Bank of Russia

TALKING TRENDS
Economy and markets

Research and Forecasting Department Bulletin

June 2022

CONTENTS

The Research and Forecasting Department prepared this bulletin based on data as of 25.05.2022

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Executive summary

MONTHLY SUMMARY

- The Russian economy's performance in April–May proved better than expectations in the Bank of Russia's April forecast. The sharp downward trends of March gave way to a strong slowdown in adverse economic developments. A significant strengthening in the ruble combined with a decline in both consumer activity and inflation expectations to cause a rapid deceleration in consumer price growth between April and May; it has yet to be seen though whether it will be sustainable.
    - The period marks a relative stabilisation in the national economy, which reflects the initial adjustment of economic players to abrupt changes, primarily in the financial environment. This is clear from the latest business survey results and indirect indicators of economic activity. However, structural changes in the economy have yet to emerge. Given the persistently deep decline in imports of goods and services, there remain considerable risks of a further drop in production as stocks of raw materials and components are depleted.
    - The low growth of consumer prices in May mainly comes as a result of several one-off disinflationary factors, primarily a stronger ruble. Moving forward, short-term trends in consumer prices will be conditional on the supply of consumer products, movements in the exchange rate, consumer lending, wages and incomes, and inflation expectations, as well as changes in households' propensity to consume. Inflation is expected to return to 4% in 2024, driven by the impact of the monetary policy stance.
    - Between April and May, Russian financial markets posted a partial recovery in the context of restrictions on cross-border capital flows and the phased removal of regulatory barriers to trade in financial instruments. At the same time, the volumes of transactions in the markets remained lower compared to the beginning of the year, although slightly increasing in late May.

In focus: How the exchange rate impacts on prices in the new reality

- In the context of significantly strengthened sanctions and supply chain restrictions weighing on product supplies to Russia, the broad impact *of the exchange rate on prices through the conventional pass-through mechanism is still in place*, we believe. However, it has become *indirect, or signalling*, in nature, feeding through the expectations of producers and sellers. Importantly, the direct pass-through of the exchange rate into prices – driven by the cost of imported goods and components – has been less pronounced. This has overall led to a significant acceleration in exchange rate pass-through into prices.
- As the product and currency markets find their new equilibriums, the ruble exchange rate will be marked by weaker fluctuations, and the above-mentioned signalling component of the pass-through effect will fade out. Having said that, the structural transformation of the

economy is likely to change the level and speed of exchange rate pass-through into prices in the future.

- In this setting, any reliable model-based estimates for the sensitivity of consumer prices to exchange rate movements may only be possible with the passage of time. Therefore, estimates for the extent of disinflationary effects of the recent strengthening in the ruble based on pass-through effect measurements, which are obtained on historical data, should only be interpreted with caution.

1. Inflation

Changes in the balance of payments along with nonsynchronous and nonlinear structural adjustment of exports and imports caused demand for foreign currency to plummet across several channels in April–May, whereas its supply did not decline much in the Russian market. This sparked a substantial ruble strengthening, which in turn slowed consumer price rises, thus bringing down household and business inflation expectations.

Also, after a panic buying spike in March petered out, consumer demand declined, reflecting a shrinkage of real wages and income, “strategic hoarding” of non-perishable and durable goods, as well as a consumer lending squeeze. This prompted a slowdown and sometimes even a fall in retail prices of goods which had earlier surged, outstripping a rise in costs.

At the same time, the most stable measures of consumer price inflation, such as trend inflation, median price rises, and core inflation indicators, suggest the persistence of still high, albeit declining overall inflationary pressure. Therefore, the current slowed pace of increase in the consumer price index does not look sustainable. As the impact of one-off disinflationary factors peters out, price rises may again accelerate.

The high uncertainty regarding price movements in the coming months arises from a structural factor, i.e., at what scale and how fast goods with a significant import component in them will be replaced by new imported and/or domestic goods. Should this replacement be fast and full-fledged, price rises will remain slow, given depressed demand. But if this replacement fails to materialise, price rises will accelerate, driven by an outpacing decline in the supply of goods even if demand is low.

1.1. Current disinflationary trend so far unsustainable

- Annual inflation accelerated to 17.8% in April, with month-on-month price rises slowing relative to March, driven chiefly by an adjustment of consumer demand after a panic-buying spike in March and by a strong ruble appreciation.
- An additional factor of a rapid price rise slowdown in April was the faster pace of consumer price rises than that of producer prices in March. At the same time, the upward pressure on prices from producer costs will in the coming months offset disinflationary impact of a decline in demand.
- The pace of weekly consumer price growth slowed further in May, bringing annual inflation down to 17.5% as of May 20.
- Despite the weekly price rise slowdown, the balance of risks will still lean towards pro-inflationary ones in the medium term.

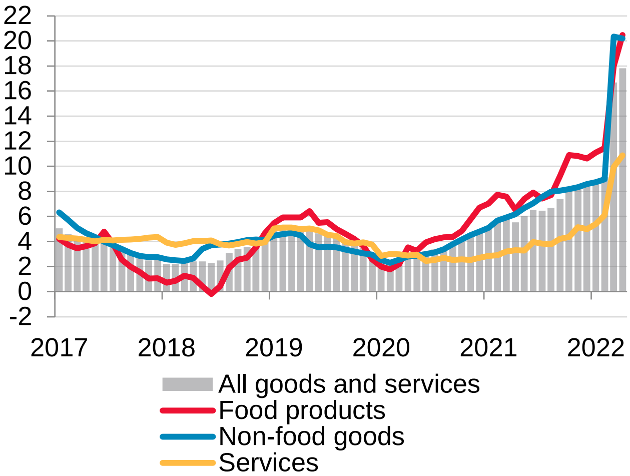
Annual inflation came in at 17.8% in April after 16.7% in March (Table 1, Figure 1). Seasonally adjusted price growth slowed dramatically to 1.5% MoM in April after a spike to 7.5% MoM in March (Figure 2). A price rise slowdown was registered across all consumer basket components, being the most notable in the non-food goods segment.

Table 1. Inflation and its components

	Dec. 2020	Dec. 2021	Feb. 2022	Marc. 2022	Apr. 2022
% YoY					
All goods and services	**4.9**	**8.4**	**9.2**	**16.7**	**17.8**
Core inflation	**4.2**	**8.9**	**9.7**	**18.7**	**20.4**
Food	6.7	10.6	11.5	18.0	20.5
Non-food goods	4.8	8.6	9.0	20.3	20.2
Services	2.7	5.0	6.1	9.9	10.9
% MoM SAAR					
All goods and services	**6.9**	**6.7**	**12.6**	**139.1**	**19.9**
Core inflation	**6.1**	**8.6**	**13.2**	**178.4**	**25.6**
Food	10.6	8.1	13.3	114.3	37.6
– net of fruit and vegetables	**6.6**	**11.3**	**12.2**	**90.8**	**49.6**
Non-food goods	5.3	8.3	9.9	258.3	6.7
– net of refined petroleum products	**5.9**	**8.2**	**11.1**	**330.9**	**8.1**
Services	4.2	2.7	15.4	60.0	15.2
– net of municipal and housing services	**7.3**	**4.8**	**17.0**	**105.8**	**22.7**

Sources: Rosstat, R&F Department estimates.

Figure 1. Inflation and its components, % YoY



Source: Rosstat.

Month-on-month food price rises came in at 2.7% SA (Figure 3). A price rise slowdown tended to be driven more by the start of fruit and vegetable price decline owing to a strong ruble appreciation. There was also an additional factor of sugar prices returning to “normal levels” after a sizable outpacing of their growth in March amid elevated demand for non-perishable food goods. At the start of May, food price rises continued to slow steadily, but the prices of some items (vegetable oils, dairy products, dry goods) are staying at an elevated level due to the persistent logistics problems and rising producer costs.

April saw non-food segment price rises slow to 0.5% MoM SA from 11.2% MoM SA in March (Figure 3), driven chiefly by ruble strengthening: prices of many goods depending on the exchange rate went down after a 10–20% surge a month earlier. Overall, median price rises in this group of goods was much slower in April than median price growth in goods which do not strongly depend on the exchange rate (Figure 29).

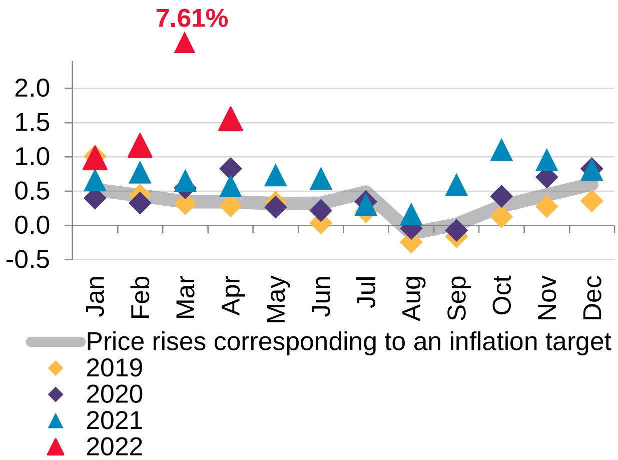
An additional factor of the rapid price rise slowdown in April was a temporarily faster consumer price growth than that of producer prices in March, which saw producer price rises in manufacturing accelerating but not as much as in the consumer segment (Figure 6). The latter is owed to the faster pace of consumer prices as consumer demand soared accompanied by panic buying amid sharply rising uncertainty. That said, pressure from producer prices was mounting in April, which is set to keep consumer price growth elevated going forward.

Services price rises slowed to 1.2% MoM SA (Figure 3), driven primarily by the slowing pace of rises in the prices of foreign travel and other, especially banking and personal, services.[1]

[1] Contribution to April’s price growth in the services sector relative to March – 0.5 pp, 0.4 pp, and 0.1 pp, respectively.

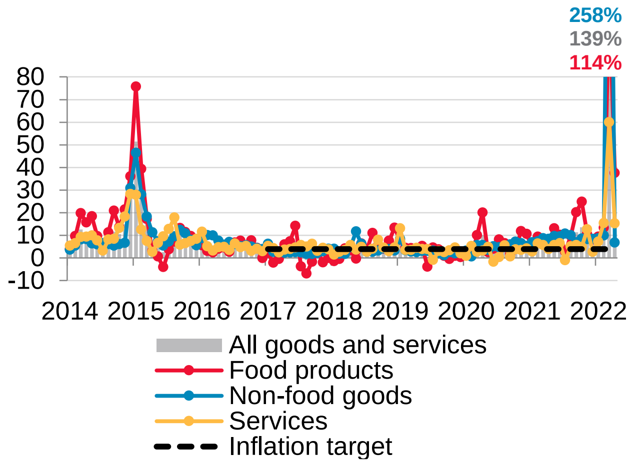
Overall, supply-side constraints continue to exert upward pressure on retail prices. At the same time, a consumer demand plunge amid the shrinkage of real household income and retail lending exerts downward pressure on prices.

Figure 2. Price rises corresponding to an inflation rate of 4%, % MoM



Source: Rosstat, R&F Department estimates.

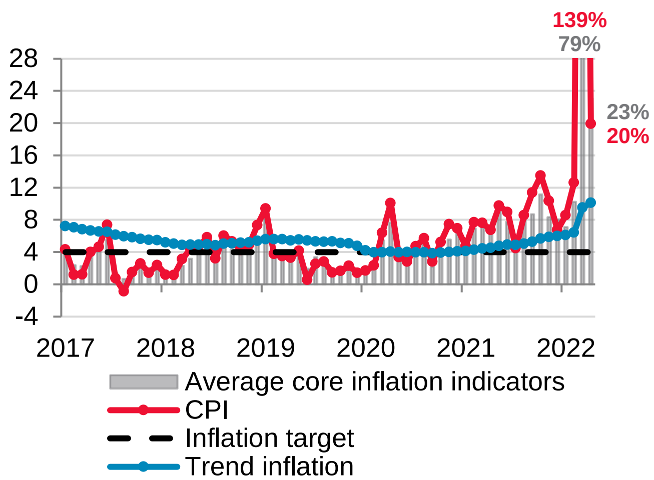
Figure 3. Seasonally adjusted inflation, % MoM SAAR



Source: Rosstat, R&F Department estimates

Analytical indicators of price movements suggest the persistence of high inflationary pressure in the consumer market. Trend inflation accelerated to 10.1% in April, with the mean of estimates of modified core inflation indicators[2] dropping to 23.1% from 79.3% in March (Figure 4). Median distribution calculated from disaggregated components remained elevated at 15.8% in April, along with core inflation, but declined from its anomalously high March levels. (Figure 5).

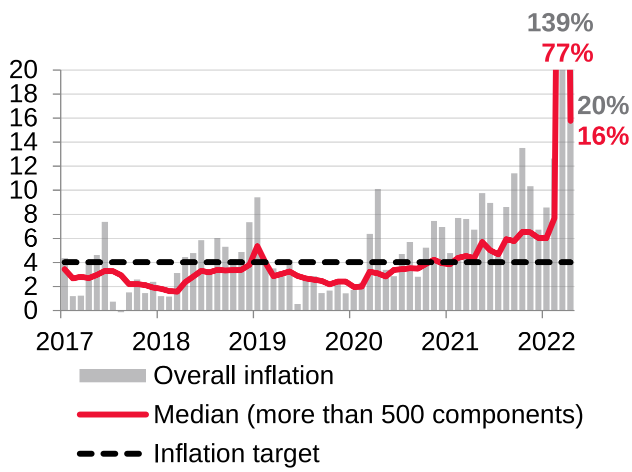
Figure 4. Modified core inflation indicators* and trend inflation estimates, % in annual terms



Source: Rosstat, R&F Department estimates.

** Computed by the method of excluding the most volatile components and the truncation method.*

Figure 5. Median distribution estimated on disaggregated components, % MoM SAAR

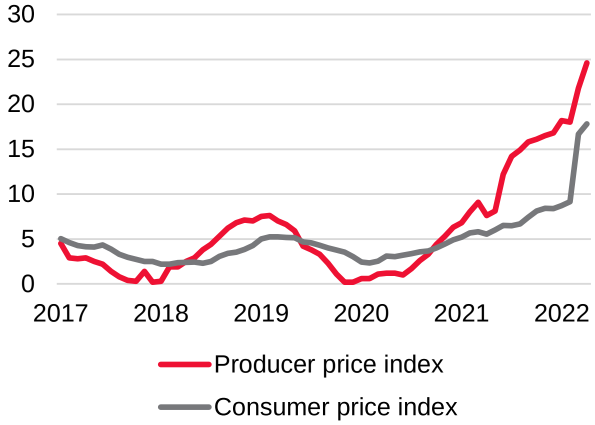


Source: Rosstat, R&F Department estimates.

[2] Computed by the method of excluding the most volatile components and the truncation method. These indicators are more sensitive to the impact of one-off and temporary factors than trend inflation is.

Real-time Rosstat data point to a gradual slowdown of week-on-week price rises and even the start of their decline. Indeed, consumer prices inched down 0.02% over the week from May 14 to May 20 (Figure 7). Consumer prices climbed 0.13% over the first 20 days of May, less than in the same period last year. Annual inflation slowed to 17.5% as of 20 May.

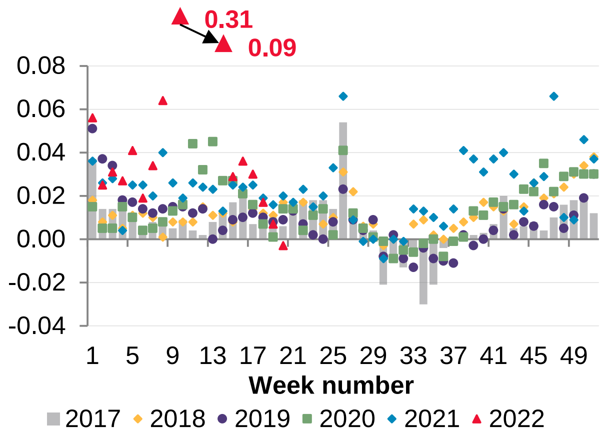
Figure 6. Manufacturing producer price index* and consumer price index, % YoY



Source: Rosstat, R&F Department estimates

** Net of metals production and petroleum refining*

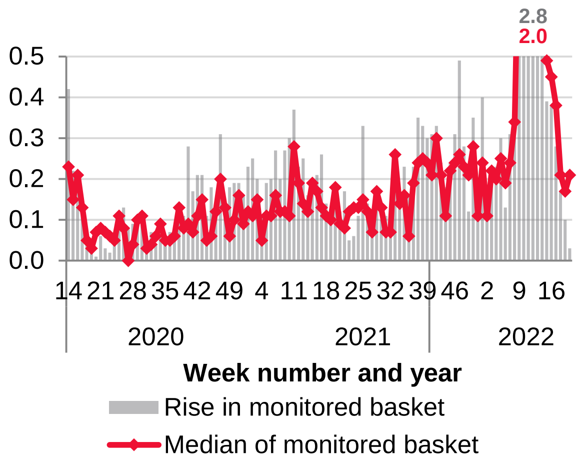
Figure 7. Average daily price rises, %



Source: Rosstat, R&F Department estimates

Week-on-week price rises in May approached the level providing for an annual inflation rate of just above 4%. But the current price rise slowdown may prove unsustainable. Although the medial of rises in the prices of goods and services monitored on a weekly basis (exclusive of fruit and vegetables, as well as services whose prices are regulated) descended from its March peak, it remains at an elevated level of late 2021 – early 2022 (Figure 8). Inflationary pressure may soon increase, driven by rising producer costs as new suppliers and logistics chains are located and demand rises for goods from domestic producers amid lower access to imports.

Figure 8. Pace of price rises and median distribution of weekly price increases, %



Note. Calculated on a set of goods and services monitored on a weekly basis, exclusive of fruit and vegetables and regulated tariffs.

Sources: Rosstat, R&F Department estimates.

2. Economic activity

Overall, the Russian economy saw a moderate economic activity decline in March – May, with the pace of decline having notably slowed recently, largely thanks to financial stabilisation and the use of inventories and financial reserves built up earlier. Structural transformation is yet to come. This transformation will be evidenced by a substantial recovery of imports with reorientation to alternative suppliers (in the short term) and a sharp increase in investment and production on a company and industry level (in a longer term). A time gap is likely between the current moment and active structural transformation, with a drop in output and supply of goods worsening during this time.

In this context, the stepping up of countercyclical fiscal policy (spending expansion concurrently with granting tax reliefs) which took place in April, as well as regulatory easing alleviate the economic downturn, providing conditions for a less painful adjustment of the economy to structural changes. The cuts in the key interest rate and lending rates in the economy also help achieve this.

Ruble strengthening in April–May has an ambivalent effect on economic activity and the economy's structural transformation. Making imports less expensive, the strong ruble makes them more financially affordable, thereby compensating for rising expenses on the restructuring of logistics chains. Also, recent business surveys have shown that the strong ruble helps the re-equipment of production facilities and implementation of investment projects. This facilitates the economy's structural transformation: import substitution for intermediate and consumer goods and the reorientation of trade flows to the eastern and southern directions. At the same time, both of these processes take time and are not so far very visible in foreign trade indicators. Meanwhile, all other things being equal, ruble strengthening brings down exporters' ruble revenue.

It is also important to note that the high exchange rate volatility exposes companies to a substantial risk. In this regard, the suspension of the fiscal rule has become a factor of increasing the ruble's volatility. The exchange rate's elevated volatility will likely continue going forward, until after the key processes of the economy's structural transformation, including the restructuring of foreign trade flows, have been completed. In the future, the resumption of the fiscal rule in one form or another would help reduce the ruble's volatility.

2.1. Economic activity contraction slows in April–May

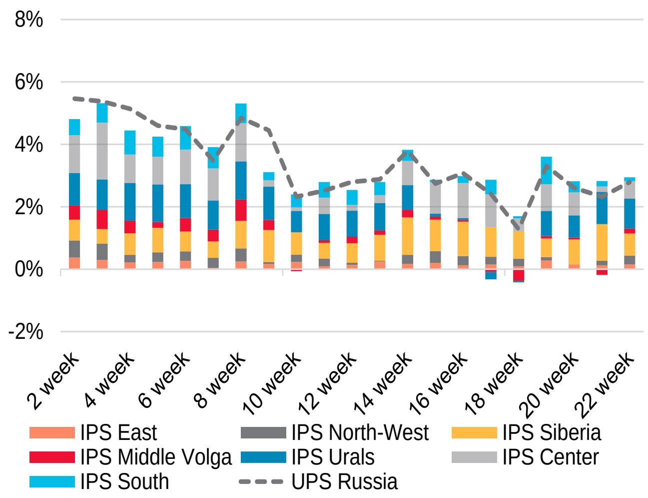
- Real-time indicators suggest a slowdown in economic activity contraction which was brought about by significant changes in external conditions and the imposition of trade and financial restrictions.
- In particular, manufacturing and services PMI indices rose dramatically in April after their drop in March but remained below the 50 mark separating growth from contraction (Figure 10). The fall in the indices is much less steep than during the acute phase of the pandemic in 2020 and the 2008–2009 global financial crisis. However, the process of the Russian

economy's restructuring prompted by a cardinal change in external conditions will take time. Given the supply-side constraints, this will have a restraining effect on business activity in the quarters to come.

- Annual electricity consumption growth slowed in April but started to accelerate in May (Figure 9). This is generally in line with oil extraction figures, which started to recover early in May after their decline in April.
- Disruptions in the traditional logistics schemes involving the transport companies and infrastructure of unfriendly countries, as well as restrictions imposed on Russian companies, have reduced import supplies drastically (Figure 11). Moreover, logistics disruptions involved not only supplies from unfriendly countries but also those from other trading partners (Figure 13).
- Production activity has contracted much less than imports have. This suggests that the contraction in external supplies has substantially affected only a part of industries, thanks mainly to the use of earlier accumulated inventories of raw materials and components which enables companies to keep up their output.
- All this indicates that the depth of economic activity contraction in Q2 will be insignificant compared with March. That said, further trajectory of the economy in H2 2022 will in large part depend on the extent to which companies will be able to find alternative schemes of supplies from foreign countries or domestic producers' substitutes for imports. The process of logistics route readjustment has already started (Figure 12). Supply chains are getting longer and more complicated, which will also affect import prices.
- Nominal growth in consumer expenditure after a setback suffered at the start of April stabilised at about +10% YoY. Given a faster pace of price rises, this means a consumption decline in real terms (Figure 14). The main contribution to this contraction comes from the performance of non-food sales, notably restrained by a limited supply of these goods,[3] the worsening of wage trends amid labour market cooling (Figure 15, Figure 16), an elevated savings ratio and consumer lending cooling, as well as anticipatory buying in March.
- As the number of vacancies falls extensively, competition in the labour market declines. Whereas the first wave of personnel demand drop could have been put down to the suspension of earlier planned hiring, the second wave likely reflects the onset of job cuts.

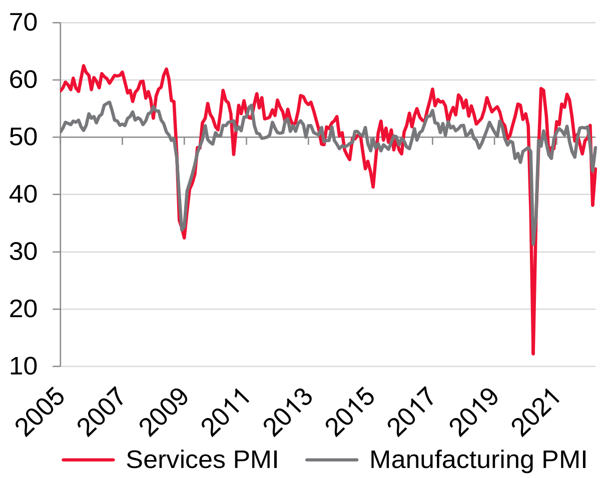
[3] For example, according to data from the Association of European Business (AEB), the sales of new passenger car and light commercial vehicles tumbled 78.5% YoY at the start of Q2 2022, largely owing to import contraction and the suspension of domestic production.

Figure 9. Contribution of regional systems to electricity consumption adjusted for temperature and the number of business days, YoY (2021 relative to 2019; 2022 relative to 2021)



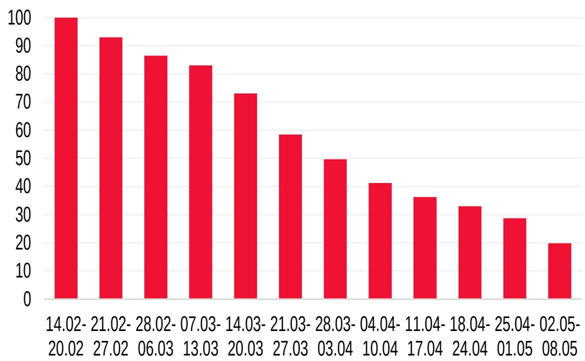
Sources: System Operator of Unified Power System, R&F Department estimates.

Figure 10. Russia's Manufacturing and Services PMI, points



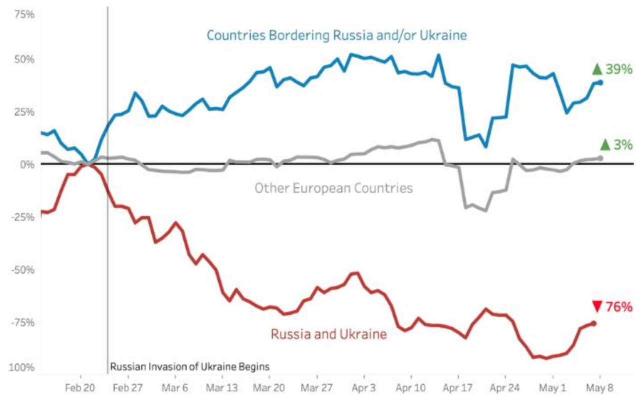
Source: S&P Global.

Figure 11. Russia's imports in physical terms. four-week rolling average, % to mid-February level



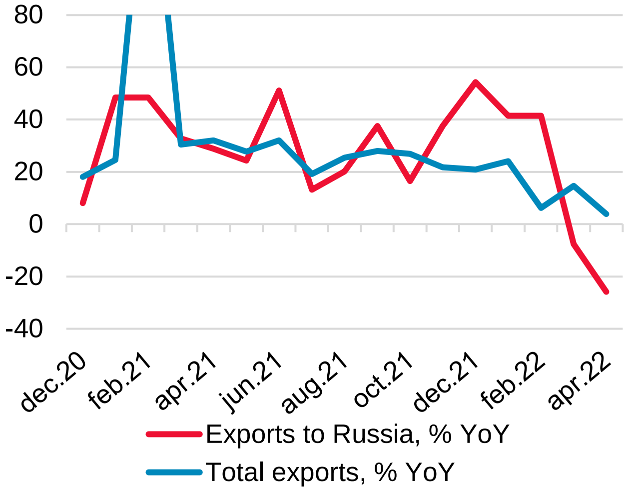
Source: FourKites.

Figure 12. Imports, 7-day average, % to 21.02



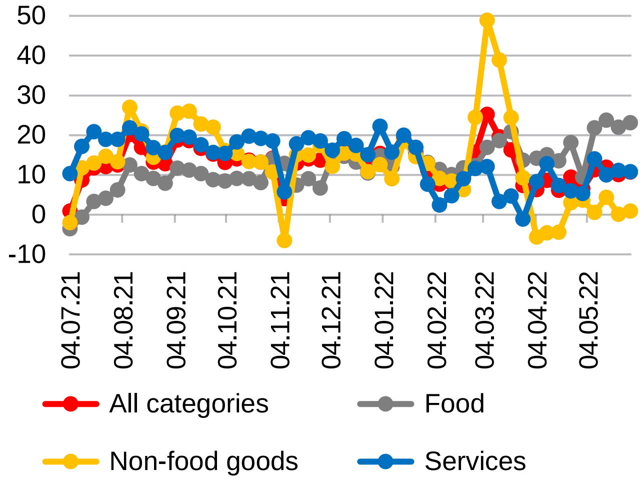
Source: FourKites.

Figure 13. Exports from China



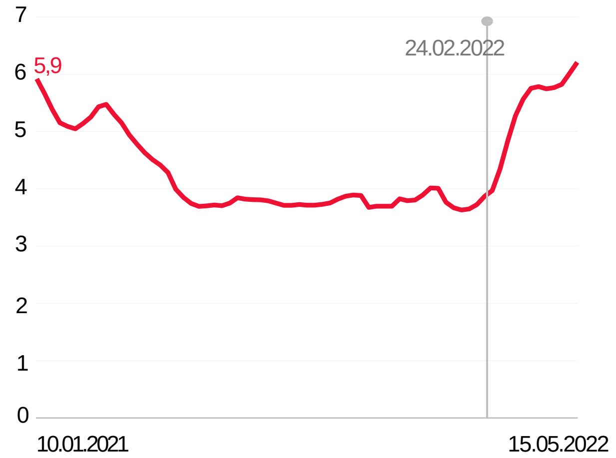
Source: Trade Economics.

Figure 14. Nominal consumer expenditures growth, % YoY



Source: SberIndex.

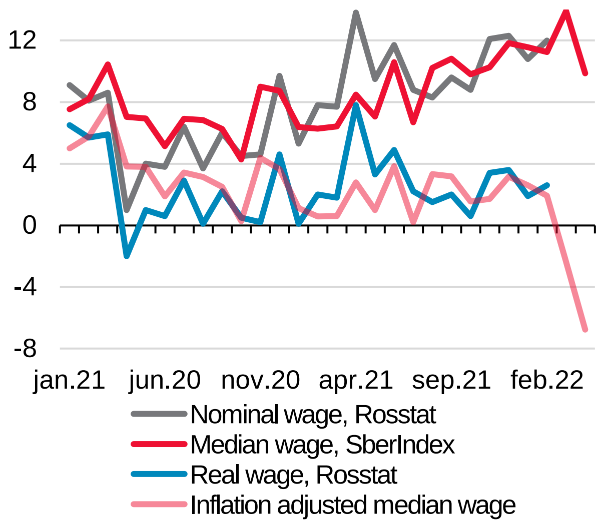
Figure 15. HeadHunter Index



Source: HeadHunter.

** The HeadHunter Index reflects the ratio of active CVs to the number of vacancies: the higher the index, the lower competition for personnel in the market.*

Figure 16. Nominal and real wage growth, % YoY



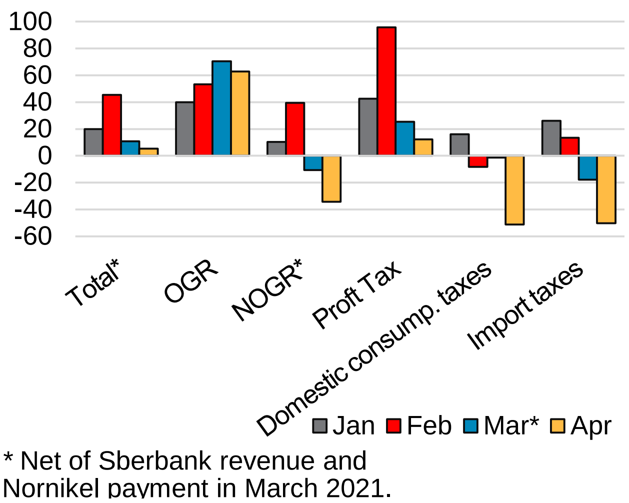
Sources: Rosstat, SberIndex.

2.2. Proactive fiscal policy in April

- April's statistics indicate the fiscal policy has been countercyclical. Measures covering budget revenue and expenditure enable the impact of the geopolitical shock on economic activity to be mitigated without significant additional inflationary pressure, with public finance stability maintained. Countercyclical fiscal policy allows for a greater monetary policy focus on ensuring medium-term price stability.

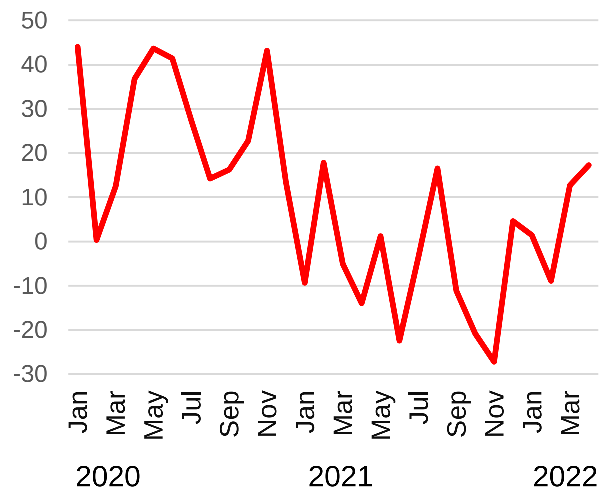
- Based on a preliminary estimate of federal budget performance, real total *revenue* expansion[4] slowed to 5% YoY in *April* from 11% YoY in March, dragged down by an acceleration of real non-oil and gas revenue (NOGR) decline to 34% YoY (Figure 17), due, above all, to large-scale contraction of taxes on domestic consumption and imports. Among the key taxes, profit tax revenue is the only to have continued growing extensively, given the high prices of exports.
- Oil and gas revenue (OGR) growth remained strong at 63% YoY in real terms: the effect of a drop in crude oil extraction, exports and Urals price as its discount to world prices increased, was offset by a steep ruble weakening.[5] Given the subsequent ruble strengthening and a contraction in exports to some countries, real OGR growth will likely give place to a decline in May.
- Spending expansion (Figure 18) and a NOGR fall reduced the *total* 12-month rolling *balance* of the federal budget to 0.8% of GDP from 1.0% of GDP in March, while the *non-oil and gas primary balance* expanded to -6.6% of GDP from -5.8% of GDP in March (Figure 19).
- Provided significantly contracted opportunities for borrowing from financial markets, the budget deficit will largely be financed by earlier accumulated reserves in the form of the National Wealth Fund, balances of budget funds in the Single Treasury Account and commercial banks. Accumulated reserves will allow maintaining a relatively high stability of public finances in the immediate future.

Figure 17. Real federal budget revenue, % YoY



Sources: RF Treasury, Rosstat, R&F Department estimates.

Figure 18. Real federal budget expenditure, % YoY



Sources: RF Treasury, Rosstat, R&F Department estimates.

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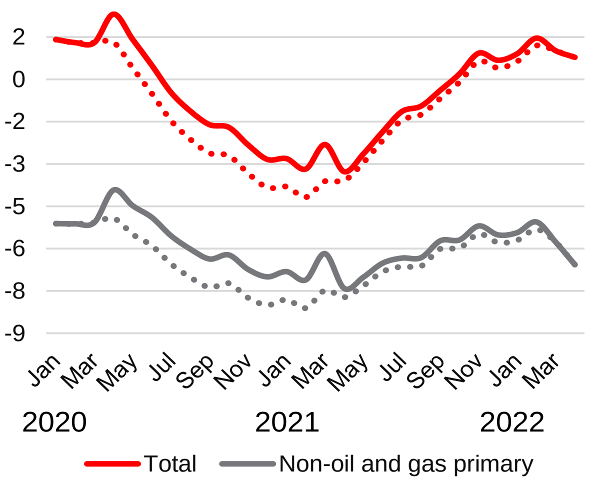
[4] All indicators are deflated using the GDP deflator. For periods with no Rosstat estimates, the mean between the CPI and PPI is employed as a proxy deflator, estimated at 25% YoY in April.

[5] April payments are primarily based on March's price and exchange rate statistics.

Figure 19. Federal budget balance (% of GDP, 12-month rolling)



** Dotted lines indicate estimates net of one-off revenues: Sberbank deal in 2020-2021 and Nornikel payment in 2021.*

Sources: RF Treasury, RF Ministry of Finance, Rosstat, R&F Department estimates.

2.3. Further retail lending squeeze in April

- Retail lending contraction accelerated to 0.5% MoM SA in April from 0.1% MoM SA in March (Figure 21). There was also a steep decline in mortgage loan issuance as interest rates and economic uncertainty soared, whereas in March this segment's growth was driven by the issuance of loans approved previously (Figure 22). Loan issuance under subsidised mortgage lending programme also contracted after a spike in March (Figure 25). As a result, the pace of banking debt growth[6] slowed from 1.9% MoM SA to 0.4% MoM SA (Figure 23). At the same time, subsidised mortgage lending programmes will support the segment's performance this year.[7]
- The unsecured consumer loan portfolio continued to shrink, declining 0.8% MoM SA after 2.0% MoM SA in March. According to National Bureau of Credit Histories data, the number of consumer loans issued in April was much smaller than in February 2022 and comparable with the "quarantine" April of 2020, albeit larger than in March. A similar picture was seen in the auto loan segment, where the portfolio continued to contract – by 2.3% MoM SA after a fall of 3.4% MoM SA in March. The consumer and auto lending squeeze is, in large part, owed to a fall in loan demand, dragged down by a rise in interest rates, uncertainty regarding future income and a drop in the supply of consumer goods.[8]

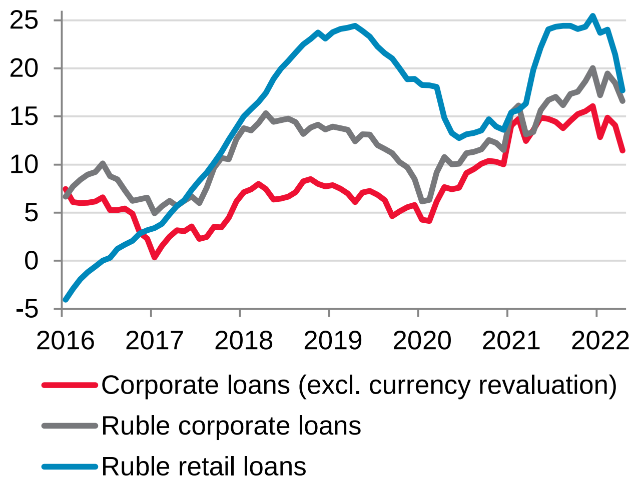
[6] Adjusted for write-offs.

[7] Indeed, the interest rate offered under the main programme Subsidised Mortgage Lending has already been cut from 12% to 9%. Also, subsidised mortgage lending will be possible to combine with other mortgage lending programmes, thus increasing a loan limit for the purchases of housing. Among measures of supporting mortgage lending, we also note special conditions for mortgage lending to IT experts.

[8] The most graphic example is a decline in the sales of new passenger cars and light commercial vehicles to many-year lows.

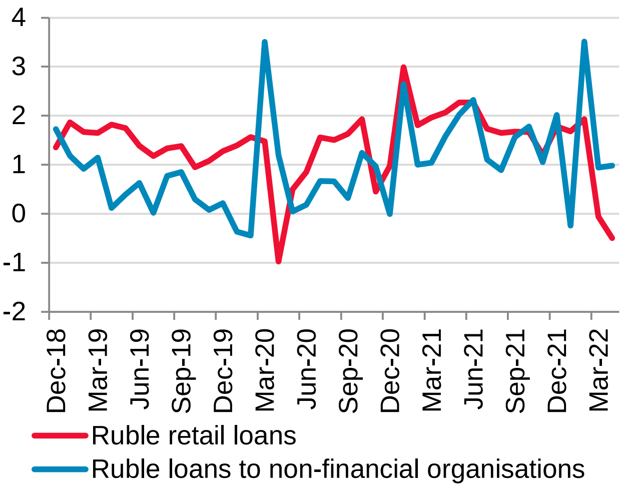
- At this point, a possible deterioration of loan claim quality does not seem to have been fully reflected in bank accounting due to regulatory easing. Nevertheless, a sharp increase in demand for loan holidays[9] in April may indicate that banks are accumulating credit risks.
- Growth in ruble loans to non-financial organisations continued at a rate of 1.0% MoM SA in April, i.e., at a slower pace than at the end of 2021 – start of 2022. The portfolio of loans to sole proprietorships and financial organisations continued shrinking, down 0.4% MoM SA and 2.4% MoM SA, respectively. Annual expansion in long-term ruble loans slowed dramatically for the third consecutive month, while medium-term loan growth also started slowing in April. (Figure 24). This may have stemmed from the slackening of companies' investment. A concurrent rise in short-term lending may evidence the popularity of loans taken to support operations. A similar picture was, in particular, seen during the most acute phase of the coronavirus pandemic in 2020.
- Growth in household ruble funds on bank accounts accelerated to 2.9% MoM SA in April from 2.7% MoM SA in March (Figure 26). The attractiveness of deposits, however, started to edge down: major banks' average highest interest rates slid below the key rate (falling to 13% in top-10 banks). Given high inflation expectations, this may lead households to look for investment alternatives for their savings again. Foreign currency deposits stopped their sharp decline (down 12.1% MoM SA in March), posting just a 0.5% MoM SA fall. This was likely helped by ruble strengthening to levels making foreign currency buying worthwhile again for households, and cancellation of some restriction on foreign currency purchases.
- Growth in corporate ruble funds slowed to 1.5% MoM SA in April from 3.1% MoM SA in March, while corporate foreign currency funds expanded 4.8% MoM SA in April after a significant drop over the past two months.

Figure 20. Banks' credit growth % YoY



Sources: Bank of Russia, R&F Department estimates.

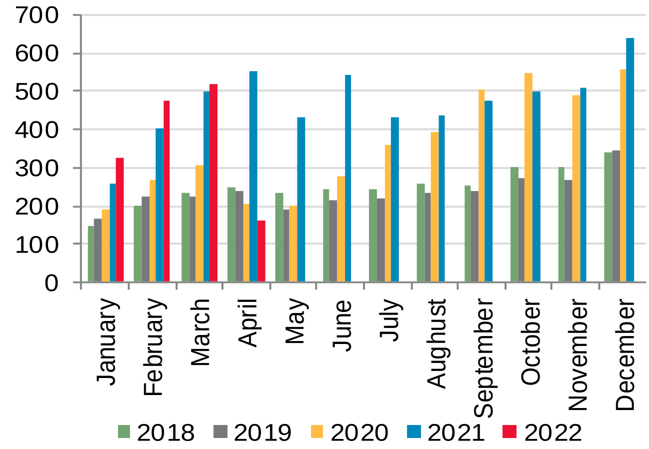
Figure 21. Banks' ruble credit growth, % MoM SA



Sources: Bank of Russia, R&F Department estimates.

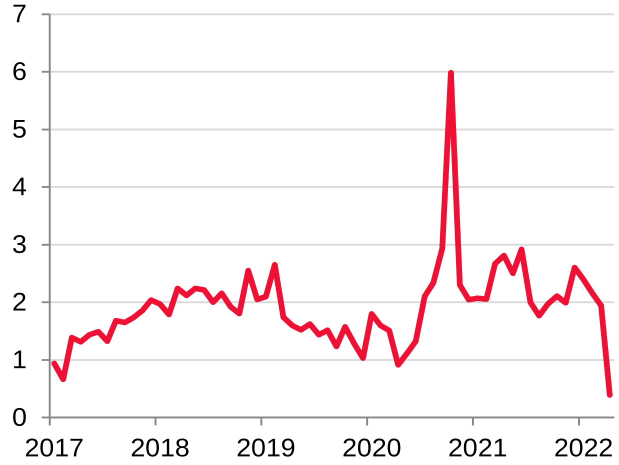
[9] Loan holidays provided by the government under laws 106-FZ and 76-FZ.

Figure 22. A total of new mortgage ruble loans issued, billion rubles



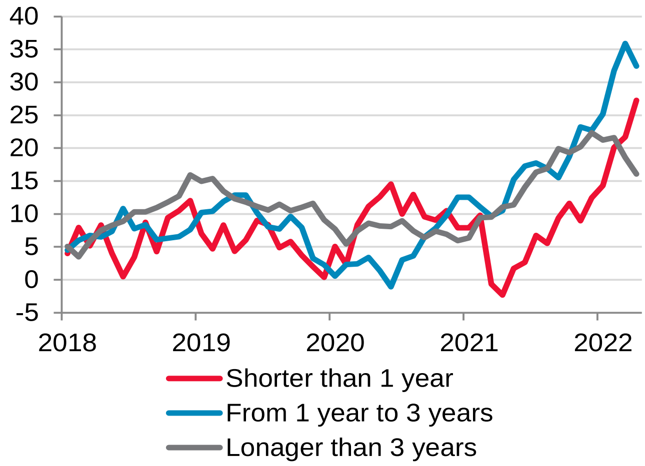
Sources: Bank of Russia, R&F Department estimates.

Figure 23. Banks' ruble mortgage loans growth, % MoM SA



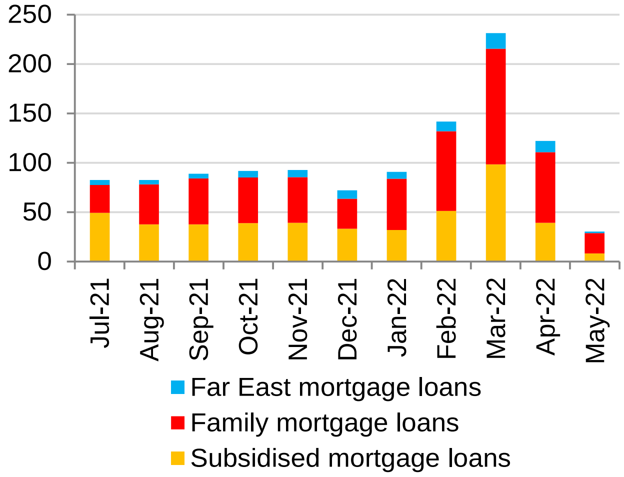
Sources: Bank of Russia, R&F Department estimates.

Figure 24. Growth of loans to nonfinancial organizations and sole proprietorships, % YoY



Sources: Bank of Russia, R&F Department estimates.

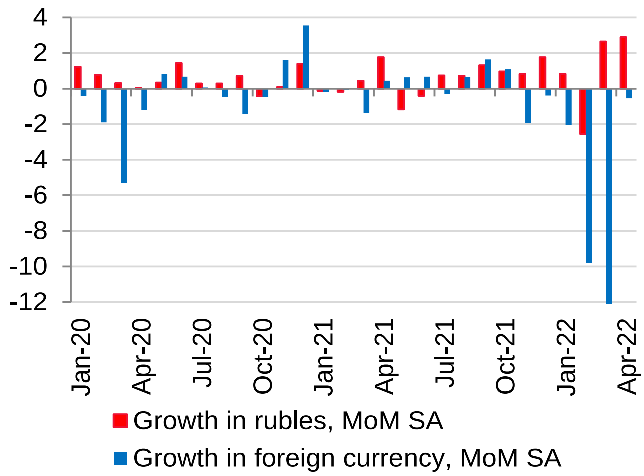
Figure 25. Total of subsidised mortgage loans issuance, billion rubles *



**Data for May are at 12.05.2022.*

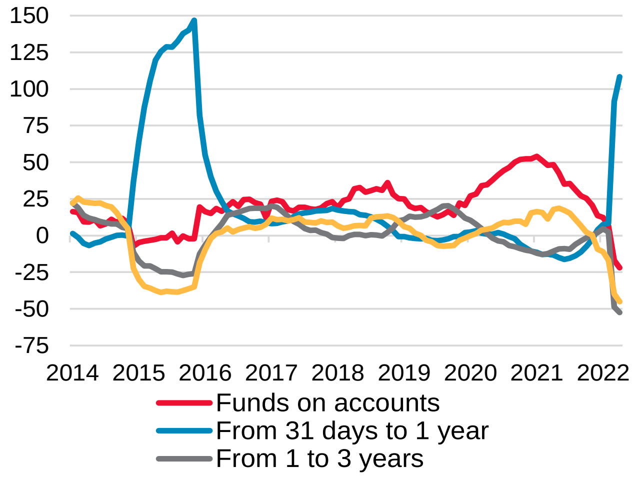
Sources: Bank of Russia, R&F Department estimates.

Figure 26. Household ruble funds at banks, % MoM SA



Sources: Bank of Russia, R&F Department estimates.

Figure 27. Household ruble funds at banks, % YoY



Sources: Bank of Russia, R&F Department estimates.

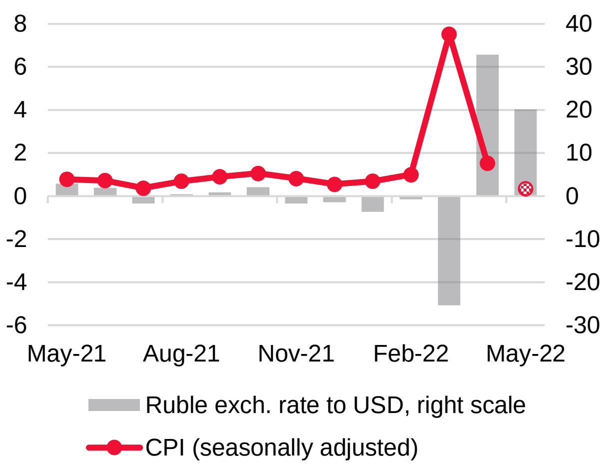
In focus. Exchange rate effect on prices in new reality

- *The adjustment of the economy and balance of payments to a dramatic change in external conditions has, since late February, been accompanied by extreme fluctuations of the ruble exchange rate.* The initial sharp ruble weakening was short-lived. Subsequently, as the Bank of Russia took steps to minimise risks to financial stability and the balance of payments came in strong in Q2, the ruble has gained a lot of ground.
- *But the balance of payments and exchange rate's adaptation to a sustainable equilibrium has not yet materialised in full and will require time.* In our view, the specifics of achieving this equilibrium under the new conditions require, among other things, a scrupulous insight into how exchange rate movements affect prices. It is important for assessing the sustainability of disinflationary processes, which were discernible in the latest weekly data on consumer price rises, and for estimating the balance of risks to prices on a short- and medium-term horizon.
- We believe that *the exchange rate impact on prices through the classical pass-through mechanism has generally held* in a situation of a significant rise in constraints related to sanctions and logistics of supplying goods to Russia. But this impact has taken on *an indirect, signalling nature,* materialising via producers and salespeople's expectations. That said, the direct pass-through of the exchange rate to prices via the prices of imported goods and components has been less pronounced, which has dramatically accelerated the pass-through of exchange rate movements to prices: we have seen a rapid change in the prices of goods which are the most sensitive to exchange rate fluctuations.
- As a new equilibrium is achieved in markets for goods and currencies, the ruble exchange rate fluctuations will be declining, with the above signalling component of the pass-through effect gradually abating. That said, the economy's structural adjustment will likely change the level and pace of exchange rate pass-through to prices.
- An additional factor distorting the impact of the pass-through mechanism has been the "unfastening" of export prices from world prices on the back of supply chain disruptions, the closure of the old sales markets, the emergence of discounts of Russian goods' prices to global benchmarks, as well as the imposition of domestic restrictions on the export of some goods. As the impact of this factor abates and a new equilibrium is established in Russia's export destinations, the "export channel" of the pass-through effect will resume its proper operation.
- Under these conditions, reliable model-based estimation of consumer price sensitivity to exchange rate movements will only become feasible with time. Therefore, the estimates of disinflationary impact of the ongoing ruble appreciation based on the measures of the pass-through effect obtained on retrospective data should be interpreted with utmost caution.

After ruble depreciation against the US dollar from 75 to 120 rubles in late February – early March on the back of massive financial shocks, the Russian currency began to strengthen, going below 60 rubles to the US dollar at the end of May. This arose from the several factors acting in the same direction: a severe import contraction, with exports remaining relatively stable, the cessation of foreign currency purchases under the fiscal rule, and restrictions imposed on foreign exchange and transborder financial transactions.

As the exchange rate fluctuated sharply, the volatility of price movements in the consumer market also rose: inflation hit record highs early in March, followed by a subsequent steady slowdown in consumer price increases, which came close to a level corresponding to an annual inflation rate of 4% in seasonally adjusted terms (Figure 28). Price rise acceleration followed by a slowdown was registered in CPI categories both highly and weakly dependent on exchange rate movements, but the former group showed a much wider range of fluctuations (Figure 29). Under these conditions, the nature of consumer price dependence on the exchange rate has changed.

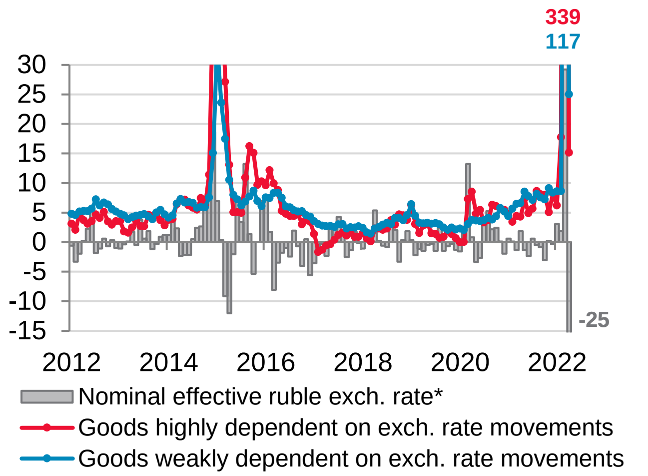
Figure 28. Ruble exchange rate relative to US dollar and CPI, %



May 2022 figures are preliminary estimates based on real-time data.

Sources: Rosstat, Bank of Russia, R&F Department estimates.

Figure 29. Median price rises (SAAR) and ruble exchange rate, %



** Positive value – ruble depreciation against foreign currencies. Negative value – ruble strengthening.*

Sources: Rosstat, Bank of Russia, R&F Department estimates.

The pass-through effect is traditionally understood as the impact of exchange rate change on inflation through the prices of imported goods and external demand for exportable goods. Econometric estimates[10] showed that since 2016, a ruble weakening of 1% has added approximately 0.1 pp to consumer price rises within 3–6 months.

But, given the ongoing structural transformation of the economy at large and its import component in the consumer market in particular, the classical approach to estimating the pass-through effect using econometric methods and historical data may give an inaccurate idea of how much exchange rate movements affect inflation and how fast exchange rate fluctuations are passed through to consumer prices.

[10] See Talking Trends No. 7 (October 2017) and Khotulev I. Relationship between the exchange rate pass-through in Russia and economic shocks (June 2020).

With logistics chains and dealings with foreign counterparties becoming increasingly complicated, long and time-consuming,[11] the impact of exchange rate fluctuations on domestic prices directly, through the price of imported goods, components, equipment, and raw materials is notably distorted. Amid a significant increase in restrictions on the supply of goods to Russia[12], it is not only exchange rate movements that become crucial but also the possibility of finding alternative sources of supplies and designing logistics schemes. In a period when exchange rate movements are subject to extreme fluctuations amid sharply changing external conditions and the supply of imports[13] sharply contracts, the impact of the exchange rate on consumer price movements becomes indirect and tends to take on a signalling nature, affecting producers and salespeople's price expectations.

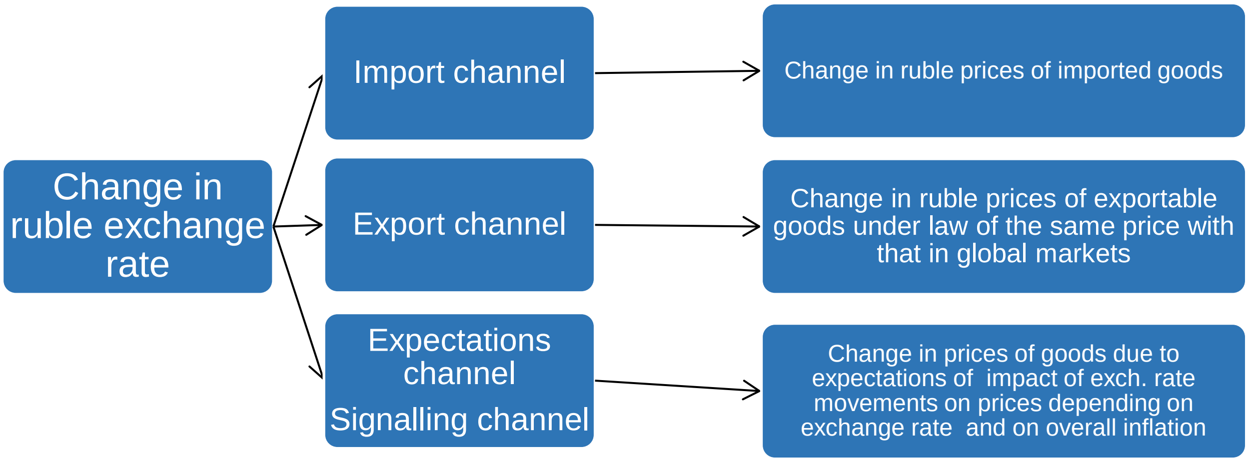
One graphic example is change in the prices of new foreign cars (Figure 32). Late in February, many automotive companies stopped their car deliveries to Russia, which, coupled with ruble weakening, pushed output prices up sharply. The pace of rises in new foreign car prices gradually slowed and, according to Rosstat data, came close to zero over the week from 7 to 13 May. While historically the pace of rises in foreign car prices were in large part governed by exchange rate movements, the recent price rise acceleration and subsequent stabilisation were not directly related to changes in the value of imports but, a to a greater extent, arose from restrictions on car supplies to Russia. In this kind of situation, retail prices are often governed by the balance of demand and the available and expected supply in the market. As a result, new car prices in Russia have exceeded those in other countries in foreign exchange terms.

An important feature of the signalling nature of exchange rate impact on consumer prices is the shortening of time within which exchange rate movements are passed through to the prices of goods. This change in the speed of consumer prices' response to exchange rate movements to a great extent arises from elevated exchange rate fluctuations. Indeed, amid a sharp rise in uncertainty and significant pressure on the ruble late in February and in March, producers, fearing a further increase in costs and mounting logistics problems, and also taking account of the emerged panic buying (of, above all, some non-food durable goods), steeply hiked their prices, including for goods which were already kept in stock. Subsequently, however, as the situation stabilised against a background of substantial ruble appreciation, prices of many items corrected down as rapidly as they rose. Besides, the lag with which a change in the exchange rate is reflected in consumer price movements, may vary appreciably across consumer basket components. For example, the shorter the storage life of a product, the less opportunity to form reserve stocks, hence the faster the exchange rate is passed through to prices. Exchange rate movements were the most rapidly reflected in the prices of food products with a shorter storage life (imported fruit, some meat and fish products, chocolate and confectionaries), and more slowly in non-food goods (Figure 30, Figure 31).

[11] The exit of a large number of companies from Russia, cessation of deliveries of dome goods to Russia, difficulties with carriage of freight by air, by sea or by road transport.

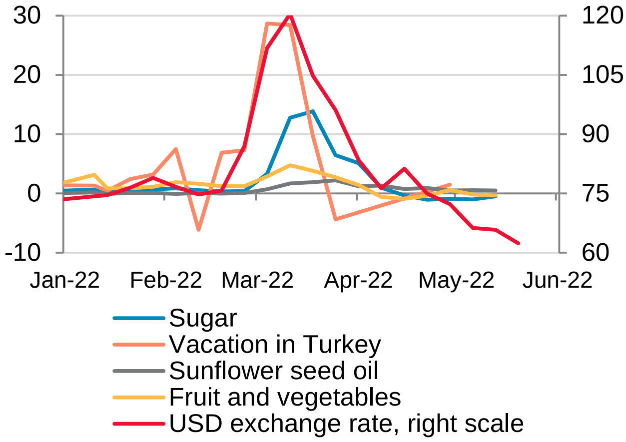
[12] According to a recent Federal Customs Service statement, import of goods has contracted to the 2020 level as sanctions were imposed.

[13] Both direct, in the form of imported goods "on shelves", and indirect through imported components used by domestic producers.



As ruble exchange rate movements stabilise, the signalling component of the exchange rate impact on prices should become less significant. That said, in the future, the economy's structural adjustment will likely result in a new change in the estimate of the level and pace of exchange rate pass-through to prices.

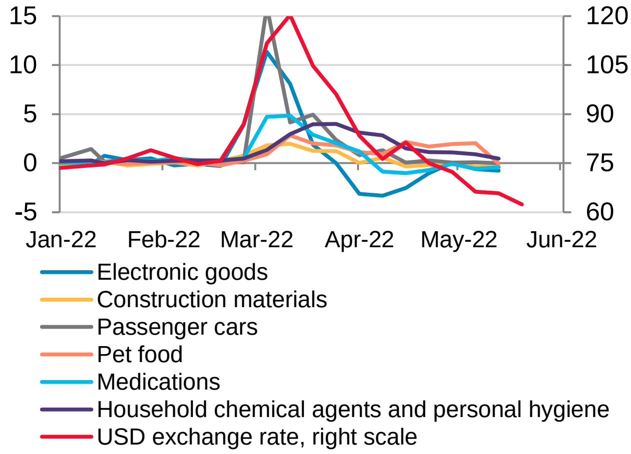
Figure 30. Weekly price rises (%) and US dollar exchange rate to ruble



Note. Weekly monitoring of travel to Turkey for vacation stopped as of 01.04.2022, April data is based on monthly statistics.

Sources: Rosstat, Bank of Russia, R&F Department estimates.

Figure 31. Weekly price rises (%) and US dollar exchange rate to ruble

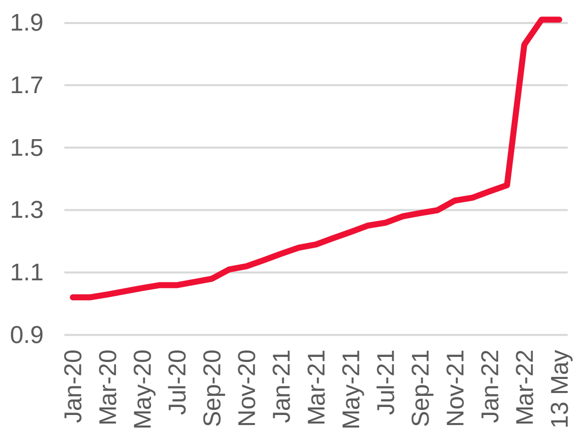


Sources: Rosstat, Bank of Russia, R&F Department estimates.

Under the current conditions, the operation of another pass-through channel – through the parity of world and domestic prices of exported goods, has also changed. In the absence of physical/logistics restrictions or export quotas, the domestic price of exportable goods is governed by the law of "single price": the world price less the difference in the cost of delivery to foreign and domestic markets, customs duties, with value added tax and the exchange rate factored in. Accordingly, exchange rate fluctuations have an effect on domestic prices through the revaluation of the ruble equivalent of world prices. Driven by logistics chain disruptions, partial or complete closure of traditional markets, along with the imposition of domestic restrictions on the export of some goods, domestic prices of exportable goods have become “unfastened” from world prices, and therefore, exchange rate fluctuations are to a much lesser extent passed through to domestic price movements. An additional impact on the distortion of the pass-through effect comes from a rising discount of Russian export prices to global benchmarks. Bur the period of price “unfastening” and finding a new equilibrium is finite. As new logistics schemes are launched and new markets open, the sensitivity of domestic prices of exportable goods to world prices, and hence the operation of this pass-through channel will recover.

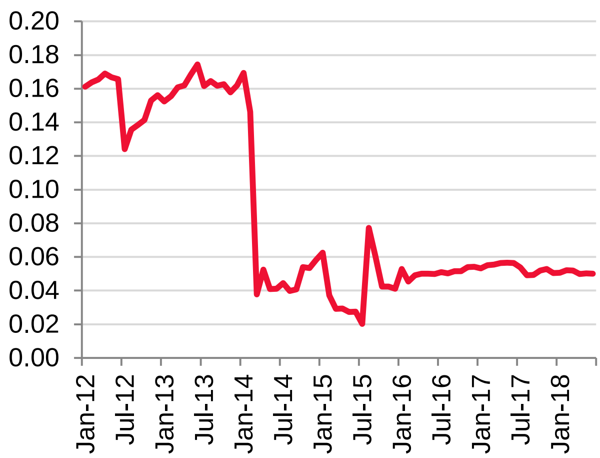
In this situation, the estimates of the pass-through effect obtained on historical data until February 2022 will hardly be relevant, whereas accurate model-based empirical estimates of the pass-through effect can only be obtained after some time has elapsed. The previous episode of a likely estimate bias occurred relatively recently: after the external shock of 2014–2015, when, in addition to external conditions, domestic conditions, i.e., monetary policy changed. That said, the Bank of Russia’s switch to inflation targeting under a floating exchange rate, substantially diminished the exchange rate pass-through to prices, reflecting a reduction in the economy’s sensitivity to exchange rate fluctuations (Figure 33).[14]

Figure 32. New foreign car prices, million rubles



Source: Rosstat.

Figure 33. Response of inflation to 1% ruble weakening within 6 months after time of shock, pp



Sources: Rosstat, Bank of Russia, R&F Department estimates.

[14] A reduction in the pass-through effect after a switch to inflation targeting was posted in both food and non-food goods, with the latter segment showing a greater reduction, which could be attributed producers’ heavier dependence on imports. The scale of the effect in the services sector, however, did not change, according to our estimates.