO Samarkand summit endorsed unanimously Belarus's application for joining the SCO; Saudi Arabia,

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1 34th OPEC and non-OPEC Ministerial Meeting. URL: [https://www.opec.org/opec\\_web/en/press\\_room/7060.htm](https://www.opec.org/opec_web/en/press_room/7060.htm)

Qatar and Egypt were granted the status of dialogue partners and Kuwait, the United Arab Emirates (UAE), the Republic of Maldives and Myanmar initiated the procedures for receiving a similar status. The UAE expressed a particular interest in cooperation with the SCO and expects to become its full member in an expedited manner. Gulf Cooperation Council countries' increased interest in the SCO is justified by the attractiveness of the Asian sales markets, particularly China and India. Amid Iran's joining the SCO, Gulf Cooperation Council countries regard their joining the SCO as an opportunity to limit Iran's influence in the Organization. Further, the SCO is a good platform for consolidating ties with Russia amid a decline in the US influence in the region. Also, GCC countries take interest in Central Asia's markets: in September 2022 the GCC – Central Asia Strategic Dialogue started in Riyadh to initiate cooperation in all sectors of mutual interest. The GCC countries' membership in the SCO will facilitate the promotion of the existing economic relations. In the long term, GCC countries expect a free trade zone to be established.

Food security and cooperation in agriculture were on the top of the SCO agenda in 2022. In accordance with the draft concept of cooperation between the SCO member countries in the field of “smart” agriculture and agricultural innovations adopted at the meeting of ministers of agriculture, it is planned to establish cooperation within the scope of R&D and exhibition and fair activities.<sup>1</sup> At the Samarkand summit, Shavkat Mirziyoyev, President of Uzbekistan put forward an initiative to develop common food security guidelines envisaging the harmonization of member countries' regulatory frameworks.<sup>2</sup> In their statement on the results of the summit, the SCO member countries called on food producers and exporters to reduce the number of tariff and non-tariff barriers and the international community to support developing countries in terms of access to capital and technologies in order to promote food security. The SCO member countries intend to promote cooperation on establishing “green” transportation corridors and routes for timely food deliveries.<sup>3</sup>

The SCO cooperation was further promoted in the field of climate change response measures. The meeting of the heads of environmental agencies approved the draft of the program of a joint establishment of the SCO platform on the ecological information exchange. Based on the summit results, the Declaration on Responding to Climate Change, underlying the need to implement the Paris agreement was signed; it called on developed countries to render financial and technological assistance to developing countries and defined a complex of planned measures to fight climate change, including a reduction in emissions, establishment of an adequate infrastructure, development of the “green” and low-

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1 Information report on the 7th ministerial meeting of SCO member countries on cooperation in agriculture. URL: <http://rus.sectscsco.org/news/20220726/906752.html>

2 President Shavkat Mirziyoyev's speech at the SCO Heads of State Council Meeting (full text). URL: <https://review.uz/post/vstuplenie-prezidenta-shavkata-mirziyoyeva-na-zasedanii-soveta-glav-gosudarstvchlenov-shos-polny-tekst>

3 The SCO Heads of State Council's declaration on facilitation of global food security. URL: <http://rus.sectscsco.org/documents/>

emission technologies and an exchange of experience in the field of investment standards and sustainable projects, particularly green taxonomies.

The SCO member countries intend to promote cooperation to mobilize funding in this sector, establish a dialogue between the SCO member countries on carbon markets, including harmonization of approaches to participation in international carbon markets and facilitate the networking of observer-states and dialogue partners in these fields. Further, Emomali Rahmon, President of Tajikistan called for endorsement of the initiative to declare 2025 as the international year of preservation of glaciers and establishment of the international fund for saving glaciers. Also, Emomali Rahmon promised to present shortly the draft of the strategy of economic development of the SCO regions till 2030 with an emphasis made on the green development concepts.<sup>1</sup> Sadyr Japarov, President of Kirgizstan called for support at the UN level of his country's initiative to declare 2023–2027 as a period of activity aimed at developing mountain regions.<sup>2</sup> Shehbaz Sharif, Prime Minister of Pakistan put forward an initiative to develop the SCO long-term climate plan.<sup>3</sup> Shavkat Mirziyoyev, President of Uzbekistan called for institutionalization of cooperation on climate issues and establishment of the SCO Climate Council.<sup>4</sup>

It is noteworthy that financial cooperation was developing further. Russia's initiative to increase the share of national currencies in mutual settlements was actively elaborated and the summit approved the road map on implementation thereof. The practice of using national currencies in mutual settlements was further promoted within the frameworks of the SCO Interbank Association. However, the establishment of the SCO Bank is still at the level of intentions set forth in the joint communique.

In the context of cooperation between the SCO and the EAEU in the transport and logistics sector, the EAEU proposed to develop jointly with the SCO a transport and logistics megaproject linking the territories of the Eurasian region. As a result, the SCO summit endorsed the decision on building the “China-Kirgizstan-Uzbekistan” railway with Iran planning to join the project.

The energy security issue was on the top of the summit's agenda, too. The member countries supported an effective utilization of the energy potential to build up global supplies of oil, gas and electricity and called for consolidation of networking between suppliers, consumers and transit countries. Also, they expressed support for clean energy, particularly the coordinated development of wind, solar, hydrogen, nuclear, hydro and bio energy and energy storage technologies, as well as cooperation in the field of innovations in the energy

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1 President Emomali Rahmon's speech at the expanded meeting of the SCO Heads of State Council. URL: [http://rus.sectSCO.org/archive\\_news/20220923/914597/Vystuplenie-Prezidenta-Respubliki-Tadzhikistan-Emomali-Rakhmona-na-zasedanii-Soveta-glav.html](http://rus.sectSCO.org/archive_news/20220923/914597/Vystuplenie-Prezidenta-Respubliki-Tadzhikistan-Emomali-Rakhmona-na-zasedanii-Soveta-glav.html)

2 The SCO summit. The text of Sadyr Japarov's speech. URL: <https://kg.akipress.org/news:1805167>

3 Shehbaz Sharif called for the development of the environment protection plan in the SCO countries. URL: <https://uz.sputniknews.ru/20220916/shaxbaz-sharif-davayte-razrabotaem-plan-kak-my-budem-spatat-nashi-strany-v-plane-ekologii-28242901.html>

4 Shavkat Mirziyoyev's speech at the meeting of the SCO Heads of State Council (the full text). URL: <https://review.uz/post/vstuplenie-prezidenta-shavkata-mirziyoyeva-na-zasedanii-soveta-glav-gosudarstvchlenov-shos-polny-tekst>

sector. An action plan for implementing the Concept of Cooperation in the Energy Sector and the Program of Cooperation between Authorized Bodies in the Field of Utilization of Renewable Energy Sources was signed.

Thus, the SCO is becoming an increasingly attractive platform for cooperation and may over time turn into an association representing the interests of all major Asian countries. The SCO agenda is growing; climate issues which used to remain beyond the focus of the organization for a long period are actively discussed and all this forms the basis for an advanced technologies exchange and financial support of developing countries. Active networking in the energy sector is particularly important amid sanctions pressure on Russia and facilitation of energy security for all SCO member countries. The implementation of Russia's initiative on increasing the share of national currencies in mutual settlements is an important step towards consolidation of economic cooperation.

#### 5.4.10. The Eurasian Economic Union: consolidation of cooperation to overcome sanctions pressure

According to the officially adopted theses of the 1<sup>st</sup> Eurasian Economic Forum held in Bishkek on May 26, 2022, the EAEU's integration priorities include: implementation of the Strategy of Development till 2025, particularly the promotion of import substitution projects, facilitation of food security, implementation of the digital agenda, integration of payment systems and bank cards for settlements in national currencies, formation of own international financial and settlement mechanisms, development of cooperation in the sector of "green" technologies, establishment of the Eurasian reinsurance company and development of trade and investment agreements with participation the SCO, the ASEAN and the BRICS member countries.<sup>1</sup>

Within the scope of networking on the climate agenda and "green technologies", the road map on cooperation adopted on October 21, 2022 was an important achievement; it included the following lines: the analysis of national legislative frameworks and development of common approaches in this sector; formation of the unified market and non-market carbon regulation mechanisms to achieve goals of the Paris agreement; identification of incentives to promote low-emission transformation in transportation, energy, metallurgy, the chemical industry, the building industry and agriculture; promotion of Eurasian low-carbon development initiatives and "green" financing; creation of the bank for climate technologies and digital initiatives; promotion of the EAEU member countries' climate-related interests in the international arena.<sup>2</sup> The cooperation in the field of hydrogen energy was actively discussed and a new catalogue of R&D projects, equipment and components in this sector was prepared.

The completion of the work on the agreement on establishment of the Eurasian Reinsurance Company (ERC) was the EAEU's major achievement in 2022.

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1 The main theses of the 1st Eurasian Economic Forum were prepared. URL: <https://eec.eaeunion.org/news/podgotovleny-osnovnye-tezisy-pervogo-evraziyskogo-ekonomicheskogo-foruma/>

2 Climate agenda. URL: <https://eec.eaeunion.org/comission/departament/dotp/klimaticheskaya-povestka/>.

The ERC's charter capital which is to be formed by means of member countries' contributions will be equal to Rb15 bn. The ERC's potential insurance capacity of up to \$2 bn (without a possible expansion taken into account) is meant to "stimulate mutual and foreign trade and implementation of joint projects through increasing insurance capacity and professional risk management in the EAEU's entire territory."<sup>1</sup>

Also, the sectoral cooperation was active, too: "Civil Aeronautics", a new technological platform was created, the Eurasian Network University was established, the information website of the Eurasian Economic Commission (EEC) on interregional development was put into operation and the agreement on free trade in organic agricultural products was prepared. Further, international cooperation in trade was fruitful, as well. A regular round of negotiations on the establishment of a free trade zone with Egypt was held, progress was made in negotiating a similar agreement with Iran and intentions were declared to develop a free trade agreement with Indonesia.

For the development of the EAEU as an integrated association, the approval of a package of amendments to the EAEU Customs Code was an important decision. These amendments will help adjust the procedure for cross-border container movement, cabotage and transit traffic, application of customs procedure of customs warehouse, customs-free zone and free warehouse. The draft of the so-called "3<sup>rd</sup> Big Protocol", which included amendments to the Agreement on the EAEU was approved. It is aimed at eliminating regulatory framework gaps identified in the course of law enforcement practice, clarifying the terminology and entrusting the EAEU bodies with authorities as regards technical regulation, phytosanitary measures, state procurement, as well as implementation of the Strategy-2025. The commission on preparing the main guidelines for the EAEU's economic development till 2035 began its work. The document will define the common perspective lines of the long-term economic development for all EAEU member countries, proceeding from the integration of their competitive advantages and with global economic development patterns taken into account.

Unfortunately, the EAEU failed to make a breakthrough in some key lines of development in 2022. In 2022, the EAEU's priorities included the preparation of the data flow agreement and finalization of agreements on common markets of oil, gas and electricity. In both the fields, the EAEU failed to formulate concrete proposals and draft agreements by the end of the year. The data flow agreement is expected to be prepared by the end of 2023. At present, the differences in approaches slow down the process of preparing the agreement; for example, some EAEU member countries require the localization of the data within the limits of their own countries and the use of electronic identification methods are limited. Common markets of energy commodities are expected to open by 2025, while the contractual framework is to be prepared by January 1, 2023. Despite an active negotiating process, no consensus was reached. Within the scope of cooperation

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<sup>1</sup> The agreement on the establishment of the Eurasian Reinsurance Company was finalized. URL: <https://eec.eaunion.org/news/zavershena-rabota-nad-soglasheniem-ob-uchrezhdenii-evraziyskoy-perestrahovochnoy-kompanii/>



in the financial sector, the EAEU member countries continued to discuss the initiatives put forward in 2021: the agreement to allow brokers and dealers of one EAEU member country to the trades at the exchanges (trade organizers) of another member country and the agreement on the standardized license within the frameworks of the EAEU.<sup>1</sup> However, no progress was achieved in this field. The promotion of cooperation in the financial and energy sectors is important for advancing Russia's interests and countering the G7 countries' attempts to isolate Russia's financial sector and introduce a price cap on Russian energy commodities.

Thus, the year 2022 saw both important breakthroughs, such as the establishment of concrete mechanisms of networking in priority fields within the EAEU frameworks and a lack of progress in key lines of cooperation. The most important thing is that the EAEU is unanimously determined to respond cohesively and jointly to economic and geopolitical challenges, take coordinated decisions to minimize the implication of sanctions imposed on Russia and Belarus and promote cooperation with friendly countries. In future, it is necessary to facilitate progress in solving the objectives defined at the Eurasian Economic Forum, particularly the data flow issues (for example, through the process of mutual bilateral recognition of data protection adequacy) and the development of financial markets, and take concrete steps to implement the adopted agreements in practice.

#### 5.4.11. The European Union: the strengthening of mutually disadvantageous and destructive restrictions

By December 2022, the EU adopted eight packages of anti-Russian sanctions which included restrictions both against individuals and economic sectors. The toughest sanctions were introduced against the RF state budget (the freezing of Central Bank of Russia's assets), the financial sector (cutting off Russia's largest banks from the SWIFT and the ban on access to the European capital market), the humanitarian sector (cancellation of the simplified visa regime first for diplomats and then for all citizens of the Russian Federation), aviation (the closure of airspace), the mass media (shutdown of branches of Russian media companies) and imports of some raw materials (iron, steel, cement and timber).<sup>2</sup>

The most serious restrictions were imposed on the Russian energy sector. The EU countries approved a ban on imports of Russian coal, tanker-transported oil (with a few exceptions) and petrochemicals and a price cap of \$60 per barrel for Russian oil endorsed by the G7 countries, as well as strengthened restrictions on supplies of equipment for the energy sector. In May 2022, the EU negotiated the REPowerEU plan which was aimed at reducing all energy commodity supplies, primarily natural gas, from Russia by 2027. The plan includes the following two lines: the diversification of gas supplies through increasing imports of LNG and pipeline imports from non-Russian exporters and further growth in biomethane

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1 The issues of free capital flow were discussed at the meeting of the Financial Market Advisory Committee. URL: <https://eec.eaeunion.org/news/voprosy-obespecheniya-svobodnogo-dvizheniya-kapitala-obsudili-na-zasedanii-konsultativnogo-komiteta/>

2 Timeline – EU restrictive measures against Russia over Ukraine. URL: <https://www.consilium.europa.eu/en/policies/sanctions/restrictive-measures-against-russia-over-ukraine/history-restrictive-measures-against-russia-over-ukraine/>



and hydrogen volumes; the upgrading of energy efficiency, an increase in the share of renewable energy sources and elimination of bottlenecks in the infrastructure. All these measures create serious economic problems for the EU countries. Appreciation of prices for energy commodities led to growth in the rate of inflation (the average level of EC-27 was equal to 9% in 2022)<sup>1</sup> and budget expenditures. With a pick-up in coal consumption (growth of 14% and 7% in 2021 and 2022, respectively)<sup>2</sup> and LNG purchases, net greenhouse gas emissions will definitely rise. For example, by some estimates, carbon emissions in production of LNG are ten times higher than those in pipeline gas production and delivery.<sup>3</sup> By other estimates, greenhouse gas emissions in LNG production, transportation, liquefying and regasification may be equal to emissions produced during gas burning and all this actually doubles the effect on the climate by each energy unit received from gas transported from abroad.<sup>4</sup> At the same time, on the back of rapid deployment of renewable energy plants, net greenhouse gas emissions decreased in 2022. However, the statistics does not take into account emissions during gas liquefaction in the country of origin. By some estimates, if Russian pipeline gas deliveries stop in 2023, it will add 35 mn tons of CO<sub>2</sub> emissions from the imported production as compared with 2021.<sup>5</sup> The EU's goal was to fill at least by 80% of gas storage facilities by the beginning of the heating season. Most EU countries managed to do it very quickly.

Though the EU succeeded in reducing the consumption of Russian pipeline gas and oil and filling gas storage facilities in 2022, they still face several important challenges which need to be resolved in the forthcoming months. In 2022, the EU managed to increase promptly and considerably LNG purchases on global markets. Owing to economic recession in China and the policy of severe restrictions, global demand for LNG declined. With China's return to the pre-pandemic level of consumption, demand will grow considerably and the EU will have to compete on the consumer market; all these factors lead to appreciation of prices. In its report, the International Energy Agency declared that the EU will be facing a possible shortage of 30 bn m<sup>3</sup> of gas next summer if Russia suspends all the remaining pipeline gas flows and China's demand for LNG picks up. At the same time, the EU countries kept buying LNG and, in some cases, started to buy gas from Russia: imports grew by 20%.<sup>6</sup> So, despite their refusal to buy pipeline gas and attempts to find alternatives, the EU turned eventually to Russia for gas purchases. The EU managed to fill its gas storage facilities, particularly by increasing gas purchases

1 Inflation rate, average consumer prices. URL: <https://www.imf.org/external/datamapper/PCPIPCH@WEO/EURO/EU/AUT/BEL/DNK/FIN/FRA/DEU/GRC/IRL/ITA/LUX/NLD/PRT/ESP/SWE/GBR>

2 Global coal demand is set to return to its all-time high in 2022. URL: <https://www.iea.org/news/global-coal-demand-is-set-to-return-to-its-all-time-high-in-2022>

3 Climate change: Hidden emissions in liquid gas imports threaten targets. URL: <https://www.bbc.com/news/science-environment-63457377>

4 Sailing To Nowhere: Liquefied Natural Gas Is Not An Effective Climate Strategy. URL: <https://www.nrdc.org/sites/default/files/sailing-nowhere-liquefied-natural-gas-report.pdf>

5 Climate change: Hidden emissions in liquid gas imports threaten targets. URL: <https://www.bbc.com/news/science-environment-63457377>

6 Europe still can't live without this Russian energy export. URL: <https://edition.cnn.com/2022/11/09/energy/russian-lng-imports-europe/index.html>

in Russia in H1 2022. Amid competition with other LNG consumers, it will be more difficult for the EU to fill its gas storage facilities without gas supplies from Russia.<sup>1</sup> Further, a ban on purchasing petrochemicals from Russia, including diesel fuel (the EU currently buys 60% of it from Russia) will come into effect from February 2023.<sup>2</sup> Consequently, the EU has to look urgently for alternative suppliers. By experts' estimates, it is going to be difficult for Russia, too, as it has to redistribute the whole volume of the EU market to other consumers, which situation leads to a reduction in production in Russia and global growth in prices for this important type of fuel.

Within the scope of the planned legislative process in 2022, the EU discussed the Fit for 55 package initiatives, primarily related with the European Union Emissions Trading System (EU ETS) and the introduction of the carbon border adjustment mechanism (CBAM). On December 18, 2022, the EU Council and Parliament came to an agreement on the reform of EU ETS and introduction of CBAM. By 2030, emissions in sectors in which respect ETS was introduced are expected to decline by 62% as compared with 2005. To facilitate this reduction, the EU will reduce on a non-recurrent basis the emission quota ceiling: by 90 mn tons and 27 mn tons of the CO<sub>2</sub> equivalent in 2024 and 2026, respectively. Further, an annual quota reduction of 4.3% and 4.4% is planned in 2024–2027 and 2028–2030, respectively. For sectors which received a permission free of charge because of the risk of carbon leakage,<sup>3</sup> a nine-year period (from 2026 to 2034) for transition to the auction-based purchase of emissions was approved. CBAM is officially established as a new instrument to fight leakage; it is expected that when buying quotas both direct and indirect emissions will be taken into account. During the transition period, in respect of the abovementioned sectors which are exposed to leakage CBAM will be applied only to that portion of emissions which is not covered by free-of-charge quotas within the frameworks of EU ETS in order to comply with the WTO's rules.<sup>4</sup> In the current situation, the potential influence of these measures on Russia's interests decreased with introduction of restrictions on imports from the country in sectors to which adjustment is applied (cement, steel). However, for example, in case of aluminum CBAM is still relevant. Also, as one cannot exclude the lifting of sanctions in the mid-term, adjustment may become a challenge to Russian exporters in future. The EU Council and Parliament approved the start of an individual quota trading system in respect of buildings and transportation by 2027, but granted its member countries a temporary permission to relieve economic entities from buying quotas until 2030 if they are charged the carbon tax at the national level at the rate which is equivalent to or above auction prices

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1 Europe needs to take immediate action to avoid risk of natural gas shortage next year. URL: <https://www.iea.org/news/europe-needs-to-take-immediate-action-to-avoid-risk-of-natural-gas-shortage-next-year>

2 The West's oil war with Russia gets real. URL: <https://www.politico.eu/article/west-oil-war-russia-sanctions-oil-price-cap-g7-vladimir-putin-zelensky-opec-war-ukraine/>

3 Production of cement, aluminum, fertilizers, electricity, iron and steel.

4 'Fit for 55': Council and Parliament reach provisional deal on EU emissions trading system and the Social Climate Fund. URL: <https://www.consilium.europa.eu/en/press/press-releases/2022/12/18/fit-for-55-council-and-parliament-reach-provisional-deal-on-eu-emissions-trading-system-and-the-social-climate-fund/>

for quotas in the new emission trading system. Further, they took a decision to include maritime transportation emissions into the EU ETS. The EU approved a gradual introduction of obligations on shipping companies to buy quotas: 40%, 70% and 100% of confirmed emissions should be covered by quotas bought on auctions in 2024, 2025 and 2026, respectively. A decision on application of quota trading to aviation, including flights beyond the EU, is expected to be taken after 2026.

Overall, the geopolitical crisis of 2022 made the EU to review its plans regarding a gradual refusal from Russian gas (the plan initially envisaged even growth in Russian gas consumption till 2030) and speed up the diversification of supplies and introduction of RES. The EU achieved some success in it, but the measures they took are most likely short-termed and helped overcome the existing problems, rather than offered long-term strategic solutions. The sanctions policy has brought about growth in expenditures which are going to pick up further and increase the inflationary pressure in 2023. At the same time, despite the difficulties and certain growth in utilization of not very climate resilient practices (use of coal and liquefied gas), in the medium and long term the EU is still committed to the goals of the Green Deal, raises the level of climate ambitions and strengthens the instruments of influence on carbon pricing by applying them extraterritorially to all market participants via CBAM. Russia loses ahead of time its main markets for numerous commodities, encounters serious challenges in the financial sector and is denied an access to frozen assets; Russian companies are cut off from resources, sales markets, technologies and investments. In the near future, both Russia and the EU will be looking for new sales markets and suppliers and addressing their mounting internal problems.

\* \* \*

The new crisis has become another evidence of fragility and low efficiency of multilateral financial institutes, particularly amid extreme manifestations of the US national egoism and hegemony.<sup>1</sup> The isolation of Russia failed owing largely to the support of its partners in non-western institutes, which situation proved the correctness of the Russian policy on establishing and developing new institutes of global and regional management. At the same time, there is a need for consistent implementation of collective decisions, promotion of new mechanisms' capacity and facilitation of their synergic interaction. The US and its allies are planning to continue the pressure in order to exclude Russia from the work in the key economic and financial institutes (the G20, the Bank for International Settlements, the Basel Committee on Banking Regulations and Supervisory Practices, the International Association of Insurance Supervisors and the International Organization of Securities Commissions), having envisaged even funding for this in the 2023

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1 *Mason P.* How coronavirus could destroy the Western multilateral order. URL: [https://www.newstatesman.com/world/north-america/2020/03/how-coronavirus-could-destroy-western-multilateralorder?mc\\_cid=6a901092aa&mc\\_eid=6f24f55c06](https://www.newstatesman.com/world/north-america/2020/03/how-coronavirus-could-destroy-western-multilateralorder?mc_cid=6a901092aa&mc_eid=6f24f55c06)

defense budget.<sup>1</sup> In this context, the promotion of economic cooperation and implementation of decisions on settlements in national currencies, establishment of common payments systems, motivation to use financial products denominated in national currencies and facilitation of mutual access to financial markets of the SCO, the BRICS and the EAEU will be crucially important in 2023.

### 5.5. Customs administration<sup>2</sup>

The year 2022 saw the approval of numerous statutory and other regulatory legal acts aimed at mitigating administrative barriers on the way of movement of goods via the customs border.

The Federal Law “On Customs Regulation in the Russian Federation and Amendment of Legislative Acts of the Russian Federation» was amended for the purpose of upgrading customs administration, including the following:

- The procedure was simplified for importing equipment transported via the border by single consignments within a lengthy period of time up to six years: until January 1, 2029 it is permitted to import composite goods within the frameworks of several foreign economic deals; restrictions were lifted on importing equipment in a disassembled state; the period of preliminary decision-making regarding the classification of goods under FEACN (Customs Commodity Code) was reduced;<sup>3</sup>
- The order for applying customs procedures for processing goods at customs territories was simplified: the rates of output of processed products were set in the range varying from the minimal value to the maximum one; transportation of intermediate goods between various production sites was permitted; no advance notification of waste prior to the start of processing was required; the period of introducing changes into a processing permit was reduced;<sup>4</sup>
- Harmonization was carried out of activities of the customs authorities’ mobile groups with powers to stop automotive vehicles in the territory of the Russian Federation in specially designated places and check the compliance of transported goods with the customs regulation in order to identify sanctioned goods and goods which are illegally imported from the territory of Kazakhstan and other EUEU member-countries.<sup>5</sup>

The RF Government is empowered to carry out an experiment with customs monitoring of the goods accounting system data being at disposal of persons

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1 H.R.7776 – James M. Inhofe National Defense Authorization Act for Fiscal Year 2023. URL: <https://www.congress.gov/bill/117th-congress/house-bill/7776/text>

2 Author: G.V. *Balandina*, Senior Researcher at the International Foreign Trade Studies Department, IAES RANEP.

3 Federal Law No. 74-FZ of March 26, 2022 “On Amendment of Individual Statutory Acts of the Russian Federation and Suspension of Individual Provisions of Legislative Acts of the Russian Federation.”

4 Federal Law No. 152-FZ of May 28, 2022 on “Amendment of the Federal Law on “The Customs Regulation in the Russian Federation and Amendment of Individual Statutory Acts of the Russian Federation.”

5 Federal Law No. 313-FZ of July 14, 2022 “On Amendment of the Federal Law “On Customs Regulation in the Russian Federation and Amendment of Individual Statutory Acts of the Russian Federation.”

participating in the experiment.<sup>1</sup> It is believed that customs authorities will be granted a remote access to the system of accounting participants in foreign economic activities (FEA) and will notify of those declarations in respect of which risks have been identified based on the data monitoring results. A FEA participant carries out a self-check and informs the customs authorities of its results. If legitimacy of the declared data is proved, customs audit is not carried out. Such an experiment will be carried out from April 3, 2023 till November 1, 2024.<sup>2</sup>

The RF Government has taken measures aimed at simplifying imports.

As a measure of support, importers require primarily to simplify the compliance of imported goods with technical regulation requirements of the Customs Union. Without a conformity assessment being made, FEA participants were granted the right to receive on the basis of their own evidence base declarations on compliance in respect of a consignment of goods. Issued (registered) certificates of compliance and (or) declarations on compliance with mandatory requirements for mass-produced goods can be used by any importers and not only those FEA participants specified in the documents. A declarant is not obligated to confirm to the tax authorities the right to use these documents. Prior to September 1, 2023 included, goods are allowed to be imported without labelling envisaged by the EAEU technical regulations. The same procedure is applied to the unified circulation mark on the EAEU market. Relevant labelling is required to be made prior to the sale of products to the buyer (consumer).<sup>3</sup>

In 2022, the authorization of parallel imports, that is, imports of goods without the trademark holder's approval on condition of legal introduction of specified goods in circulation beyond the territory of the Russian Federation was a high-profile imports support measure. Although the international principle of exhaustion of trademark rights is allowed in numerous countries, including the USA, Brazil, China and India, parallel imports are authorized temporarily in Russia till the end of 2023 and only in respect of those goods which are included in the special list approved by the RF Ministry of Industry and Trade.<sup>4</sup> The procedure for forming the list is not formalized; it was amended three times within a year. It is understood that the list includes the brands of those companies which left the Russian market. Without networking with trademark holders, the customs authorities still intend to prevent counterfeit goods and request occasionally from importers the documents certifying the introduction of goods in circulation in the third country with the consent of the trademark holder and engage experts for this work. A temporary nature of these measures does not suggest a system-based

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1 Federal Law No. 314-FZ of July 14, 2022 "On Amendment of Article 120 of the Federal Law "On Customs Regulation in the Russian Federation and Amendment of Individual Statutory Acts of the Russian Federation."

2 URL: <https://www.osfts.ru/meropriyatiya/2022/3277-novye-problemy-regulyatory-i-biznes-dolzhny-reshat-vmeste>

3 RF Government Decree No. 353 of March 12, 2022 (as amended of December 23, 2022) "On the Specifics of Licensing Activity in the Russian Federation in 2022 and 2023."

4 Order No. 1532 of April 19, 2022 of the RF Ministry of Industry and Trade "On Approval of the List of Goods (Groups of Commodities) in Respect of which Provisions of Article 1359 (6) and Article 1487 of the Civil Code of the Russian Federation are not Applied Provided That Specified Goods (Groups of Commodities) Have Been Introduced into Circulation by Right Holders (Patent Holders), as well as with Their Consent Beyond the Territory of the Russian Federation."

parallel imports regulation which takes into account the interests of trademark holders and consumers and promotion of competition as customary in other countries applying the international principle of exhaustion of trademark rights. In 2022, the overall volume of parallel imports was estimated at \$17 bn-\$20 bn.<sup>1</sup>

For individual categories of FEA participants, the deadline for execution of the customs authorities' notifications of unpaid customs duties is extended from 15 business days to 45 calendar days until April 3, 2023.<sup>2</sup> Such payers include declarants which paid over Rb7 bn in the budget in the past three years or used the services of customs agents, authorized economic operators and customs representatives.

Until February 1, 2023, weight and dimensional control of motor vehicles transporting essential food products and non-food products from abroad is not carried out at entry points on Russia's state border.<sup>3</sup>

Multiple utilization of containers carried by rail, sea, inland waterway and mixed river-sea transport to the Russian Federation is allowed for domestic transportation.<sup>4</sup>

As a matter of priority, customs authorities carry out customs clearance of goods of the so-called critical imports without unjustified delays. The list of priority import products<sup>5</sup> approved by the Government of the Russian Federation includes primarily food and medical goods, building materials, paper and cardboard, equipment and manufacturing components.

The year 2022 saw an automatic registration, that is, without involvement of customs officials, of 87% of declarations for goods (DG); autorelease was equal to about 33% (over 1.2 mn of DG out of 3.7 mn DG). Over 86% of the declarations are issued within 4 hours, while the remaining 14%, within a longer period; the Federal Customs Service believes it happens mainly because of declarants' errors (inaccurate completion of DG, late submission of documents, as well as a low level of professionalism of individual customs representatives<sup>6</sup>). According to FEA participants, unpredictable timing for the release of goods is related with multiple risk profiles established by customs authorities within the frameworks of the risk management system (RMS).

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1 URL: <https://www.vedomosti.ru/economics/news/2022/11/30/952811-obem-parallelnogo-importa-dostig-17-mlrd>

2 RF Government Decree No. 565 of April 02, 2022 "On the Establishment of the Categories of Payers of Customs Duties, Taxes and Special Anti-Dumping Countervailing Duties and Persons which are Jointly and Severally Liable with the Payer for Payment of Customs Duties, Taxes and Special Anti-Dumping Countervailing Duties."

3 RF Government Decree No. 1670 of September 22, 2022 "On the Specifics of State Control (Supervision) of International Road Transportation of Goods at Entry Points on the Border of the Russian Federation"; the list of essential goods is approved by RF Government Edict No. 762-r of March 27, 2020.

4 Federal Law No. 92-FZ of April 15, 2022 "On Amendment of Individual Statutory Acts of the Russian Federation."

5 RF Government Decree No. 895 of May 18, 2022 "On Approval of the Rules of Granting Subsidies out of the Federal Budget to Credit Institutions for Reimbursement of the Lost Income on Loans Extended for Purchasing Priority Import Products."

6 URL: <https://www.osfts.ru/meropriyatiya/2022/3341-zadacha-tamozhni-i-biznesa-ne-tolkoslushat-no-i-slyshat-drug-druga>

The Federal Customs Service of the Russian Federation announces a stepwise introduction of RMS in 2023–2024 based on the real-time monitoring and being capable of reducing an administrative load on bona fide FEA participants. The new model allows to identify in a real-time mode the known and new types of risk situations by means of modern data analysis technologies, artificial intelligence (AI) and machine learning, as well as carry out control measures to fix violations and determine the actual likelihood of occurrence thereof. Based on the real-time monitoring outputs, RNS instruments of nationwide, regional and area-based importance will be developed and measures on risk minimization will be applied in conformity with these risk profiles.

In 2022, amid a decrease in imports volumes the number of customs audits and cases of administrative violations increased. In 2022, the customs authorities carried out 1,940 customs audits and 8,161 forms of other customs control; the overall amount of additionally accrued liabilities was equal to Rb28 bn, the amount of those collected, to Rb18.5 bn.<sup>1</sup> By contrast, in 2021 they carried out 1866 customs audits and 8542 forms of customs control with additionally accrued liabilities and those collected amounting to Rb24.4 bn and Rb14.3 bn, respectively.<sup>2</sup> In 2022, customs authorities initiated 146,936 cases of administrative violations (AV), an increase of 6.5% relative to 2021 (138,818). It is noteworthy that legal entities account for over a half of them, that is, 50.7% (74,495 cases).<sup>3</sup>

The year 2022 saw the disruption of customary logistics routes and reorientation of commodity flows from the north-western to south-eastern and southern directions where entry lines happened to be unprepared to a substantial increase in commodity volumes. The seaports at the Far East and Novorossiysk reached the peak of their capacity. The reconstruction of automobile check points making it feasible to increase capacity is scheduled for 2024–2026.<sup>4</sup>

Amid infrastructure limitations, administrative state control procedures faded into the background. However, the means of optimization of control procedures at check points are already defined in numerous program and management documents of the RF Government and federal executive authorities, as well as statutory acts of the EAEU. Various concepts (prospective models), such as “An Intelligent Checkpoint”<sup>5</sup> (the responsibility of the Federal Customs Service), “the Single Window”<sup>6</sup> (the responsibility of the RF Ministry of Economic Development),

1 URL: <https://customs.gov.ru/activity/results/itogi-deyatel-nosti-tamozhennyx-organov-posushhestvleniyu-tamozhennogo-kontrolya-posle-vypuska-tovarov/document/377866>

2 URL: <https://customs.gov.ru/activity/results/itogi-deyatel-nosti-tamozhennyx-organov-posushhestvleniyu-tamozhennogo-kontrolya-posle-vypuska-tovarov/document/342633>

3 URL: <https://customs.gov.ru/activity/pravooxranitel-naya-deyatel-nost-/informacziya-upravleniya-tamozhennyx-rassledovaniy-i-doznaniya/document/323702>

4 URL: <https://www.vedomosti.ru/business/articles/2022/12/23/956694-rasshirenie-punktov-propuska-s-kitaem>

5 The plan of measures in 2021–2024 approved by the RF Federal Customs Service on implementation of the Strategy of Development of the Customs Service of the Russian Federation till 2030.

6 Decision No. 68 of May 29, 2014 of the Supreme Eurasian Economic Council “On the Main Guidelines for the Development of the “Single Window” Mechanism in the System of Regulation of the Foreign Economic Activity.”



“Seamless Freight Logistics”<sup>1</sup> (the responsibility of the Ministry of Transport of the Russian Federation) were developed. The Ministry of Transport of the Russian Federation approved the prospective checkpoint models for all means of transportation<sup>2</sup>; these models are expected to implement from 2025. The RF Federal Customs Service introduced the electronic document management technology in exercising state control at sea checkpoints (KPS “Portal Morskoj Port”). It is important to introduce developed concepts on the basis of the “single window” mechanism which facilitates a one-time submission of data in an electronic format for a multiple utilization thereof by all state supervising authorities.

For the purpose of reducing an administrative load and making customs administration clearer and more predictable in order to facilitate more companies, including small and mid-sized business, to engage in foreign economic activity, it is proposed to do the following:

1. Ensure real-time notification on a regular basis of new requirements to imports, exports and transit of goods on the website of the RF Federal Customs Service, as well as uniform application of the customs legislation by means of monitoring, generalization and analysis of case law and FEA participants’ complaints and queries and preparation by the RF Federal Customs Service of explanations (guidelines) on how to apply individual provisions of the customs legislation.
2. Introduce in the legislation reservations regarding inadmissibility of a retroactive change in the stable law enforcement practice in carrying out of control after the release (including the rule that all explanations by the RF Ministry of Finance and the RF Federal Customs Service, on which basis FEA participants’ customs payments due have been increased, are applicable only after the publication thereof without extension on legal relations which took place prior to the publication of such explanations).
3. Facilitate regular consultations with business associations on issues related with efficiency of the risk management system, categorizing of FEA participants for the purpose of identification and elimination of excessive and ineffective audits and refinement of the criteria for assessment of FEA participants in order to attribute them to a certain risk category.
4. Organize the work of the institute of preliminary decisions, including:
  - 1) Establish regional customs authorities’ specialization by individual types of goods in issuing of a preliminary decision on the classification of goods in accordance with FEACN; this will make it feasible to distribute

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1 RF Government Edict No.3363-r (On the Transport Strategy of the Russian Federation till 2030 with Outlook till 2035); RF Government Edict No. 3744-r of December 21, 2021; RF Government Decree No.1596 of December 20, 2017 “On Approval of the “Development of the Transport System” State Program.”

2 Instructions No.VS-270-r of October 21, 2022 of the Ministry of Transport of the Russian Federation “On Prospective Models of Automobile, Sea, Rail and Air Checkpoints Through the State Border of the Russian Federation Used as a Standard in Building, Reconstruction, Outfit and Technical Equipment of Buildings, Premises and Facilities Required for the Organization of Border, Customs and other Types of Control Carried Out Checkpoints Through the State Border of the Russian Federation.”



appropriately the functions of specialists in individual markets (sectors); facilitate control over issuing of preliminary decisions by the RF Federal Customs Service and disapprove unjustified refusals;

- 2) Take preliminary decisions on the classification of goods in accordance with FEACN per name of the goods and not per article, provided that the differences between articles do not affect the classification of goods, with a FEA participant having the right to prove that the preliminary decision is also applicable to other goods with similar classification features;
  - 3) Renew the practice of regular written explanations on classification in accordance with FEACN of individual types of goods<sup>1</sup> with their state registration with the Ministry of Justice of the Russian Federation and official publication, including on the basis of classification decisions and opinions of the World Customs Organization (WCO);
  - 4) Establish procedures for issuing mandatory preliminary decisions on the issues related with the methodology of determining the customs value and other customs issues, having excluded the requirements to provide unnecessary documents and data which have nothing to do with the subject of a preliminary decision in order to rule out denials in issuing such decisions on formal grounds.
5. Supplement the provisions of the EUEU's customs legislation with the institute of FEA participants' self-check with a waiver to collect any fines or apply other penalties for infringements identified by FEA participants on their own unless it is proved that such violations were committed willfully.
  6. Assign VAT charging functions – VAT is paid at importing goods – to tax authorities in order to reduce costs of importers and fiscal authorities. The recurring nature of the VAT suggests payment thereof in the amounts being equal to the difference between tax liabilities and tax deductions. At the first stage, the assignment of the “import” VAT charging function to the tax authorities can be limited to cases of existence of general (comprehensive) guarantees of payment of the required amounts and (or) collection of additional VAT amounts accrued on the basis of outputs of the audit after the release of goods and not at customs declaration of goods.
  7. Grant the right to customs authorities to request the provision of security for the payment of customs duties from companies attributed to the medium and high levels of risks in cases of a quick release of goods without examination of the data defining the size of customs duties to be paid unless goods are declared by a customs representative. The size of a general guarantee is set at the level being equal to the full sum of charges and taxes and payable customs duties only in cases if such a guarantee is

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<sup>1</sup> Order No. 886 of October 24, 2022 of the RF Federal Customs Service “On Amendment of the Explanations Approved by Order No.995 of November 17, 2021 of the RF Federal Customs Service Regarding Classification of Individual Types of Goods in Accordance with the Single Commodity Nomenclature of Foreign Economic Activity of the Eurasian Economic Union” (registered by the RF Ministry of Justice, registration No.71173 of November 28, 2022).

- applied to customs operations with goods associated with a high risk of fraud. In all other cases, the customs service is in a position to set the sum of a guarantee at a lower level as 30%, 50%, 75% or 100% of the potential due sum of customs charges and taxes by means of using the existing criteria for categorization of FEA participants.
8. Limit the number of decisions to be taken on the basis of a single customs audit or verification of documents and data (one inspection report – one decision instead of multiple single decisions on each goods declaration).
  9. Take measures to develop the institute of authorized economic operators (AEO):
    - 1) Simplify the terms of including legal entities into the AEO register by reviewing the terms of provision of financial guarantees through correlation of the size of such guarantees with the volume of transactions, with the obligation to carry out activity as AEO replaced by a general guarantee to pay customs duties in the amount equal to the relevant volume of the transactions and the risk of customs duties avoidance; this initiative will make it feasible to apply the AEO institute to SME;
    - 2) Supplement the terms of inclusion of legal entities in the AEO register with the criteria for eligibility of persons for security requirements in accordance with the supply chain security standards based on international standards, which is the basis of mutual recognition of AEO status with third parties;
    - 3) Expand simplifications granted to AEO in customs clearance of goods in accordance with the WCO guidelines set in the Framework for Standards of Security and World Trade Facilitation.
  10. Continue work on simplifying confirmation of conformity of imported goods with technical regulation requirements of the Customs Union and the labelling of goods:
    - 1) Ensure recognition of certificates of compliance (other relevant documents) issued by some foreign countries;
    - 2) Transfer the confirmation of conformity requirement from the stage of importing (controlled by the customs authorities) to the stage of entry of good to the market;
    - 3) Give up certification of goods brought into the country by importers for their own production needs proceeding from the fact that only products put into circulation need to comply with safety requirements;
    - 4) Allow labelling of goods (the mark of conformity, identification mark, consumer information) after importing at temporary storage warehouses, other customs control zones, as well as the recipient's warehouses after a conditional release of goods.
  11. Take measures aimed at the liberalization of criminal and administrative responsibility for customs offences:
    - 1) Increase the thresholds of recognition of sums of unpaid customs duties as large and particularly large-scale offenses for qualification of the

offense envisaged by Article 194 of the RF Criminal Code (Rb2 mn and Rb6 mn to Rb15 mn and Rb45 mn, respectively);

2) Establish exemption from criminal responsibility under Article 194 of the RF Criminal Code in case of voluntary repayment of the debt on customs duties (by analogy with Article 199 of the RF Criminal Code envisaging a similar rule for tax crimes);

3) Introduce sanctions in terms of a warning and (or) fixed penalty for committing administrative customs offenses which implications are not related with customs duties avoidance or a failure to comply with non-tariff barriers;

4) Establish exemption from administrative responsibility for small, minor customs offenses (for example, in respect of individual copies of goods, goods valued under euro 200 and discrepancies of up to 5% between the declared and actual weight of goods).

## **5.6. Russia in the WTO trade disputes<sup>1</sup>**

### **5.6.1. Sanctions against Russia and prospects of its participation in the WTO**

For several years now, the WTO system, in particular the mechanism for resolving trade disputes, is facing a crisis. The main reasons are as follows: growth of protectionism, trade wars, the COVID-19 pandemic, systemic problems, primarily, freezing of the Appellate Body (AB). According to the U.S., the AB exceeds authority, sometimes making decisions outside of the WTO law, which creates rights or obligations for member states that are not provided for in the existing WTO agreements, violating time limits for consideration of appeals. Many WTO member states agree on the need for reforms.<sup>2</sup>

After the start of the SMO at the end of February 2022, a number of countries (primarily the EU and the U.S.) began to impose unprecedented trade and economic sanctions against Russia. Countries began to suspend most-favored-nation treatment (MFN) with regard to Russia, contradicting the basic WTO principle of non-discrimination, discussing its exclusion from the WTO, i.e. suspending Russia's membership rights contrary to WTO rules, which do not envisage such actions. Attempts to isolate Russia from WTO negotiation and regular activities result in the paralysis of the main WTO functions, that is, providing a platform for trade negotiations and the administration of trade agreements. Such an attempt to block the negotiation process for political reasons looks more like a pretext for hiding their inability or unwillingness to seek compromise on substantive issues through negotiations. Statements by representatives of some WTO members

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2 See more info.: URL: <https://www.iep.ru/ru/publikatcii/publication/rossiyskaya-ekonomika-v-2020-godu-tendentsii-i-perspektivy-vypusk-42.html>

show a clear intention to bring the issue of territoriality into the WTO framework, which has historically avoided it.<sup>1</sup>

In mid-March 2022, the Russian Federation circulated a message to WTO members<sup>2</sup>, drawing their attention to the dangers hanging over the multilateral trading system due to aggressive and politically motivated actions of some members in restricting trade. Instead of promoting gradual normalization of international trade required for economic recovery from the COVID-19 pandemic, these members are implementing unilateral trade measures designed to undermine the economies of Russia and its neighbors. Recently, the scale of the economic war has reached a tipping point, damaging virtually every country in the world. For example, issues of food security and hunger in the least developed and developing countries, energy crises, etc. are particularly sensitive. This could have been avoided if these countries did not violate the basic rules of the WTO. The above communication says that the following anti-Russian measures clearly contradict the provisions of the General Agreement on Tariffs and Trade (GATT) 1994 and the General Agreement on Trade in Services (GATS):

- introduction of import tariffs above MFN rates;
- a ban on imports of Russian oil and refined products and intentions to limit imports of other energy resources such as natural gas and coal;
- restrictions on exports to Russia of various goods, including oil refining equipment and technology, foods and industrial consumer goods;
- blocking Russian financial institutions and transportation companies;
- a ban on the new investment in Russia, including in the Russian energy sector;
- strict exports control / complete ban on trade in certain goods and technologies critical to the economic development.

Due to large-scale trade sanctions imposed against Russia discriminating Russian companies in foreign markets, prospects of Russia's participation in the WTO, possible violations of plurilateral trade rules by WTO members, potential withdrawal of Russia from the organization are widely discussed.<sup>3</sup> Some Russian experts and politicians suggest that Russia should voluntarily withdraw from the WTO, while others believe that this is what the countries imposing sanctions against Russia are trying to achieve.<sup>4</sup>

Any WTO member under Article XV ("Withdrawal") of the Marrakesh Agreement (Agreement Establishing the WTO) can withdraw from the organization. To do so, a country must give a written notice of withdrawal to the Director-General of the WTO, which will take effect six months after it is received. Such withdrawal applies not only to the WTO Establishing Agreement but also to other WTO agreements. Withdrawal from a Restricted Trade Agreement is governed by the provisions of such an Agreement. In order to exclude a country from the WTO, it is

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1 URL: [https://wto.ru/news/rasprostraneno-soobshchenie-rossiyskoy-federatsii-v-ramkakh-vto/?bitrix\\_include\\_areas=N](https://wto.ru/news/rasprostraneno-soobshchenie-rossiyskoy-federatsii-v-ramkakh-vto/?bitrix_include_areas=N)

2 Ibid.

3 URL: <https://pravo.ru/story/239997/>

4 URL: <https://www.rbc.ru/rbcfreenews/6238870a9a79476f887f02ee>

necessary to hold two votes among all WTO members (164 members) and receive two-thirds of the votes in one vote and three-fourths in the other.<sup>1</sup>

Some supporters of Russia's withdrawal from the WTO appeal to the high fees for participation in the organization. However, Russia's WTO membership fees are not that high: in 2021, Russia's fee was Euro 3.4 mn. For comparison: membership in the United Nations costs Russia about \$140 mn.<sup>2</sup>

A number of experts' arguments for Russia's participation in the WTO and suggestions for the Russian position can be highlighted<sup>3</sup>:

- there will be more restrictions against Russia without the WTO. The terms of trade with those countries that Russia has no political contradictions will become more complicated. Most WTO members have not imposed sanctions against Russia;
- the WTO is an important tool to support Russian exports, and leaving the organization would create risks for businesses and people;
- there will be no tools to removing barriers on the platform of the WTO working bodies;
- there will be no access to the development of new rules for international trade;
- there will be no tools to settle the WTO trade disputes;
- If Russia withdraws from the WTO, it will be extremely difficult to rejoin the organization, because Russia will be presented with completely different, most likely more stringent, requirements;
- WTO principles are largely integrated into the EAEU and Russia's withdrawal from the WTO will complicate trade relations with other EAEU member countries (Belarus, Kazakhstan, Armenia and Kyrgyzstan).

At the 12th WTO Ministerial Conference, the head of the Russian delegation, Deputy Minister of Economic Development V. Ilyichev noted that unilateral politically motivated trade restrictions pose a real threat to the WTO. He believes that major challenges of the multilateral trade system at the moment are unilateralism, sophisticated forms of protectionism and fragmentation into trade blocs. Unilateral restrictive measures also have a negative effect on the economies of countries not involved in the conflict. Among the most problematic issues for Russia are the following<sup>4</sup>:

- unilateral unlawful sanctions since 2014;
- illegal methods of calculating dumping margins;
- appeals of disputes won (including by Russia) "to nothing";
- unilateral tariffs imposed on one or a group of WTO members.

Russia is interested in maintaining the multilateral format of negotiations and in strengthening commitments and compliance with existing obligations in accordance with WTO norms and rules. It is necessary to restore full-fledged work of the Dispute Settlement Body (DSB) and implementation of Russia's tasks in

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1 URL: [http://www.vavt-imef.ru/wp-content/uploads/2022/07/Monitoring\\_82.pdf](http://www.vavt-imef.ru/wp-content/uploads/2022/07/Monitoring_82.pdf)

2 Ibid.

3 Ibid.

4 Ibid.

current disputes with its participation, as well as in other disputed trade practices. It is important to be able to attract attention and organize discussion with a wide range of participants on the development and practical application by the U.S. and the EU specific approaches to counteracting subsidies to third countries, as well as methodologies for calculating and applying internal market protective measures. Ensuring transparency also remains an important Russian initiative.

It is inevitable to improve the regime of notifications to the WTO, including the exchange of experience, providing comprehensive assistance to developing countries. Other important aspects of Russia's participation in the WTO relate to sustainable development in the WTO (involving Russia in discussions to prevent unreasonable trade barriers in this area) and electronic commerce (the need for establishing rules of regulation accounting the opportunities and risks of digital economy and trade for all member countries, both developed and developing).

Amid global economic crises and pandemics, trade presents fundamental stabilizing importance, and therefore, emergency rules are needed. WTO rules on sanctions should be revised formalizing the concept of emergencies and introducing restrictions on the use of sanctions measures.<sup>1</sup>

In April 2022, the President of Russia instructed the government to prepare an updated strategy of Russia's actions in the WTO amid the restrictions imposed by a number of Western countries on Russian exports,<sup>2</sup> in particular, to assess the legality of sanctions against the metallurgical industry. The Ministry of Economic Development has prepared and submitted to the government a draft of the updated strategy of Russia's actions in the WTO, stating the rationale for Russia to stay in the WTO and use the whole set of instruments of the organization to protect trade interests.<sup>3</sup>

In addition to assessing the legitimacy of sanctions against the metallurgical industry, it is important to properly estimate sanctions in the energy, financial, aviation, and fertilizer sectors.

The mechanism for suspending MFNs with respect to a particular country is controversial. The Marrakesh Agreement has no provisions allowing for such measures. However, other WTO agreements, such as GATT, allow imposition of certain restrictions referring to Article XXI ("Security exceptions") when there is an emergency and a significant threat to national security.

The main problem is that defendants refer to these provisions and a question arises regarding the enforcement and interpretation of the Article provisions in relation to each specific situation.

Nevertheless, it seems reasonable, for example, to develop a complaint against the EU and the U.S. to the WTO regarding the ban on selling aircrafts, spare parts and equipment, insurance and maintenance services to Russian airlines and the violation of leasing companies' obligations. One of the arguments could be that these bans affect the safety of Russian airlines.

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1 URL: [http://www.vavt-imef.ru/wp-content/uploads/2022/07/Monitoring\\_82.pdf](http://www.vavt-imef.ru/wp-content/uploads/2022/07/Monitoring_82.pdf)

2 URL: <https://www.rbc.ru/politics/20/04/2022/62601c189a79472a3b0649da>

3 URL: <https://wto.ru/news/minekonomrazvitiya-schitaet-chto-rossiya-dolzhdna-ostavatsya-v-vto/>

Another controversial issue is the ban on transit of sanctioned goods through Lithuania from Russia to the Kaliningrad region. In the event of a dispute against Russia over the ban on transit of sanctioned goods through Lithuania to the Kaliningrad region, the EU may also resort to this article. The DSB sided with Russia in a dispute over restrictions on transit of goods from Ukraine through Russia to third countries (Central/Eastern Asia and the Caucasus) initiated by Ukraine in 2016 (DS512). However, the difference is that Russia banned transit for international trade, while Lithuania banned it from one Russian region to another. Finally, in July 2022, the European Commission banned road transport of subsanctioned goods through its territory from Russia to Kaliningrad, but this regime did not apply to rail transport.<sup>1</sup>

### 5.6.2. The WTO trade dispute settlement mechanism

August 22, 2022 marks the 10th anniversary of Russia's accession to the World Trade Organization, including the WTO trade dispute settlement mechanism. This mechanism operates under the Understanding on Rules and Procedures Governing the Settlement of Disputes (URPGSD).<sup>2</sup> Since August 2012, Russia is authorized to protect its trade interests through this instrument. The WTO dispute settlement procedure consists of five main successive stages<sup>3</sup>:

- 1) *bilateral consultations* (within 60 days of the request for consultation);
- 2) *setting up an arbitration panel (AP)* at the request of any disputing party and selection of its members to consider the point of the dispute (45 days from the date of the request to create an AP);
- 3) *arbitration panel proceedings* (6–9 months from the start of the AP) and acceptance of the panel report by the dispute resolution body and recommendations of the DSB (approximately 60 days from the date of submission of the panel report);
- 4) *consideration of a dispute by the Appellate Body (AB)* if at least one party has filed an appeal (60–90 days from the date of filing an appeal), adoption of the report of the DSB Appellate Body and informing parties of the DSB recommendations (30 days from the date of submission of the AB report);
- 5) *DSB control* over fulfillment of recommendations (not exceeding 15–18 months from the date of adoption of the DSB report by AP or AB).

### 5.6.3. WTO trade disputes involving Russia

By the end of 2022, Russia has been and is involved in 116 WTO disputes: in 8 cases as plaintiff, in 11 cases as defendant (*Table 13*), and in 97 cases as a third party. In 2022, Russia did not initiate any disputes. The EU initiated a dispute against Russia in the role of a defendant on the issue of export restrictions on wood products (DS608).

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1 URL: <https://www.rbc.ru/politics/13/07/2022/62cecbfa9a79479d807eb34b>.

2 URL: [https://www.wto.org/english/tratop\\_e/dispu\\_e/dispu\\_e.htm](https://www.wto.org/english/tratop_e/dispu_e/dispu_e.htm)

3 URL: <https://www.iep.ru/ru/publikacii/publication/rossiyskaya-ekonomika-v-2021-godu-tendentsii-i-perspektivy-vypusk-43.html>



According to the WTO at the 2022 yearend, Russia joined one dispute in 2022 as a third party, showing the lowest indicator for all the years of Russia's participation in the WTO (for 2012–2022 on average, Russia has joined ten trade disputes a year in the role of a third party).

Russia joined the largest number of disputes in 2018, when protectionist tendencies became visible globally. Some of the disputes where Russia acts as a third party have already ended, and in a number of instances Russia has benefited (directly or indirectly) from its participation in such disputes.

*Table 13*

**WTO trade disputes involving Russia as a major party to the dispute (plaintiff or defendant)<sup>1</sup>**

<b>Dispute</b>	<b>Essence of the claim</b>	<b>Current stage (as of 2022 yearend)</b>
<i>As a plaintiff</i>		
<i>DS474</i> : EU – Methodology of cost-adjustment and certain anti-dumping measures for imports from Russia (23.12.2013) <sup>2</sup>	Energy adjustments in anti-dumping investigations to calculate dumping margins (EU ignored information on costs and prices from Russian producers and exporters). EU conducted end-of-dumping inspections without sufficient data on continuation of dumping and injury	Approval of AP members (22.07.2014). The dispute actually turned into another dispute – see second lawsuit (DS494)
<i>DS476</i> : EU – Certain measures affecting the energy sector (30.04.2014)	The third EU Energy Package: gas production companies cannot be the owners of trunk pipelines located in the EU. Operating companies under the control of foreigners must undergo a special certification procedure.	AB activities (21.09.2018). Actually, AB activities have been frozen
<i>DS493</i> : Ukraine – Anti-dumping measures in relation to ammonium nitrate (07.05.2015)	When conducting anti-dumping investigations on ammonium nitrate, Ukraine did not take into account electricity prices in Russia provided by producers, but focused on prices from third countries (energy adjustments) when calculating the cost of production.	The defendant fulfilled DSB recommendations (repeal of measures) (21.09.2020)
<i>DS494</i> : EU – Methodology of cost-adjustment and certain anti-dumping measures for imports from Russia (07.05.2015)	In anti-dumping investigations related to welded pipes and ammonium nitrate from Russia, the EU did not take into account information on costs and prices from producers and exporters to calculate the dumping margin, but focused on prices from third countries (energy adjustments)	AB activities (28.08.2020). Actually, AB activities have been frozen
<i>DS521</i> : EU – Anti-dumping measures on cold-rolled steel from Russia (27.01.2017)	In anti-dumping investigations, information provided by Russian producers is not taken into account by the EU, but is replaced by unsubstantiated data and incorrect calculations	Suspension of AP activities (18.03.2022)

1 URL: <https://www.iep.ru/ru/publikacii/publication/rossiyskaya-ekonomika-v-2021-godu-tendentsii-i-perspektivy-vypusk-43.html>

2 The date of request for consultation is indicated in the brackets.



<b>Dispute</b>	<b>Essence of the claim</b>	<b>Current stage (as of 2022 yearend)</b>
<i>DS525</i> : Ukraine – Measures restricting trade of goods and services and the transit (19.05.2017)	Comprehensive lawsuit over Ukrainian measures restricting trade in goods and services from Russia	Consultations (19.05.2017)
<i>DS554</i> : U.S. – Special protective measures for steel and aluminium products (29.06.2018)	Russia believes that the U.S. imposed protective measures on steel and aluminum products in spring 2018 in violation of GATT 1994 and the Agreement on Special Safeguards, i.e. granted certain countries privileges and exemptions that did not apply to other countries, imposed import restrictions beyond duties, taxes or other charges through quotas, failed to justify the imposition of emergency measures, failed to send a prompt written notice, failed to allow consultations.	AP activities (25.01.2019). AP report is expected no sooner than in Q4 2022
<i>DS586</i> : Russia – Anti-dumping measures against Russian hot-rolled flat products of carbon steel (U.S. 05.07.2019)	Russia believes that the U.S. failed to correctly calculate the fair cost and dumping margin for all known exporters and producers and the costs of producing the goods in question; failed to properly demonstrate the need for further application of measures, did not terminate, but expanded measures; refused to rely on information from Russian exporters.	Consultations (05.07.2019)
<b><i>As a defendant</i></b>		
<i>DS462</i> : Russia – Recycling fee on transport vehicles (EC, 09.07.2013)	Additional payments (recycling fee) on imported vehicles, while domestic vehicles exempt from paying under certain conditions. When calculating the fee, there is too much difference in the amount of the fee for new and used cars.	Approval of AP members (25.11.2013). Dispute is inactive
<i>DS463</i> : Russia – recycling fee on transport vehicles (Japan, 24.07.2013)	Additional payments (recycling fee) on imported vehicles, while domestic vehicles exempt from paying under certain conditions.	Consultations (24.07.2013). Dispute is inactive
<i>DS475</i> : Russia – Measures affecting imports of live pigs, pork and other pork products (EU, 08.04.2014)	Ban on imports of live pigs, pork and pork products from the EU is a disproportionate measure, since there have been several minor cases of ASF infection of wild boars near the borders with Belarus-Russia, which were promptly localized. The EU disputes how Russia is regionalizing its territory.	Dispute suspended. (28.01.2020). The AP suspended activities after inspecting fulfillment of DSB recommendations at the request of the EU; its powers have expired 28.01.2021
<i>DS479</i> : Russia – anti-dumping duties on light commercial vehicles from Germany and Italy (EU, 21.05.2014)	The procedure of anti-dumping investigations conducted by Russia and determination of dumping margins on light commercial vehicles contradicts the WTO rules in establishing the fact of dumping and injury, evidence, determination of the branch, public notice and explanation of decisions	Defendant fulfilled the DSB recommendations (repeal of measures) (20.06.2018)
<i>DS485</i> : Russia – calculation of import duties on certain agricultural and industrial goods (EU, 31.10.2014)	Russia applies a duty of 15% or 10% for paper and cardboard exceeding the bound level of 5%. For a number of other goods, when the customs value is below a certain level, duties are levied above the bound level	Defendant fulfilled the DSB recommendations (08.06.2017). AP rejected accusations of systemic violations of Russia's WTO commitments on import tariffs.

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Dispute	Essence of the claim	Current stage (as of 2022 yearend)
DS499: Russia – measures restricting imports of railroad equipment and its parts (Ukraine, 21.10.2015)	Russia suspends certificates of conformity confirmation issued to manufacturers of track parts and rolling stock until introduction of new technical regulations and rejects applications for new certificates	Defendant fulfilled the DSB recommendations (05.03.2020) Ukraine requested clarification from Russia regarding requirements that Ukrainian suppliers must meet in order to obtain a certificate of conformity (23.03.2020)
DS512: Russia – measures restricting transit (Ukraine, 14.09.2016)	International transit road and rail transportation of goods from the territory of Ukraine to Kazakhstan or Kyrgyzstan through the Russian Federation should be organized only through Belarus under certain conditions. Ban on transit of goods for which tariff rates are not zeroed and those under embargo	Reports accepted and no further actions required (26.04.2019)
DS532: Russia – measures restricting imports and transit of some Ukrainian goods (Ukraine, 13.10.2017)	Russia introduced measures to restrict imports and transit through Russia to third countries of juices, beer, confectionery and wallpaper of Ukrainian origin. Exports of such Ukrainian products to Russia decreased significantly, for some positions down to zero	Consultations (13.10.2017)
DS566: Russia – rise in import tariffs on a number of U.S. manufactured goods (CША, 27.08.2017)	Since August 2018, Russia raised import duties on certain types of vehicles for cargo transportation, road construction equipment, oil and gas equipment, tools for metal processing and rock drilling and fiber optics (25%, 30% and 40% depending on the product). The U.S. believe that these measures violate GATT 1994, because Russia does not impose such duties on similar goods from other countries, members of the WTO, and gives the U.S. less favorable treatment	AP activities (25.01.2019). AP report is expected no sooner than in H2 2022
DS604: Russia – some measures with regard to domestic and foreign goods and services (EU, 22.02.2021)	The EU disputes measures of Russia's import-substitution policy applied to nongovernmental procurement of state-owned enterprises with reference to the provisions of GATT, GATS, the Protocol on Russia's Accession to the WTO and the Report of the Working Group on Russia's Accession to the WTO: – pricing preferences; – preliminary permits; – minimal quotas	AP activities suspended (08.03.2022)
DS608: Russia – measures with regard to exports of wood products (EU, 20.01.2022)	In the WTO, Russia committed to apply export duties at rates no higher than 13% or 15% for certain volumes of exports, however, Russia applies export duties at a higher rate of 80%. Russia reduced the number of border crossings aimed for exports of a number of wood products to the EU from more than 30 to 1. The EU believes that Russia is in violation of GATT 1994 and the Protocol on Accession. The EU added to its request the imposition of export restrictions or bans on certain timber products by the Eurasian Economic Union	Consultations (20.01.2022)

Source: own calculations based on the WTO official website: URL: [https://www.wto.org/english/tratop\\_e/dispu\\_e/dispu\\_by\\_country\\_e.htm](https://www.wto.org/english/tratop_e/dispu_e/dispu_by_country_e.htm)

## Changes in 2022 on WTO trade disputes involving Russia as a plaintiff

### *DS521: EU – Anti-dumping measures on cold-rolled steel from Russia (Russia)*

On January 27, 2017, Russia asked the WTO to consult with the EU on anti-dumping measures against Russian cold-rolled steel.<sup>1</sup> Exports of disputed goods from Russia to the EU in 2016 dropped by 84% compared to 2015; the share of Russian exports in total exports of these goods dropped from 46% in 2015 to 10% in 2016.<sup>2</sup> Anti-dumping duties are as follows: for Severstal – 34%, for OAO MMC – 18.7%, for PJSC NLMK group and others – 36.1%. The dispute is an example of Russia’s challenging the practice of “energy adjustments” used in anti-dumping investigations, when information from Russian producers is replaced by data from third countries even if the EU recognized Russia’s status as a market economy. On March 13, 2019, Russia asked the DSB to set up an AP, and it was set up on April 26, 2019. Some countries that joined as third countries, support the plaintiff’s position, while others (Ukraine was involved in a similar dispute with Russia, won by Russia in late September 2019 (DS493)) and it supported the defendant’s position.<sup>3</sup>

On March 28, 2022 the DSB granted the request of the Russian Federation of March 18, 2022 to suspend the work of AP in accordance with Article 12.12 (“Panel Procedures”) of the URPGSD for an indefinite period (the EU did not object). If the work of the AP has been suspended for more than 12 months, the authority to establish the AP expires, and the parties have time until March 28, 2023 to resume the work of AP.

## Changes in 2022 on WTO trade disputes involving Russia as a defendant

### *DS604: Russia – Certain measures related to domestic and foreign goods and services (EU)*<sup>4</sup>

On July 22, 2021, the EU asked the WTO to consult with Russia on measures that lead to discrimination by Russian state-owned companies against foreign suppliers.<sup>5</sup> The EU challenges Russia’s measures, which relate to nongovernmental procurement by a wide range of government-related entities that are not government agencies (including state-owned enterprises and state trading businesses):

- price preferences for domestic goods and services in the procurement of a wide range of entities associated with the state, including state-owned enterprises;
- obtaining non-automatic prior approval from the Russian state commission on import substitution by Russian companies wishing to buy specific mechanical engineering products;

1 URL: [https://www.wto.org/english/tratop\\_e/dispu\\_e/cases\\_e/ds521\\_e.htm](https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds521_e.htm)

2 Database UN COMTRADE. URL: <http://comtrade.un.org/>

3 URL: <https://www.iep.ru/files/text/trends/2019/04.pdf>

4 URL: [https://www.vavt-imef.ru/wp-content/uploads/2021/10/Monitoring\\_74.pdf](https://www.vavt-imef.ru/wp-content/uploads/2021/10/Monitoring_74.pdf)

5 URL: [https://www.wto.org/english/tratop\\_e/dispu\\_e/cases\\_e/ds604\\_e.htm](https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds604_e.htm)

- minimum quotas for domestic products in the procurement of state-owned enterprises, including trade and other enterprises related to the state.

Since 2015, Russia has been gradually expanding its import substitution policy, which, among other things, is aimed at reducing the share of foreign goods and services in procurements by state organizations and in investment projects with state support. In Russia in 2019, the value of published tenders by state-owned enterprises amounted to Rb23.5 trillion (about Euro290 bn), which is equivalent to about 21% of Russia's GDP.<sup>1</sup> The main legal acts regulating import substitution in the field of procurement are the Federal Law of 18.07.2011 No. 223-FZ "On procurement of goods, works and services by individual legal entities" and the Federal Law of 31.12.2014 No. 488-FZ "On Industrial Policy of the Russian Federation." Russia is not a member of the WTO Agreement on Government Procurement (GPA), but has been an observer since 2013 and is negotiating accession to the agreement. The GPA does not apply to the procurement of goods and services for the purpose of commercial sale/resale and for use in the production of goods and services for the same purpose.

The Ministry of economic development<sup>2</sup> and the experts, including RANEPА, note the legality of disputed Russian measures and the fact that Russia can invoke the need to ensure national security in terms of vital industries, while the consequences of the dispute bear reputational risks.<sup>3</sup> If the decision is not in favor of Russia, additional retaliatory measures are possible.

The policy of the EU and some other countries, including the U.S., is largely aimed at reducing the role of the state in the economy of individual countries, primarily Russia and China. The issues of market economies, including anti-dumping investigations; pricing in various domestic markets, for example, for commodities in Russia can be highlighted; the provision of subsidies, strictly regulated by the WTO, etc. In November 2022, the U.S. recognized Russia's economy as a non-market economy due to the increased role of the state. The U.S. will not consider Russia anymore as a market economy in its investigations on the introduction of protective measures (anti-dumping and compensatory).<sup>4</sup> As of the end of 2022, 8 anti-dumping and 5 compensatory measures against Russian companies of metallurgical and chemical industries, as well as 3 special protective measures (in respect of steel, aluminum and photovoltaic elements) have been imposed by the U.S. Protective duties imposed by the U.S. against Russian exporters are often restrictive, reaching sometimes 800.0%. According to RANEPА estimates of effective U.S. anti-dumping duties on Russian products in 2014–2020, the application of protective measures, primarily anti-dumping measures, reduced Russian exports to the U.S. by an average of 14.4% in the commodity group. The U.S. recognition of Russia as a non-market economy allows the U.S. to use data on

1 URL: <https://wto.ru/news/es-initsiiroval-spor-v-vto-iz-za-diskriminatsii-goskompaniyami-rf-inostrannykh-postavshchikov/>

2 URL: <https://wto.ru/news/v-mer-zayavili-o-gotovnosti-rossii-provesti-konsultatsii-s-es-posporu-o-goszakupkakh>

3 URL: <https://rg.ru/2021/07/20/chem-groziat-rossii-pretenzii-evrosoiuzua.html>

4 URL: <https://iz.ru/1423862/2022-11-11/ministerstvo-torgovli-ssha-priznalo-ekonomiku-rossii-nerynochnoi>

costs from third countries instead of considering the actual costs of producers in the domestic Russian market.<sup>1</sup>

On November 17, 2021, the EU submitted a request to the DSB to set up the AP and it was set up on December 20. On February 22, 2022, AP started working, however, on March 8, 2022, it interrupted their activities on the EU request in accordance with Article 12.12 (“Panel Procedures”) of the URPGSD for an indefinite period, and the parties have time until March 8, 2023 to resume this dispute.

***DS608: Russia – Measures with regard to exports of wood products (EU)***

On January 20, 2022, the EU submitted a request to the WTO for consultations with Russia on export restrictions related to wood products (DS608).<sup>2</sup> In the WTO, Russia undertook to apply export duties at rates no higher than 13% or 15% for certain export volumes of some unprocessed timber products (tariff quotas), as well as for planned export volumes to the EU. By abolishing these tariff quotas, Russia began to apply export duties at a higher rate of 80%, which, according to the EU, violates its obligations under WTO law. Moreover, Russia has reduced the number of border crossings for certain wood products to be exported to the EU from more than 30 to 1 (Luttia, Finland). The EU added to the request the introduction of export restrictions or bans on certain timber by the Eurasian Economic Union.<sup>3</sup>

On September 30, 2020, the President of the Russian Federation instructed the government to completely prohibit the export of unprocessed or roughly processed coniferous and valuable hardwoods from January 1, 2022 and to prepare a legislative base to prevent the uncontrolled export of unprocessed wood.<sup>4</sup> Russia terminated application of the tariff quotas on some timber materials from January 1, 2022: the RF Government Decree No. 39677 repealed the Government Decree No. 779 from January 1, 2022. A significant part of the tariff quotas was previously to be allocated for exports to the EU. After termination of these tariff quotas, the export duties applied by the Russian Federation to the products in question constitute “80% of the customs value, but not less than Euro55.2 per 1 cubic meter” in accordance with the non-quota tariff rates.

The EU believes that termination of tariff quotas on exports of certain timber products seems incompatible with Russia’s obligations, in particular with Article II:1(a) (“Schedules of Concessions”) of GATT 1994, as Russia gives the EU less favorable treatment with respect to trade in certain timber products compared to Russia’s obligations; with clause 2 of the Protocol on Russia’s Accession to the WTO linked to par. 638 and 1450 of the Report of the Working Group on Russia’s Accession to the WTO, as Russia does not exempt certain timber products under tariff position 4403 from export duties in excess of those related to Russia’s accession to the WTO, Russia does not comply with its tariff concessions

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1 URL: [http://www.vavt-imef.ru/wp-content/uploads/2023/02/Monitoring\\_88.pdf](http://www.vavt-imef.ru/wp-content/uploads/2023/02/Monitoring_88.pdf)

2 URL: [https://www.wto.org/english/tratop\\_e/dispu\\_e/cases\\_e/ds608\\_e.htm](https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds608_e.htm)

3 URL: [https://ec.europa.eu/commission/presscorner/detail/en/IP\\_22\\_410](https://ec.europa.eu/commission/presscorner/detail/en/IP_22_410)

4 URL: <https://tass.com/economy/1206747>

and obligations and does not apply export duties in accordance with the WTO agreements.

Reducing the number of border crossings for the export of some timber seems to the EU to be incompatible with Russia's WTO commitments, in particular, with:

- Article XI:1 (“General Elimination of Quantitative Restrictions”) GATT 1994, as Russia has imposed and maintains the restrictions, other than duties, taxes or other charges, on the export of certain wood products intended for the EU and other WTO countries;
- Article XIII:1 (“Non-discriminatory Administration of Quantitative Restrictions”) GATT 1994, as Russia applies export restrictions on certain wood products intended for the EU and other WTO countries, while similarly Russia does not restrict exports of similar goods to all third countries;
- Article I:1 (“General Most-Favored-Nation Treatment”) GATT 1994, as Russia does not grant any preference, benefit, privilege or immunity in relation to rules and formalities associated with exports, granted by Russia immediately and implicitly to goods destined for another country to similar goods destined for the EU and other countries;
- Clause 2 of the Protocol on Russia's Accession to the WTO linked to par. 668 and 1450 of the Working Group Report on Russia's Accession to the WTO, as Russia applies quantitative export restrictions or export sales restrictions to certain timber or measures which equivalent effect cannot be justified by the provisions of WTO agreements.

As of the yearend 2022, the dispute is in the consultation phase.

### **Trade disputes involving Russia as a third party**

On average over the past 10 years of its membership in the WTO Russia has joined approximately 10 disputes per year. Most often Russia joins the disputes on measures affecting agricultural and food products, metallurgy, automobile and aircraft industry, chemical industry, timber and wood products, renewable energy sources (RES). As for the agreements covering disputes to which Russia joined as a third party (one dispute usually covers several agreements), *Table 14* and *Fig. 2* present the corresponding distribution of topics as of the end of 2022. Most of the disputes are related to GATT, as well as to the Agreements on Antidumping and Subsidies and Countervailing Measures. Besides, Russia is also interested in violations of the Agreement on Special Protective Measures and the Agreement Establishing the WTO.

*Table 14*

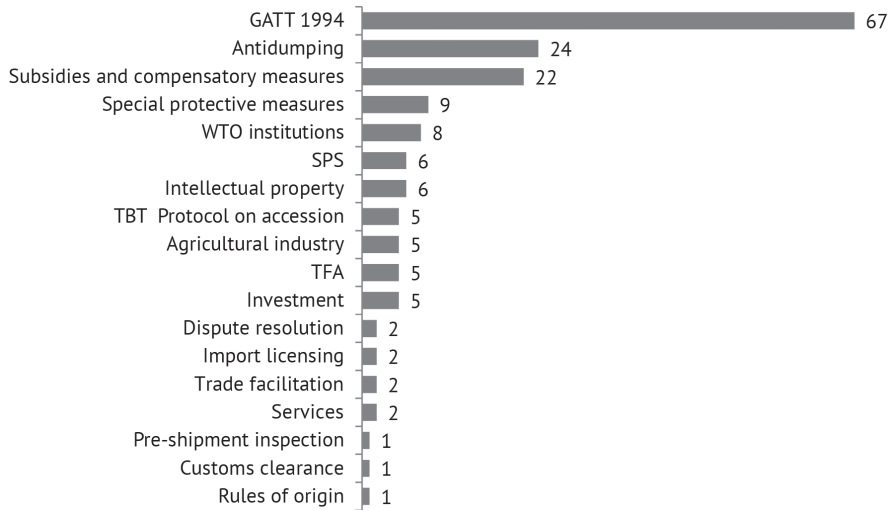
#### **WTO disputes involving Russia as a third party\***

Theme	Disputes
1. Import bans or restrictions (for environmental or other reasons), including rules of origin	<i>DS400, DS401, DS469, DS484, DS495, DS524, DS531, DS537, DS576, DS589, DS597, DS600</i>

Theme	Disputes
2. Protective investigations and measures (anti-dumping, countervailing and special protective measures)	<i>DS414, DS437, DS449, DS454, DS460; DS468, DS471, DS473, DS480, DS488, DS490, DS496, DS513, DS516, DS518, DS523, DS529, DS533, DS534, DS536, DS538, DS539, DS544, DS545, DS546, DS547, DS548, DS550, DS551, DS552, DS553, DS556, DS562, DS564, DS573, DS577, DS578, DS591, DS595, DS598, DS601; DS602; DS603; DS605</i>
3. Export restrictions	<i>DS431, DS432, DS433, DS508, DS509, DS541, DS590, DS592</i>
4. Intellectual property rights	<i>DS441, DS458, DS467, DS526, DS542, DS567</i>
5. Subsidies (including tax and other privileges) and localization requirements	<i>DS456, DS472, DS487, DS497, DS489, DS502, DS510, DS511, DS522, DS579, DS580, DS581, DS583, DS593, DS592</i>
6. Tariffs and tariff quotas	<i>DS492, DS517, DS557, DS558, DS559, DS560, DS543, DS561, DS566, DS582, DS584, DS585, DS588</i>
7. Trade and economic sanctions	<i>DS526</i>

\* Updated table. Ref.: URL: <https://www.iep.ru/ru/publikacii/publication/rossiyskaya-ekonomika-v-2021-godu-tendentsii-i-perspektivy-vypusk-43.html>

Source: based on: *M.A.Baeva*. Trade disputes within WTO involving Russia and a mechanism for their settlement // Russian Foreign Trade Bulletin. 2015. No. 3. p. 75–90.



**Fig. 2.** Themes of the WTO Dispute Agreements involving Russia as a third party, as of the end of 2022

Source: own calculations based on the WTO official website: URL: [https://www.wto.org/english/tratop\\_e/dispu\\_e/dispu\\_by\\_country\\_e.htm](https://www.wto.org/english/tratop_e/dispu_e/dispu_by_country_e.htm)

In 2022, Russia joined only one dispute as a third party – DS603.

***DS603: Australia – antidumping and countervailing duties for certain goods from China (China)***

In 2021, China submitted a request to the WTO for consultations with Australia on anti-dumping and countervailing measures against imports of certain goods of Chinese origin, particularly wind towers, deep-drawn stainless steel sinks and railway wheels (DS603). According to China, these measures violate:

- Article 2 (“Determination of Dumping”) and Article 9.3 (“Imposition and collection of Anti-Dumping Duties”) of the Anti-Dumping Agreement, because Australia did not calculate costs based on the records kept by exporters or producers involved in the dispute; incorrectly determined the cost of production; did not use the cost of production in the country of origin in constructing fair value; in calculating fair value included costs not related to the production and sale of the product in question; did not make a fair comparison between the export price and the normal cost and did not make proper adjustments for differences affecting price comparability; did not properly determine the profit amounts; the amount of anti-dumping duty charged by Australia exceeds the dumping margin set forth in this Article;
- Article VI:1 and VI:2 (“Anti-Dumping and Countervailing duties”) GATT 1994, because Australian anti-dumping and countervailing measures negate or impair, directly or indirectly, the benefits accruing to China;
- Article. 1.1(a), 1.1(b) (“Definition of a Subsidy”), Article 2.1(c) (“Specificity”), Articles 11.1, 11.2, 11.3 (“Initiation and Subsequent Investigation”) and Article 14(d) (“Calculation of the Amount of a Subsidy in Terms of the Benefit to the Recipient”) of the Agreement on Subsidies and Countervailing Measures, because Australia incorrectly determined or did not have a sufficient basis for determining financial assistance; improperly stated that the purported provision of goods for less than adequate consideration provided a benefit to the recipient, and improperly calculated the amount of any benefit, allegedly citing, inter alia, its erroneous conclusions that prevailing market conditions in China were “distorted,” as a basis for rejecting actual transaction prices in China as a benchmark; did not make a proper determination based on positive evidence that the alleged provision of imported goods for less than adequate consideration was specific to an enterprise, industry, or group of enterprises/industries; Australia initiated a compensatory investigation into the alleged provision of resources for less than adequate remuneration in the absence of sufficient evidence in the application to determine financial co-operation and in the absence of sufficient consideration of the application; Australia initiated a countervailing investigation into the alleged provision of resources for less than adequate remuneration in the absence of sufficient evidence in the application to support the claim that any such subsidy would be



specific under Article 2.1(c) of Agreement on Subsidies and Countervailing Measures and in the absence of sufficient consideration of the application.

Consultation between China and Australia held in 2021 did not resolve the dispute, and in January 2022 China submitted a request for establishing the AP and it was established on February 28, 2022, and members approved on September 5, 2022. Russia and a number of other countries joined the dispute as third countries. On April 28, 2022, Australia and China informed the DSB that they have agreed upon arbitration procedures in accordance with Article 25 (“Arbitration”) of the URPGSD in this dispute. These procedures were introduced by Australia and China aimed to implement the Multiparty Interim Appeal Arbitration Arrangement (MPIA) in accordance with Article 25 of the URPGSD aimed to establish the basis for decision to be made by the Arbiter on appeals against any final report of the AP, submitted on this particular dispute, if the AP fails to hear the appeal in accordance with Article 16.4 (“Adoption of Panel Reports”) and Article 17 (“Appellate Review”) by the URPGSD.

Russia’s interest is primarily due to its participation in disputes over anti-dumping and countervailing measures and investigations and application of subsidies, since the issues of non-market economy are becoming increasingly relevant not only for China, but also for Russia (disputes over “energy adjustments” with the EU, revocation of the market status of the Russian economy by the U.S.).



## References

### **Regulatory legal acts, materials of state government bodies**

The Federal Law of 26.12.1995 No. 208-FZ “On Joint Stock Companies”.

The Federal Law of 22.04.1996 No. 39-FZ “On the Securities Market”.

The Federal Law of 29.07.1998 No. 135-FZ “On appraisal activities in the Russian Federation”.

The Federal Law of 05.04.2013 No. 44-FZ «On the Contractual System in the Sphere of Procurement of Goods, Works and Services for State and Municipal Needs”.

The Federal Law of 31.12.2014 No. 488-FZ “On the Industrial Policy in the Russian Federation” (as revised of 07.10.2022 No. 390-FZ).

The Federal Law of 31.12.2017 No. 481-FZ “On Amendments to Certain Legislative Acts of the Russian Federation”.

The Federal Law of 01.04.2020 No. 69-FZ “On Protection and Promotion of Capital Investments in the Russian Federation” (as revised of 28.06.2022 No. 226-FZ).

The Federal Law of 03.08.2018 No. 291-FZ “On Special Administrative Districts in the Territories of the Kaliningrad Oblast and Primorsky Krai”.

The Federal Law of 06.12.2021 No. 390-FZ “On the Federal Budget for 2022 and for the Planning Period of 2023 and 2024” (original version).

The Federal Law of 06.12.2021 No. 406-FZ “On Amendments to Article 1 of the Federal Law “On the Minimum Wage”.

The Federal Law of 25.02.2022 No. 25-FZ “On Amendments to the Federal Law “On Joint Stock Companies” and on the Suspension of Certain Provisions of Legislative Acts of the Russian Federation”.

The Federal Law of 08.03.2022 No. 46-FZ “on Amendments to Certain Legislative Acts of the Russian Federation”.

The Federal Law of 07.03.2022 No. 55-FZ “On Amendments to Articles 6 and 7 of the Federal Law “On Amendments to the Federal Law “On the Central Bank of the Russian Federation (Bank of Russia)” and Certain Legislative Acts of the Russian Federation Regarding the Specifics of Changing Terms of the Credit Agreement, Loan Agreement” and Article 21 of the Federal Law “On Amendments to Certain Legislative Acts of the Russian Federation”.

The Federal Law of 26.03.2022 No. 64-FZ “On Amendments to Certain Legislative Acts of the Russian Federation”; Federal Law of 19.12.2022 No. 519-FZ “On Amendments to Certain Legislative Acts of the Russian Federation and Suspension of Certain Legislative Acts of the Russian Federation”.

The Federal Law of 26.03.2022 No. 74-FZ “On Amendments to Certain Legislative Acts of the Russian Federation and On Suspension of Certain Provisions of Legislative Acts of the Russian Federation”.

The Federal Law of 15.04.2022 No. 92-FZ “On Amendments to Certain Legislative Acts of the Russian Federation”.

The Federal Law of 16.04.2022 No. 108-FZ “On Amendments to Article 12 of the Federal Law “On Science and State Scientific and Technical Policy” and Article 8 of the Federal Law “On Education in the Russian Federation”.

The Federal Law of 16.04.2022 No. 114-FZ “On Amendments to the Federal Law “On Joint Stock Companies” and Certain Legislative Acts of the Russian Federation”.

The Federal Law of 28.05.2022 No. 152-FZ “On Amendments to the Federal Law “On the Customs Regulation and On Amendments to Certain Legislative Acts of the Russian Federation”.

The Federal Law of 28.06.2022 No. 213-FZ “On Amendments to Article 18 of the Federal Law “On Amendments to Certain Legislative Acts of the Russian Federation”.

The Federal Law of 14.07.2022 No. 292-FZ “On Amendments to Certain Legislative Acts of the Russian Federation, Recognizing as Invalid the Sixth Paragraph of the First Part of Article 7 of the Law of the Russian Federation “On State Secrets,” the Suspension of Certain Provisions of Legislative Acts of the Russian Federation and the Establishment of Specific Regulations on Corporate Relations in 2022 and 2023”.

The Federal Law of 14.07.2022 No. 313-FZ “On Amendments to the Federal Law “On the Customs Regulation in the Russian Federation and On Amendments to Certain Legislative Acts of the Russian Federation”.

---

The Federal Law of 14.07.2022 No. 314-FZ “On Amendments to Article 120 of the Federal Law “On the Customs Regulation in the Russian Federation and On Amendments to Certain Legislative Acts of the Russian Federation”.

The Federal Law of 14.07.2022 No. 319-FZ “On Amendments to Certain Legislative Acts of the Russian Federation”.

The Federal Law of 14.07.2022 No. 320-FZ “On Amendments to the Federal Law “On Privatization of State and Municipal Property”, Certain Legislative Acts of the Russian Federation and On the Establishment of Peculiarities of the Regulation of Property Relations”.

The Federal Law of 14.07.2022 No. 323-FZ “On Amendments to the Second Part of the Tax Code of the Russian Federation”.

The Federal Law of 19.12.2022 No. 519-FZ “On Amendments to Certain Legislative Acts of the Russian Federation and Suspension of Certain Provisions of Legislative Acts of the Russian Federation”.

The Federal Law of 19.12.2022 No. 531-FZ “On Amendments to the Federal Law “On the Russian Scientific Fund and On Amendments to Certain Legislative Acts of the Russian Federation”.

Executive Order of the President of RF of 21.07.2020 No. 474 “On the National Development Goals of the Russian Federation until 2030”.

Executive Order of the President of RF of 15.06.2021 No. 364 “On Temporary Measures to Regulate the Legal Status of Foreign Nationals and Stateless Persons in the Russian Federation during the Period of Overcoming the Consequences of the Spread of New Coronavirus Infection (COVID-19)”.

Executive Order of the President of RF of 28.02.2022 No. 79 “On Application of Special Economic Measures in Connection with Unfriendly Actions of the United States of America and Foreign States and International Organizations Affiliated with Them”.

Executive Order of the President of RF of 01.03.2022 No. 81 “Additional Temporary Economic Measures to Ensure Financial Stability of the Russian Federation”.

Executive Order of the President of RF of 05.03.2022 No. 95 “On the Temporary Procedure for the Fulfillment of Obligations to Certain Foreign Creditors”.

Executive Order of the President of RF of 08.03.2022 No. 100 “On Application of Special Economic Measures in the Sphere of Foreign Economic Activity in Order to Ensure Security of the Russian Federation”.

Executive Order of the President of RF of 23.05.2022 No. 303 “On Amendments to the Executive Order of the President of RF of February 28, 2022 No. 79 “On Application of Special Economic Measures in Connection with Unfriendly Actions of the United States of America and Foreign States and International Organizations Affiliated with Them”.

Executive Order of the President of RF of 22.06.2022 No. 394 “On the Temporary Procedure for Execution to Residents and Foreign Creditors of Government Debt Obligations of the Russian Federation, expressed in Government Securities, the Nominal Value of Which is Indicated in Foreign Currency”.

Executive Order of the President of RF of 05.07.2022 No. 430 “On Repatriation of Foreign Currency and Currency of the Russian Federation by Residents-Participants of Foreign Economic Activity”.

Executive Order of the President of RF of 05.08.2022 No. 520 “On Application of Special Economic Measures in the Financial and Fuel-energy Spheres in Connection with Unfriendly Actions of Some Foreign States and International Organizations”.

Executive Order of the President of RF of 09.11.2022 No. 809 “On Approval of the Basic State Policy for the Preservation and Strengthening of Traditional Russian Spiritual and Moral Values”.

RF Government Decree of 4.01.1999 No. 1 “On the Forecast of the Development of the Public Sector of the Economy of the Russian Federation” (as amended on December 30, 2002).

RF Government Decree of 29.01.2015 No. 72 “On Some Measures to Improve Statistical Observation in the Sphere of State Property Management”.

RF Government Decree of 04.02.2022 No. 107 “On Features of Implementation of the Basic Program of Compulsory Health Insurance in the Context of the Threat of Spread of Diseases Caused by a New Coronavirus Infection (COVID-19)”.

RF Government Decree of 06.03.2022 No. 297 “On Establishing the Size of the Initial (maximum) Contract Price and the Annual Volume of Purchases for the Purchase of Certain Types of Medical Devices by Electronic Request for Quotations”.

RF Government Decree of 06.03.2022 No. 302 “On the Introduction of a Temporary Ban on the Export Outside the Russian Federation of Medical Devices Previously Imported into the Russian Federation from Foreign States That Have Decided to Impose Restrictive Economic Measures Against the Russian Federation”.

RF Government Decree of 09.03.2022 No. 311 “On Measures to Implement Decree No. 100 of the President of the Russian Federation of March 8, 2022”.

---

RF Government Decree of 15.04.2014 No. 320 “On Approval of the State program of the Russian Federation “Public Finance Management and Regulation of Financial Markets”.

RF Government Decree of 12.03.2022 No. 346 “On Amendments to the Program of State Guarantees of Free Medical Care for Citizens in 2022 and for the Planning Period of 2023 and 2024”.

RF Government Decree of 12.03.2022 No. 351 “On Features of Disclosure and Provision in 2022 of Information to Be Disclosed and Provided in Accordance with the Requirements of the Federal Law “On Joint-Stock Companies” and the Federal Law “On the Securities Market” and Features of Disclosure of Insider Information in Accordance with the Requirements of the Federal Law “On Counteraction of Illegal Use of Insider Information and Market Manipulation and on Amendments to Some Legislative Acts of the Russian Federation”.

RF Government Decree of 16.03.2022 No. 373 “On Amendments to the RF Government Decree of 28.12.2021 No. 2505”.

RF Government Decree of 16.03.2022 No. 374 “On Suspension of the RF Government Decree of 19.04.2021 No. 620”.

RF Government Decree of 16.03.2022 No. 375 “On Approval of the Rules for Granting Subsidies from the Federal Budget to Russian Credit Organizations for Reimbursement of Under-Received Income on Credits Granted at a Reduced Rate to Systemically Important Organizations and (or) Their Subsidiaries Engaged in the Agro-industrial Complex for Operating Activities”.

RF Government Decree of 12.03.2022 No. 353 (revised of 23.12.2022) “On the Features of Permitting Activities in the Russian Federation in 2022 and 2023».

RF Government Decree of 17.03.2022 No. 392 “On Approval of the Rules for Granting Subsidies from the Federal Budget to an Autonomous Non-Profit Organization “Engineering and Innovation Support Center” in Order to Create Tools for Finalizing Products of Technological Companies to Meet the Requirements of Large Corporations”.

RF Government Decree of 17.03.2022 No. 39 “On Approval of the Rules for Granting Subsidies from the Federal Budget to Russian Credit Organizations for Reimbursement of Under-Received Income on Loans Granted to Systemically Important Organizations of Industry and Trade and to Entities Belonging to a Group of Entities of a Systemically Important Organization of Industry and Trade”.

RF Government Decree of 19.03.2022 No. 414 “On Some Issues of the Application of Requirements and Target Values of Indicators Related to Publication Activity”.

RF Government Decree of 23.03.2022 No. 444 “On Amendments to the Specifics of State Regulation of Manufacturers’ Maximum Selling Prices for Medicines Included in the List of Vital and Essential Medicines”.

RF Government Decree of 23.03.2022 No. 440 “On Approval of Peculiarities of Amending the Documents Contained in the Registration Dossier for a Registered Medicinal Product for Medical Use in Case of Defects or Risk of Drug Defects in Connection with the Introduction of Restrictive Economic Measures Against the Russian Federation”.

RF Government Decree of 29.03.2022 No. 506 “On Goods (groups of goods) in Relation to Which Certain Provisions of the Civil Code of the Russian Federation on Protection of Exclusive Rights to the Results of Intellectual Activity, Expressed in Such Goods, and Means of Individualization with Which Such Goods Are Marked”.

RF Government Decree of 01.04.2022 No. 552 “On Approval of Peculiarities of Circulation Including Peculiarities of State Registration of Medical Devices in Case of Their Defectiveness or Risk of Defectiveness in Connection with the Introduction of Restrictive Economic Measures in Respect of the Russian Federation”.

RF Government Decree of 02.04.2022 No. 565 “On Determination of Categories of Payers of Customs Duties, Taxes, Special, Antidumping and Countervailing Duties, Persons Bearing Joint Liability with the Payer for Payment of Customs Duties, Taxes, Special, Antidumping and Countervailing Duties”.

RF Government Decree of 05.04.2022 No. 593 “On Peculiarities of Circulation of Medicines for Medical Use in Case of Defects or Risk of Defectiveness of Medicines in Connection with the Introduction of Restrictive Economic Measures in Respect of the Russian Federation”.

RF Government Decree of 19.04.2022 No. 701 “On Amendments to the RF Government Decree of March 12, 2022 No. 353”.

RF Government Decree of 03.12.2004 No. 738 “On Management of Federally Owned Shares of Open Joint-Stock Companies and Use of the Special Right of Participation of the Russian Federation in Managing Joint-Stock Companies (“golden share”)” (as amended and supplemented).

RF Government Decree of 22.04.2022 No. 739 “On Amendments to Annex No. 5 to the State Program of the Russian Federation “Health Care Development”.

RF Government Decree of 29.04.2022 No. 776 “On the Change in the Deadline for Payment of Insurance Premiums in 2022”.



---

RF Government Decree of 18.05.2022 No. 895 “On Approval of the Rules for Granting Subsidies from the Federal Budget to Credit Organizations for Reimbursement of Lost Income on Credits Issued for the Purchase of Priority for Import Products”.

RF Government Decree of 28.05.2022 No. 973 “On Peculiarities of Calculation and Establishment in 2022 of the Minimum Wage, the Amount of the Subsistence Minimum, the Social Additional Payment to Pensions, as Well as on Approval of the Coefficient of Indexation (additional increase) of the Fixed Payment to the Insurance Pension, the Coefficient of Additional Increase in the Cost of One Pension Coefficient and the Coefficient of Additional Indexation of Pensions Provided by the Fourth – Sixth Paragraph 1 of Article 25 of the Federal Law “On State Pension Provision in the Russian Federation”.

RF Government Decree of 31.05.2022 No. 993 “On Amendments to the Rules for Reimbursement to Credit and Other Organizations of Shortfall in Income on Housing (Mortgage) Loans (Credits) Extended to Citizens of the Russian Federation in 2020–2022”.

RF Government Decree of 09.06.2022 No. 1056 “On Suspension of Certain Provisions of Some Acts of the Government of the Russian Federation”.

RF Government Decree of 20.12.2017 No. 1596 “On Approval of the State Program of the Russian Federation ‘Development of Transportation System’”.

RF Government Decree of 26.12.2017 No. 1640 “On Approval of the State Program of the Russian Federation ‘Health Care Development’”.

RF Government Decree of 22.09.2022 No. 1670 “On Peculiarities of State Control (Supervision) Over the Implementation of International Road Transport at Checkpoints Across the State Border of the Russian Federation”; the list of non-food essentials was approved by the Order of the Government of the Russian Federation of 27.03.2020 No. 762-p.

RF Government Decree of 04.10.2022 No. 1759 “On Amendments to The RF Government Decree of March 12, 2022 No. 353”.

RF Government Decree of 10.10.2022 No. 1805 “On Amendments to Annex 10 to the State Program of the Russian Federation ‘Health Care Development’”.

RF Government Decree of 21.10.2022 No. 1878 “On Amendments to the Regulations on Coordination of the Draft Territorial Planning Scheme for Two or More Subjects of the Russian Federation or the Draft Territorial Planning Scheme of a Subject of the Russian Federation”.

RF Government Decree of 02.11.2022 No. 1959 “On Amendments to Certain Acts of the Government of the Russian Federation”.

RF Government Decree of 23.11.2022 No. 2115 “On Amendments to the Decree of the Government of the Russian Federation of October 13, 2020 No. 1681”.

RF Government Decree of 29.12.2022 No. 2497 “On the Program of State Guarantees of Free Medical Help in 2023 and for the planning period of 2024 and 2025”.

RF Government Decree of 31.12.2022 No. 2572 “On Amendments to the State Program of the Russian Federation ‘Public Finance Management and Regulation of Financial Markets’”.

RF Government Edict of 31.01.2019 No. 117-p. “On Approval of the Concept of Improving the Efficiency of Budget Expenditures in 2019–2024”.

RF Government Edict of 01.10.2021 No. 2765-p “On Approval of the Unified Plan to Achieve National Development Goals of the Russian Federation for the Period up to 2024 and for the planning period up to 2030”.

RF Government Edict of 23.11.2021 No. 3303-p “On the Establishment in 2022 of the Quota for Admission to Target Education Programs of Higher Education at the Expense of Budgetary Allocations from the Federal Budget”.

RF Government Edict of 27.11.2021 No. 3363-p “On the Transport Strategy of the Russian Federation until 2030 with the Forecast for the Period up to 2035”.

RF Government Edict of 21.12.2021 No. 3744-p “On Approval of the Strategic Direction in the Digital Transformation of the Transport Industry of the Russian Federation until 2030”.

RF Government Edict of 18.03.2022 No. 532-p “On Budget Appropriations Allocated in 2022 to the Ministry of Agriculture of Russia for Granting Subsidies from the Federal Budget to Russian Credit Institutions for Compensation of Their Shortfalls in Income from Loans Extended at a Preferential Rate to Systemically Important Organizations and (or) Their Subsidiaries Engaged in the Agro-Industrial Complex for Carrying out Operational Activities”.

RF Government Edict of 20.05.2022 No. 1252-p “On Preparation of Draft Directives for Representatives of the Interests of the Russian Federation to Participate in the Meeting of the Supervisory Board of Sberbank of Russia Public Joint Stock Company”.

RF Government Edict of 29.09.2022 No. 2847-p (revised of 13.12.2022) "On the Allocation by the Ministry of Economic Development of the Russian Federation in 2022 of Budget Appropriations for the Provision of Subsidies from the Federal Budget to Credit institutions, Non-Credit Financial Organizations Which Carry Out Activities to Provide Loans (credits), or the State Corporation of Development "VEB. RF" to Compensate for Part of Their Shortfall in Income Under Credit Agreements (loan agreements) in Respect of Which a Special Procedure of Charging and Paying Interest for Using the Credit (loan)".

RF Government Edict of 24.09.2022 No. 3147-p "On Distribution of Other Interbudgetary Transfers Provided in 2022 From the Federal Budget to the Budgets of the Subjects of the Russian Federation and to the Budget of Baikonur, the Source of Financial Support of Which Are Budgetary Allocations From the Reserve Fund of the Russian Federation Government, in Order to Co-Finance Expenditure Obligations of Constituent Territories of the Russian Federation and Baikonur to Provide Interbudgetary Transfers to the Budget of the Respective Territorial Fund for Mandatory Medical Insurance for Additional Financial Support of Medical Care Provided to Insured Individuals".

RF Government Edict of 17.11.2022 No. 3502-p "On Establishing for 2023 a Quota for Admission to Targeted Training Educational Programs of Higher Education From Budgetary Allocations From the Federal Budget".

Order of Rosstat of 29.03.2019 No. 181 "On Approval of Methodology for Calculating the Indicator 'Proportion of Citizens Leading a Healthy Lifestyle'".

Order of the MMI Federal Fund No. 149H of 29.12.2021 "On Establishing the Procedure for the Use of the Normalized Insurance Stock of the Territorial Compulsory Medical Insurance Fund".

Order of the Ministry of Industry and Trade of Russia of 19.04.2022 No. 1532 "On Approval of the List of Goods (groups of goods) in Relation to Which the Provisions of Subparagraph 6 of Article 1359 and Article 1487 of the Civil Code of the Russian Federation Do Not Apply, provided that the Said Goods (groups of goods) Are Put into Circulation Outside the Territory of the Russian Federation by the Right Holders (patent holders) and with Their Consent".

Order of the FCS of Russia of 24.10.2022 No. 886 "On Amendments to the Clarifications on the Classification in Accordance with the Single Commodity Nomenclature of Foreign Economic Activity of the Eurasian Economic Union of Certain Types of Goods, approved by Order of the FCS of Russia of 17.11.2021 No. 995" (registered with the Russian Ministry of Justice 28.11.2022 No. 71173).

Order of the Russia Ministry of Finance of 15.12.2022 No. 553 "On Approval of the List of Federal Property Which Is to Be Privatized Without Inclusion in the

Forecast Plan (program) of Privatization of Federal Property for the Planning Period for 2023–2025”.

Ordinance of the Ministry of Transportation of Russia of 21.10.2022 No. BC-270-p “On Promising Models of Road, Sea, Rail and Air Checkpoints Across the State Border of the Russian Federation Used as a Standard for the Construction, Reconstruction, Equipment and Technical Equipment of Buildings, Premises and Structures Necessary for the Organization of Border, Customs and Other Types of Control Carried out at Checkpoints Across the State Border of the Russian Federation”.

Draft Law No. 201618-8 “On Amendments to Article 1 of the Federal Law ‘On the Minimum Wage’ and on Suspension of Its Certain Provisions”. URL: <https://sozd.duma.gov.ru/bill/201618-8>

### **Russian sources**

*Abramov A.* (2019). Stake out a platform // *Expert*. No. 44. 28 October – 3 November. Pp. 64–68.

*Abramov A.E., Radygin A.D., Chernova M.I.* (2021). Russian stock market: Trends, Challenges and solutions // *Voprosy Ekonomiki*. No. 11. Pp. 5–32.

Russian airlines plan to increase transportation to 101 million passengers in 2023 // *TASS*. URL: <https://tass.ru/ekonomika/16872953>

*Ageeva O., Kotova M.* Medical equipment will be released for repairs abroad. But foreign manufacturers will be required to guarantee their return // *RTVI*. 10.08.2022. URL: <https://rtvi.com/stories/medtehniku-otpustyat-na-remont-zarubezh-no-ot-inostrannyh-proizvoditelej-potrebuyut-garantii-ee-vozvrata/>

Road freight transportation returned to growth // *Kommersant*. URL: <https://www.kommersant.ru/doc/5459439>

ACRA announced the recovery of Russian oil exports amid the embargo // *RBC*. URL: <https://www.rbc.ru/business/08/12/2022/6390756f9a794733bf81beb9>

*Apevalova E.A., Polezhaeva N.A., Radygin A.D.* Corporate governance standards and practices: some current trends. *Russian Economy in 2019. Trends and Outlooks*. Issue. 41. Moscow. Gaidar Institute Press, 2020. Pp. 486–498.

*Apevalova E.A., Polezhaeva N.A.* Corporate governance during the coronavirus crisis: A course for diversity of interests and slow implementation of principles // *Russian Economy in 2021. Trends and Outlooks*. Issue. 43. Moscow. Gaidar Institute Press, 2022. Pp. 460–473.

Sber shareholders decided not to pay dividends for 2021. URL: <https://quote.rbc.ru/news/article/62bd6dde9a7947787a4de72a>

The Bali Declaration of the G20 Leaders. URL: <http://kremlin.ru/events/president/news/69844>

Biden banned the U.S. Treasury from exchanging special drawing rights with Russia. URL: <https://rg.ru/2022/10/05/bajden-zapretil-minfinu-ssha-obmenivatsia-specialnymi-pravami-zaimstvovaniia-s-rossiej.html>

*Baeva M.A.* Trade disputes within the framework of the WTO where Russia participates and the mechanism for their resolution // Russian Foreign Economic Bulletin. 2015. No. 3. Pp. 75–90.

*Barinova V.A., Zemtsov S.P., Tsareva Yu.V.* In search of entrepreneurship in Russia. Part I. What prevents small and medium-sized businesses from developing. Moscow. Delo Publishing house RANEPА, 2023.

*Beskaravainaya T.* ITS Ministry of Public Health disclosed data on non-reproducible types of medical products in Russia // Medvestnik. 29.03.2022. URL: <https://medvestnik.ru/content/news/Minzdrav-raskryl-dannye-o-nevosproizvodimyh-v-Rossii-vidah-medizdelii.html>

*Beskaravainaya T.* The Rogachev Center transferred patients who received CAR-T therapy to other types of treatment // Medvestnik. 23.05.2022. URL: <https://medvestnik.ru/content/news/Centr-Rogacheva-perevel-poluchavshih-CAR-T-terapiu-pacientov-na-drugie-vidy-lecheniya.html>

*Bozhechkova A., Sinelnikova-Muryleva E., Trunin P.* Capital control allowed to stabilize the situation on the currency market // Monitoring of Russia's Economic Outlook. Trends and Challenges of Socio-Economic Development. 2022. No. 5 (158).

*Bozhechkova A., Sinelnikova-Muryleva S.G., Trunin P.V.* Factors of the Russian ruble exchange rate dynamics in the 2000s and 2010s // Voprosy Ekonomiki. 2020. No. 8. Pp. 1–18.

*Borussyak L.* A new wave of highly educated emigrants: Why are they leaving Russia? // Palladium. 2022. No. 3 (2). Pp. 98–115. DOI: 10.55167/29b32cb46280

*Budris A.* Oil service companies stop investing in Russia: What will happen to oil production // Forbes. 23.03.2022. URL: <https://www.forbes.ru/biznes/459711-nefteservisnye-kompanii-prekrasaut-investicii-v-rossii-cto-budet-s-dobycej-nefti>

*Burmistrov A.* Russian scientists develop cooperation with Iran // Scientific Russia. April 20, 2022. URL: <https://scientificrussia.ru/articles/rossijskie-ucenyey-razvivaut-sotrudnicestvo-s-iranom>

*Bukharskiy V., Tirskiy T., Galieva G.* Consolidated regional budgets: Sustainability in spite of sanctions. Moscow. 2022. URL: [https://raexpert.ru/researches/regions/regional\\_budgets\\_2022/](https://raexpert.ru/researches/regions/regional_budgets_2022/)

*Bykova N.* President of the RAS of the mobilization era // Expert. September 26, 2022. No. 39. URL: <https://expert.ru/expert/2022/39/prezident-ran-epokhi-mobilizatsii/>

*Vasilieva A.* Universities have mislabeled priority // Kommersant. December 1, 2022. URL: <https://www.kommersant.ru/doc/5695686>

*Vasilieva A.* Governors will not be handed over science // Kommersant. April 13, 2022. URL: <https://www.kommersant.ru/doc/5305620>

*Vedeneeva N.* Official and academics discovered 135 billion in extra grant money // MKRU. December 27, 2022. URL: <https://www.mk.ru/science/2022/12/27/chinovnik-i-akademiki-obnaruzhili-lishnie-135-milliardov-grantovykh-deneg.html>

*Vitaliy Soloviev.* Vitaly Savelyev told about new technologies of water transportation in Russia // Maritime News of Russia. URL <http://www.morvesti.ru/news/1679/99296/>

*Vlasova M., Gershman M.* Making science in Russia: Attitudes and expectations // Science. Technologies. Innovations. Express-information. December 14, 2022. URL: <https://issek.hse.ru/news/802297927.html>

Price volatility and food security. Report of the high-level panel of experts on food security and nutrition of the Committee on world food security. Rome, 2011. P. 104. URL: <https://www.fao.org/publications/card/en/c/ca7b994d-715a-5f6e-84ee-6879701d75b2/>

Volga Shipping Company will close the sale of eight oil tankers in October 2022 // Portnews. URL: <https://portnews.ru/news/336378/>

*Volchkova N.* When the thunder sounded. Measures to support science under sanctions are outlined // Poisk. April 15, 2022 No. 16. P. 3. URL: <https://poisknews.ru/magazine/kogda-gryanul-grom/>

*Volchkova N.* ITS Hardly enough. The science budget will continue to shrink // Poisk. October 21, 2022 No. 43. P. 3. URL: <https://poisknews.ru/science-politic/vryad-li-dostatochno-nauchnyj-byudzh-et-prodolzhit-sezhivatsya/>

---

ITS Time for transformation: How the airline market will change in 2022 // RBC. URL: <https://ekb.plus.rbc.ru/news/6268cdd97a8aa97357fa6a4d>

Voronin N. The isolation of Russia will hit Russian science hard and affect the world one. March 10, 2022. URL: <https://www.bbcussian.com/russian/features-60682102>

All domestic airlines have completed the transition to Russian reservation systems // Ministry of Transport of Russia. URL: <https://mintrans.gov.ru/press-center/news/10467>

Get out of a cargo dive // RZhD Partner.ru URL: <https://www.rzd-partner.ru/aviation/comments/vyyti-iz-gruzovogo-pike-/>

Russian Minister of Foreign Affairs Sergey Lavrov speaks and answers to media questions on the results of the G20 summit // Denpasar. November 15, 2022. URL: <https://www.mid.ru/ru/detail-material-page/1838803/>

A new furnishing ship “Mikhail Gromov” arrived in the Kama basin of the Volga-Dnepr // Portnews. URL: <https://portnews.ru/news/337650/>

The “Transport of Russia” forum included a plenary discussion on “International Transport Cooperation-2022. New directions, trends, results”. // Ministry of Transport of Russia. URL: <https://mintrans.gov.ru/transport-news/10511>

Rossiia Airlines announced the launch of Russian meteorological software // TASS. URL: <https://tass.ru/ekonomika/16276305>

Gazprom explained what happened to the flow of Russian gas through Poland // Gazeta.ru URL: <https://www.gazeta.ru/business/2022/05/12/14846882.shtml>

200 routes of public transport were cut in Russian cities // RBC. URL: <https://www.rbc.ru/business/14/11/2022/636e73949a79471f6fdbfafa>

The EU briefed what prices are being discussed for the gas ceiling // RBC. URL: <https://www.rbc.ru/politics/19/12/2022/63a02a639a79471cccd336d7>

The EAEU will use navigation seals to track shipments // GARANT.RU URL: <https://www.garant.ru/news/1581498/>

Twelve additional vehicle lanes were opened at the Upper Lars border crossing point on the Russian-Georgian border // Trans.ru. URL: <https://trans.ru/news/v-punkte-propuska-verhnii-lars-na-granitse-rossii-s-gruziei-otkrili-12-dopolnitelnih-polos-dlya-transporta>

The Russian Federation has extended the program of preferential car loans for 2023 // Moscow24. URL: <https://www.m24.ru/news/transport/22112022/523835>

The piers were reconstructed in Taman // Seanews.URL: <https://seanews.ru/2022/08/12/ru-v-tamani-rekonstruirovali-prichaly/>

Exhibition of Water Management Achievements // Vgudok. URL: <https://vgudok.com/lenta/vystavka-dostizheniy-vodnogo-hozyaystva-na-transportnoy-nedele-rasskazali-o-tom-kak-morskie-i>

Life expectancy increased in Russia in 2022 // Kommersant. News – society. URL: <https://www.kommersant.ru/doc/5825512?ysclid=lecry15h66746866442>

Around 90% of outpatient cancer care centers were built in Russia // TASS. 12.12.2022. URL: <https://tass.ru/obshchestvo/16567505>;

UN General Assembly suspends Russia's membership in the UN Human Rights Council // UN News. URL: <https://news.un.org/ru/story/2022/04/1421492>

ITS Grigory Trubnikov, General Director of the Joint Institute for Nuclear Research in Dubna, on who loses first to sanctions and the search for trust between scientists and the state // Kommersant. October 29, 2022. URL: <https://www.kommersant.ru/doc/5608815>

Head of Lithuanian Ministry of Finance proposed to discuss the suspension of Russia's membership in the IMF at the EU level. URL: <https://tass.ru/ekonomika/14282785>

The head of Rosaviatsiya asked the industry what it lacks // RZhD Partner.ru URL: <https://www.rzd-partner.ru/aviation/comments/glava-rosaviatsii-sprosil-u-otrasli-chego-ey-ne-khvataet/>

The Head of Aurora – RBC: “Russians have begun to look more inward”. // Aviation Explorer. URL: <https://www.aex.ru/fdocs/2/2022/12/6/33203/>

Global energy and food prices, inflation in Russia // AKRA. URL: <https://www.acra-ratings.ru/research/2666/>

*Golikova Tatiana*: Vital and essential medicines are sufficient for the activities of medical institutions and the provision of our citizens // Government of Russia. 04.04.2022. URL: <http://government.ru/news/45042/>

*Grinkevich D., Kinyakina E., Boiko A., Sidorkova I.* Ministry of Industry and Trade offered a way to achieve technological sovereignty // Vedomosti. November 6,



2022. URL: <https://www.vedomosti.ru/business/articles/2022/11/03/948680-minpromtorg-predlozhit-sposob-dostich-tehnologicheskogo-suvereniteta>

*Gusev A.B., Yurevich M.A.* Science policy of Russia – 2022: The profession is not dearer than the Motherland. M.: JSC Buki Vedi, 2022. P. 10.

Freight companies warned of the risk of bankruptcy on the market // RBC. URL: <https://www.rbc.ru/business/06/06/2022/629a1f419a794737332869a8>

Cargo turnover of Arctic basin seaports increased by 3.3% // Neftegaz.ru. URL: <https://neftegaz.ru/news/transport-and-storage/746804-gruzooborot-morskikh-portov-arkticheskogo-basseyna-vyros-na-3-3>

The Governor of the Chelyabinsk region said that the tariffs of compulsory medical insurance in Russia should be indexed // TASS. 11.03.2022. URL: <https://tass.ru/ekonomika/14041863>

*Dezhina I.G.* International scientific cooperation of Russian universities in the new environment: Restrictions and opportunities // EKO. 2022. No. 11. Pp. 125–143. DOI: 10.30680/ECO0131-7652-2022-11-125-143.

*Dezhina I.G., Ponomarev A.C.* Approaches to ensuring technological independence of Russia // Science management: Theory and practice. 2022. Vol. 4. No. 3. Pp. 53–68. DOI: 10.19181/sntp.2022.4.3.5. EDN: DGCVVI

*Demidova K.V.* SMEs under anti-Russian sanctions: results of the first half of 2022 and possible ways of support // Russian Economic Development. 2022. No. 11. Pp. 46–58.

*Dmitry Chernenok.* Wagons to the East: How the railway responds to sanctions // RBC. URL: <https://www.rbc.ru/opinions/business/01/06/2022/62977ebe9a7947485528b403>

*Dobrunov M.* Rusnano named an alternative to liquidation of the company // RBC. October 20, 2022. URL: <https://www.rbc.ru/business/20/10/2022/6350f2c59a79475ba2ab963f>

Gas production in Russia dropped by almost 12% // Vedomosti. URL: <https://www.vedomosti.ru/business/articles/2022/12/05/953639-dobicha-gaza-v-rossii-snizilas>

Report of monetary policy in Russia // Bank of Russia. May 2022. URL: [https://www.cbr.ru/collection/collection/file/40972/2022\\_02\\_ddcp.pdf](https://www.cbr.ru/collection/collection/file/40972/2022_02_ddcp.pdf)

Report of monetary policy in Russia // Bank of Russia. July 2022. URL: [https://www.cbr.ru/Collection/Collection/File/42214/2022\\_03\\_ddcp.pdf](https://www.cbr.ru/Collection/Collection/File/42214/2022_03_ddcp.pdf)

Report of monetary policy in Russia. Bank of Russia. October 2022. URL: [https://www.cbr.ru/Collection/Collection/File/43452/2022\\_04\\_ddcp.pdf](https://www.cbr.ru/Collection/Collection/File/43452/2022_04_ddcp.pdf)

Report of the Ministry of Economic Development of Russia on the results of privatization of federal property in 2010;

Report of the Ministry of Economic Development of Russia on the results of privatization of federal property in 2011;

Achievements in information and telecommunications in the context of international security. URL: <https://undocs.org/Home/Mobile?FinalSymbol=a%2F77%2F380&Language=E&DeviceType=Desktop&LangRequested=False>

Household income, expenditures, and consumption in 2022 (based on a sample survey of household budgets) // Rosstat. URL: [https://gks.ru/bgd/regl/b22\\_102/Main.htm](https://gks.ru/bgd/regl/b22_102/Main.htm)

*Drobyshevsky S.M., Pavlov P.N.* Structure of GDP growth rates in Russia up to 2024 // *Voprosy Ekonomiki*. 2022. No. 3. C. 29–51.

Western sanctions are changing the logistics of transportation in Russia // *Maritime News of Russia*. URL: <http://www.morvesti.ru/analitika/1691/95280/>

Procurements by companies with state participation from SMEs exceeded 3 trillion rubles this year URL: [https://www.economy.gov.ru/material/news/zakupki\\_kompaniy\\_s\\_gosuchastiem\\_u\\_msp\\_v\\_tekushchem\\_godu\\_prevysili\\_3\\_trln\\_rubley.html](https://www.economy.gov.ru/material/news/zakupki_kompaniy_s_gosuchastiem_u_msp_v_tekushchem_godu_prevysili_3_trln_rubley.html)

*Zarutskaya N.* (2023). Why 11 Russian banks were hit by sanctions // *Vedomosti*. February 24 URL: <https://www.vedomosti.ru/finance/articles/2023/02/25/964270-11-bankov?from=newsline>

Statement of the Council of Heads of State of the Shanghai Cooperation Organization on ensuring global food security. URL: <http://rus.sectesco.org/documents/>

Statement by Elvira Nabiullina, Chairman of the Bank of Russia, following the meeting of the Board of Directors of the Bank of Russia on March 17, 2023. URL: <https://www.cbr.ru/press/event/?id=14629>

It won't hurt for the country // *Transport of Russia*. URL: <https://transportrussia.ru/razdely/logistika/9368-za-derzhavu-ne-budet-obidno.html>

*Zemtsov S.P., Tsareva Yu.V., Salimova D.R., Barinova V.A.* Small and medium-sized enterprises in Russia: In search of the employment growth factors // *Voprosy Ekonomiki*. 2021. No. 12. Pp. 66–93.

*Zykina T.* Ministry of Education and Science has obliged scientists to approve research topics from regional heads // *RBC*. April 11, 2022. URL: <https://www.rbc.ru/society/11/04/2022/6253544f9a794784b517f0db>

NAFI Business Climate Index: Three-month dynamic. 17.05.2022. URL: <https://nafi.ru/analytics/indeks-delovogo-klimata-nafi-dinamika-za-3-mesyatsa/>

Indexation of freight tariffs by 8% from 2023 adds to the anxiety and financial burden on the market // *RZhd Partner.ru* URL: <https://www.rzd-partner.ru/zhd-transport/news/indeksatsiya-tarifov-na-gruzoperevozki-na-8-s-2023-goda-dobavlyaet-trevogi-i-finansovoy-nagruzki-na->

Science indicators: 2022. Statistical compendium. Moscow. NRU HSE, 2022. P. 131.

Foreign lecturers quit the Tyumen School of Advanced Studies: What will happen next? // *72.ru*. June 1, 2022. <https://72.ru/text/education/2022/06/01/71369477/>

Information letter of the Bank of Russia of 25.02.2022 No. IH-018-53/16: URL: <http://www.cbr.ru/Crosscut/LawActs/File/5801>

Information message of the Seventh Meeting of Ministers of the Shanghai Cooperation Organization Member States on Agriculture. URL: <http://rus.sectsc.org/news/20220726/906752.html>

InFom “Voices of Entrepreneurs”. April 2022. URL: <https://smbiz.fom.ru/>

Results of river navigation - 2022: Stability against the background of sanction turbulence // *RZhd Partner.ru* URL: <https://www.rzd-partner.ru/wate-transport/reviews/itogi-rechnoy-navigatsii-2022-stabilnost-na-fone-sanktsionnoy-turbulentnosti/>

What companied can exit from the Moscow Exchange. URL: <https://journal.tinkoff.ru/news/review-leaving-moex/>

“Cannibalism” and 500 planes: How will the aviation industry live until 2030 // *Aviaport*. URL: <https://www.aviaport.ru/digest/2022/10/26/733763.html>

By the end of the year, KAMAZ will present an unmanned truck for testing on the highway M-11 // *TASS*. URL: <https://tass.ru/ekonomika/16363483>

How Russia can reorient supplies to the East // Nezavisimaya Gazeta. URL: [https://www.ng.ru/kartblansh/2022-11-10/3\\_8587\\_kb.html](https://www.ng.ru/kartblansh/2022-11-10/3_8587_kb.html)

*Knobel A.Yu.* Estimation of import demand function in Russia // Applied Econometrics. 2011. No. 4 (24). Pp. 3–26.

*Knobel A., Firanchuk A.* Russia in the global export in 2017 // Russian Economic Development. 2018. No. 9. Pp. 17–21.

*Kogalovsky V.* Experts predict five years of high mortality in Russia after COVID-19 pandemic // Medvestnik. 18.02.2022. URL: <https://medvestnik.ru/content/news/Eksperty-prognoziruyut-pyat-let-vysokoi-smertnosti-v-Rossii-posle-pandemii-COVID-19.html?ysclid=lefgz571pa113653402>

*Kokareva M.* From the automotive industry to pharmaceuticals: How dependent the Russian economy is on imports // Forbes. 19.04.2022. URL: <https://www.forbes.ru/finansy/462829-ot-avtoproma-do-farmaceutviki-naskol-ko-rossijskaa-ekonomika-zavisit-ot-importa>

*Kokarev R.* ITS Russian corporate governance at a crossroads: What does the coming day hold for us? // JSC: Issues of corporate management. 2022. No. 6 (217). URL: <https://ao-journal.ru/rossiyskoe-korporativnoe-upravlenie-na-perepute-chto-den-gryadushchiy-nam-gotovit>

*Kolomiets M., Kulieva E., Galieva G.* (2023). Corporate sector on the debt market: Refinancing for all, debuts in SMEs, 40% of companies are waiting for the spring window // RA Expert review. March 1. URL: [https://www.raexpert.ru/researches/ua/debt\\_market\\_2023/](https://www.raexpert.ru/researches/ua/debt_market_2023/)

Corporate governance, or what's left of it. Report. URL: <https://www.interfax.ru/business/849830>

Corporate governance in the context of ESG: A new understanding of sustainability. URL: <http://corptransparency.ru/documents/corporate-governance-in-the-context-of-esg.pdf>

Corporate governance in the Covid era: Cybersecurity and high-tech considerations. URL: <https://gaap.ru/articles/Corporativnoe-upravlenie-v-epohu-covida/>

*Leibin V.* Disconnecting from the science network // Expert. May 9, 2022. URL: <https://expert.ru/expert/2022/19/otklyucheniye-ot-nauchnoy-seti/>

Lithuania imposed a ban on the transit of railway refrigerators to the Kaliningrad region // Interfax. URL: <https://www.interfax-russia.ru/northwest/main/litva-vvela-zapret-na-tranzit-po-zh-d-refrizheratorov-v-kaliningradskuyu-oblast>

---

*Malginov G., Radygin A.* Privatization dynamic and the state of property relations: Current trends // Russian Economic Development. 2021. No. 8. Pp. 47–57.

*Malkin V.* Russia ramped up oil production and exports in May // Vedomosti. 02.06.2022. URL: <https://www.vedomosti.ru/business/articles/2022/06/02/924946-rossiya-eksport-nefti>

*Mau V.A.* Economic policy in times of the pandemic: The experience of 2021–2022 // Voprosy Ekonomiki. 2022. No. 3. Pp. 5–28.

International freight traffic will get support // Maritime News of Russia. URL: <http://www.morvesti.ru/analitika/1691/96191/>

*Mekhanik A.* Lack of principle means subordination // stimul.online September 2, 2022. URL: <https://stimul.online/articles/innovatsii/bezydeynost-oznachaet-podchinennost/>

*Mekhanik A.* From science to the business of science and back again: The scientist's way // Expert. November 14, 2022. No. 46. URL: <https://expert.ru/expert/2022/46/ot-nauki-k-biznesu-na-nauke-i-obratno-put-uchenogo/>

Russian Ministry of Public Health supported the People's Front proposal to allow the employment of residents as trainee doctors // All-Russia People's Front. 09.11.2022. URL: <https://onf.ru/2022/11/09/minzdrav-rossii-podderzhal-predlozhenie-narodnogo-fronta-razreshit-trudoustroystvo/>

Russian Ministry of Public Health and WHO European Office agreed on regular contacts. URL: <https://tass.ru/obschestvo/16341083>

Russian Finance Ministry. Execution of federal budget expenditures for the implementation of national projects. URL: [https://minfin.gov.ru/ru/press-center/?id\\_4=38341-ispolnenie\\_raskhodov\\_federalnogo\\_byudzheta\\_na\\_realizatsiyu\\_natsionalnykh\\_proektov;](https://minfin.gov.ru/ru/press-center/?id_4=38341-ispolnenie_raskhodov_federalnogo_byudzheta_na_realizatsiyu_natsionalnykh_proektov;)

Ministry of Science and Higher Education of the Russian Federation. Minutes of the meeting of the Presidium of the Council for Support of Development Programs of Educational Institutions of Higher Education within the framework of implementation of the Strategic Academic Leadership Program “Priority-2030” of December 21, 2022.

Ministry of Education and Science and the Ministry of Justice will protect Russia's interests in science from external influence. September 1, 2022. URL: <https://minjust.gov.ru/ru/events/49057/>

*Mikhail Mishustin* participated in the XVI International Forum “Transport of Russia” // RF Government. URL: <http://government.ru/news/47042/>

*Mikhalnichenk N.* The Broken Mirror of Bibliometrics // *stimul.online*. March 17, 2022. URL: <https://stimul.online/articles/science-and-technology/razbitoe-zerkalo-bibliometrii/>

*Mishina V., Kurilova A.* Assessment of the universities development will be revised to reflect the “new realities” // *Vedomosti*. August 19, 2022. URL: <https://www.vedomosti.ru/society/articles/2022/08/18/936683-razvitiya-vuzov>

*Mischshenko E.* No need to put new wine into old bottles. Publications and science metrics in the context of sanctions // *Indicator.ru*. May 23, 2022. URL: <https://indicator.ru/humanitarian-science/ne-stoit-vlivat-molodoe-vino-v-starye-mekhi-publikacii-i-naukometriya-v-usloviyakh-sankcii.htm>

Monitoring of youth employment CENO IAES RANEPa.

*Mordovina M.* (2023). Analysts estimated the cost of Russian assets sold by foreigners // *RBC online*. February 15. URL: <https://www.rbc.ru/finances/15/02/2023/63eca9869a79477016f25667>

Russian seaports are adapting to the current situation // *Maritime News of Russia*. URL: <http://www.morvesti.ru/analitika/1691/99515/>

*Murashko:* The plan to increase life expectancy in Russia by the end of the year will be exceeded // *TASS*. 22.11.2022. URL: <https://tass.ru/obschestvo/16392551>

*Melnikov M.* Cash execution of the primary care modernization program in 2022 reached 69% // *Vademecum*. 08.12.2022. URL: <https://vademec.ru/news/2022/12/08/kassovoe-ispolnenie-programmy-modernizatsii-pervichnogo-zvena-v-2022-godu-dostiglo-69/?ysclid=ldwyw2efcm880133696>

Navigation-2022 in the Moscow basin shows a significant increase in transportation by water transport // *Rosmorrechflot*. URL: <https://morflot.gov.ru/news/lenta/n6311.html>

Nonresidents continue to sell OFZ at a discount of up to 40% even in 2023 // *Frank Media*. January 27, 2023. URL: <https://frankrg.com/110155>

The EEF-2022 discussed the state and prospects of development of the domestic aircraft industry // *Russian Ministry of Transport*. URL: <https://mintrans.gov.ru/press-center/news/10359>

New leading universities: An analysis of the contribution to the development of Russian higher education. Analytical brochure / *E.G. Grishakina, V.L. Parkacheva, et al.*; Synergy Moscow Financial and Industrial University. Moscow. Synergy University Publishing House, 2022. P. 89.

Financial stability review. Q2-Q3 2022. Moscow. Bank of Russia, 2022. URL: [https://www.cbr.ru/analytics/finstab/ofs/2\\_3\\_q\\_2022/](https://www.cbr.ru/analytics/finstab/ofs/2_3_q_2022/)

The volume of ocean freight along the Northern sea route in 2022 exceeded the target set in the national project // *Rosyiskaya Gazeta*. URL: <https://rg.ru/2022/12/15/obem-perevozok-po-sevmorputi-v-2022-godu-prevysil-celevoj-pokazatel-zalozhennyj-v-nacproekte.html>

*Osipenko O.V.* Corporate Conflictology: Monograph. Moscow: Statute, 2022.

Report on the implementation of the forecast plan (program) of privatization of federal property for 2011–2013.

On the current situation in the Russian economy // Ministry of Economic Development of Russia. October 2022. URL: [https://www.economy.gov.ru/material/file/a9fbc41aeb4681259708168ff7119a78/2022\\_11\\_30.pdf](https://www.economy.gov.ru/material/file/a9fbc41aeb4681259708168ff7119a78/2022_11_30.pdf)

On the current situation in the Russian economy. December 2022 – January 2023. URL: [https://www.economy.gov.ru/material/file/c5eae890fdea17276c86004981bd51f2/2023\\_02\\_08.pdf](https://www.economy.gov.ru/material/file/c5eae890fdea17276c86004981bd51f2/2023_02_08.pdf)

Operational report on the execution of the consolidated budgets of the subjects of the Russian Federation for January-June 2022. Accounts Chamber of the Russian Federation. Moscow. 2022. Pp. 43–44.

Operational report on the execution of the FCMIF budget for January-June 2022. // Accounts Chamber. 29.08.2022. URL: <https://ach.gov.ru/audit/35102>

Operational report on the execution of the FCMIF budget for January-June 2022. // Accounts Chamber. 07.06.2022. URL: <https://ach.gov.ru/audit/31790>

Operational report on the execution of the federal budget and budgets of state extra-budgetary funds. January-June 2021. // Accounts Chamber, 25.08.2021. URL: <https://ach.gov.ru/audit/13372>

Operational report on the execution of the FCMIF budget for January-September 2022. // Accounts Chamber. 02.12.2022. URL: <https://ach.gov.ru/audit/36086>

Operational report on the execution of the FCMIF budget for January-June 2022.// Accounts Chamber. 29.08.2022. URL: <https://ach.gov.ru/audit/35102>

Federal budget execution reports as of January 1, 2016; January 1, 2017; January 1, 2018; January 1, 2019; January 1, 2020; and January 1, 2021 (annual); URL: <http://roskazna.gov.ru>

Report on the execution of the RF consolidated budget and budgets of state extra-budgetary funds as of January 1, 2022; URL: <http://budget.gov.ru>

On the current economic situation in the Russian economy // Ministry of Economic Development of Russia. December 2021 – January 2022. URL: <https://www.economy.gov.ru/material/file/6211dc39795bea0da2120d1d8df9d646/20220209.pdf>

Assessment of Russia's dependence on imports of intermediate products. Series of reports on economic research. No. 106. December 2022. URL: [https://www.cbr.ru/Content/Document/File/144138/wp\\_106.pdf](https://www.cbr.ru/Content/Document/File/144138/wp_106.pdf)

Review of the financial market risks. November-December 2022. Information and analytical material. Moscow. Bank of Russia, 2023. P. 11. URL: [https://www.cbr.ru/Collection/Collection/File/43666/ORFR\\_2022-11.pdf](https://www.cbr.ru/Collection/Collection/File/43666/ORFR_2022-11.pdf)

Overview of the Russian financial sector and financial instruments. 2019 Analytical material. Moscow. Bank of Russia. P. 37.

Review of the financial market risks. November - December 2022. Information and analytical material. Moscow. Bank of Russia. URL: [https://www.cbr.ru/Collection/Collection/File/43666/ORFR\\_2022-11.pdf](https://www.cbr.ru/Collection/Collection/File/43666/ORFR_2022-11.pdf)

Overview of apartment blocks construction in the Russian Federation. 2022. DOM. RF. March 2023.

*Obukhova E.* Bonds have no chance // Expert. No. 1–3. December 26, 2022 – January 22, 2023.

Overview of corporate governance practices in Russian public companies at the end of 2021. URL: [https://cbr.ru/Collection/Collection/File/43510/Review\\_corp\\_0112022.pdf](https://cbr.ru/Collection/Collection/File/43510/Review_corp_0112022.pdf)

The main directions of the unified state monetary policy for 2022 and the period 2023-2024. // Bank of Russia. URL: [https://www.cbr.ru/about\\_br/publ/ondkp/on\\_2022\\_2024/](https://www.cbr.ru/about_br/publ/ondkp/on_2022_2024/)



Discussions on the creation of a compensation fund for investors were suspended on February 10 // Frank Media. 2023. URL: <https://frankrg.com/112079>

Life expectancy at birth // UISIS. 2022. URL: <https://www.fedstat.ru/indicator/31293B>

The main directions of development of the financial market of the Russian Federation in 2023 and for the period of 2024 and 2025 // Bank of Russia. P. 39, 2022. URL: [https://www.cbr.ru/Content/Document/File/143773/onfr\\_2023-2025.pdf](https://www.cbr.ru/Content/Document/File/143773/onfr_2023-2025.pdf)

Will Sapsan halt in Russia due to sanctions? // RZHD Partner.ru. URL: <https://www.rzd-partner.ru/zhd-transport/comments/ostanovitsya-li-dvizhenie-sapsanov-v-rf-iz-za-sanktsiy/>

Main theses of the 1st Eurasian Economic Forum. URL: <https://eec.eaeunion.org/news/podgotovleny-osnovnye-tezisy-pervogo-evraziyskogo-ekonomicheskogo-foruma/>

Countries that refuse to pay for gas in rubles have already been cut off from Russian supplies // Interfax. URL: <https://www.interfax.ru/russia/845534>

Rosimushchestvo reports on fulfillment of the forecast plan (program) of federal property privatization for 2014–2016 in 2014, in 2015, and in 2016. URL: <http://rosim.gov.ru>

Rosimushchestvo reports on fulfillment of the forecast plan (program) of federal property privatization for 2022–2024 in 2022. URL: <http://rosim.gov.ru>

Report on the fulfillment of the forecast plan (program) of privatization of federal property for 2017–2019.

Report on the activities of Rosimushchestvo for 2015; Forecast plan (program) of federal property privatization and main directions of federal property privatization for 2017–2019.

Possible losses from leakage at Nord Streams have been estimated // Vzglyad. URL: <https://vz.ru/news/2022/9/27/1179658.html>

On some parameters of the medium-term forecast: adapting to the sanctions // CMASF. URL: [http://www.forecast.ru/\\_Archive/analitics/DB/foreparam2022.pdf](http://www.forecast.ru/_Archive/analitics/DB/foreparam2022.pdf)

*Pavlov A.Yu., Danilov I.A.* On the dividend policy of companies with state participation // Financial Law. 2022. No. 9. Pp. 33–37.

Passport of the federal project “The fight against cancer” (approved by the minutes of the meeting of the project committee of the national project “Health Care” of 07.12.2018 No. 3).

Passenger traffic of water transport in St. Petersburg during navigation in 2022 surged by 31% // Maritime News of Russia. URL: <http://www.morvesti.ru/news/1679/99332/>

The first wave of operational socio-economic monitoring among entrepreneurs. March 2022. URL: <https://nafi.ru/projects/predprinimatelstvo/pervaya-volna-operativnogo-sotsialno-ekonomicheskogo-monitoringa-sredi-predprinimateley/>

*Perevyshin Yu.N.* Short-Term Inflation Forecasting in the Russian Economy // Economic Policy. 2022. Vol. 17. No. 5. Pp. 1–18.

*Perevyshin Yu.N., Trunin P.V.* Monetary policy and inflation in early 2023 // Monitoring of Russia’s Economic Outlook. URL: <https://www.iep.ru/ru/monitoring/denezhno-kreditnaya-politika-i-inflyatsiya-v-nachale-2023-goda.html>

*Pertsova V., Kirilochkina V.* Isolation from the global community and the brain drain: what the future holds for Russian science // Forbes. March 21, 2022. URL: <https://www.forbes.ru/forbeslife/459339-izolaciya-ot-mirovogo-soobshchestva-i-uteckamozgov-kakoe-budusee-zdet-rossijskuu-nauku>.

Letter of the Bank of Russia of 10.04.2014 No. 06-52/2463 “On the corporate governance code” // Bank of Russia Bulletin. No. 40. 18.04.2014.

Letter of the Ministry of Public Health of Russia of 12.08.2022 No. 16-2/2358 “On targeted education”.

Letter of the Ministry of Public Health of Russia of 11.08.2022 No. 16-2/И/2-13202. On targeted training in educational programs of secondary vocational and higher education.

Letter of the Prosecutor General’s Office of the Russian Federation of 31.10.2022 No. 74/2-452-2022. On sending information on the application of the provisions of the legislation on education during the enrollment of applicants in medical schools.

*Polkanov V.* Scientists tame fusion // Nezavisimaya Gazeta – nauka. October 25, 2022. URL: [https://www.ng.ru/nauka/2022-10-25/12\\_8574\\_synthesis.html](https://www.ng.ru/nauka/2022-10-25/12_8574_synthesis.html)

*Polezhaeva N.A.* The main changes in corporate governance in Russia caused by sanctions // Khozyaistvo i Pravo. 2023. No. 1. Pp. 46–53.

---

*Polezhaeva N.A.* Platform companies: Features of the business model and corporate governance. The Russian Economy in 2020. Trends and Outlooks. Issue 42. Moscow. Gaidar Institute Press. Pp533–556.

*Popova T.* Brain drain organization as a new global weapon of the U.S. // *Nezavisimaya Gazeta – Nauka*. May 5, 2022. URL: [https://www.ng.ru/world/2022-05-05/100\\_usa050522.html](https://www.ng.ru/world/2022-05-05/100_usa050522.html)

Portrait of a brokerage customer. First half of 2022r. Moscow. Bank of Russia. C.14. URL: [https://cbr.ru/Content/Document/File/143859/Portrait\\_client\\_brok.PDF](https://cbr.ru/Content/Document/File/143859/Portrait_client_brok.PDF)

Almost two-thirds of Russian regions restricted planned medical care because of Omicron // *TASS*. 03.02.2022. URL: <https://tass.ru/obschestvo/13609369>

Representatives of Russia, Ukraine, Turkey and the UN signed agreements on grain exports. URL: <https://tass.ru/ekonomika/15288405>

The government has clarified the requirements for the domestic airline ticket booking system // *RF Government*. URL: <http://government.ru/news/46205/>

The government has allocated another almost 2.5 billion rubles to compensate operating costs of airports in the south and center of Russia // *RF Government*. URL: <http://government.ru/news/46261/>

The Government of the Russian Federation approved the indexation of freight railway tariffs for 2023 // *Trans.ru*. URL: <https://trans.ru/news/pravitelstvo-rf-utverdilo-indeksatsiyu-gruzovih-zheleznodorozhnikh-tarifov-na-2023-god>

Preliminary results of 2022 on the residential real estate market from the Russian Guild of Realtors (RGR). 2022. Pp. 11–13.

Preliminary report on the execution of the federal budget as of January 1, 2023; Federal Treasury.

Entrepreneurs plan to fix supply chains within six months. 25.04.2022. URL: <https://nafi.ru/analytics/predprinimateli-planiruyut-naladit-tseepochki-postavok-v-techenie-polugoda/>

Forecast of socio-economic development of the Russian Federation for 2022 and for the planning period of 2023 and 2024. Ministry of Economic Development of the Russian Federation. URL: [https://www.economy.gov.ru/material/directions/makroec/prognozy\\_socialno\\_ekonomicheskogo\\_razvitiya/prognoz\\_socialno\\_ekonomicheskogo\\_razvitiya\\_rf\\_na\\_2022\\_god\\_i\\_na\\_planovyy\\_period\\_2023\\_i\\_2024\\_godov.html](https://www.economy.gov.ru/material/directions/makroec/prognozy_socialno_ekonomicheskogo_razvitiya/prognoz_socialno_ekonomicheskogo_razvitiya_rf_na_2022_god_i_na_planovyy_period_2023_i_2024_godov.html)

The forecast plan (program) of privatization of federal property and the main directions of privatization of federal property for 2011–2013.

The forecast plan (program) of privatization of federal property and the main directions of privatization of federal property for 2014–2016.

The forecast plan (program) of privatization of federal property and the main directions of privatization of federal property for 2020–2022.

The forecast plan (program) of privatization of federal property and the main directions of privatization of federal property for 2022–2024.

The forecast plan (program) of privatization of federal property and the main directions of privatization of federal property for 2023–2025.

Human capital development project. 2018. International Bank for Reconstruction and Development. World Bank. URL: <https://documents1.worldbank.org/curated/en/772591566979744762/pdf/The-Human-Capital-Project.pdf>

GDP produced. Annual data on OKVED 2 in current prices. // Rosstat. URL: <https://rosstat.gov.ru/statistics/accounts>

Border crossings are a priority // Transport of Russia. URL: <https://transportrussia.ru/razdely/avtomobilnyj-transport/9497-punky-propuska-v-prioritete.html>

Guide to sanctions and restrictions against the Russian Federation. URL: <https://base.garant.ru/57750632/>

*Rara-Avis A.* Academic boycott and political persecution: Russian science at war. April 11, 2022. URL: <https://www.opendemocracy.net/ru/rossiyskaya-nauka-vo-vremya-voyny/>

*Ratai T.* Russian science in 2021. // Science. Technology. Innovations. Express information. September 8, 2022. URL: <https://issek.hse.ru/news/759541996.html>

Transportation bottlenecks will be resolved at the expense of the budget // Nezavisimaya Gazeta. URL: [https://www.ng.ru/economics/2022-11-15/4\\_8590\\_problems.html](https://www.ng.ru/economics/2022-11-15/4_8590_problems.html)

Decision of the Supreme Eurasian Economic Council of 29.05.2014 No. 68 “On the Main directions of development of the “single window” mechanism in the system of regulation of foreign economic activity”.

Rosaviatsiya held a round table discussion on the effectiveness of state support measures during the sanctions // Rosaviatsiya. URL: <https://favt.gov.ru/novosti-novosti/?id=9686>

*Rozmirovich S.* Gazelles of good hope // Expert. May 16, 2022. URL: <https://expert.ru/2022/05/16/gazeli-dobroy-nadezhdy/>

Rusnano sold out 70% of its historical assets in two years // TASS. October 25, 2022. URL: <https://tass.ru/ekonomika/16153479>

Russia returned to the grain deal with Ukraine. URL: <https://www.gazeta.ru/politics/2022/11/02/15720481.shtml>

“Russia” is expanding its routes. The airline is actively developing regional networks // Aviaport. URL: <https://www.aviaport.ru/digest/2022/10/14/732829.html>

Russian companies will have delisting of notes from foreign exchanges. URL: <https://journal.tinkoff.ru/news/ru-dr-delist/>

Russian ports are ready to adjust to new economic conditions // Analytical Center under the Government of the Russian Federation. URL: <https://ac.gov.ru/news/page/rossijskie-porty-gotovy-podstroitsa-pod-novye-ekonomiceskie-uslovia-27237>

Russian Economy in 2021. Trends and Outlooks. Issue. 43. Moscow. Gaidar Institute Press, 2022.

Rosstat stopped publishing data on mortality from COVID-19 // RIA Novosti. 07.10.2022. URL: <https://ria.ru/20221007/covid-19-1822353601.html?ysclid=lefh30zslt809736226>

*Ryabova A.* Murashko: regions received 240 billion rubles in advance payments for the purchase of medicines at the expense of the CHI // Vademecum. 18.04.2022. URL: <https://vademec.ru/news/2022/04/18/murashko-regiony-poluchili-240-mlrd-rublej-avansov-na-zakupku-lekarstv-za-schet-oms/>

Sanctions against logistics // Maritime News of Russia. URL: <http://www.morvesti.ru/analitika/1685/97432/>

Sanctions and corporate governance // Joint Stock Company: Issues of corporate governance. 2022. No. 5 (216). URL: <https://ao-journal.ru/sanktsii-i-korporativnoe-upravlenie>

Sanctions against Russia and Russian counter-sanctions // Russian-German Foreign Chamber of Commerce. URL: <https://rusland.ahk.de/ru/obzor/obzor-sankcii>

Sverdlovsk TFCMI owes hospitals more than 1 billion rubles // Noviy Den'. 06.12.2022. URL: <https://newdaynews.ru/ekaterinburg/780239.html>

Coordinate actions. Russian Railways, together with its partners, eliminate the negative effects of sanctions // Vgudok. URL: <https://gudok.ru/content/freighttrans/1620213/>

Reduction of loading on the network of Russian Railways by the end of 2022 is expected up to 4% – INMR // Portnews. URL: <https://portnews.ru/news/339786/>

UN Security Council: Russia vetoed a resolution condemning the annexation of Ukrainian territories. URL: <https://news.un.org/ru/story/2022/09/1432952>

*Sokolov A.* Russia's import dependence reached its highest level since 2014 against the backdrop of rising prices // Vedomosti. February 1, 2022. URL: <https://www.vedomosti.ru/economics/articles/2022/02/01/907191-importozavisimost-rossii>

Socio-economic situation in Russia. January 2023. // Rosstat. URL: <https://rosstat.gov.ru/storage/mediabank/osn-01-2023.pdf>

Socio-economic situation in Russia – 2022. // Rosstat. URL: <https://rosstat.gov.ru/storage/mediabank/osn-12-2022.pdf>

The medium-term forecast of the Bank of Russia following the meeting of the Board of Directors on the key rate on February 10, 2023. URL: [https://www.cbr.ru/collection/collection/file/43735/forecast\\_230210.pdf](https://www.cbr.ru/collection/collection/file/43735/forecast_230210.pdf)

The stage of wings. The Ministry of Transport has developed a strategy for the aviation industry until 2030. // Kommersant. URL: <https://www.kommersant.ru/doc/5329222>

Statistical data to the review of key indicators of professional securities market participants. Bank of Russia, 2023. URL: [https://www.cbr.ru/securities\\_market/statistic/](https://www.cbr.ru/securities_market/statistic/)

*Stolyarov A.* (2023). UniCredit and Raiffeisen reached a dead lock // Expert. No. 9. February 27 – March 5. URL: <https://expert.ru/expert/2023/09/unicredit-i-raiffeisen-zashli-v-tupik/>

BRICS Economic Partnership Strategy up to 2025. URL: <https://brics-russia2020.ru/images/114/81/1148133.pdf>

The EU countries have decided to reduce gas consumption by 15%. What's important to know // RBC. URL: <https://www.rbc.ru/business/27/07/2022/62dfeca29a7947649a78baef>

Raw materials will leave the rail cars // Kommersant. URL: <https://www.kommersant.ru/doc/5707280>

*Taleb N.* (2015). *Black Swan. Under the sign of unpredictability*. 2nd ed. Translated from the English. Moscow. KoLibri, Azbukaa – Attikus.

Tariffs for cargo transportation by rail may surge by 11% from June 1 // Vedomosti. URL: <https://www.vedomosti.ru/business/articles/2022/05/27/924029-gruzovie-perevozki-virasti>

Russian Railways' tariffs will rise by 10% // Kommersant. URL: <https://www.kommersant.ru/doc/5651246>

Transneft's oil pumping tariffs will increase by 5.99% in 2023 // Interfax. URL: <https://www.interfax.ru/business/876015>

Tokyo Stock Exchange reformed in hopes of attracting foreign investors. URL: <https://rossaprimavera.ru/news/212efea5>

"Transport of Russia": Success, luck, optimism. The realists were not invited to the opening of the transportation forum in Moscow // Vgudok. URL: <https://vgudok.com/lenta/transport-rossii-uspeh-udacha-optimizm-na-otkrytie-transportnogo-foruma-v-moskve-realistov-ne>

*Trubnikova E.I.* Gift exchange in academia: Predatory practices, false signals, and conflict of interest in programs of excellence // *Mir Rossii*. 2022. No. 31 (1). Pp. 25–48. <https://doi.org/10.17323/1811-038X-2022-31-1-25-48>

*Tueva E.* IT We do not observe a total flight of foreigners, although there are some bitter losses // *Kommersant*. May 22, 2022 URL: <https://www.kommersant.ru/doc/5357614>

Turkey banned the flights of Russian planes with double registration // RBC. URL: <https://www.rbc.ru/business/08/11/2022/636925de9a7947f6ad5f00b9>

*Tyutina V.* Kovalchuk said that Chubais did not achieve anything at Rusnano // RBC. June 17, 2022. URL: <https://www.rbc.ru/politics/17/06/2022/62acb34b9a7947d9e6ff3035>

*Uvarchev L.* (2023). For the first time, the U.S. announced the transfer of assets confiscated from the Russians to Ukraine // *Kommersant*, February 4. URL: <https://www.kommersant.ru/doc/5810341>

Business Rights Commissioner. May 2022. URL: <https://www.vedomosti.ru/business/news/2021/12/07/899413-opros-pokazal-vosstanovivshih-sya-predpriyatii>

Business Rights Commissioner. November 2022. URL: <http://www.finmarket.ru/news/5836006>

Russian civil aviation has a good future // *Ekonomika I Zhizn*. URL: <https://www.eg-online.ru/article/460710/>

Actual prices for shipbuilding steel in Russia exceeded the cost by 2–3 times // *Portnews*. URL: <https://portnews.ru/news/327099/>

Finland and Ukraine deprived Russian Railways network of cars for 32 billion // *Vgudok*. URL: <https://vgudok.com/lenta/finlyandiya-i-ukraina-lishili-set-rzhd-va-gonov-na-32-milliarda-zheleznodorozhnye-operatorov>

The Medical Insurance Fund did not pay Yaroslavl hospitals 300 million rubles. // *YarNews*. 14.11.2022. URL: <https://yarsmi.ru/2022/11/14/fond-mediczinskogo-strahovaniya-ne-oplatil-yaroslavskim-bolniczam-300-millionov-rublej/>

FOM. Stabilization of perceptions of the business environment: optimism grows. URL: <https://smbiz.fom.ru/post/stabilizaciya-vospriyatija-biznes-sredy-optimizm-rastet>

*Chaban T., Rameeva R., Denisov I., Kersha Yu., Zvyagintseva R.* The Russian school in the COVID-19 pandemic: The effects of the first two waves and the quality of education // *Educational Studies*. Moscow. 2022. Issue 1 (March). Pp. 160–188. URL: <https://doi.org/10.17323/1814-9545-2022-1-160-188>

*Chernyshenko D.* Transport industry allocates almost 20 billion rubles for the creation and replacement of imported software. URL: <http://government.ru/news/47045/>

*Chernysheva E., Kanaeva P.* Authorities have begun discussing the possible liquidation of Rusnano // *RBC*. October 19, 2022. URL: <https://www.rbc.ru/business/19/10/2022/634f559d9a79475b384c7d51>

What is a stock listing? URL: <https://www.tinkoff.ru/invest/research/education/listing/>



*Chumakov K.* Monkeypox. Coronavirus not defeated. War will kill Russian science. May 24, 2022. URL: <https://www.youtube.com/watch?v=THrHUEMjHrQ>

*Shamardina L.* The Ministry of Public Health registers 600,000 new cases of cancer annually // *Medvednik*. 03.02.2023. URL: <https://medvestnik.ru/content/news/Minzdrav-registriruet-600-tys-novyh-sluchaev-raka-ejegodno.html>;

*Sheludchenko S.* (2023). The Ministry of Finance and the Central Bank will force issuers to replace Eurobonds // *Vedomosti*, February 22. URL: <https://www.vedomosti.ru/finance/articles/2023/02/22/963952-minfin-i-tsb-obyazhut-emitentov-zameschat-evrobondi>

*Shokhin A.N.* Presentation at the Plenary Session of the National Industrial Congress: Development Priorities. October 5, 2022.

*Khokhlov A.* Science metric analysis confirms that the expert selection for the elections was carried out qualitatively // *RAS*. July 5, 2022. URL: <https://new.ras.ru/activities/news/naukometricheskiy-analiz-podtverzhdает-cto-ekspertnyy-otbor-na-vyborakh-proveden-kachestvenno-aleks/>

Experts forecast the GDP growth in Russia will slow down to 2.5% by the end of 2022 // *TASS*. URL: <https://tass.ru/ekonomika/13311805>

It's a challenge. The head of the Russian Science Foundation spoke about the Foundation's new tasks // *Poisk*. December 23, 2022. No. 52. PC. 2.

### English Sources

26st OPEC and non-OPEC Ministerial Meeting concludes // *OPEC*. 02.03.2022. URL: [https://www.opec.org/opec\\_web/en/press\\_room/6830.htm](https://www.opec.org/opec_web/en/press_room/6830.htm)

33rd OPEC and non-OPEC Ministerial Meeting // *OPEC*. 05.09.2022. URL: [https://www.opec.org/opec\\_web/en/press\\_room/7021.htm](https://www.opec.org/opec_web/en/press_room/7021.htm)

*Abelow B.* (2022) *How the West Brought War to Ukraine: Understanding How U.S. and NATO Policies Led to Crisis, War, and the Risk of Nuclear Catastrophe*. Siland Press.

Aggression against Ukraine. URL: [https://www.securitycouncilreport.org/atf/cf/%7B65BFCF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/a\\_res\\_es-11\\_1.pdf](https://www.securitycouncilreport.org/atf/cf/%7B65BFCF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/a_res_es-11_1.pdf)

*Allen M.* US philanthropic organizations spend over \$30bn a year on science // *Physics World*. 3 July 2022. URL: <https://physicsworld.com/a/us-philanthropic-organisations-spend-over-30bn-a-year-on-science/>

*Ambrose M.* US Restricts Science Collaborations with Russia // FYI Bulletin, No. 47. 17 June 2022. URL: <https://www.aip.org/fyi/2022/us-restricts-science-collaborations-russia>

*Ambrose M.* US Restricts Science Collaborations with Russia // FYI Bulletin, No. 47. 17 June 2022. URL: <https://www.aip.org/fyi/2022/us-restricts-science-collaborations-russia>

*Baker S.* Do academic boycotts work? // Times Higher Education. 9 March 2022. URL: <https://www.timeshighereducation.com/depth/do-academic-boycotts-work>

BlackRock Investment Stewardship: Proxy voting guidelines for U.S. securities. URL: <https://www.blackrock.com/corporate/literature/fact-sheet/blk-responsible-investment-guidelines-us.pdf>

*Brainard J.* Few journals heed calls to boycott Russian papers // Science. 10 March 2022. doi: 10.1126/science.adb1981. URL: <https://www.science.org/content/article/few-journals-heed-calls-boycott-russian-papers>

By *Nick Timiraos N.* (2023). Jerome Powell Says Fed Is Prepared to Speed Up Interest-Rate Rises // The Wall Street Journal on-line. 7 March 7. URL: [https://www.wsj.com/articles/jerome-powell-to-testify-to-congress-on-outlook-for-rates-inflation-e4e7f1e3?mod=hp\\_lead\\_pos5](https://www.wsj.com/articles/jerome-powell-to-testify-to-congress-on-outlook-for-rates-inflation-e4e7f1e3?mod=hp_lead_pos5)

CEO's Letter on Our 2022 Proxy Voting Agenda. URL: <https://www.ssga.com/us/en/institutional/ic/insights/ceo-letter-2022-proxy-voting-agenda>

*Ching H., Tardelli R.* Corporate Governance Rules in Six Stock Exchanges: A Comparative Study // Advances in Social Sciences Research Journal. 2015. No. 2(2). P. 197–209.

CNBC (2022). Russia divestment promises by U.S. states go largely unfulfilled // CNBC on-line. 27 August. URL: <https://www.cnn.com/2022/08/27/russia-divestment-promises-by-us-states-go-largely-unfulfilled-.html>

Could seizing Russian assets help rebuild Ukraine? // The Economist. 2022. URL: <https://www.economist.com/finance-and-economics/2022/06/06/could-seizing-russian-assets-help-rebuild-ukraine>

*Duttgupta R. and C. Pazarbasioglu.* Miles to Go. URL: <https://www.imf.org/external/pubs/ft/fandd/2021/06/the-future-of-emerging-markets-duttguptaand-pazarbasioglu.htm>

EBRD commits up to €3 billion to Ukraine. URL: <https://www.ebrd.com/news/2022/ebd-commits-up-to-3-billion-to-ukraine.html>

*Eisen B., Ackerman A.* (2023). Where Were the Regulators as SVB Crashed? // The Wall Street Journal on-line. 11 March. URL: <https://www.wsj.com/articles/wherewere-the-regulators-as-svb-crashed-35827e1a>

Frequently-Asked Questions on Ukraine. URL: [https://www.imf.org/en/About/FAQ/ukraine#Q2%20Why%20did%20Ukraine%20cancel%20its%20existing%20program,%20with%20\\$2.2%20billion%20left%20to%20be%20disbursed?](https://www.imf.org/en/About/FAQ/ukraine#Q2%20Why%20did%20Ukraine%20cancel%20its%20existing%20program,%20with%20$2.2%20billion%20left%20to%20be%20disbursed?)

G20 Press Conference: the 2nd Finance Ministers and Central Bank Governors Meeting. URL: <https://www.youtube.com/watch?v=3CvsumWiX7Y>

Full-court press on climate in mandate letters, but environmentalists will wait and see. URL: <https://www.thestar.com/news/canada/2021/12/22/full-court-press-on-climate-in-mandate-letters-but-environmentalists-will-wait-and-see.html>

*Gaind N., Abbott A., Witze A., Gibney E., Tollefson J., Irwin A., Van Noorden R.* Seven ways the war in Ukraine is changing global science // Nature. 2022. No. 607. P. 440–443. DOI: 10.1038/d41586-022-01960-0

*Gaind N., Else H.* Global research community condemns Russian invasion of Ukraine // Nature. 2022. No. 603. P. 209–210. doi: <https://doi.org/10.1038/d41586-022-00601-w>

*Gordin M.* A century of science boycotts // Nature. 2022. No. 606. P. 27–29. doi: <https://doi.org/10.1038/d41586-022-01475-8>

*Guarascio F.* Risk of medical gear shortage in Russia falls as West restores exports // Reuters. 20.04.2022. URL: <https://www.reuters.com/world/europe/risk-medical-gear-shortage-russia-falls-west-restores-exports-2022-04-20/>

*Hanis T., Sass Z.* (2022). Are Russian Stocks Worthless? // MSCI Research. 26 May. URL: <https://www.msci.com/www/blog-posts/are-russian-stocks-worthless-/03202146429>

IMF Executive Board Approves the Establishment of a Multi-Donor Administered Account for Ukraine. URL: <https://www.imf.org/en/News/Articles/2022/04/08/pr22111-imf-executive-board-approves-establishment-of-a-multi-donor-administered-account-for-ukraine>

*Johnson J., Adams J., Grant J., Murphy D.* Stumbling bear, soaring dragon. Russia, China and the geopolitics of global science. Harvard Kennedy School for Business and Government, Clarivate, The Policy Institute, King's College London. July 2022.

*Kaplan Paul D.* (2020). What Prior Market Crashes Taught Us in 2020 // Morningstar on-line. 23 July.

*Kollmeyer B.* (2022). 250 years of history is telling investors to bet on Treasury bonds in 2023, Bank of America says // MarketWatch on-line. 29 October. URL: <https://www.marketwatch.com/story/250-years-of-history-is-telling-investors-to-bet-on-treasury-bonds-in-2023-bank-of-america-says-11666958942?mod=home-page>

*Lem P.* War forces post-Soviet scholars to choose between Russia and West // Times Higher Education. 19 March 2022. URL: <https://www.timeshighereducation.com/news/war-forces-post-soviet-scholars-choose-between-russia-and-west>

*Malerba F., Lee K.* An Evolutionary Perspective on Economic Catch-up by Latecomers // Industrial and Corporate Change. 2021. Vol. 30. No. 4. P. 986–1010. DOI: 10.1093/icc/dtab008.

*Mantong A.W. and G.Kembara.* Indonesia's G20 Presidency and the War in Ukraine. URL: <https://www.iai.it/en/publicazioni/indonesias-g20-presidency-and-warukraine>

*Manurung H.* Indonesia-Ukraine Bilateral Relations. URL: [https://www.researchgate.net/publication/353738760\\_INDONESIA\\_-\\_UKRAINE\\_BILATERAL\\_RELATIONS](https://www.researchgate.net/publication/353738760_INDONESIA_-_UKRAINE_BILATERAL_RELATIONS)

*Mearsheimer J.J.* Playing with Fire in Ukraine. The Underappreciated Risks of Catastrophic Escalation. URL: <https://www.foreignaffairs.com/ukraine/playing-fire-ukraine>

*Mielcarz P., Osiichuk D., Puławska K.* Increasing shareholder focus: the repercussions of the 2015 corporate governance reform in Japan // Journal of Management and Governance. 2021.

*Morgan J.P.* Asset Management. Guide to the Markets. 4Q 2022. 30 September 2022. URL: <https://am.jpmorgan.com/us/en/asset-management/adv/insights/market-insights/guide-to-the-markets/>

*Morgan T.C., Bapat N., Kobayashi Y.* Threat and imposition of economic sanctions 1945–2005: Updating the TIES dataset // Conflict Management and Peace Science. 2014. No. 31 (5). P. 541–558. URL: <https://doi.org/10.1177/0738894213520379>

*Mulder N.* How America Learned to Love (Ineffective) Sanctions // Foreign Policy. 30 January 2022. URL: <https://foreignpolicy.com/2022/01/30/us-sanctions-reliance-results/>

Norges bank Investment management. Government Pension Fund Global. Half-year report 2022. URL: [https://www.nbim.no/contentassets/e49be8b7b9764b929bcdd21f4176f2bb/gpfg-half-year-report\\_2022.pdf](https://www.nbim.no/contentassets/e49be8b7b9764b929bcdd21f4176f2bb/gpfg-half-year-report_2022.pdf)

---

*Nurgozhayeva R.* Why do sanctions against Russia miss the target? A corporate governance perspective. URL: <https://ecgi.global/blog/why-do-sanctions-against-russia-miss-target-corporate-governance-perspective>

Producer and Consumer Support Estimates. OECD Agriculture statistics (database). URL: [https://stats.oecd.org/Index.aspx?DataSetCode=MON2022\\_SINGLE\\_COMMODITY\\_INDICATORS](https://stats.oecd.org/Index.aspx?DataSetCode=MON2022_SINGLE_COMMODITY_INDICATORS)

*Puchniak D.W.* No Need for Asia to be Woke: Contextualizing Anglo-America's 'Discovery' of Corporate Purpose. European Corporate Governance Institute – Law Working Paper No. 646/2022. URL: <https://ssrn.com/abstract=4122483>

*Restoy Fernando* (2021). Fintech regulation: how to achieve a level playing field. Financial Stability Institute, BIS // Occasional Paper No.17. February.

*Robinson N.J., Chomsky N.* If We Want Humanity to Survive, We Must Cooperate with China. URL: <https://chomsky.info/20220815/>

Russian Federation: Financial Position in the Fund as of November 30, 2022. URL: <https://www.imf.org/external/np/fin/tad/exfin2.aspx?memberKey1=819&date1key=2099-12-31>

Russian Federation: Lending to the Fund. URL: <https://www.imf.org/external/np/fin/tad/extlend1.aspx?memberKey1=819&date1key=2022-11-30>

Safety Audit Results: USOAP interactive viewer // ICAO. URL: <https://www.icao.int/safety/Pages/USOAP-Results.aspx>

*Siegel Laurence B.* (2010). Black Swan or Black Turkey? The State of Economic Knowledge and the Crash of 2007–2009. // *Financial Analysts Journal*. Vol. 66. Issue 4. July/August. P. 6–10.

*Smith E.* (2022). Russia thinks it has found a way around Washington's dollar bond payment blockade // CNBC on-line. URL: <https://www.cnn.com/2022/06/06/russia-thinks-its-found-a-way-around-us-dollar-bond-payment-blockade.html>

*Talley I.* (2022). U.S. Prosecutors Target Russian Assets, but Legal Hurdles Loom // *The Wall Street Journal* online. 24 November. URL: <https://www.wsj.com/articles/u-s-prosecutors-target-russian-assets-but-legal-hurdles-loom-11669233820>

The EBRD and the war on Ukraine. URL: <https://www.ebrd.com/what-we-do/war-on-ukraine>

The EBRD in Russia. URL: <https://www.ebrd.com/russia.html>

The Economist (2022). Five financial trends that 2022 killed. December, 21 on-line.

The Economist. Five financial trends that 2022 killed. 21 December 2022. URL: [https://www.economist.com/finance-and-economics/2022/12/21/five-financial-trends-that-2022-killed?utm\\_content=article-link-1&etear=nl\\_today\\_1&utm\\_campaign=a.the-economist-today&utm\\_medium=email.internal-newsletter.np&utm\\_source=salesforce-marketing-cloud&utm\\_term=12/22/2022&utm\\_id=1429525](https://www.economist.com/finance-and-economics/2022/12/21/five-financial-trends-that-2022-killed?utm_content=article-link-1&etear=nl_today_1&utm_campaign=a.the-economist-today&utm_medium=email.internal-newsletter.np&utm_source=salesforce-marketing-cloud&utm_term=12/22/2022&utm_id=1429525)

The Little Engine That Won an Environmental Victory Over Exxon. URL: <https://www.bloomberg.com/news/articles/2021-06-09/engine-no-1-proxy-campaign-against-exxon-xom-marks-win-for-esg-activists>

The Russia–Ukraine Crisis: What Does It Mean For Markets? URL: <https://www.jpmorgan.com/insights/research/russia-ukraine-crisis-market-impact#:~:text=J.P.%20Morgan%20Research%20forecasts%20that,contraction%20of%20at%20least%207%25>

Trade Map – Bilateral trade between European Union (EU 27) and Russian Federation.

*Upton B.* Centralised hiring a barrier to research assessment reform // Times Higher Education. 21 December 2022. URL: <https://www.timeshighereducation.com/news/centralised-hiring-barrier-research-assessment-reform>

*Upton B.* ERC evaluation overhaul focuses on proposals over track record // Times Higher Education. 21 December 2022. URL: <https://www.timeshighereducation.com/news/erc-evaluation-overhaul-focuses-proposals-over-track-record>

Vgudok. Forum “Transportation of Russia”. URL: <https://vgudok.com/lenta/odivnyy-novyy-mir-forum-transport-rossii-perevozki-mezhdu-rf-i-eaes-nastolko-horoshi-cto-o>

WHO Foundation calls for additional support for Health Emergency Appeal for Ukraine. URL: <https://who.foundation/wp-content/uploads/2022/05/WHO-Foundation-Ukraine-second-appeal-press-release-12.05.22.pdf>

*William Watts W.* (2023). The 2023 stock market rally looks wobbly. What's next as investors prepare for longer inflation fight // MarketWatch on-line. 26 February. URL: <https://www.marketwatch.com/story/the-2023-stock-market-rally-looks-wobbly-whats-next-as-investors-come-to-grips-with-a-further-rise-in-interest-rates-bdb3e1a3?mod=home-page>

---

*Williams T.* China's dip in research collaboration 'temporary', funder insists // Times Higher Education. 12 October 2022. URL: <https://www.timeshighereducation.com/news/chinas-dip-research-collaboration-temporary-funder-insists>

World Bank Financing Support Mobilization to Ukraine since 24 February 2022. URL: <https://www.worldbank.org/en/country/ukraine/brief/world-bank-emergency-financing-package-for-ukraine>

World Bank Group Statement on Russia and Belarus. URL: <https://www.worldbank.org/en/news/statement/2022/03/02/world-bank-group-statement-on-russia-and-belarus>

*Zuber N.* New U.S. Sanctions Prohibit Collaborations with Certain Russian Entities // MIT. 5 August 2022. URL: [https://orgchart.mit.edu/node/27/letters\\_to\\_community/new-us-sanctions-prohibit-collaborations-certain-russian-entities](https://orgchart.mit.edu/node/27/letters_to_community/new-us-sanctions-prohibit-collaborations-certain-russian-entities)

*Zweig J.* (2022). How to Make Peace With Your Stock Market Losses // The Wall Street Journal on-line. 7 October. URL: [https://www.wsj.com/articles/selling-stock-in-down-market-11665153733?mod=wsjhp\\_columnists\\_pos1](https://www.wsj.com/articles/selling-stock-in-down-market-11665153733?mod=wsjhp_columnists_pos1)

### **Internet sources**

Scopus. URL: <https://nces.nsf.gov/pubs/nsb20214/publication-output-by-country-region-or-economy-and-scientific-field>

UN COMTRADE // URL: <http://comtrade.un.org/>

VTSIOM. URL: <https://wciom.ru/analytical-reviews/analiticheskii-obzor/pora-predprinimat-monitoring-1992-2022>

The World Bank Group. URL: <https://www.cbr.ru/today/ms/smo/wb/>

DOM.RF. URL: <https://дом.рф>

"Constructor SARM-ru" IAES RANEPА. URL: <https://ipei.ranepa.ru/ru/capm-ru/ruseco-index>

MSP Corporation. URL: <https://t.me/corpmspof/1807>

GARANT.RU. URL: <https://www.garant.ru/news/>

Information resources Merger.ru of the agency Cbonds and Institute of Mergers Merger.ru. URL: <http://mergers.ru/>

Information resource Emerging Portfolio Fund Research (EPFR Global). URL: <https://www.epfrglobal.com/>

Official Internet portal of legal information. URL: <http://publication.pravo.gov.ru/Document/View/0001202104050036?index=5&rangeSize=1>

Official website of the Russian MinFin. URL: <https://minfin.gov.ru/>

Official website of the Moscow stock exchange. URL: <https://www.moex.com/>

Official website of the Treasury of Russia URL: <https://www.roskazna.gov.ru/>

Official website of the UNCTAD. URL: <https://unctad.org/webflyer/global-trade-update-february-2022>

Official website of the OECD. URL: <https://www.oecd.org/economic-outlook/december-2021/>

Official website of the World Bank. URL: <https://openknowledge.worldbank.org/bitstream/handle/10986/38030/GEP-January-2023.pdf>

The World Bank Group. URL: <https://www.cbr.ru/today/ms/smo/wb/>

Official website of the WTO. URL: [https://www.wto.org/english/news\\_e/news23\\_e/wtoi\\_01mar23\\_e.htm](https://www.wto.org/english/news_e/news23_e/wtoi_01mar23_e.htm)

Official website of the UNCTAD. URL: <https://unctad.org/news/global-trade-set-hit-record-32-trillion-2022-outlook-increasingly-gloomy-2023>

Official website of the IMF. URL: // <https://www.imf.org/en/Publications/WEO/Issues/2022/01/25/world-economic-outlook-update-january-2022>

Official website of International Energy Agency. World Energy Outlook. URL: <https://iea.blob.core.windows.net/assets/830fe099-5530-48f2-a7c1-11f35d510983/WorldEnergyOutlook2022.pdf>

Official website of the Federal State Statistics Service (ROSSTAT). URL: <https://rosstat.gov.ru/>

Official website of the Ministry of Economy of Russia. URL: [https://economy.gov.ru/material/news/minekonomrazvitiya\\_rossii\\_sozdali\\_matricu\\_klientskogo\\_puti\\_eksportera.html](https://economy.gov.ru/material/news/minekonomrazvitiya_rossii_sozdali_matricu_klientskogo_puti_eksportera.html)

Official website of Community Council of the FCS of Russia. URL: <https://www.osfts.ru/meropriyatiya/2021/2110-glavnye-tseli-otkrytost-i-rezultativnost>



---

Official website of the Accounts Chamber of the Russian Federation. URL: <https://ach.gov.ru/checks/schetnaya-palata-vyyavila-priznaki-zanizheniya-tamozhennykh-platezhey-na-98-5-mlrd-rub->

Official website of the Federal Customs Service. URL: <https://customs.gov.ru/press/federal/document/319904>

Official website of UISIS. URL: <https://www.fedstat.ru/>

Official website of the Ministry of Trade and Industry of India. URL: <https://tradestat.commerce.gov.in/meidb/default.asp>

Official website of Eurostat. URL: <https://ec.europa.eu/eurostat/en/web/products-eurostat-news/w/ddn-20230303-1>

RBC. URL: <https://realty.rbc.ru/news/>

RBC. URL: <https://www.rbc.ru/business/>

RBC. URL: <https://www.rbc.ru/newspaper/>

Rosaviatsiya. URL: <https://favt.gov.ru/deyatelnost-vozdushnye-perevozki-stat-pokazately/>

Rosreestr. URL: <https://rosreestr.gov.ru/>

Website of the Central Bank of the Russian Federation. URL: <https://cbr.ru/>

Website of the Ministry of Science and Higher Education of RF. URL: [https://fcpir.ru/upload/medialibrary/955/gt\\_57\\_14vn\\_metodika-ugt\\_002\\_.pdf](https://fcpir.ru/upload/medialibrary/955/gt_57_14vn_metodika-ugt_002_.pdf)

Website of the MinFin of Russia. URL: <https://minfin.gov.ru/ru/>

Website of the Government of Russia. URL: [http://government.ru/support\\_measures/category/finance/](http://government.ru/support_measures/category/finance/)

Portal of the foreign economic information. URL: [http://www.ved.gov.ru/rus\\_export/torg\\_exp](http://www.ved.gov.ru/rus_export/torg_exp)

Sovcombank. URL: <https://sovcombank.ru/blog/ipoteka/dalnevostochnaya-ipoteka--chto-eto-usloviya-stavka>

Federal portal of the normative legal acts. URL: <https://regulation.gov.ru/>

CIAN. URL: <https://www.cian.ru/stati-lgotnaya-no-ne-volgotnaya-chto-stalo-s-ipotekoi-s-1-iyulya-319129>

URL: [https://wto.ru/news/rasprostraneno-soobshchenie-rossiyskoy-federatsii-v-ramkakh-vto/?bitrix\\_include\\_areas=N](https://wto.ru/news/rasprostraneno-soobshchenie-rossiyskoy-federatsii-v-ramkakh-vto/?bitrix_include_areas=N)

URL: [https://wto.ru/news/rasprostraneno-soobshchenie-rossiyskoy-federatsii-v-ramkakh-vto/?bitrix\\_include\\_areas=N](https://wto.ru/news/rasprostraneno-soobshchenie-rossiyskoy-federatsii-v-ramkakh-vto/?bitrix_include_areas=N)

URL: <https://www.iep.ru/ru/publikacii/publication/rossiyskaya-ekonomika-v-2020-godu-tendentsii-i-perspektivy-vypusk-42.html>

URL: <https://www.metrium.ru/upload/iblock/38a/8annax1g7a303n1unknq8kjql9skolc.pdf>

URL: <https://realty.rbc.ru/news/63c6ec7b9a79476978f73129>

URL: <https://www.xn--d1aqf.xn--p1ai/upload/iblock/3ec/khhrcrf6wzzbu157urm5vwk5b8oj1jo1.pdf>

URL: <https://www.banki.ru/news/daytheme/?id=10974860>

URL: <https://realty.ria.ru/20230216/rosreestr-1852320104.html>

URL: <https://rosreestr.gov.ru/press/archive/reg/rosreestr-v-dekabre-chislo-zaregistrovannykh-prav-na-vtorichnom-rynke-zhilya-v-moskve-vyroslo-na-t/>

URL: <https://www.yitgroup.com/en/news-repository/stock-exchange-releases/yit-sells-its-businesses-in-russia>

URL: <https://www.rbc.ru/business/14/12/2022/6398bf739a7947193631f2e3>

URL: <https://realty.rbc.ru/news/63c6ec7b9a79476978f73129>

URL: <https://wciom.ru/analytical-reviews/analiticheskii-obzor/moskovskaja-stroika-ehkonomicheskaja-konjunktura-i-administrativnye-barery>

URL: <https://realty.rbc.ru/news/627ca82a9a7947e7150513b6>

URL: <https://profi.erzrf.ru/poll/trands-2022-development/>

URL: <https://www.development-school.com/about>

URL: <http://rosstat.gov.ru/>

- URL: [https://rosstat.gov.ru/storage/mediabank/pr\\_572\\_12082022.pdf](https://rosstat.gov.ru/storage/mediabank/pr_572_12082022.pdf).
- URL: [https://rosstat.gov.ru/storage/mediabank/ind\\_perv\\_4kv-2022.xlsx](https://rosstat.gov.ru/storage/mediabank/ind_perv_4kv-2022.xlsx);
- URL: [https://rosstat.gov.ru/storage/mediabank/ind\\_vtor\\_4kv-2022.xlsx](https://rosstat.gov.ru/storage/mediabank/ind_vtor_4kv-2022.xlsx)
- URL: <https://tass.ru/ekonomika/16415131>
- URL: <https://www.atorus.ru/node/50839>
- URL: [https://vogazeta.ru/articles/2023/1/24/quality\\_of\\_education/21894](https://vogazeta.ru/articles/2023/1/24/quality_of_education/21894)
- URL: [https://cbr.ru/vfs/statistics/BankSector/Borrowings/02\\_01\\_Funds\\_all.xlsx](https://cbr.ru/vfs/statistics/BankSector/Borrowings/02_01_Funds_all.xlsx)
- URL: <http://www.cbr.ru/Collection/Collection/File/43719/Bbs2301r.pdf>
- URL: <https://www.forbes.ru/finansy/481880-cb-ocenil-vozmoznuu-potrebnost-bankov-v-dokapitalizacii-v-700-mlrd-rublej>
- URL: <https://tass.ru/ekonomika/15627499>
- URL: <https://nbki.ru/company/news/?id=1597722>
- URL: <https://www.cbr.ru/press/pr/?file=638046460634914087FINSTAB.htm>
- URL: <https://www.garant.ru/products/ipo/prime/doc/405654369/#review>
- URL: [https://www.kommersant.ru/doc/5864435?from=top\\_main\\_1](https://www.kommersant.ru/doc/5864435?from=top_main_1)
- URL: [https://lenta.ru/news/2022/09/12/green\\_ipo/](https://lenta.ru/news/2022/09/12/green_ipo/)
- URL: [https://www.cbr.ru/Collection/Collection/File/43816/analytical\\_review\\_bs-2022.pdf](https://www.cbr.ru/Collection/Collection/File/43816/analytical_review_bs-2022.pdf)
- URL: [https://www.cbr.ru/Collection/Collection/File/43512/2q\\_3q\\_2022.pdf](https://www.cbr.ru/Collection/Collection/File/43512/2q_3q_2022.pdf)
- URL: <https://nbki.ru/company/news/?id=1567769>
- URL: <http://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=pet&s=rbrte&f=m>
- URL: <https://regulation.gov.ru/projects#npa=136735>
- URL: [https://www.cbr.ru/Collection/Collection/File/43767/DKU\\_2301-07.pdf](https://www.cbr.ru/Collection/Collection/File/43767/DKU_2301-07.pdf)
- URL: [https://www.cbr.ru/statistics/macro\\_itm/sec\\_st/issue/](https://www.cbr.ru/statistics/macro_itm/sec_st/issue/)

URL: [https://www.cbr.ru/Collection/Collection/File/43767/DKU\\_2301-07.pdf](https://www.cbr.ru/Collection/Collection/File/43767/DKU_2301-07.pdf)

URL: [https://www.cbr.ru/statistics/RSCI/activity\\_uk\\_if/stat\\_pif\\_aif/](https://www.cbr.ru/statistics/RSCI/activity_uk_if/stat_pif_aif/)

URL: [https://www.cbr.ru/securities\\_market/analytics/](https://www.cbr.ru/securities_market/analytics/)

URL: <https://www.morningstar.com/features/what-prior-market-crashes-can-teach-us-in-2020>

URL: [https://www.cbr.ru/analytics/rcb/cl\\_broker/](https://www.cbr.ru/analytics/rcb/cl_broker/)

URL: <https://www.e-disclosure.ru/#>

URL: [https://www.sberbank.com/ru/investor-relations/t\\_disclosure](https://www.sberbank.com/ru/investor-relations/t_disclosure)

URL: <https://www.e-disclosure.ru/portal/company.aspx?id=3043>

URL: <https://www.e-disclosure.ru/portal/files.aspx?id=934&type=4>

URL: <https://www.e-disclosure.ru/poisk-po-soobshheniyam>

URL: <https://frankrg.com/112060>

URL: <http://www.cbr.ru/press/event/?id=14135>

URL: <https://www.castellum.ai/russia-sanctions-dashboard>

URL: <https://quote.ru/news/article/63d8c5db9a79475d8f7a1497>

URL: <http://www.cbr.ru/press/event/?id=14059>

URL: [http://www.cbr.ru/about\\_br/dir/rsd\\_2022-12-29\\_31\\_02/](http://www.cbr.ru/about_br/dir/rsd_2022-12-29_31_02/)

URL: <https://www.interfax.ru/business/872120>

URL: <https://www.cbr.ru/Crosscut/LawActs/File/6114>

URL: <https://www.reuters.com/world/europe/eu-seeks-use-frozen-russian-funds-rebuild-ukraine-2023-02-14/>

URL: [https://www.cbr.ru/Content/Document/File/134865/plan\\_limit.pdf](https://www.cbr.ru/Content/Document/File/134865/plan_limit.pdf)

URL: <https://www.castellum.ai/russia-sanctions-dashboard>

URL: <https://mcn.pф/>

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URL: <https://smbiz.fom.ru/post/otnoshenie-predprinimatelej-k-meram-podderzhki-malogo-biznesa>

URL: <https://etpgpb.ru/portal/import-substitution/>

URL: <https://kommersant-ru.turbopages.org/kommersant.ru/s/doc/5839267>

URL: [https://minfin.gov.ru/ru/press-center/?id\\_4=38331-o\\_provedenii\\_operatsii\\_na\\_vnutrennem\\_valyutnom\\_rynke\\_v\\_svyazi\\_s\\_formirovaniem\\_dopolnitelnykhvypadayushchikh\\_neftegazovykh\\_dokhodov\\_federalnogo\\_byudzheta](https://minfin.gov.ru/ru/press-center/?id_4=38331-o_provedenii_operatsii_na_vnutrennem_valyutnom_rynke_v_svyazi_s_formirovaniem_dopolnitelnykhvypadayushchikh_neftegazovykh_dokhodov_federalnogo_byudzheta)

URL: [https://minfin.gov.ru/ru/press-center?id\\_4=38327](https://minfin.gov.ru/ru/press-center?id_4=38327)

URL: [https://rosstat.gov.ru/storage/mediabank/186\\_09-11-2022.html](https://rosstat.gov.ru/storage/mediabank/186_09-11-2022.html)

URL: <https://www.rbc.ru/economics/13/03/2022/622dd6ee9a7947081b63341c>

URL: [https://cbr.ru/Collection/Collection/File/40915/ar\\_2021.pdf](https://cbr.ru/Collection/Collection/File/40915/ar_2021.pdf)



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