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TRENDS AND OUTLOOKS

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The review "Russian Economy. Trends and Outlooks" has been published by the Gaidar Institute since 1991. This is the 42th issue. This publication provides a detailed analysis of main trends in Russian economy, global trends in social and economic development. The paper contains 6 big sections that highlight different aspects of Russia's economic development, which allow to monitor all angles of ongoing events over a prolonged period: global economic and political challenges and national responses, economic growth and economic crisis; the monetary and budget spheres; financial markets and institutions; the real sector; social sphere; institutional changes. The paper employs a huge mass of statistical data that forms the basis of original computation and numerous charts confirming the conclusions.

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2.1. Monetary policy in Russia in 2020₁

2.1.1. Monetary policy trends

In 2020, the world economy was faced with a large-scale crisis caused by the coronavirus pandemic, a worsening situation in the global oil market, increasing global uncertainty, and capital outflows from emerging markets. The crisis phenomena were experienced, to a varying degree, by every sector of the economy and required the implementation of a set of urgent monetary policy measures. The Bank of Russia's switchover to monetary policy easing became its key decision aimed at sustaining aggregate demand: in 2020, the regulator cut the key rate four times, from 6.25% per annum in February to 4.25% per annum in July, thus sinking it to its historic low.

It should be noted that just before the onset of the 2020 epidemiological crisis, the Russian economy was characterized by a favorable situation in terms of monetary conditions, inflationary processes, the balance of payments, and the foreign exchange market. Low inflation, stabilization of inflationary expectations, high levels of international reserves, a positive current account balance, low external debt, a significant structural surplus of banking sector liquidity, and lower dependence of the ruble exchange rate against major world currencies on the movement of oil prices under the fiscal rule had all contributed to the Russian economy being more secure that before from external shocks.

In February-March 2020, the Russian economy had to deal simultaneously with two major challenges. The slowdown in the global economy resulting from the rapid spread of the coronavirus translated into a sharp plunge in aggregate demand, while the containment measures introduced in the Russian Federation

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triggered a decline in aggregate supply. All this was occurring alongside a growing uncertainty and capital outflows from the developing markets. In addition, the OPEC+ deal failure on March 6, 2020 sharply accelerated the oil price downfall. Following the auction on March 9, prices of Urals crude fell more than 30%, to \$33 per barrel. Over the remaining weeks of March, Urals prices continued to slide, reaching a local minimum of \$18.64 per barrel on March 18, 2020, which corresponds to their level in February 2002.

An additional downward pressure on the ruble exchange rate was exerted by capital outflows from emerging markets in a situation of uncertainty. Over March, the share of non-residents in the OFZ market shrank by 3 p.p., from 35% to 32%, which corresponds to a reduction in the portfolio held by non-residents by Rb280 bn. The outflow exceeded the volume of OFZ placement in Q1 2020, which amounted to Rb227 bn.

In the short term, these shocks created challenges to Russia's financial sustainability. Thus, over the course of February 2020, the ruble depreciated against the US dollar by 6.3%, to Rb67.0; and in March 2020, it lost another 16.0%, getting to Rb77.7. In view of the sharply deteriorating external situation, the RF Central Bank decided, from March 9 onwards, not to purchase foreign currency in the domestic market within the framework of the fiscal rule mechanism; and on March 10, it began proactive sales of foreign currency, thereby implementing the fiscal rule in order to support the cheapening ruble. Thus, over the period from March 10 to March 31, the Bank of Russia sold foreign currencies to the value of Rb143.5 bn, and the total volume of foreign currency sales under the fiscal rule over the period from March to December 2020 amounted to Rb1.7 trillion.

An additional mechanism applied in order to boost the foreign currency supply in the domestic forex market was the sale of foreign currency reserves from the National Welfare Fund (NWF) to pay for the RF Government's purchase of shares in Sberbank to the value of Rb 2.1 trillion. The daily volume of foreign exchange sales in the framework of that deal varied depending on the fluctuations of the price of Urals crude under \$25 per barrel. When the cutoff price was exceeded, no operations were carried out. With due regard for the situation in the world oil market, forex sales were taking place from March 19 through May 12, 2020. The total amount of proactive forex sales and those involved in the Sberbank deal was about Rb0.5 trillion. Note that in August-September 2020, the RF Central Bank offset the remaining unsold foreign currency balance within the framework of the Sberbank deal against the balance of all the foreign currency purchases and proactive sales that had been deferred since 2018. The resulting balance of these operations amounted to Rb185 bn. Over the course of O4 2020, the Bank of Russia evenly distributed the sales of the forex surplus in addition to its regular forex operations under the fiscal rule. In October 2020, the deal of purchase, by the RF Government of shares in Aeroflot PJSC at the expense of the NWF, was launched. The volume of forex sales completed by the regulator within the framework of this deal until the end of 2020 amounted to Rb50 bn.

In order to boost forex market stability and expand the possibilities for providing banks with foreign exchange liquidity, the Bank of Russia, starting from 10 March, decided to increase the limit of forex swap transactions for providing US dollars with maturity of 'today' from \$3 bn to \$5 bn. However, there was no demand for this instrument, which confirms the vital function of the fiscal rule as an automatic stabilizer – among other things, of foreign currency liquidity in the financial sector.

The measures implemented by the monetary authorities in order to maintain financial stability made it possible to prevent the development of a forex market crisis. In April-May 2020, the ruble exchange rate fluctuated within Rb70–75 rubles per US dollar. Our calculations demonstrate that over that period, a fundamentally sound ruble-to-USD exchange rate should have hovered around Rb75, if the price of oil remained at around \$25-30 per barrel.1

Importantly, for the first time in a crisis environment, Russia's macroeconomic policy made it possible to avoid a tightening of its monetary policy. At its meeting on March 20, 2020, the Bank of Russia Board decided to keep the key rate at 6% per annum, although based on the experiences of the previous crisis, many had been expecting it to be raised. It should be recalled that during the currency crisis of late 2014 and early 2015, increasing inflationary expectations coupled with inflation acceleration as a result of a rapidly depreciating ruble necessitated, in December 2014, an urgent key rate increase from 10.5% to 17% per annum. In 2020, there was no national currency plunge of a similar magnitude, and after two short-term inflation surges in March-April and May-June 2020, the inflation rate slowed down, and the ruble strengthened. Thus, while the monthly growth rate of the CPI in March and April stood at 0.6% and 0.8%, respectively, later on, in May and June, its movement slowed down to 0.3% and 0.2%, respectively. It is in this aspect that the situation in 2020 significantly differs from that in 2014, when, as the ruble exchange rate plunged, inflation accelerated to 2.6% in December 2014, and then to 3.9% in January 2015.

As early as the spring of 2020, the RF Central Bank switched to monetary policy easing. On April 27, the key rate was cut by 0.5 p.p. to 5.5% per annum; on June 22, by 1 p.p. to 4.5% per annum; and on July 27, by 0.25 p.p. to 4.25% per annum (the latter, as noted earlier, corresponds to historic low). Thereafter, over the September-December 2020 period, under the influence of short-term proinflationary factors, including some recovery in consumer demand and growth in the inflationary expectations of consumers and businesses resulting from the ruble weakening, the regulator temporarily discontinued monetary policy easing.

Note that in the unprecedented crisis conditions typical of 2020, the majority of central banks in the developed and developing economies likewise reduced their key rates. As shown by the year-end results of 2020, the key interest rate in Russia in real terms (based on actual inflation) decreased significantly, and thus became negative (-0.65% per annum), at a level that was comparable to that of Australia (-0.6% per annum) and the UK (-0.5% per annum). The real key rates in the majority of developed economies, as well as some of the developing ones that relied on inflation targeting, also shifted to negative values (-1.4% per annum in

¹ The calculations are based on the econometric model of a fundamental ruble exchange rate movement pattern, developed by the Gaidar Institute and the RANEPA.

Norway, -0.45% per annum in Canada, and -2.5% per annum in Chile), while their nominal interest rates hovered near zero, and inflation was low (Fig. 1 and Table 1).

 ${\it Table~1}$ Inflation and key rates in some developed and developing countries

| | Actual inflation, December 2020 to December 2019, % | Key rate, end of year, % per annum | | |
|----------------|--|---------------------------------------|--|--|
| | Developing countries | | | |
| Colombia | 1.6 | 1.75 | | |
| Indonesia | 1.7 | 3.75 | | |
| Peru | 2.0 | 0.25 | | |
| Poland | 2.4 | 0.10 | | |
| Hungary | 2.7 | 0.60 | | |
| Chile | 3.0 | 0.50 | | |
| South Africa | 3.1 | 3.50 | | |
| Mexico | 3.2 | 4.25 | | |
| Brazil | 4.5 | 2.00 | | |
| India | 4.6 | 4.00 | | |
| Russia | 4.9 | 4.25 | | |
| Kazakhstan | 7.5 | 9.00 | | |
| Turkey | 14.6 | 17.00 | | |
| | Developed countries | | | |
| EU | 0.2 | 0.00 | | |
| United Kingdom | 0.6 | 0.10 | | |
| Australia | 0.7 | 0.10 | | |
| Canada | 0.7 | 0.25 | | |
| Norway | 1.4 | 0.00 | | |
| New Zealand | 1.4 | 0.25 | | |
| USA | 1.4 | 0.25 | | |
| Czech Republic | 2.3 | 0.25 | | |
| Iceland | 3.6 | 0.75 | | |

Source: Central banks' websites.

In addition to the measures designed to maintain financial stability that have been discussed earlier, the Bank of Russia proposed a package of anti-crisis measures that included support of the lending market (including lending to SMEs, housing mortgage loans, and lending to businesses operating in the affected industries). Among the most significant measures, we may also point out payment holidays on consumer loans. In addition, the RF Central Bank launched a support program for small and medium-sized businesses to cover the payment of wages to their employees. Besides, it was decided to zero out the risk ratios for housing mortgage loans. Meanwhile, it is worth noting that this measure triggered a rush demand in the real estate market, resulting in a record increase in the volume of new mortgage loans issued and a surge in housing prices, thus giving rise to the risk of a mortgage bubble.

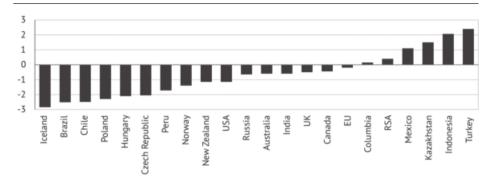


Fig. 1. The real key rates as of the end of November 2020, % per annum (based on the actual inflation patterns over the previous 12 months)

Source: Central banks' websites; own calculations.

The Bank of Russia also decided that, from March 1 to September 30, 2020, no increased risk-based buffers should be applied for foreign currency loans issued during that period to manufacturers of pharmaceuticals, and of materials and equipment used for medical purposes, as well as for their investments, over the same period, in forex-denominated debt securities. Besides, the Bank of Russia decided to grant a preferential treatment to systemically important banks for their compliance with the short-term liquidity ratios, in order to expand their opportunities for lending to the private sector. In addition to reducing the fee for the right to use an irrevocable credit line (ICL) from 0.5% to 0.15%, the Bank of Russia increased the maximum total limit for ICLs from Rb1.5 trillion to Rb5 trillion for the period from April 1, 2020 to March 31, 2021.

In general, having analyzed the actions undertaken by the Bank of Russia during the acute phase of the epidemiological crisis, it can be concluded that the key role in successfully dealing with the crisis period in terms of monetary measures belonged to the inflation targeting regime and the fiscal rule, which made it possible to prevent a dramatic weakening of the ruble, acceleration of inflation, and panic in the markets; in this, the current crisis differs significantly from the global financial crisis and the currency crisis in this country in late 2014 and early 2015.

2.1.2. The money market

In 2020, amid the spread of the epidemic, the higher uncertainty also created certain risks for the money market. The increased demand for liquid funds displayed by economic agents led to a rapid reduction in the liquidity surplus across the banking system. In this connection, part of the Bank of Russia's package designed to maintain financial stability were the measures aimed at providing the banking system with additional liquidity.

To begin with, over the period from March through November 2020, the structural surplus of banking sector liquidity; shrank from Rb3.8 trillion as of March 1, 2020, to Rb0.2 trillion as of January 1, 2020 (Fig. 2). The liquidity surplus shrinkage occurred in the main due to the increasing cash in circulation volume that resulted from the high demand for it displayed by economic agents. Thus, the amount of cash in circulation in March 2020 increased by Rb0.7 trillion, and the maximum increase (Rb0.2 trillion) occurred on March 27, 2020, the first day of the weekend preceding the non-work week. Note that the growth rate of cash in circulation in March 2020 relative to the previous month turned out to be significantly higher than the average monthly growth rate displayed by that indicator over the past 5 years (6.9% vs 0.8%). A similar pattern was observed in May-October 2020. Although during that time span the monthly growth rate of household demand for cash declined on March 2020, over the period from May through October it amounted on average to 1.7%, while in the previous 5 years it had stood significantly lower, at 0.2%. In November-December 2020, the growth rate of demand for cash stabilized at a level that was comparable to the previous year's values. As a result, at the start of January 2021, compared to the beginning of 2020, the volume of cash held by individuals increased on early 2020 by 26.4%, to Rb13.4 trillion.

Secondly, the liquidity surplus of the banking sector was receding due to the rising correspondent accounts balances of credit institutions with the Bank of Russia, because a number of banks wanted to create additional cash reserves as a safety net against the risk of sudden withdrawals of funds by their clients in face of growing uncertainty. Thus, over the course of March, the correspondent account balances of credit institutions jumped by 26.9%, to Rb2.6 trillion; and in April, by another 16.3%, to Rb3.0 trillion. Between May and December, the correspondent account balances of credit institutions stabilized at Rb2.9 trillion, and the fluctuations of this index were caused by the redistribution of funds between the correspondent and deposit accounts held by credit institutions with the Bank of Russia, which they did in order to meet the requirement for averaging their required reserves.

Thirdly, the liquidity surplus of the banking sector was shrinking in response to the increase in the required reserves of commercial banks as a result of the liabilities of credit institutions being adjusted relative to the changing forex rate of the weakening ruble. This effect was most pronounced in April and September 2020 when, due to the ruble weakening, the required reserves of banks increased by 6.9% and 2.1%, respectively. According to the year-end results of 2020, they stood at Rb0.7 trillion, having gained 15.6% relative to their year-beginning value.

Fourthly, the liquidity surplus shrinkage was associated with budget operations. Over the period from March 1 through May 10, foreign currency sales under the

According to the Bank of Russia definition, structural liquidity deficit/surplus is calculated as a difference between the Bank of Russia's 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 of raising funds with the Bank of Russia operations; in case of structural liquidity surplus, it is their permanent need of allocating funds through the Bank of Russia operations.

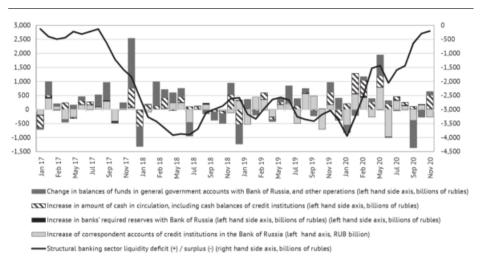


Fig. 2. Structural liquidity surplus of the banking sector and its components, 2017–2020

fiscal rule, increased net government borrowing, cash inflow into bank deposits, and the repo transactions carried on by the Federal Treasury, when taken together, accounted for liquidity absorption from the banking sector in the amount of Rb0.8 trillion; this was in part offset by the excess of budget expenditure over budget revenue, in the amount of Rb0.38 trillion. As a result, a total of Rb0.46 trillion was absorbed from the money market through the budget channel. Over the next period, from May 11 through June 2020, the situation drastically changed, and the budget channel was the source of liquidity for the banking system in the amount of Rb1.2 trillion. Thus, e.g., the operations of the RF Ministry of Finance with financial assets and liabilities (foreign currency sales under the fiscal rule, changes in the amount of net government borrowing, cash inflow into bank deposits, and the repo transactions of the Federal Treasury) absorbed liquidity in the amount of Rb0.3 trillion, but the excess of budget expenditure over budget revenue increased the banking sector liquidity by Rb1.5 trillion. Over the July-November 2020 period, budget operations pushed down the liquidity surplus as liquidity absorption amounted to Rb2.5 trillion, being in part offset by the excess of budget expenditure over budget revenue in the amount of Rb1.3 trillion. In December 2020, on the contrary, the operations of the RF Ministry of Finance with financial assets and liabilities absorbed Rb1.3 trillion, while the excess of budget expenditure over budget revenue added liquidity to the banking sector in the amount of Rb1.4 trillion; as a result, the budget channel supplied liquidity to the banking system only in the amount of Rb0.1 trillion. It should be noted that the liquidity inflow turned out to be rather modest for the month of December (compared with Rb1.8 trillion in December 2017, Rb0.4 trillion in December 2018,

and Rb0.3 trillion in December 2019), and so the liquidity surplus of the banking system in December 2020 remained at a low level (Rb0.2 trillion an average).

In response to the growing need of banks for liquidity resources, the RF Central Bank reduced its placement of Bank of Russia coupon bonds (COBR). While the offer of COBR in March and April 2020 amounted to Rb490.4 bn and Rb582.0 bn, respectively (vs Rb500 bn each in March and April 2019), in May the volume of new placements of COBR was zero (vs Rb600 bn in May 2019). Thus, on May 12, the auction for the placement of COBR-33 was canceled, and the regulator also decided to stop holding its COBR-32 auctions until the maturity date of COBR-31. As a result, in March-May 2020, the volume of commercial banks' investment in COBR decreased by 41%, to Rb1.1 trillion. Overall in 2020, the volume of COBR placements amounted to Rb5.2 trillion, while in 2019 the same indicator had exceeded Rb6.0 trillion.

In the context of a shrinking liquidity surplus, banks' demand for the Bank of Russia's deposit auctions became less prominent. So, while in 2019 the volume of funding attracted through deposit auctions amounted on average to Rb1.6 trillion, in 2020 it was only Rb1.2 trillion.

In general over 2020, broad money increased by 9.8%, to Rb18,472 bn (in 2019, it increased by 4.7%, to Rb16823.4 bn). Among the fastest-growing components of broad money by the end of 2020, as noted earlier, we can point out cash in circulation, which jumped by 26.4%, to Rb13,180.9 bn, and bank deposits with the Bank of Russia, which increased by 18.9%, to Rb1,220.7 bn. The amount of required reserves increased by 15.6%, to Rb713.6 bn, while the volume of Bank of Russia bonds held by credit institutions shrank by 70.6%, to Rb570.0 bn. The correspondent accounts of credit institutions with the Bank of Russia shrank by 2.9%, to Rb2,548.5 billion. Overall, in face of liquidity surplus, the volume of excess reserves for 2020 decreased by 22.4% and amounted to Rb4339.2 bn (*Table 2*).

Table 2
The broad money dynamics in 2020,
billions of rubles

| | 01.01.2019 | 01.01.2020 | 01.01.2021 |
|---|------------|------------|------------|
| Monetary base (broad) | 16,063.4 | 16,823.4 | 18,472.4 |
| cash in circulation, including cash balances of credit institutions | 10,312.5 | 10 616.1 | 13,419.6 |
| correspondent accounts of credit institutions with Bank of Russia | 1,898.2 | 2,625.5 | 2,548.5 |
| required reserves | 575.3 | 617.4 | 713.6 |
| deposits of credit institutions with Bank of Russia | 1,903.5 | 1,027.7 | 1,220.7 |
| Bank of Russia bonds held by credit institutions | 1,373.9 | 1,936.7 | 570 |
| For reference: excess reserves | 5,175.7 | 5,589.9 | 4,339.2 |

Source: Bank of Russia.

¹ Excess reserves of the banking system include deposits of credit institutions with the Bank of Russia, correspondent accounts of credit institutions with the Bank of Russia, as well as bonds of the Bank of Russia held by credit institutions.

The sharp liquidity surplus decline observed in March and April 2020 influenced both the volatility of money market rates and the measures taken by the RF Central Bank by way of stabilizing the situation. The Bank of Russia launched fine-tuning repo auctions to provide liquidity to the banking sector, which had not taken place since February 2017. Over the March- May 2020 period, the RF Central Bank carried out a total of 11 auctions, with the average allotment amount of Rb406 bn. A high demand for these operations persisted over the first ten days of May 2020. Later on, as the situation in the money market stabilized, there was no longer any need for fine-tuning operations to provide necessary cash to the banking sector.

In May 2020, the Bank of Russia expanded the list of instruments that it was using to provide ruble liquidity to credit institutions through one-month and oneyear repo auctions. The list of acceptable collateral was reduced as compared to short-term repos. The acceptable collateral included federal government bonds put on the Lombard List and bonds of subjects of the Russian Federation and municipalities with the highest credit rating according to the national rating scale. The 28-day long auction offering up to Rb500 bn, scheduled for May 25, 2020, was recognized to be canceled as it was participated by only one lender. In June-September 2020, alongside a stabilizing situation in the money market, the demand for long-term refinancing likewise effectively dwindled. However, within the framework of 28-to-35-day long repo auctions held over the October-December 2020 period, banks were provided with a total of Rb2.6 trillion. It is noteworthy that the growth in banks' demand for monthly repo auctions is neutral in terms of money supply, because the bulk of these funds is spent on purchasing OFZs. Besides, throughout the year, these operations had neutral effect on money supply, because as early as December 2020, the money received by the budget as a result of OFZ sales went back into the economy in the form of budget spending. The demand for one-year repo auctions was extremely low: banks took part in one-year repo auctions only three times (on June 22, October 12, and December 7, 2020), and the amount of borrowing amounted to Rb5.1 bn, Rb20 bn, and Rb10.5 bn, respectively.

With the liquidity surplus decline in 2020, there was an increase in the debt of credit institutions to the Bank of Russia. By the end of 2020, the amount of loans attracted by credit institutions from the Bank of Russia had soared by 47%, to Rb3.6 trillion (vs Rb2.5 trillion as of January 1, 2020) (*Fig. 3*). The volume of the regulator's claims on banks within the framework of repo auctions at year end 2020 amounted to Rb0.85 trillion (vs zero claims at year end 2019), while banks' debt on loans secured by non-marketable assets reached Rb 0.96 trillion (vs Rb2.0 trillion at year end 2019).

Overall, the situation in the money market amid the epidemiological crisis radically differed from the currency crisis of late 2014 and early 2015, when in face of an increasing structural liquidity deficit, the banking sector's debt to the RF Central Bank nearly doubled the record high reached during the 2009 crisis, having climbed 2.1 times over the previous 12 months and amounting to Rb9.3 trillion as of January 1, 2015.

Another important feature distinguishing the two crises has to do with the banking sector's demand for forex resources. During the March-May 2020 period, the situation with foreign exchange liquidity in the banking sector remained stable. The stability of the required level of foreign exchange liquidity was further sustained by foreign currency sales by the Bank of Russia under the fiscal rule (Rb0.9 trillion in March-June 2020), by additional foreign currency sales carried out when the price of Urals oil plunged below \$25 per barrel, and by the increasing de-dollarization of the Russian economy over recent years. One more important factor that determined the low demand of banks for foreign currency was the absence of panic-triggered retail purchases of foreign currency cash. As a result, banks displayed no demand for the foreign exchange liquidity instruments offered by the RF Central Bank. It should also be noted that in late 2014 and early 2015, amid a panic in the forex market, banks were actively taking part in forex repo auctions, and the resulting debt claims rose to \$33.9 bn.

Table 3

The Bank of Russia's balance sheets
in 2018–2020

| | January 1, 2018 | | January 1, 2019 | | November 30, 2020 | |
|---|--------------------|------------------------------|--------------------|------------------------------|--------------------|---------------------------|
| | Billions of rubles | % of assets / liabilities | Billions of rubles | % of assets / liabilities | Billions of rubles | % of assets / liabilities |
| Funds placed with non- residents and foreign issuers of securities | 24,496.1 | 62.2 | 25,342.9 | 62.6 | 30,995.1 | 60.2 |
| Loans and deposits | 3,672.5 | 9.3 | 3,305.7 | 8.2 | 4,378.6 | 8.5 |
| Precious metals | 6,123.9 | 15.6 | 6,952.8 | 17.2 | 10,225.2 | 19.9 |
| Securities | 1,038.8 | 2.6 | 1,121.6 | 2.8 | 1,037.3 | 2.0 |
| Other assets | 2286.0 | 5.8 | 2,252.7 | 5.6 | 2,861.4 | 5.6 |
| Total assets | 39,368.9 | 100.0 | 40,513.1 | 100.0 | 51,492.4 | 100.0 |
| Currency in circulation | 10,312.8 | 26.2 | 10,616.5 | 26.2 | 12,918.0 | 25.1 |
| Funds in accounts with Bank of Russia | 14,526.6 | 36.9 | 16,951.7 | 41.8 | 17,995.8 | 34.9 |
| including RF Government | 7,894.7 | 20.1 | 10,734.1 | 26.5 | 10,953.1 | 21.3 |
| resident credit institutions | 4,381.7 | 11.1 | 4,273.9 | 10.5 | 5,116.5 | 9.9 |
| Credit float | 0.05 | 0.0 | _ | | _ | |
| Securities issued | 1,388.3 | 3.5 | 1,952.9 | 4.8 | 606.3 | 1.2 |
| Liabilities to IMF | 1,616.4 | 4.1 | 1,363.9 | 3.4 | 1,648.4 | 3.2 |

| | January 1, 2018 | | January 1, 2019 | | November 30, 2020 | |
|---------------------------|-----------------------|---------------------------|--------------------|---------------------------|--------------------|---------------------------|
| | Billions of rubles | % of assets / liabilities | Billions of rubles | % of assets / liabilities | Billions of rubles | % of assets / liabilities |
| Other liabilities | 130.6 | 0.3 | 190.6 | 0.5 | 8,886.5 | 17.3 |
| Capital | 11,394.3 | 28.9 | 9,437.5 | 23.3 | 9,437.4 | 18.3 |
| Profit for reporting year | - | _ | - | _ | - | |
| Total liabilities | 39,368.9 | 100.0 | 40,513.1 | 100.0 | 51,492.4 | 100.0 |



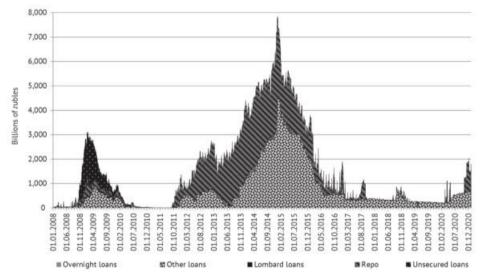


Fig. 3. Debt of commercial banks to the Bank of Russia, rubles. 2008–2020

Note that as a result of the growing tension in the money market, there were days when the short term money market rate rose above the key rate. The spread peaked at the end of April, at 0.5 p.p. Nevertheless, the measures implemented by the regulator made it possible to stabilize the situation in the money market and push the money market rate close to the key rate. As a result, over the May-December 2020 period, the MIACR rate stayed closer to the bottom of the interest rate band (*Fig. 4*). On average over the January-December 2020 period, the MIACR rate stood at 4.87% per annum, which was significantly lower than its average index for 2019, when it had risen to 7.2% per annum; this is consistent with the Bank of Russia's switchover to monetary policy easing. It is noteworthy that in December 2014, the one-day MIACR rate repeatedly deviated beyond the interest rate band, on some days jumping 1.1–1.3 p.p. above the key rate. Under

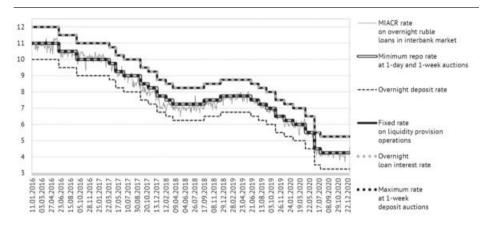


Fig. 4. The Bank of Russia interest rate band and the movement of interbank market interest rates, 2016–2020

such conditions, the instability in the money and forex markets necessitated an urgent raise of the key rate, from 10.5% to 17% per annum. On the contrary, the situation in the economy and in the financial market during the current crisis made it possible to significantly soften the monetary policy. Thus, the regulator's measures launched in the spring of 2020 and designed to stabilize the situation in the financial market and ensure an adequate liquidity level in the banking sector turned out to be effective, and so it became possible to fully achieve the operational monetary policy goal of keeping the short term money market rate close to the key rate.

One of the factors that played a certain role in ensuring financial stability during the crisis situation was the record high amount of accumulated international reserves. Between January and December 2020, international reserves gained 7.5%, increasing to \$595.8 bn. In early August 2020, a new historic high of international reserves was achieved, amounting to \$600.7 bn (Fig. 5). It should be reminded that as far as the amount of international reserves is concerned, its previous historic high was hit in August 2008, when they climbed to \$596.6 bn. The movement pattern of forex reserves in 2020 was determined in the main by the ruble exchange rate revaluation and the climbing gold prices in the world market. Note that in 2020, the monetary gold reserves increased by 25.7% to \$138.8 bn, mostly due to the positive revaluation of this particular asset over the course of that year. Forex reserves gained 2.9%, and their value as of the beginning of January 2021 stood at \$457.0 bn. The shrinkage of forex reserves resulting from the regulator's proactive foreign currency sales in the domestic forex market within the framework of the fiscal rule (the operations over the period of March through December 2020 to the total value of Rb1.7 trillion), and also, in part, from the foreign currency sales from the National Welfare Fund to pay for the government stakes in Sberbank and Aeroflot, was fully offset by the upward revaluation of

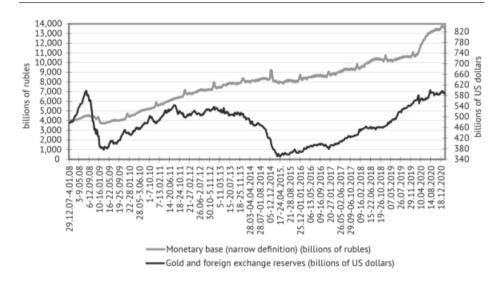


Fig. 5. The movement of the monetary base (narrow definition) and gold and foreign exchange (international) reserves in the Russian Federation, 2008–2020

foreign currency assets based on the exchange rate movement, in particular as a result of the US dollar weakening against the euro. As of January 1, 2021, the share of forex reserves in the total amount of reserve assets was 76.7% (vs 80.1% in 2019), and that of gold was 23.3% (vs 19.9% in 2019). In this connection it is noteworthy that from April 1, 2020, the Bank of Russia discontinued buying gold in the domestic precious metals market, announcing that its further decisions concerning purchases of gold would depend on the evolvement of the financial market situation. It should be reminded that the regulator had been actively buying gold since 2014. The halt in purchases of gold by the RF Central Bank was followed by its export abroad by the banking sector, and this helped sustain the balance of payments of the Russian Federation.

As of year end 2020, the volume of reserves was sufficient to maintain a sustainable balance of payments, because it provided both for 18-month imports of goods and services (vs 16-month imports in 2019) and for the payments due on external debt that were scheduled for 2021.

The economic response measures adopted by the government authorities in 2020 significantly sustained the incomes of economic agents and the lending market. In 2020, the average monthly growth of M2 (relative to the corresponding period of the previous year) was 14.1% (vs 8.7% in 2019), and that of the monetary base was 12.0% (vs 1.9% in 2019). As a result, the money multiplier (the ratio

¹ In the structure of forex and gold assets held by the Bank of Russia, the share of the euro is 29.5%; that of the US dollar is 22.2%; and that of the yuan is 12.2% (based on data for Q2 2020).

between M2 and the monetary base) amounted to 3.0 (vs 2.95 in 2019). The accelerated growth of M2 relative to the monetary base occurred in the main due to an increase in the lending volume in a situation of softening loan conditions, both in terms of loan price and otherwise. It is noteworthy that the achieved money multiplier index corresponds to its average value for developing economies (Ukraine, Belarus, Kazakhstan), while in the developed countries it is usually in a range of 5 to 8. It should also be noted that over the past 20 years in the countries of Eastern Europe, as their banking systems developed, the money multiplier was demonstrating an upward movement pattern. Thus, for example, in Poland over the period 1993–2020, the money multiplier increased from 3.1 to 4.9, while in Russia over the same period it climbed from 1.4 to 3.0.

According to preliminary estimates, the level of monetization in the Russian economy (the ratio of M2 to GDP) over the period 1999–2020 jumped 3.5 times to 55.0%, which is still lower than in many other developing countries. For example, in Poland, the ratio of M2 to GDP in 2020 amounted to 82.7% (vs 40.2% in 1999); in Chile, to 84% (vs 52.2% in 1999), in Brazil, to 95.0% (vs 42.8% in 1999); in Thailand, to 122.8% (vs 112.2% in 1999); and in Malaysia, to 123% (vs 122% in 1999). Meanwhile, in Belarus, the ratio of M2 to GDP over the same period increased 2.2 times to 37.5%; in Kazakhstan, 2.2 times to 30.2%; in Ukraine, 2.1 times to 36.0%; in Mexico, 1.4 times to 38.5%; in Colombia, 1.4 times to 49%; and in Peru, 1.4 times to 49.1%. In the developed countries, the index of monetization relative to GDP is even higher, due to a higher level of the financial system development: for example, in 2020 in the UK, this indicator climbed to 145.2%; and in Switzerland, to 193.1%.

2.1.3. Inflationary processes

At the end of 2020, inflation in the Russian Federation amounted to 4.9% (vs 3.0% in 2019), thus jumping 0.9 p.p. above the RF Central Bank's target (*Fig. 6*). The upward movement of the Consumer Price Index (CPI) over the course of 2020 was shaped by the effects of many multidirectional factors. As noted earlier, in spite of the inflation surge in March and April 2020 in response to the increased demand for consumer goods and a sliding exchange rate, the annual inflation rate (as measured during the previous 12 months) in March and April 2020 stood at 2.5% and 3.1%, respectively, while still staying well below the target. Over the May-June period, in face of a weak consumer demand, and also as the exchange rate pass-through effect reached its peak, inflation in annual terms was 3.0% and 3.2%, respectively, which turned out to be slightly below the Bank of Russia forecasts. In view of the current situation, the Bank of Russia switched to a significant easing of its monetary policy.

Over the September-December 2020 period, inflation was accelerated by the ruble weakening once again, the increased inflationary expectations of individuals and businesses, a consumer demand recovery, and rising food prices in the world market. As the pro-inflationary factors prevailed, inflation in annual terms increased from 3.6% in August to 4.9% in December 2020. Under such conditions,

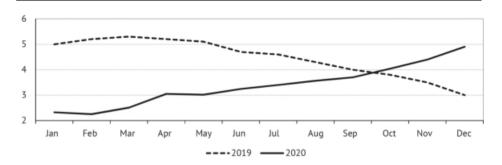


Fig. 6. The CPI growth rate in 2019–2020, % for the previous 12 months

Source: Rosstat; own calculations.

as noted earlier, the Bank of Russia took a pause in monetary policy easing by keeping the key rate unchanged.

Food inflation, after increasing in March and April 2020 to 1.0% and 1.7% in monthly terms, respectively, thereafter slowed down to 0.2% in May and June. In the July-September 2020 period, seasonal deflation was observed in the food sector. In the autumn, alongside climbing world food prices, Russian food products likewise rose in price. The leaders in price growth on the world market and Russia's domestic market were sugar (in Russia, + 64.5% in December 2020 relative to December 2019) and sunflower oil (+ 25.9% in December 2020 relative to December 2019). As a result, at the end of the year, food inflation in annual terms stood at 6.7% (vs 2.6% in December 2019 relative to December 2018) (*Fig. 7*).

In view of such a significant surge in the prices for several socially important foodstuffs, the RF Government decided, in December 2020, to freeze sugar and sunflower oil prices over the January-March 2021 period. According to our estimates, this measure is unlikely to significantly affect the price movement patterns, because it was adopted after the prices of these products had already jumped significantly.

Non-food inflation in annual terms increased from 2.4% in February to 4.8% in December 2020 (vs 3.0% in December 2019 relative to December 2018), which was due, in the main, to the ruble weakening, as well as the consumer demand recovery after the containment measures had been lifted. Over the course of 2020, the highest surge was demonstrated by the prices of pharmaceuticals (9.8%), tobacco products (8.2%), electrical goods and other household appliances (6.4%), Russian automobiles (9.4%), and foreign automobiles (10.3%).

According to the year-end results of 2020, prices for paid services provided to the population rose by only 2.7% (vs 3.8% at year end of 2019), because it was this sector that faced the most significant plunge in demand as a result of the containment measures. At the same time, prices for medical services (+ 4.3%) and resort and spa services (+ 3.8%) grew quite rapidly in response to a surge in demand triggered by the pandemic. The outbound tourism sector, on the contrary, demonstrated a deflation (-0.4% at year end of 2020).

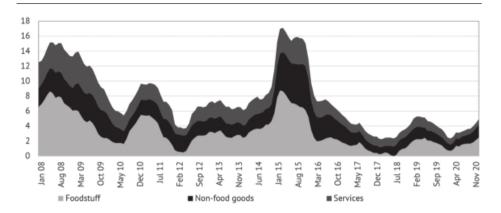


Fig. 7. The structure of inflation in 2008–2020 (%, month to the corresponding month of the previous year)

Source: Rosstat: own calculations.

Thus, core inflation (cleared of the effects of seasonal and administrative factors) grew steadily, to 4.2%.

In 2020, the key factor responsible for the downward pressure on consumer prices was shrinking demand, which resulted from real personal income decline, at the rate of -3.0% in 2020 (vs +1.7% in 2019). As a result, retail turnover likewise decreased significantly: -4.1% in 2020 vs +1.9% in 2019. Meanwhile, inflation acceleration was sped up by the ruble weakening. In 2020, the ruble fell 19.3% against the US dollar, to Rb73.9.

The rise in consumer prices in Russia was also contributed to by the climbing world food prices as a result of reduced supply. The food price index jumped from 91% in May 2020 to 107.5% in December 2020. Over the June-December 2020 period, world prices for dairy products gained 10.7%; prices for grain, 19.6%; prices for vegetable oils, 47.3%; and prices for sugar, 16.2%.

The rapid growth of food and non-food prices pushed up the inflationary expectations of individuals and businesses. The first wave of increasing price growth expectations was observed in March-April 2020. Over the May-July period, the balance between the responses of managers of enterprises and individuals in a survey conducted by InFOM, pointed to the emergence of a downward trend in the expected price movement. However, from August onwards, individual inflationary expectations once again began to climb, rising by December 2020 to 11.5% (vs 9% in December 2019). The balance of responses received from enterprises also indicated a significant shift towards price growth, from 8.3 p.p. in January 2020 to 19 p.p. in December, as a result of a weakening ruble and rising costs. Growth in inflation expectations will contribute to a persistently elevated inflation rate in early 2021.

¹ Data released by the Food and Agriculture Organization of the United Nations.

Table 4

The annual growth rate of prices for certain types of consumer goods and services in 2018–2020 (%, December relative to December of previous year)

| | 2018 | 2019 | 2020 | 2018-2020 |
|-----------------------------------|------|-------|------|-----------|
| CPI | 4.3 | 3.0 | 4.9 | 12.7 |
| Foodstuffs | 4.7 | 2.6 | 6.7 | 14.6 |
| Sugar | 3.6 | -30.8 | 64.5 | 17.9 |
| Fish and seafood | 3.7 | 5.2 | 5.2 | 14.8 |
| Sunflower oil | 1.8 | -2.9 | 25.9 | 24.4 |
| Milk and dairy products | 2.9 | 6.1 | 3.6 | 13.1 |
| Pasta | 1.4 | 5.7 | 12.1 | 20.1 |
| Bread and Bakery | 5.2 | 6.3 | 7.3 | 20.0 |
| Alcoholic beverages | 1.3 | 1.2 | 2.8 | 5.4 |
| Fruits and vegetables | 4.9 | -2.0 | 17.4 | 20.7 |
| Cereals and legumes | 1.2 | 15.2 | 20.1 | 40.0 |
| Meat and poultry | 9.7 | 0.2 | 2.7 | 12.9 |
| Eggs | 25.9 | -5.0 | 15.1 | 37.7 |
| Non-food goods | 4.1 | 3.0 | 4.8 | 12.4 |
| Gasoline | 9.4 | 1.9 | 2.5 | 14.3 |
| Tobacco products | 10.1 | 11.0 | 8.2 | 32.2 |
| Textiles | 1.7 | 1.3 | 2.0 | 5.1 |
| Washing and cleaning products | 3.1 | 4.9 | 6.0 | 14.6 |
| Footwear | 1.9 | 1.2 | 1.2 | 4.4 |
| Knitwear | 2.5 | 2.4 | 2.0 | 7.1 |
| Clothes and underwear | 2.3 | 2.2 | 1.6 | 6.2 |
| Pharmaceuticals | 4.6 | 6.9 | 9.8 | 22.8 |
| Services | 3.9 | 3.8 | 2.7 | 10.8 |
| Resort and spa services | 3.8 | 3.1 | 3.8 | 11.1 |
| Passenger transportation services | 4.3 | 6.1 | 1.1 | 11.9 |
| Medical services | 4.3 | 3.8 | 4.3 | 12.9 |
| Education services | 8.4 | 5.6 | 1.9 | 16.6 |
| Housing and amenities | 3.7 | 4.3 | 3.6 | 12.1 |
| Communications | 2.4 | 4.2 | 3.1 | 10.0 |

Source: Rosstat.

Thus, as shown by the year-end results of 2020, under the influence of the pro-inflationary factors discussed earlier, inflation stood 0.9 p.p. above its target value (4%). Nevertheless, in the absence of new fiscal stimulus in 2021, consumer demand will remain at a modest level. Given the positive situation on the oil market coupled with the fiscal rule effects that sustain the ruble, any significant plunge in the ruble exchange rate is unlikely. In this connection we estimate that in H2 2021, inflation will stabilize near the target. In such a situation, the Bank of Russia in 2021 will begin to shift from monetary policy easing to a neutral monetary policy, which corresponds to the real key rate at the level of 1-2% per annum.

2.1.4. The balance of payments and the ruble exchange rate

According to the preliminary balance of payments estimates for 2020 released by the Bank of Russia, the current account balance amounted to \$32.5 bn, which is 50% (or \$32.3 bn in absolute terms) less than the corresponding figure for 2019.

The goods trade balance amounted to \$89.4 bn, which is 46% (or \$76 bn in absolute terms) less than in 2019 (\$165.3 bn) (*Fig. 8*). A decisive role in this decline was played by a shrinkage of exports by 22% (or \$90 bn in absolute terms), from \$419.9 bn in 2019 to \$329.5 bn in 2020. This decline is primarily due to the downward movement of the average annual export prices of oil, petroleum products, natural gas, metals, and Russia's other main exports (*Table 5*). As a result, the share of fuel and energy complex products in the total export volume shrank from 56.9% in 2019 to 45.2% in 2020, which corresponds to the level of the late 1990s (*Fig. 9*). It should be noted that prices for some of Russia's main exports even increased; this was true of prices for grain, timber and vegetable oil, but the overall picture, nevertheless, remained unchanged.

 ${\it Table~5}$ The movement of prices for Russia's main exports, in 2020 relative to 2019

| | Share | Average expor | Destructor | | |
|--------------------------|------------------------|-----------------------|-----------------------|------------------------|--|
| Commodity group | in total exports, % | January-November 2020 | January-November 2019 | Price in- crease, % | |
| Crude oil | 22.0 | 301 | 454 | -33.6 | |
| Petroleum products | 13.5 | 321 | 471 | -31.9 | |
| Natural gas * | 7.3 | 123 | 190 | -34.9 | |
| Ferrous metals | 4.7 | 399 | 449 | -11.3 | |
| Coal | 3.7 | 63 | 78 | -19.5 | |
| Wheat and meslin | 2.3 | 209 | 201 | +4.1 | |
| Natural gas, liquefied** | 2.1 | 99 | 124 | -19.7 | |
| Mineral fertilizers | 2.1 | 203 | 246 | -17.4 | |
| Timber | 1.3 | 231 | 227 | +1.9 | |
| Aluminum | 1.3 | 1,573 | 1,691 | -7.0 | |
| Copper | 1.3 | 5,773 | 5,900 | -2.2 | |
| Fish, fresh and frozen | 0.9 | 1,645 | 1,825 | -9.9 | |
| Vegetable oil | 0.8 | 743 | 708 | +4.9 | |
| Iron ores | 0.6 | 75 | 97 | -23.1 | |
| Nickel | 0.5 | 13,119 | 13,696 | -4.2 | |
| Synthetic rubber | 0.4 | 1.261 | 1,596 | -20.9 | |

^{*} price in US dollars per 1bn m3

Source: Federal Tax Service: own calculations.

The goods trade balance shrinkage, in addition to the downfall of exports, was also contributed to by declining imports (at a significantly more moderate rate, both in absolute and in relative terms), which over the course of 2020 lost 5.7% (or

^{**} price in US dollars per 1,000 m3

¹ Bozhechkova A., Knobel A., Trunin P. Balance of payments in 2019 // Russian Economic Development. 2019. V. 27. No. 3. P. 9–12.

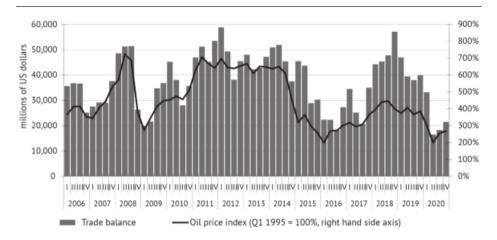


Fig. 8. Trade balance and the movement of oil prices

14.5% in absolute terms), shrinking from \$254.6 bn in 2019 to \$240.1 bn in 2020. The decline in imports of goods was caused primarily by the ruble weakening: according to the Bank of Russia data for 2020, the real effective exchange rate of the ruble against foreign currencies lost 7.8% on 2019.1

The deteriorating goods trade balance was in part offset by a significant improvement in the balance of trade in services: it amounted to only -\$18.3 bn in 2020, which is 50% less in absolute terms than the corresponding index for 2019 (-\$36.7 bn). At the same time, services exports fell by 28% (or by \$ 5.7 bn in absolute terms, from \$ 61.9 bn to \$44.5 bn, as a result of a decreased inflow of foreign visitors into Russia and a decline in transportation services); and services imports (due in the main due to the curtailed travel of Russians abroad) shrank by 36%, from \$98.7 to \$62.8 bn.

In 2020, the balance of investment income and the balance of wages both changed very significantly. The former improved by \$19.5 bn (from -\$50 to -\$30.5 bn), due in the main to a decrease of \$32.3 bn in incomes payable (investment income repatriation), alongside a more moderate decline in incomes receivable (by \$12.9 bn); and the latter lost \$1.9 bn (sliding from -\$3.6 to -\$1.7 bn). These changes illustratively demonstrate that during a pandemic, when the national currency is weakening, foreign owners of the factors of production (capital and labor) are much less likely to actively repatriate their incomes generated by these factors.

Thus, the year 2020 once again confirmed that the current account balance of the Russian Federation is secure from any significant downfalls, let alone a shift into negative zone, because the national currency weakening in response

¹ Concerning the effects of the exchange rate movement on trade, see Knobel A., Firanchuk A. Russia's foreign trade in January-August 2017 // Russian Economic Development. 2017. V. 24. No. 11. P. 12–18.

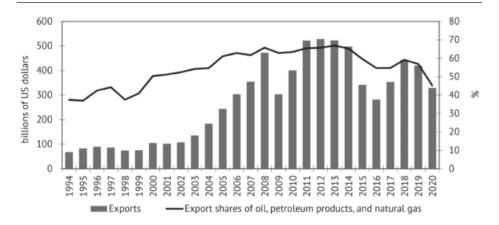


Fig. 9. The movement of goods exports and the export shares of products of the fuel and energy complex, 1994–2020

to declining prices for Russia's main exports translates into a shrinkage in the negative balances of both trade in services and factor income (generated from capital and labor). However, in 2020, it is the closure of borders and the nearly total halt in outbound tourism that contributed significantly to a less pronounced weakening of the ruble and the persisting current account surplus.

In 2020, the financial account deficit reached \$49.9 bn, compared with a surplus of \$3.9 bn in 2019. Net capital outflow was caused in the main by a shrinkage in foreign financial liabilities, by \$43.1 bn in 2020 (while in 2019, foreign financial liabilities increased by \$28.7 bn), and by a slight growth displayed by foreign financial assets (\$6.8 bn in 2020 vs \$24.8 bn in 2019).

The liabilities to non-residents were reduced as a result of operations carried out in 2020 by the banking sector and the other sectors, to the total value of -\$25.8 and -\$20.3 bn, respectively (vs -\$19.8 and +\$25.2 bn in 2019, respectively). The amount of foreign portfolio investments in the other sectors decreased by \$14.1 bn (vs -\$4.2 bn in 2019); the volume of foreign loans and borrowings decreased by \$8.3 bn (vs -\$6.2 bn in 2019); other liabilities to non-residents increased by only \$0.7 bn (vs \$6.7 bn in 2019). Foreign direct investment in the other sectors increased by \$1.4 bn in 2020 (vs \$28.9 bn in 2019).

As seen by the year-end results of 2020, the volume of government bodies' liabilities to non-residents increased by \$3.9 bn (vs \$22.0 bn in 2019). As of January 1, 2021, the share of non-residents in the OFZ market dropped to 23.3%, while at the beginning of the previous year it had been 32.2%. The reduction in foreign liabilities was due, most likely, to the high uncertainty as to the development prospects of the global economy and Russia's domestic economy: the attraction of non-residents' investment in Russian assets is becoming less rewarding both for Russian and foreign economic agents.

The growth of financial assets of Russian residents abroad occurred predominantly due to operations in the non-banking sector. Thus, for example, in 2020, the foreign assets held by the other sectors increased by \$13.9 bn (+\$26.5 bn in 2019). The growth of foreign assets in the other sectors resulted from increasing outgoing direct investments (\$6.3 bn in 2020 vs \$22.6 bn in 2019), outgoing portfolio investments (\$10.2 bn in 2020 vs \$2.3 bn in 2019), and trade loans and trade advances (\$7.9 bn in 2020 vs \$9.6 bn in 2019). The amount of foreign assets held by banks shrank by \$7.9 bn (vs \$2.1 bn in 2019). The foreign assets held by government administration bodies increased by \$0.9 bn (vs +\$0.5 bn in 2019).

As a result, net capital outflow from the private sector in 2020 fell sharply, to \$47.8 bn (vs \$22.1 bn in 2019) (*Fig. 10*). At the same time, in 2020, net capital outflow from the banking sector amounted to \$17.9 bn, which corresponds to the level of 2019 when this index stood at \$17.7 bn. In the non-banking sector, net capital outflow significantly increased, to \$30.0 bn (vs \$4.3 bn in 2019).

The excess of capital outflow in the financial account over the positive current account balance was offset by a shrinkage in international reserve assets, in the amount of \$13.8 bn (vs +\$66.5 bn in 2019). The decline in forex reserves was the upshot of foreign currency sales carried out by the Bank of Russia from March 2020 onwards by way of complying with the fiscal rule, because the oil price fell below the cutoff price. Overall for 2020, the volume of foreign currency sales by the RF Ministry of Finance in the domestic forex market amounted to approximately \$22.7 bn, including the currency needed to pay for the government stakes in Sberbank PJSC and Aeroflot PJSC. It should be noted that over the August-September 2020 period, in connection with the Sberbank deal, the RF Central Bank offset the foreign currency residuals earmarked for sale against all the foreign currency purchases and sales that had been deferred since 2018. The balance of these transactions amounted to approximately \$2.4 bn. The regulator

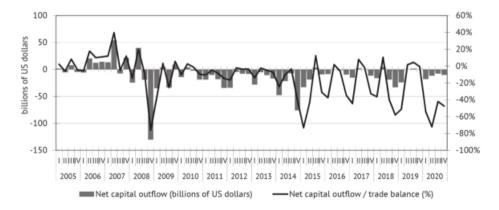


Fig. 10. Net capital outflow from the private sector, 2005–2020

Source: Bank of Russia; own calculations.

then gradually sold this excess currency in equal amounts over the course of Q4 2020 alongside its regular currency sale operations under the fiscal rule.

As mentioned earlier, in 2020 the ruble exchange rate against the US dollar fell by 19.3%, to Rb73.9. The first plunge occurred in March 2020 (16%), it was caused in the main by the sharp drop in oil prices. The ruble's second depreciation peak was observed in September 2020 (6.8%). It had to so with the intensification of geopolitical risks coupled with the diminishing attractiveness of Russia's OFZs for non-residents in the context of a reducing key rate and waning investor interest in the assets available in the developing countries in a situation of global uncertainty. Over the November-December 2020 period, in response to improved terms of trade, the ruble appreciated by 6.9% relative to October 2020.

It should be noted that in 2020, the ruble lost more in nominal terms against the US dollar than the national currencies of many other developing countries where inflation is targeted. Thus, in 2020, while in South Africa and Mexico the decline of the national currency's nominal effective exchange rate amounted to 4.7% and 5.9%, respectively, Russia's national currency plunged by 19.3% (*Fig. 11*). As of year-end 2020, the leaders in terms of national currency weakening were Brazil and Turkey (28.9% and 23.1%, respectively). Meanwhile, the currencies of some other developing countries strengthened slightly (2.1%, Chilean peso; 1.0%, Polish zloty).

In 2020, the foreign debt of the Russian Federation decreased by \$21.3 bn, amounting to \$470.1 bn as of January 1, 2021. The foreign debt of government administration bodies decreased by 5.5% to \$66.1 bn, as a result of foreign capital outflow from the Russian OFZ market. The foreign debt of banks and enterprises decreased by 4.1%, to \$391 bn.

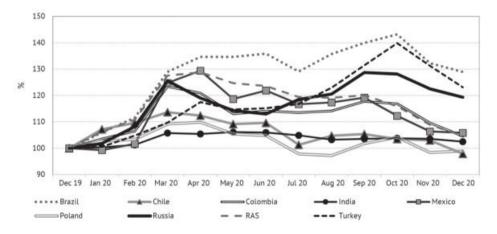


Fig. 11. The movement of nominal effective exchange rates of national currencies in the developing countries targeting inflation (December 2018 = 100%)

Source: IMF; own calculations.

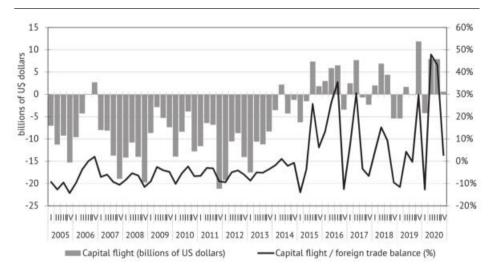


Fig. 12. Capital flight dynamics, 2005–2020.

Source: Bank of Russia; own calculations.

Our year-end estimate of capital flight for 2020 (Fig. 12) is \$ 12.2 billion, which represents an increase of 50.6% on 2019₁ and reflects the success of Russia's authorities in blocking illegal channels of capital flight.

* * *

For 2021, as the epidemiological risks are expected to recede and the global economy to recover, we predict an increase in the current account surplus following the upward movement of prices for energy carriers, in spite of a possible recovery in imports. In addition, a gradual risk premium decline will conduce to the inflow of capital into the Russian market. As the oil price is expected to climb above the cutoff level in 2021, reserve assets will increase in response to the operations under the fiscal rule. As of the beginning of 2021, the ruble's fundamentally substantiated exchange rate against the US dollar was Rb68–69, which means that it was undervalued by 7–9%.2 Thus, during 2021, the ruble may strengthen to this level, but this will happen only in absence of new economic and geopolitical shocks.

¹ Capital flight is calculated according to the IMF methodology; it is the sum of 'trade loans and advance payments', 'questionable deals', and 'net errors and omissions'.

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, pp. 1–18.