

## 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).

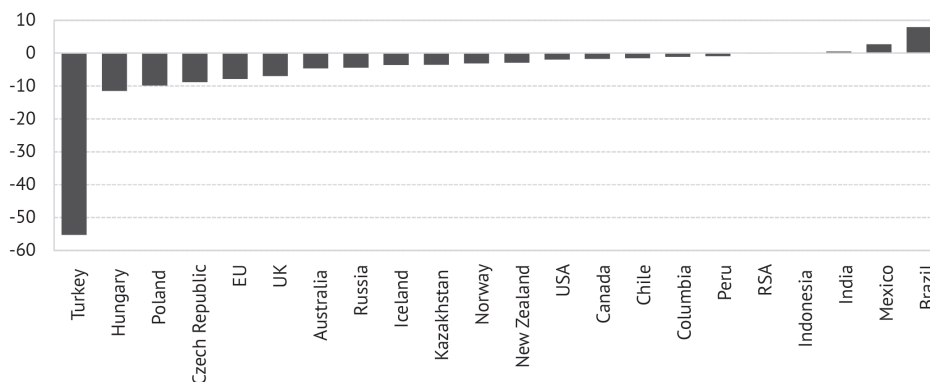
According to the Bank of Russia estimates, in order to gradually move inflation towards the target, it will be necessary to maintain the key rate within the average range of 7–9% per annum in 2023, and 6.5–7.5% per annum in 2024. In response to the easing inflationary pressure, the Bank of Russia will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

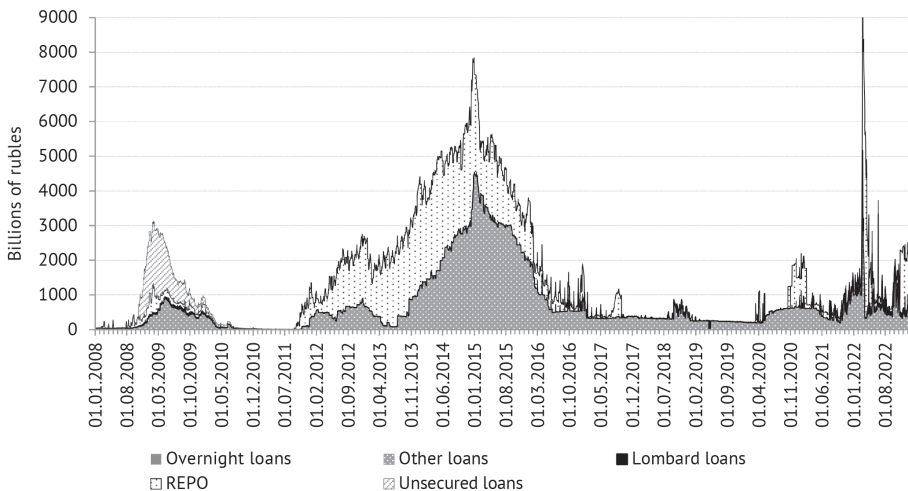


Fig. 2. Debt of commercial banks to the Bank of Russia, rubles, 2008–2022

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.

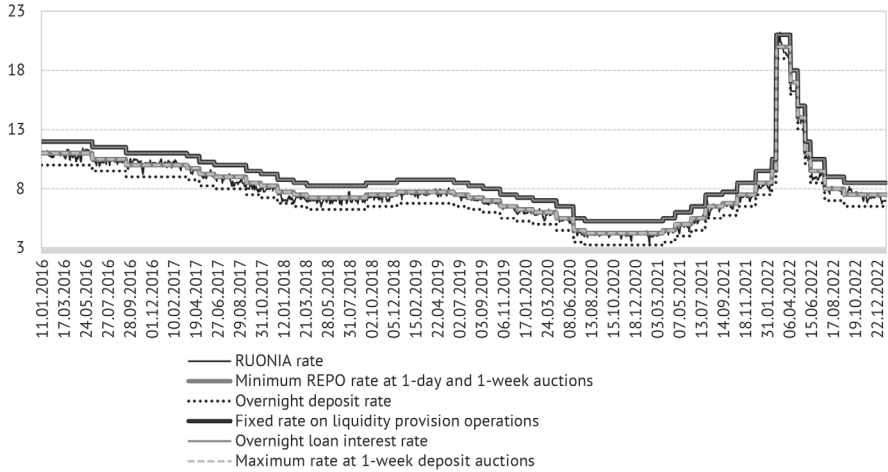


Fig. 3. The Bank of Russia interest rate band and the movement of interbank market interest rates, 2016–2022

Source: Bank of Russia.

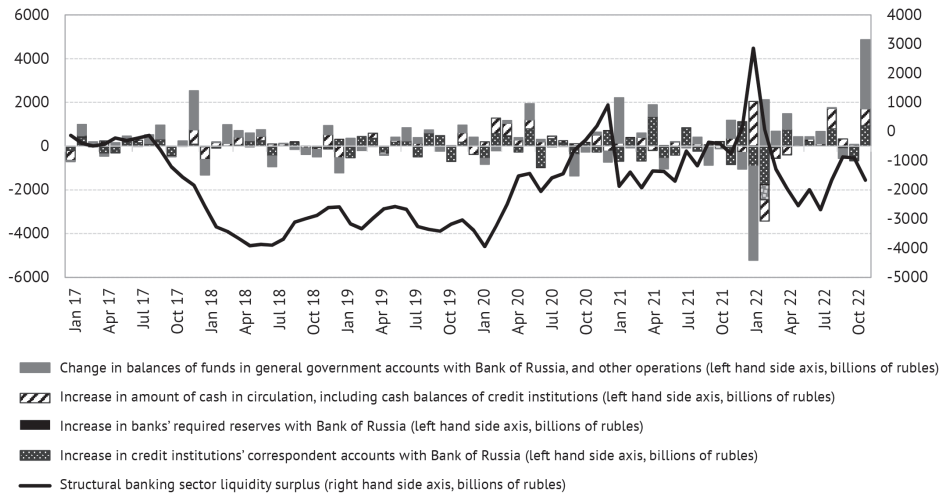


Fig. 4. The banking sector structural liquidity surplus and its components, 2017–2022

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.

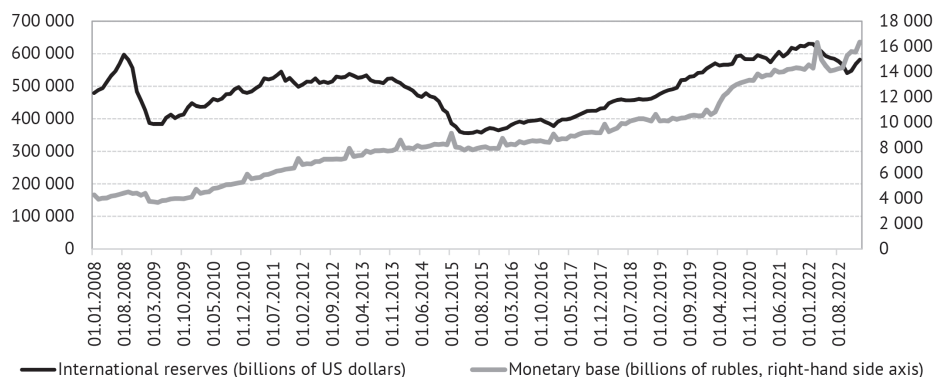
reserve assets was frozen. As a result, about 50% of the reserves were affected by sanctions (\$300 bn out of \$630 bn available as of February 1, 2022).<sup>1</sup> In 2022, the total amount of international reserves<sup>2</sup> decreased by 7.7% to \$582 bn (*Fig. 5*). This happened mainly as a result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

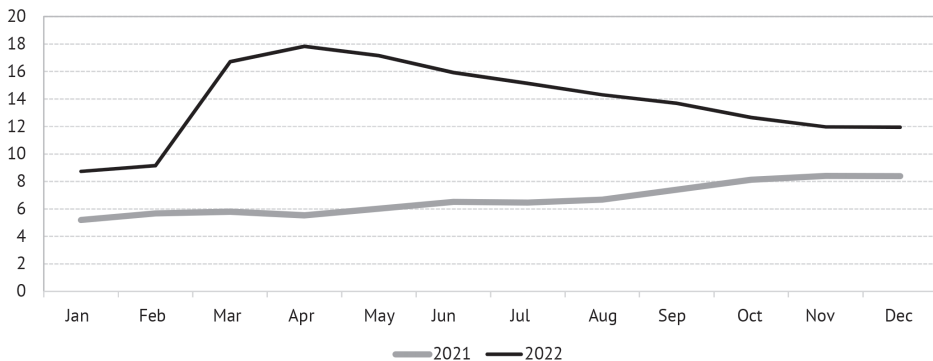
<sup>1</sup> *Bozhechkova A., Sinelnikova-Muryleva E., Trunin P. Capital control stabilized the situation on the currency market // Monitoring of Russia's Economic Outlook. Trends and Challenges of Socio-Economic Development. 2022. No. 5 (158).*

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

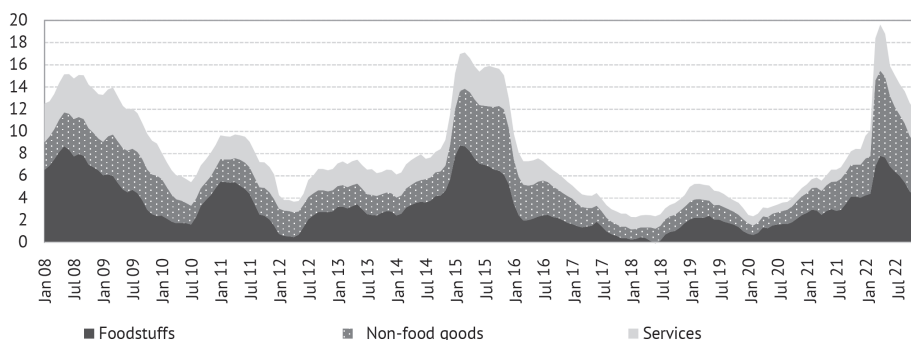
services (by 28.24%), sanatoria and health resort services (by 10.83%), medical services (by 11.72%), and housing and utility services (by 11.57%).

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*).

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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.

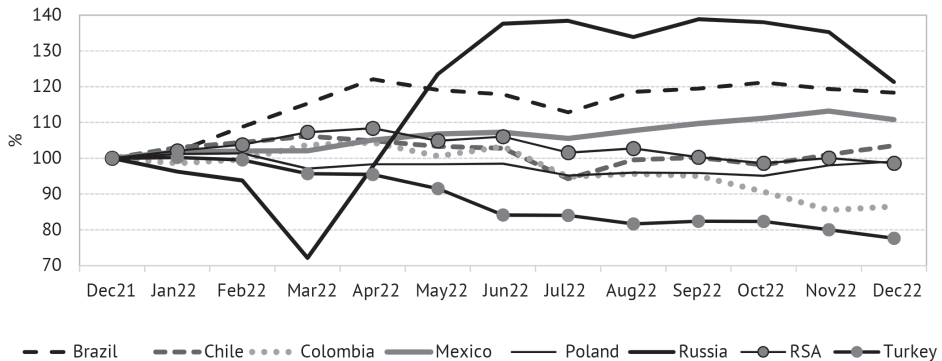


Fig. 8. The movement of nominal effective exchange rates of national currencies in the developing countries targeting inflation (December 2021 = 100%)

## 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>

1 Authors: *Arlashkin I.Yu.*, Researcher, Budget Policy Department, Gaidar Institute; *Barbashova N.E.*, Candidate of Economic Sciences, Researcher, Budget Policy Department, Gaidar Institute; *Vekerle K.V.*, Researcher, Budget Policy Department, Gaidar Institute; *Deryugin A.N.*, Acting Head of the Budget Policy Department, Gaidar Institute; *Leonov E.A.*, Researcher, Budget Policy Department, Gaidar Institute; *Matveev E.O.*, Researcher, Budget Policy Department, Gaidar Institute; *Sokolov I.A.*, Candidate of Economic Sciences, Leading Researcher, Budget Policy Department, Gaidar Institute; *Tishenko T. V.*, Candidate of Economic Sciences, Senior Researcher, Budget Policy Department, Gaidar Institute.

	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)

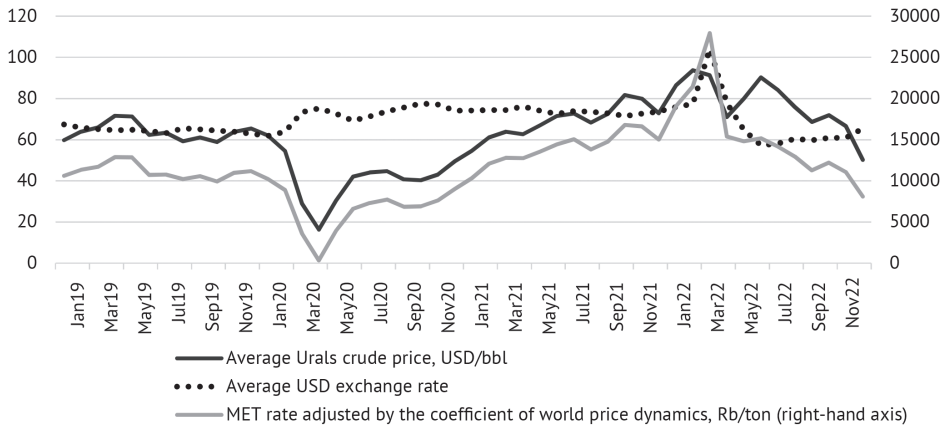


Fig. 9. Dynamic of the actual MET tax rate, Urals oil prices and the value of the dollar exchange rate in 2019–2022

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

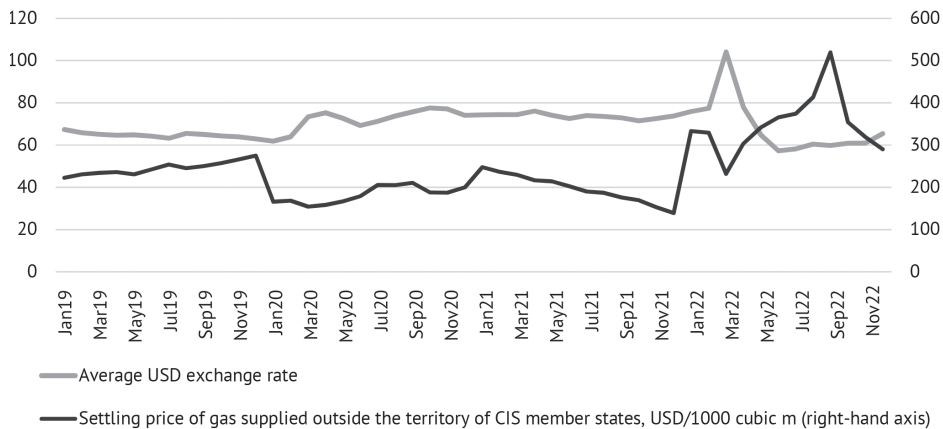


Fig. 10. Dynamic of the settling price of natural gas and the value of the dollar exchange rate in 2019–2022

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).

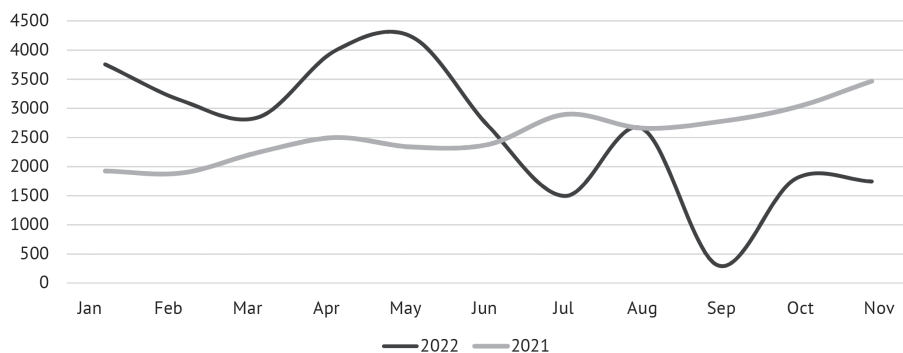


Fig. 11. Performance of profitable organizations, Rb bn

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	5 558	5.2	5 889	4.4	6 509	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	2085.2	1.9	2226.6	2.1	2355.9	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.

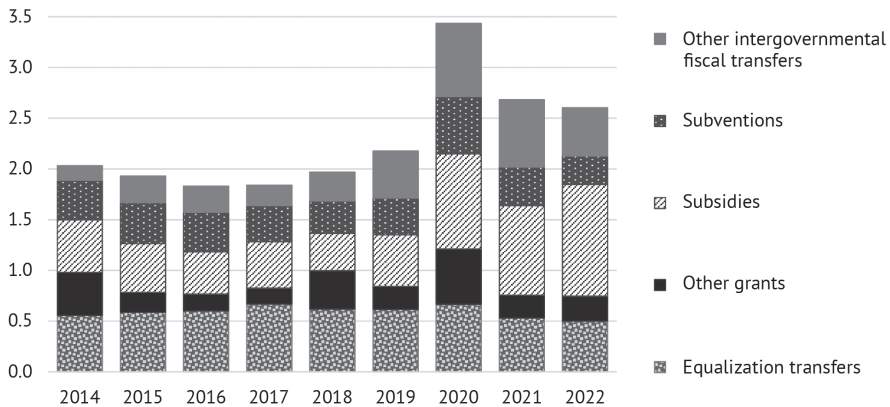
*Table 13*

**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.

<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.



*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*

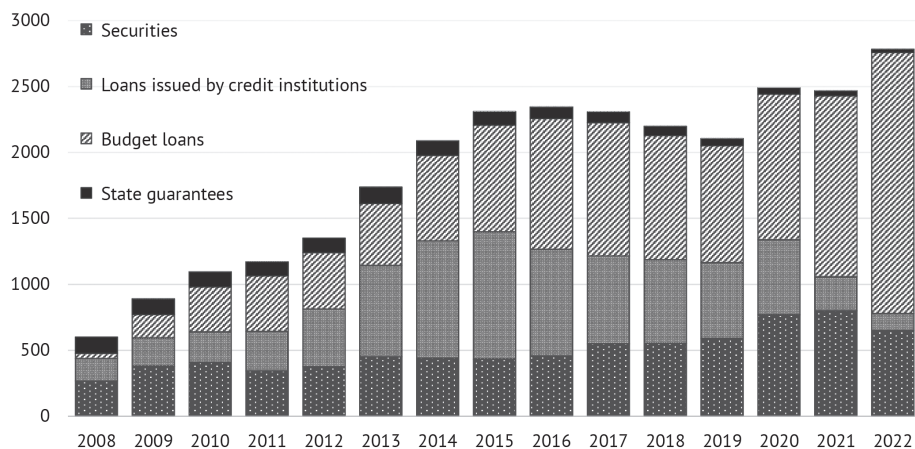
**Execution (deficit/surplus) of the consolidated budgets of the Russian Federation in 2014–2022**

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.