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The views and recommendations expressed in the bulletin do not necessarily reflect the official position of the Bank of Russia.

Please send your comments and suggestions to djp1@cbr.ru

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EXECUTIVE SUMMARY

MONTHLY SUMMARY

- Due to the coronavirus crisis, price movements were highly volatile in Russia in 2020, with alternating periods of low and elevated price growth rates. As a result, the beginning of 2021 recorded increased prices, primarily driven by one-off factors, especially in the food segment. As Russia partially reintroduced restrictions, this interrupted economic recovery yet had almost no effect on consumer demand and put no disinflationary pressure. Accommodative monetary policy continues to support economic activity and domestic demand, specifically through lending expansion. According to our estimates, inflationary pressure adjusted for temporary and one-off factors stays close to 4%.
 - In January, annual inflation exceeded 5% and is likely to start going down in March, after reaching a local peak. This is partially explained by the low base effect. The pass-through of the ruble weakening since March 2020 continues to affect consumer prices.
 - Overall, the economy came to a halt in 2020 Q4 due to tightened restrictions and self-restrictions related to the resurgence of coronavirus cases. Nonetheless, export and intermediate goods industries continued to bounce back, while the demand for consumer services declined.
 - Over the first three weeks of 2021, the Russian financial market maintained positive trends amid a rise in global risk appetite.

IN FOCUS. Structured bonds as a potential alternative to deposits: all that glitters is not gold

- Over the previous year, individuals demonstrated increased demand for securities market instruments, including higher-risk assets. *On the one hand*, this trend is part of the development of the securities market and the long-term investment institute. *On the other hand*, when the demand for more complex and riskier instruments with higher expected returns trends upwards amid persistently low interest rates in the economy during a long period, this may become a potential threat to financial stability.
- In such a situation, a range of banks were offering structured bonds as a safe alternative to deposits. Although a considerable portion of them were capital protected instruments, they are still complicated for understanding and assessment. They also involve issuer credit risks, including potential bankruptcy and payment delays, as well as liquidity risks and market risks in the case of sale in the secondary market.
- Given the above risks and explicit and implicit fees, returns on such products will most likely be lower than returns on investment in traditional instruments. In particular, actual returns on already redeemed structured bond issues in 2020 were lower than returns on deposits (3.8% against 6%).

- Taking this into account, it is essential to take efforts for individuals lacking investment experience in the securities market to properly comprehend all risks arising for them when they transfer their funds from deposits to investment products, including the possibility to lose their incomes and investments. Therefore, retail investors should not purchase complex investment products if they are unable to comprehensively estimate their inherent risks.

1. Inflation

Annual inflation accelerated to 4.9% in December, reaching an estimated 5.1% in mid-January. The leading indicators of inflation, including producer prices of consumer goods and business survey data, suggest that the elevated pace of monthly price rises (in seasonally adjusted terms) may continue in the next few weeks on the back of cost increases, despite some weakening of demand for consumer services.

Still, as a number of proinflationary factors, in particular, the subsiding effect of ruble weakening pass-through to prices, run their course with time, we will see the start of inflation deceleration in March.

As in the previous year, consumer prices will be exposed to a mixed set of factors in 2021. In particular, the expected epidemic situation's return to normal following mass vaccination will spark the recovery of demand for goods and services whose consumption was limited. At the same time, demand for other goods and services which rose previously since they had to substitute for goods and services out of reach earlier, may weaken. The effects of these groups of factors will partially offset one another. Also, some supply-side constraints arising from coronavirus contagions, work from home, and migration, will gradually ease.

Monetary easing put in place in 2020 will, with a lag, offset the effect of demand-side disinflationary factors in 2021. That said, the impact of disinflationary factors will depend on how long the impact of coronavirus-related restrictions, pandemic implications, and fiscal consolidation on aggregate demand will last.

1.1. Prevalence of proinflationary factors towards end of 2020

- Inflation accelerated to 4.91% in December 2020 from 4.42% in November. Monthly seasonally adjusted price rises slowed somewhat to 6.72% in December from 7.32% SAAR¹ in November, remaining far above 4%. Given the inertia of price movements, risks of elevated proinflationary pressure will continue in the months to come.
- The balance of disinflationary and proinflationary factors came in with the latter on top at the end of the year. The key contribution to inflation acceleration in the last several months was provided by prices in the food segment, which largely depended on rises in world food prices, ruble weakening, and a decline in the output of some of domestic agricultural crops.
- At the same time, the recent acceleration of price rises has affected a wide range of consumer basket components. This indicates the presence of not only short-term but also more enduring proinflationary factors associated with cost increases due to restrictions imposed to combat the epidemic and elevated household inflation expectations.

¹ SAAR – Seasonally Adjusted Annualised Rate.

- Annual inflation will hit a local peak in February 2021 to start slowing subsequently. We expect the disinflationary effect of fiscal consolidation to be largely offset by a further economic activity recovery, given the effect of monetary easing measures already in place. This will also be accompanied by the emergence of structural proinflationary factors due to supply-side shocks, in particular, in the labour market (shortages of professional workforce).
- On top of that, the expected epidemic situation's return to normal on the back of mass vaccination will spark the recovery of demand for goods and services whose consumption was earlier limited. At the same time, demand for other goods and services which rose as they had to substitute for good and services out of reach, may weaken. As a result, the impact of this mixed set of factor groups will partially offset one another, while price movements in various groups of goods and services will show increased non-uniformity.

The pace of inflation was uneven in 2020, driven by a large number of proinflationary and disinflationary factors, both one-off and more enduring in nature. Having declined to levels close to the 2018 lows at the start of the year, inflation started to accelerate gradually, reaching 4.91% at the start of the year (Figure 1). The key contribution to last year's price rise acceleration came from food prices, which climbed 6.69% YoY. Price increases in non-food goods also exceeded 4%, coming in at 4.79% YoY. By contrast, a significant drop in demand for services contained overall price moves, up 2.70% YoY. These non-uniform price movements across broader consumer basket components reflects the impact of a large number of concurrent disinflationary and proinflationary factors throughout 2020. These factors were both short-term and more enduring in nature (enduring factors are underlined below):

Disinflationary factors:

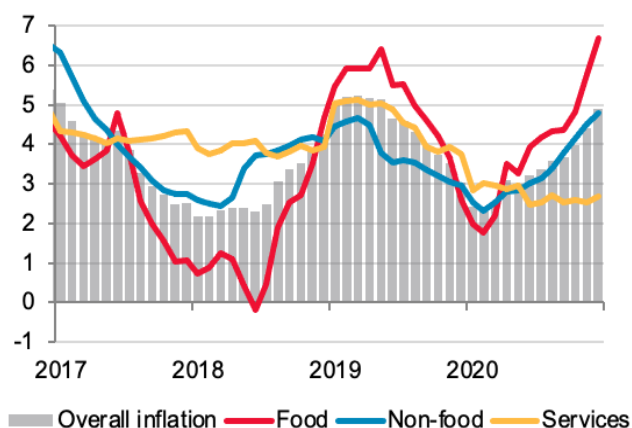
- a drop in demand driven by an income decline as restrictions were put in place;
- a lesser than planned price indexation for some regulated services (education);
- an oil price fall (via motor fuel prices and transportation costs);
- epidemic-related restrictions which distorted price movements in "contact" services.

Proinflationary factors:

- ruble weakening and its pass-through to prices;
- world food price rises and an output decline in some agricultural crops;
- a temporary surge in demand for FMCG and non-perishable goods at the end of the first quarter;
- increases in companies' costs incurred in meeting epidemic-related sanitary requirements;
- a shift in household demand from services to goods (part of it can be enduring in nature);

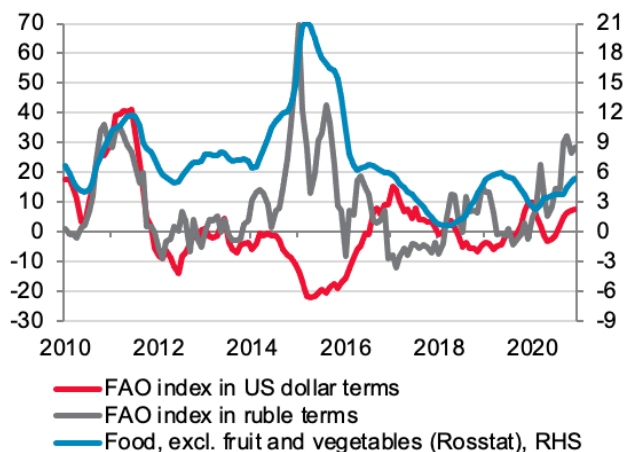
- a loss of production potential (including a temporary one due to a rise in contagions and restrictions on work in offices);
- countercyclical macroeconomic policy: fiscal and monetary policy easing to support the economy and neutralize elevated disinflationary risks associated with weak demand).²

Figure 1. Inflation and its components, % YoY



Source: Rosstat.

Figure 2. World and domestic food prices, % YoY



Sources: Rosstat, FAO, R&F Department estimates.

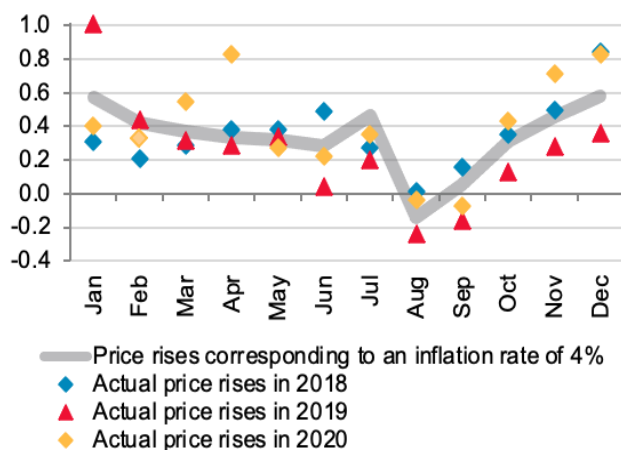
A sizable input to annual inflation acceleration has, in the past few months, been provided by *food prices*, in particular, those of sugar, sunflower seed oil, flour, macaroni and bakery products, as well as fruit and vegetables. The key factors behind the acceleration of price rises in these food categories in 2020 were world food price increases (fairly closely correlated with domestic price movements, Figure 2), a fall in supply of some agricultural crops, driven by a year-on-year decline in the output of some agricultural crops (sugar beets, sunflower seed oil, potatoes, and vegetables), and ruble weakening. December's annual inflation also accelerated in the market for *non-food goods and the services sector*, but at a slower rate than in the food segment. Goods sensitive to exchange rate fluctuations were the key drivers of the increased pace of non-food price rises.

Consumer prices added 0.83% MoM NSA³ in December (Figure 3). Seasonally adjusted pace of price rises remained far above a level corresponding to an inflation rate of 4%, albeit it slowed marginally to 6.72% MoM SAAR in December from 7.32% MoM SAAR in November (Figure 4). An overall seasonally adjusted price increase in the fourth quarter stood at 6.6% QoQ SAAR.

² In particular, this policy, supported employment and wages, along with lower-income groups' income, and, helped a fast recovery of lending, including consumer lending.

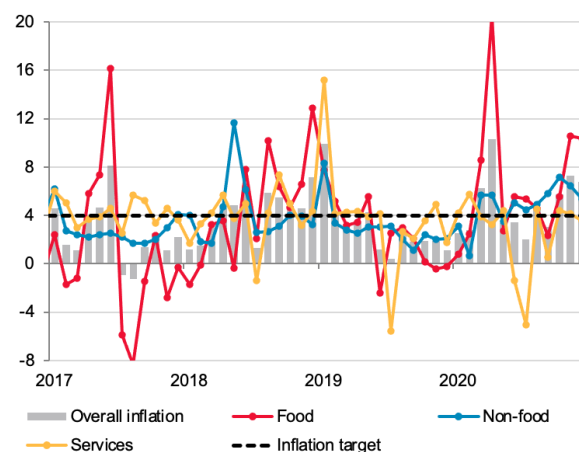
³ NSA – non-seasonally adjusted.

Figure 3. Price rises corresponding to an inflation rate of 4%, % MoM



Sources: Rosstat, R&F Department estimates.

Figure 4. Seasonally adjusted inflation, % SAAR



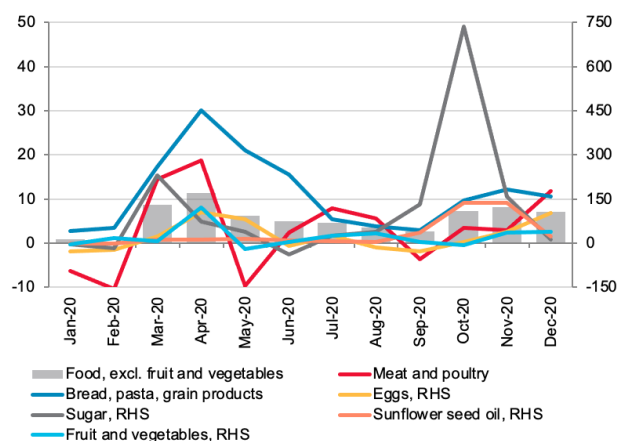
Sources: Rosstat, R&F Department estimates.

Food price inflation stood at 10.40% SAAR in December, down from 10.66% SAAR in November. Government measures to freeze sugar and sunflower seed oil prices helped stabilize the situation in these markets: rises in the prices of these goods slowed in December on a seasonally adjusted basis (Figure 5). We estimate that the price freeze for these goods may pare *about 0.1 pp* off overall consumer price inflation as of the end of the first quarter. That said, price rise acceleration was also posted in other food goods, such as meat products, fish, eggs, and fruit and vegetables.

The pace of rises in the prices of non-food goods slowed somewhat in December but remained elevated at 5.31% SAAR compared with 6.48% SAAR in November. The lagged ruble weakening pass-through continued to have a proinflationary effect on price movements. At the same time, some price rise slowdown in the non-food segment against a background of stable demand evidenced by a number of real-time indicators, suggests a gradual fading of this effect.

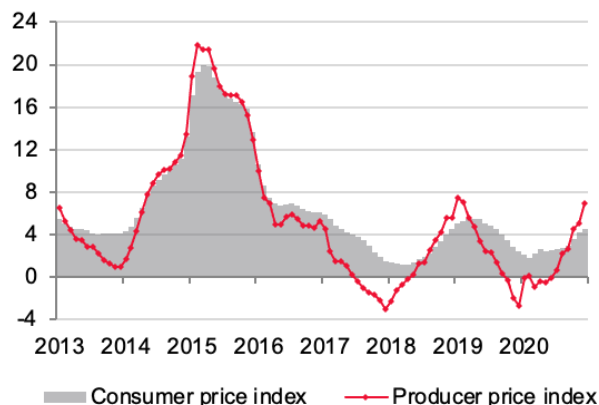
Services prices climbed 3.44% SAAR in December, down from 4.21% SAAR in November. Some slowdown of seasonally adjusted price increases was owed to a price decline in some types of services, such as communications and health resort services. The absence of foreign tourism price registration and the maintenance of restrictions on a number of “contact” services continue to distort price movements in services. It is, however, important to note that the epidemic situation worsening in the autumn will likely bring about a further production potential decline as a large share of companies exit the market due to accumulated financial losses. This will, above all, affect the hardest hit companies and a number of services on which restrictions were imposed. This process will be accompanied by an upward pressure of restrictions on the costs of producers staying on in the market.

Figure 5. Seasonally adjusted inflation for some food goods, % SAAR



Sources: Rosstat, R&F Department estimates.

Figure 6. Prices of some comparable goods in CPI and PPI structure, % YoY



Note: Under Rosstat methodology, producer price movements are calculated net of VAT. Hence the effect of the VAT hike in January 2019 is not taken into account.

Sources: Rosstat, R&F Department estimates.

Pressure from producer prices generally rose somewhat in the consumer market towards the end of 2020, as evidenced by producer prices of the basket of representative goods making up the consumer basket.⁴ The pace of price rises accelerated to 6.9% YoY in December from 5.0% YoY in November, staying notably above the rate of rises in consumer prices of comparable goods⁵ (Figure 6). This was, above all, driven by an acceleration of cost increases in the manufacture of many food products: as costs rose producers passed part of them through to consumers. The elevated rate of producer price hikes at the end of the year suggests that the inertia of consumer prices will likely continue in the first few months of 2021.

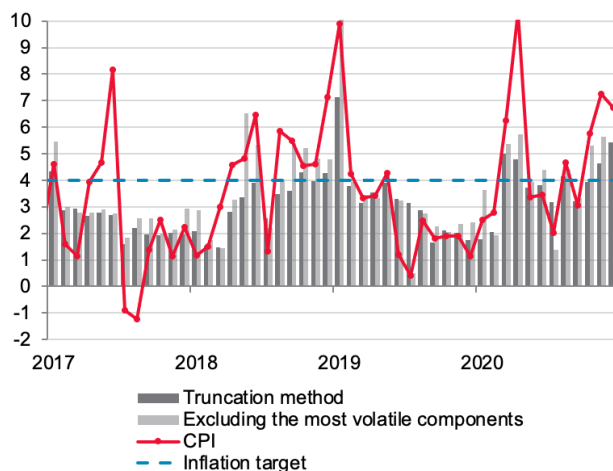
Price rise acceleration at the end of 2020 cannot be all put down to the impact of transient and one-off factors. Some increase in the persistent inflationary pressure is evidenced by modified core and trend inflation indicators. They are less sensitive to transient and one-off factors than the headline inflation measure. According to our estimate, the mean modified core inflation indicator went up to 5.35% in December (Figure 7). The mean level of modified core inflation indicators came in at 4.2% SAAR for the full-year 2020, equalling 4.5% SAAR for the second half of the year. The trend inflation estimate,⁶ meanwhile, edged up to 4.10% in December 2020 from 4.01% in November. The estimate computed on a shorter three-year time interval stood at 4.11%.

⁴ The calculation used comparable goods in the CPI and PPI structure: meat products, fish products, butter and fats, dairy products, pasta products, sugar, tea and coffee, wearing apparel, footwear, detergents and cleaning solutions, perfumery and cosmetic products, household electronic appliances, and furniture. The account for about 30% of the consumer basket.

⁵ Producer price growth accelerated to 3.6% YoY towards the end of the year (a 4.3% YoY price decline was posted for the full-year 2019).

⁶ For details see [Trend inflation estimate for December 2020](#).

**Figure 7. Modified core inflation indicators,
% SAAR**



Sources: Rosstat, R&F Department estimates.

Annual inflation will continue to accelerate at the start of 2021 and is assumed to reach a peak in February, to be followed by a decline as the monthly price rises slow concurrently with the weakening effect of and the effect of the high base of 2020 weakens. According to a Bank of Russia forecast, inflation will slow to a range of 3.5%–4.0% at the end of 2021.

On the one hand, a monthly price rise slowdown is assumed to be helped by the expected gradual shift of the balance of short-term factors from proinflationary to disinflationary ones going forward. This should occur due to, first, petering out of the above transient factors which have brought about an elevated rate of price increases in recent months and, second, the consequences of ruble appreciation occurring from the start of November as optimism rose in global markets. From the perspective of more enduring factors, monthly price growth will likely be restrained by a more moderate consumer demand amid gradual and non-uniform recovery of business activity across individual industries and risks of the epidemic situation's drawn-out return to normal. The return of budget expenditure to normal will also be an important factor restraining price growth in 2021.

On the other hand, the absence of a steep consumer activity contraction amid the prospects of the economy's return to recovery-generated growth in the first half of 2021 (especially if mass vaccination against the coronavirus infection proves effective) will contain the demand-side disinflationary impact. Demand will continue to be buoyed by lagged effects of monetary easing measures put in place earlier. Against this background, supply-side structural factors engendered by the crisis and the loss of potential, will, to a certain extent, likely act as sources of some upward price pressure.

1.2. Inflation remains elevated at the start of 2021

- The pace of price rises remains elevated at the start of 2021. Consumer prices added 0.78%⁷ in the period from 1 to 25 January. An average daily price increase was elevated relative to the same periods of previous years, except 2019, which saw an extensive pass-through of the VAT hike to prices (Figure 8). An annual inflation estimate rose to 5.3% as of 25 January.
- Based on weekly data, our preliminary estimate of January's price rises stands in the 0.8%–0.9% MoM NSA⁸ range (Figure 9). As a result, annual inflation may accelerate to 5.3%–5.4% for January.
- Therefore, January's inflation may, for the fourth consecutive month, rise above the 4% SAAR mark, and, should the price inertia continue, may also exceed this level in February. Given the low base of the start of last year, we expect a local peak of annual inflation in February, to be followed by an inflation slowdown.
- January's price growth is traditionally affected by an indexation of many regulated prices and excise taxes. Thus, public transport fares, rail transportation rates, housing and utility prices⁹ were raised as of 1 January 2021, excise taxes on petrol, diesel, and motor oils increased 4% as planned; also, excise taxes on alcohol were indexed for inflation, with excise tax on tobacco raised as much as 20%.¹⁰
- With the government taking steps to contain price rises in some food items, price growth in the basket of socially sensitive food products continued to slow at the start of January (Figure 11). But the prices of chicken meat, fish, flour, tea, and pasta still went up at an elevated rate, driven by a pass-through of cost increases and rising world grain prices.
- Climbing car prices were the key driver of price rise acceleration in non-food goods (Figure 11), making a hefty contribution to the difference between the median and average increase in the price of the basket of goods (exclusive of fruit and vegetables) monitored on a daily basis (Figure 12). Noteworthy among other components of non-food goods are continuing elevated pace of price rises in cigarettes and matches, and some types of household appliances. In other categories, price growth remained moderate. That said, the decomposition of weekly price rises at the start of the year shows a substantial contribution to inflation of the relevant adjustment to price growth in categories which are not monitored on a weekly basis (Figure 10).
- With world oil prices going up, wholesale petrol prices started to climb from the middle of December (Figure 13). This began to put pressure on the consumer prices of petrol as the conditional cut-off price was, according to plan, raised in calculating the mark-up as part of the damper mechanism. As a result, all other things being equal, a return on

⁷ As of 1 January 2021, the number of items monitored on a weekly basis was increased to 106. In place of the one-day hotel accommodation service, five hotel types were introduced, ranging from a hostel to a five-star hotel. The list of categories monitored on a monthly basis was also brought to 556.

[Rosstat has increased the number of goods and services estimated in calculating inflation](#) / Rosstat / 14.01.2021.

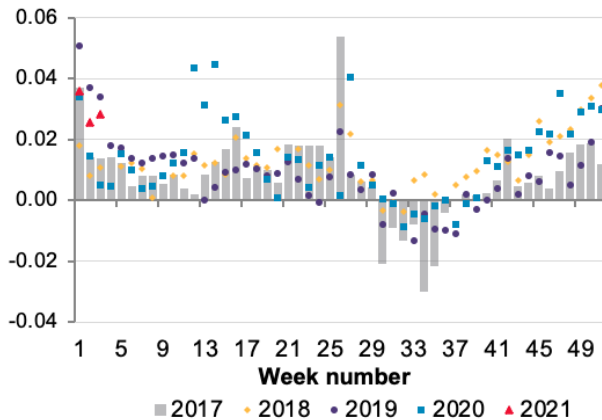
⁸ Seasonally unadjusted.

⁹ [Which prices will be raised in 2021](#) / RBC / 01.01.2021.

¹⁰ [Excise taxes on fuel will be indexed by 4% as of 1 January](#) / TASS / 26.12.2020.

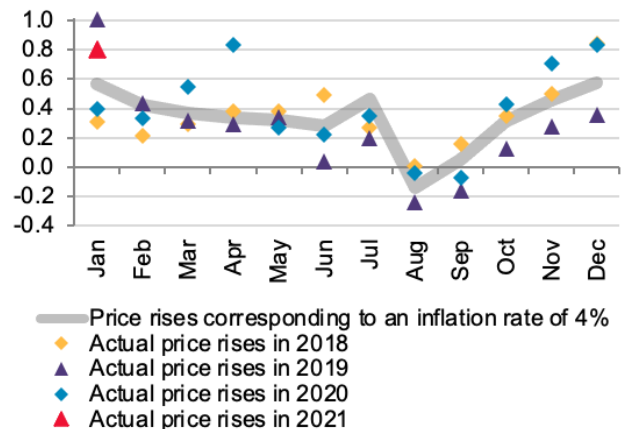
refined petroleum product deliveries to the domestic market declines, creating incentives to raise retail prices. The damper mechanism is, however set in such a way as to enable a conditional price increase to keep fuel price rises close to the inflation target.

Figure 8. Average daily price rises, %



Sources: Rosstat, R&F Department estimates.

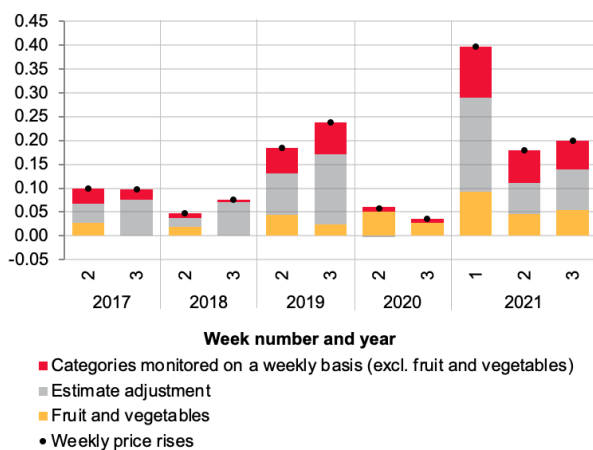
Figure 9. Price rises corresponding to an inflation rate of 4%, % MoM



Note: January 2021 – preliminary estimate.

Sources: Rosstat, R&F Department estimates.

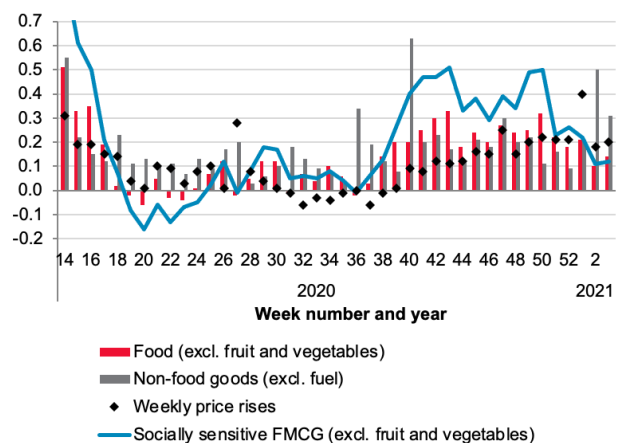
Figure 10. Decomposition of weekly price rises



Note: The diagram does not present values for the first week of 2017–2020, because average prices are not comparable in these periods. The value for the first week of 2020 is calculated using data on price increases from a Rosstat release, now provided for a wide range of categories

Sources: Rosstat, R&F Department estimates.

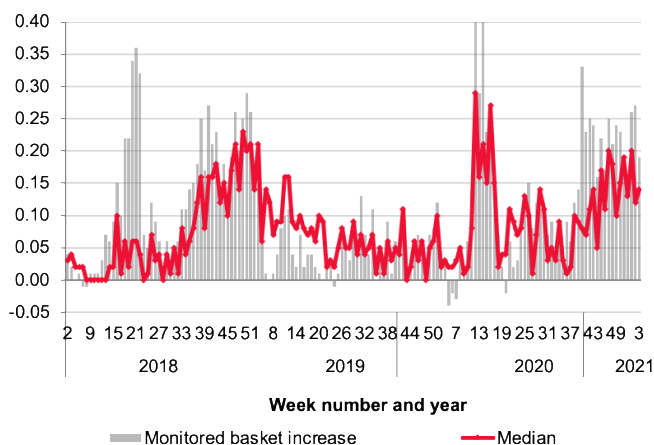
Figure 11. Price rises in goods monitored on a weekly basis



Note: The calculation uses an enlarged list of goods. The list of socially sensitive FMCG, for which retail price caps are allowed to be imposed, is obtained from RF Government Decree No. 530 of 15.07.2010 (excl. fruit and vegetables).

Sources: Rosstat, R&F Department estimates.

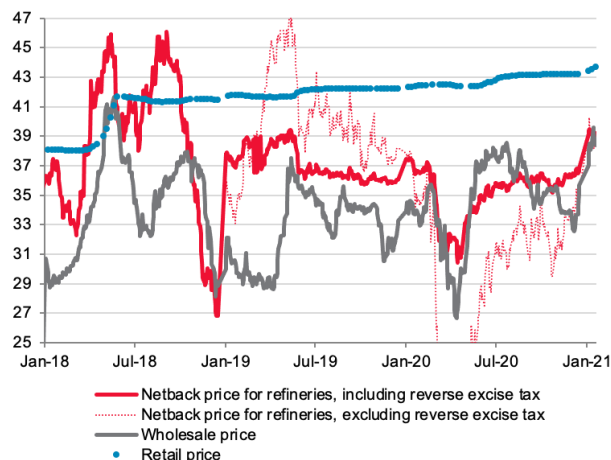
Figure 12. Price rises and median distribution of weekly price rises, %



Note: The calculation uses goods exclusive of fruit and vegetables. The diagram does not present values for the first and fifth weeks of 2018–2020, since average prices are not comparable in these periods. The value for the first week of 2021 is calculated using data on increases from a Rosstat release, now provided for a wide range of categories.

Sources: Rosstat, R&F Department estimates.

Figure 13. AI-92 petrol price, rub/litre



Sources: St Petersburg International Commodity Exchange, Rosstat, R&F Department estimates.

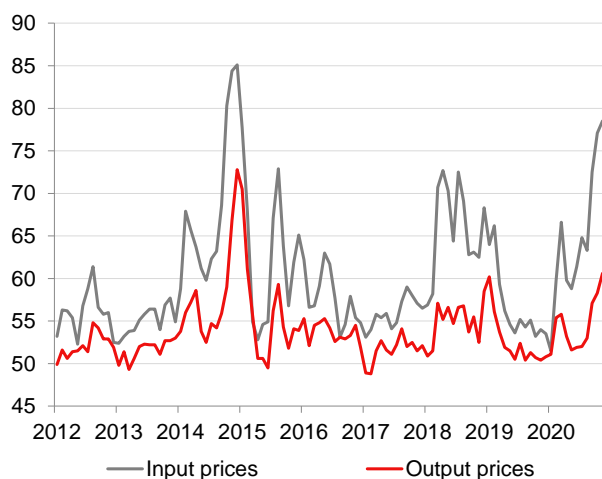
1.3. PMI price indices in December: inflationary pressure mounting

- PMI price indices suggest a rise in inflationary pressure at the end of 2020. Output price indices alike hit multi-year highs in December, recording the highest level since March 2015 in manufacturing and since February 2019 in services (Figure 14, Figure 15). The key driver was a significant increase in costs which companies are able to pass through to final prices as there are no signs of consumer demand weakening despite the epidemic situation aggravation in the fourth quarter.
- A rise in costs is evidenced by the input price index. It climbed to the highest level since January 2015 in manufacturing and slid from its November peak in services, staying, however, at an elevated level relative to its average reading over the period from the start of observations in 2001. The key factors behind this are, according to the respondents, the impact of exchange rate movements and price hikes by suppliers.
- The respondents' emphasis on the exchange rate factor even amid ruble strengthening since the first half of November confirms that the pass-through of the exchange rate to prices was lagged in time. We, however, believe that that the lagged upward effect of ruble weakening on input and output prices will run its course in the next few months.
- Price hikes by suppliers may in turn be owed to a deterioration in the supply system's operation under the impact of coronavirus-related restrictions in Russia and foreign countries. The relevant sub-index¹¹ in manufacturing, for example, declined in December.

¹¹ Suppliers' Delivery Times Index.

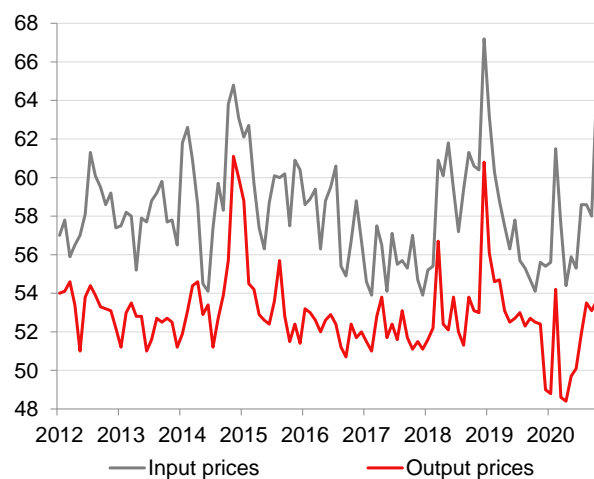
As restrictions are lifted and the epidemic situation stabilises, one can expect the operation of logistics chains to improve. But this process will most probably be rather protracted, given the continuing uncertainty over the duration of the pandemic and recovery of business activity, which is likely to be drawn out and non-uniform (even as the epidemic situation returns to normal).

Figure 14. Change in PMI manufacturing indexes, pp



Source: IHS Markit.

Figure 15. Change in PMI services indexes, pp



Source: IHS Markit.

2. Economic performance

Real-time data suggests that Russian economy showed near-zero growth in the fourth quarter relative to the third quarter on a seasonally adjusted basis. As a result, GDP decline was likely below 4% for the full-year 2020.

The overall level of economic performance did not drop all that much thanks largely to a recovery in exporting industries and the production of intermediate consumption goods. Consumer demand contracted moderately primarily due to the weakening of the spending activity in the services sector.

The resumption of economy's recovery is expected in the first half of 2021 as the pandemic wave has subsided and most of the coronavirus-related restrictions have been lifted.

Credit activity remained at a high level in November–December, due to, among other things, loose monetary policy, regulatory easing, and government support measures. This continues to buttress domestic demand, further alleviating the impact of restrictions on economic activity.

Nevertheless, some deterioration of the quality of bank's overall corporate loan portfolio is expected in 2021. The quality will be dragged down by a rise in the share of relatively less solvent borrowers as regulatory easing comes to an end and their debt burden increases.

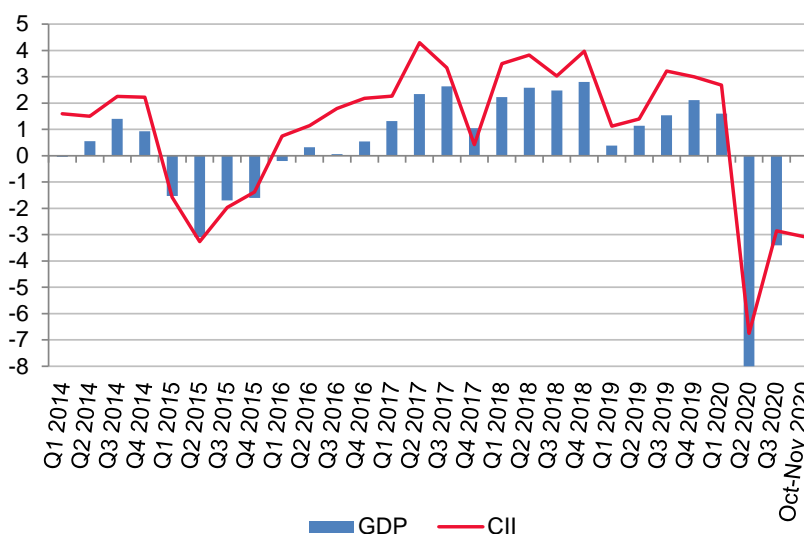
2.1. Economic activity stabilisation at the end of the year

- More selective restrictions than in the spring of last year, and economic agents' gradual adaptation to the new conditions helped to alleviate the impact of the epidemic situation worsening on business activity in the Russian economy at the end of the year.
- A preliminary estimate suggests GDP stabilisation in the fourth quarter at a level close to that of the third quarter. As a result, GDP contraction will likely come in below 4% for the full-year 2020.
- A less deep than was expected in the middle of the year GDP decline in 2020 largely stemmed from a faster activity resumption in the third quarter: the recovery of domestic demand after the key restrictions had been lifted was supported by a rise in budget expenditure and lending expansion.
- Part of changes in the demand and production structure which occurred in 2020 will become permanent. This indicates a likely loss of output potential for at least the period of production factors' redistribution and adjustment to structural changes.

The implications of the epidemic situation worsening in the autumn and winter have had a much milder effect on the economy than during the first bout of the epidemic in the spring. This was, above all, helped by more selective restrictions than in the spring, allowing a more moderate population mobility decline, and by a gradual adaptation of producers and consumers to the changing conditions.

According to a preliminary estimate, the fourth quarter's economic performance was close to the third quarter level. Changes in the core industries index in October–November show just a marginal acceleration of an annual GDP decline in the fourth quarter from -3.4% in the third quarter (Figure 16).

Figure 16. Quarterly index of GDP and CII in physical terms, % YoY



Source: Rosstat, R&F Department estimates.

Therefore, the Russian economy's downturn for the full-year 2020 will be more moderate than forecast in the middle of last year and will likely come in below 4%. That said, we believe that Rosstat's upward revision to 2018–2019 macro statistics will not provide grounds for a subsequent downward revision to the current estimate of 2020 GDP on account of the high base (see box below: *The impact of retrospective revision to 2018–2019 economic performance on the 2020 growth estimate*).

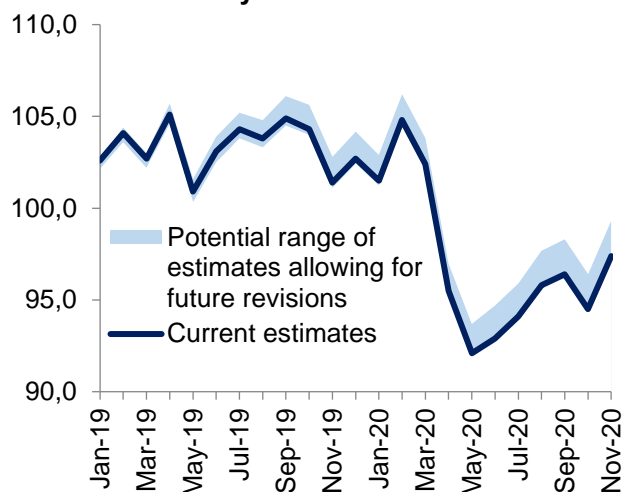
Impact of retrospective revision to 2018–2019 economic performance on 2020 growth estimate

Last year, Rosstat significantly revised key economic performance indicators for 2018–2020. In particular, GDP growth in 2018 and 2019 was revised up by 0.3 pp and 0.7 pp, respectively. This stemmed from, among other things, a revision to industrial output indicators, including for 2020: the new data showed that industrial output contraction during the most acute phase of the crisis amid restrictions put in place in the second quarter of 2020 was more moderate than initial estimates suggested.

The increase in the 2018–2019 base does not imply an automatic reduction in the current estimates of the 2020 GDP performance. Moreover, our analysis of previous revisions to key macroeconomic indicators shows that subsequent revisions to the 2020 GDP estimates are highly likely (Figure 17, Figure 18).

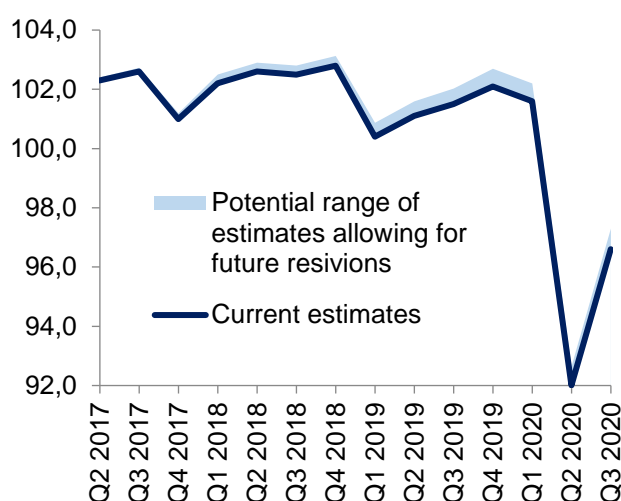
Indeed, the initial estimates of industrial output and GDP figures are, as a rule, revised up. That said, the magnitude of revisions for the entire period of observations equalled up to 2 pp for industrial output and stood within the 0.6–0.7 pp range for GDP.

Figure 17. Industrial output, % of the previous year's level



Sources: Rosstat, R&F Department estimates.

Figure 18. GDP, % of the previous year's level



Sources: Rosstat, R&F Department estimates.

The key factors which, to a large extent, helped substantially to alleviate the 2020 economic downturn are as follows:

- 1. Expansion in social expenditure of the budget to support income and demand.** The end of Q2 – the start of Q3 saw a peak of budget expenditure seeking to contain the crisis.
- 2. Monetary easing.**
- 3. Measures to support lending.** Regulatory easing helped banks expand both corporate and consumer lending.
- 4. Short-term positive impulse from lifting most of the restrictions at the end of the second quarter.** *First*, this provided for a more extensive than initially expected recovery of economic activity in the summer months amid a faster pace of bridging the output gap in consumer goods industries. *Second*, the selective nature of restrictions put in place to combat soaring contagions in the autumn, kept consumption from a sharper fall.
- 5. Domestic tourism substitution for foreign tourism.** An additional impetus to a rise in domestic demand came from the closure of borders. As a result, seasonal expansion in tourist flows was redistributed towards domestic resorts. Also, part of funds which failed to be spent on foreign travel translated into a rise in demand for goods, above all non-food goods.

Despite its recovery, *consumer activity* remained far below the pre-coronavirus level at the end of the year, with its structure having undergone substantial change, part of which may become permanent. This was reflected by the consumption of goods partially substituting for the consumption of services. Indeed, retail sales are already fairly close to the pre-coronavirus level, whereas the provision of consumer services was 12.5% below the level of the start of the year (Figure 19). Retail sales contracted 4.1% for the full-year 2020, while services plummeted 17.3%. As the pandemic situation improves and restrictions are lifted, especially if mass vaccination is a success, one can expect the structure of consumption to gradually return to normal, shifting towards services. However, the consumption structure is unlikely to replicate the pre-coronavirus pattern in the medium- and long term for several reasons.

First, permanent changes in consumer preferences and behaviour arising from the recent adaptation to the implications of the coronavirus crisis, a possible maintenance of the elevated (relative to the pre-coronavirus levels) savings ratio may, for a fairly long period to come, cause the consumption of some, primarily “contact” types of services, to be given up, at least partially,

Second, a mass shift to work from home has shown that this setup does not involve a loss of efficiency. This gives employers an extra bonus of saving part of expenses for office space. This should eventually bring down demand for services associated with work in the office (public transport, office space, public food services, etc.).

Some sectors of the economy, such as communications, online retail, and others, will certainly benefit from the structural changes. In general, structural changes in demand may temporarily bring down *the level* of potential output for the period of adjustment and

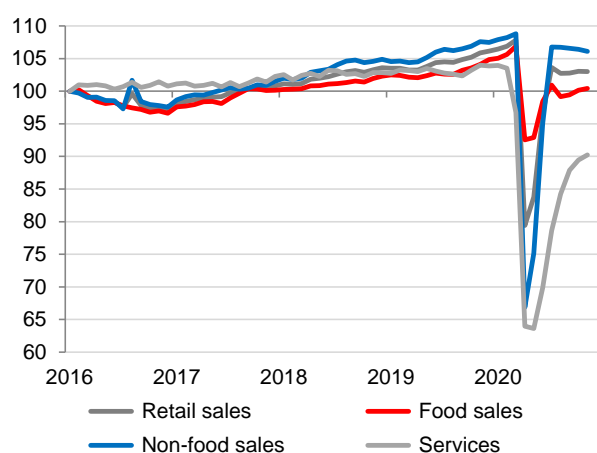
redistribution of production factors which will ensure a return to the *pace* of potential output growth further on.

In addition to a rise in consumer demand, there were signs of a gradual recovery in *investment demand* in second half of the year. As in the case of consumption, some support was provided by the budget investment expenditure. It is also worth mentioning that the depth of the investment decline was much smaller than could have been expected, given a substantial rise in uncertainty. Fixed investment dropped 4.1% in January–September 2020.

We expect investment growth to remain moderate in 2021–2022, despite loose monetary policy. This may be due to the following causes:

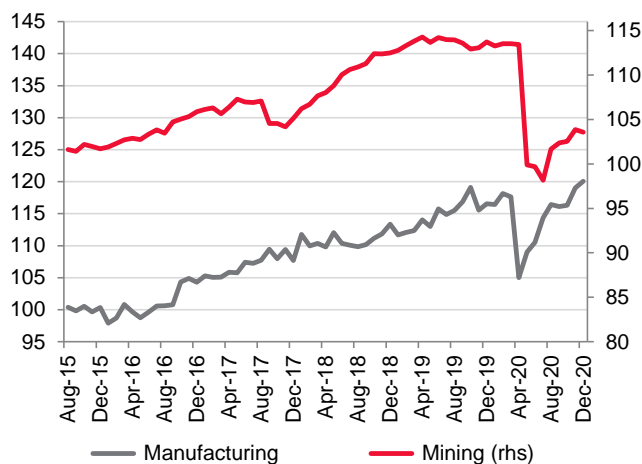
- elevated uncertainty over how long it will take the epidemic situation to come back to normal and, accordingly, what effect this will have on the prospects of business activity recovery;
- recent cuts of investment programmes by systemically important companies and lags in making future investment decisions;
- SME's limited access to financing for reasons other than cost of borrowing

Figure 19. Retail and services sector sales (January 2016 = 100%, seasonally adjusted), %



Source: Rosstat, R&F department estimates.

Figure 20. Change in mining and quarrying and manufacturing indexes (January 2016 = 100)



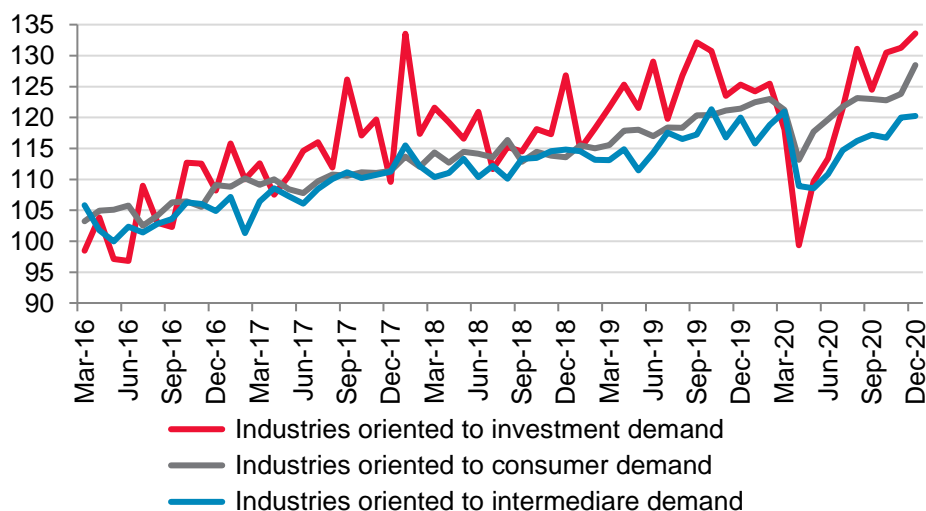
Source: Rosstat, R&F department estimates.

Production performance reflected changes in both the pace of growth and structure of domestic and external demand. Industrial output remained below the pre-coronavirus level at the end of the year, an output decline came in at 2.9% for the year. This was primarily driven by mining and quarrying, in particular oil extraction. Global economic contraction depressed oil demand. The OPEC+ countries responded by signing an agreement on extraction cuts: in Russia, oil production stood 11.5% below the pre-coronavirus level at the end of 2020. As a result, mining and quarrying output contraction was 7.0% for 2020.

Manufacturing output, however, edged up 0.3% relative to 2019 (Figure 20). In consumer goods industries, output *exceeded* the pre-coronavirus level as demand for goods recovered

and imports plunged (Figure 21). Output also rebounded in investment goods industries, but its growth pace so far remains volatile.

Figure 21. Manufacturing industries' output, Jan 2016=100%, seasonally adjusted



Source: Rosstat, R&F department estimates.

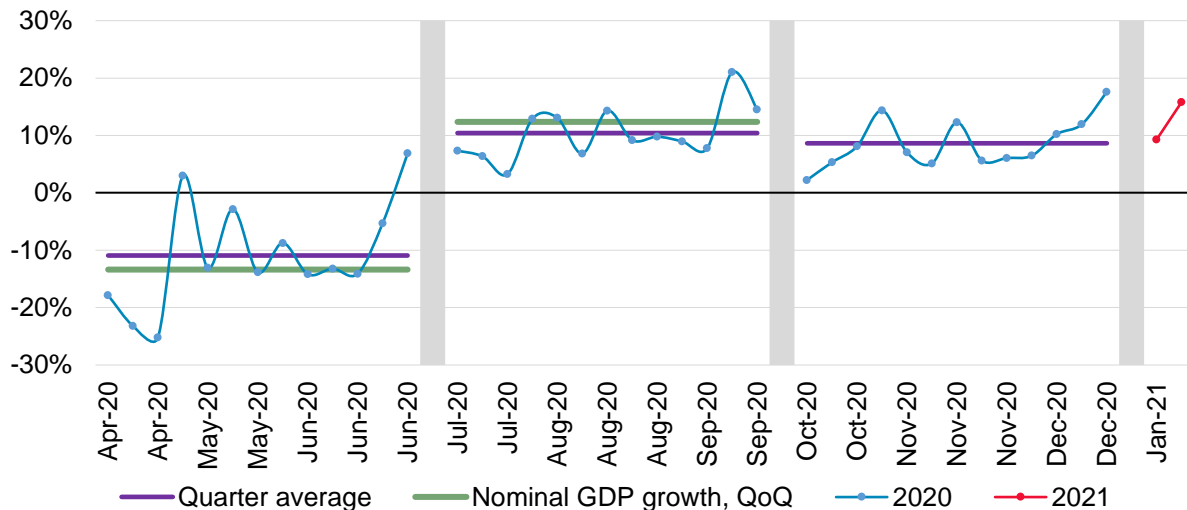
Therefore, consumer demand and external markets will likely remain the key growth engines in the medium term.

2.2. January's business activity remained at previous quarter's level

- According to January's real-time indicators, economic activity generally remained at the previous quarter's level in the beginning of 2021.
- The weekly deviation of incoming payment flows from the average Q4 2020 level was positive at 9.3% and 15.8%, respectively, in the first two business weeks of 2021 (11–15 and 18–22 January, Figure 22), but this was almost totally owed to a rise in financial flows in the government consumption and mining and quarrying (Figure 23). Net of mining and quarrying, petroleum refining and public administration, deviation was close to zero at -0.6% and +0.5%, respectively. Their performance was, however, mixed across groups of industries, showing a significant increase in exports as oil prices went up, a more modest expansion in final and intermediate consumption, and a financial flows' decline in investment goods industries.
- Data from SberIndex Laboratory indicates consumer expenditure stabilisation at last the year level. A gradual improvement in the pandemic situation and the launch of mass vaccination may boost activity in the services sector and shift the structure of demand from goods towards services.
- Electricity consumption data also indicates absence of significant changes in power-intensive industries' business activity (Figure 24). In early January, consumption adjusted for temperature and calendar factors was close to the last year levels. The structurally

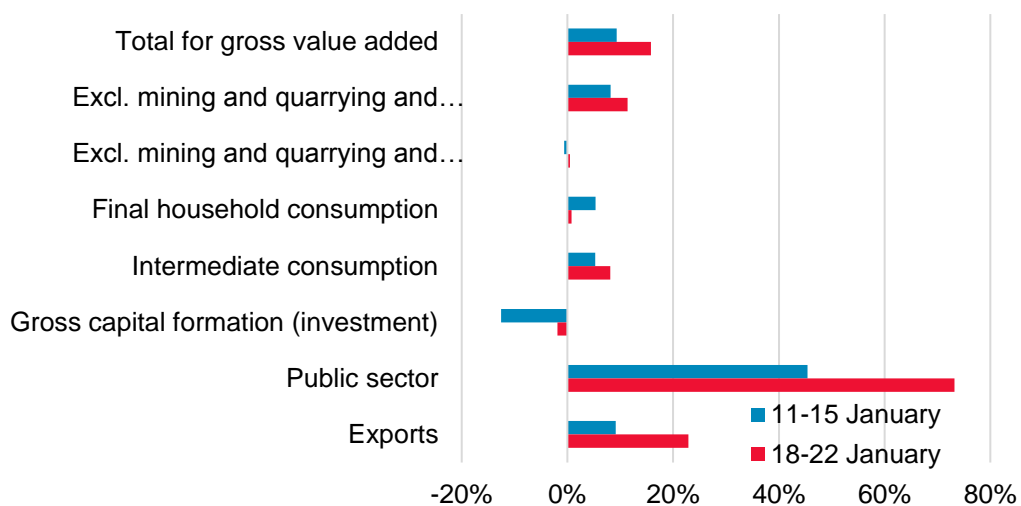
depressed level in oil extracting regions was offset by consumption growth in the Integrated Power Systems of the Centre and the South. This may have stemmed from the cessation of foreign travel and a rise in domestic tourist flows as the borders remained closed.

Figure 22. Deviation of incoming payments from the previous quarter's average level, %



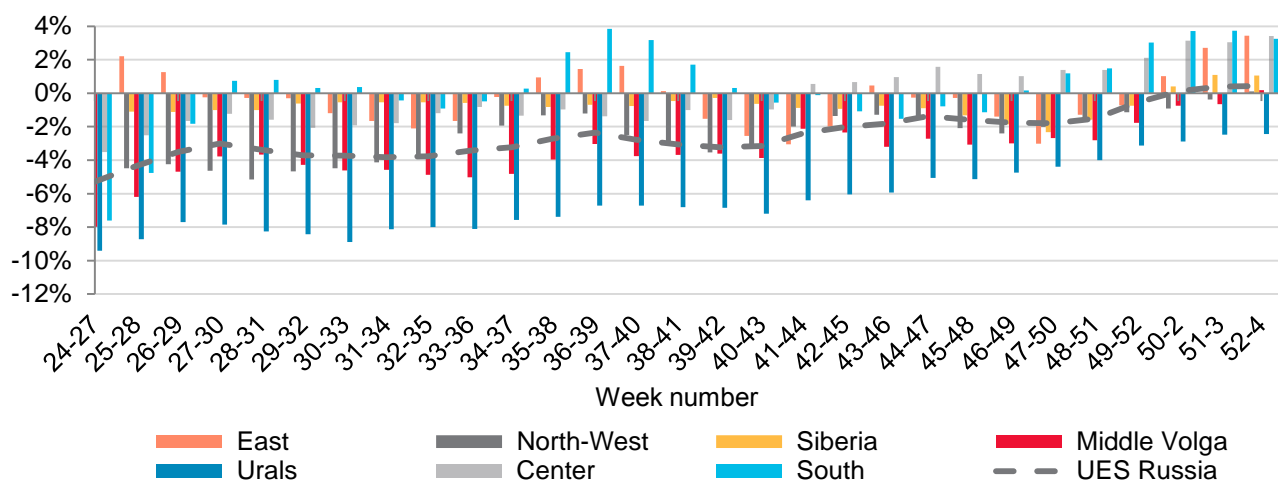
Source: Bank of Russia ([Monitoring of individual industries' financial flows](#)).

Figure 23. Deviation of incoming payments from the previous quarter average level by sector in first weeks of January, %



Source: Bank of Russia ([Monitoring of individual industries' financial flows](#)).

Figure 24. Electricity consumption growth rate, 4-weeks moving average adjusted for temperature and calendar factors, % YoY



Source: System operator of United Energy System, R&F Department estimates.

2.3. Lending expansion supported economic activity recovery in 2020

- Although banks maintained their conservative policy regarding loan issuance amid elevated uncertainty in the economy and the associated rise in credit risks, monetary easing coupled with temporary regulatory easing had a notable positive effect on lending performance in 2020.
- Retail lending growth was driven by mortgage loans at the end of the year. That said, it appears that mortgage loan portfolio expansion is owed to reliable borrowers, which, among other things, boosted the share of mortgage loan application approvals by banks, with the share of other retail loan approvals shrinking.
- Debt servicing quality deteriorated just marginally in 2020, supported by restructuring and credit vacation programmes. As regulatory easing is wound down in 2021, loan quality will not be distorted by these factors. This may limit some banks' ability to expand lending.

Lending performance was affected by a number of mixed factors in 2020. *On the one hand*, lending expansion was contained by an overall economic activity decline and an increase in uncertainty, which prompted banks to tighten issuance standards and maintain cautious lending policies. Introduction by the Bank of Russia in 2019 of adds-on to risk weights in relation to borrowers' debt service ratio contributed to banks' conservative behaviour at the start of 2020. *On the other hand*, lending expansion was buttressed by a shift to loose monetary policy, which provoked a rise in demand for loans even amid falling household and corporate income, as well as by programmes for subsidized retail (mortgage¹² and auto loans¹³) and corporate

¹² Government programmes for subsidized mortgage lending, Far East mortgage lending, rural mortgage lending, and family mortgage lending.

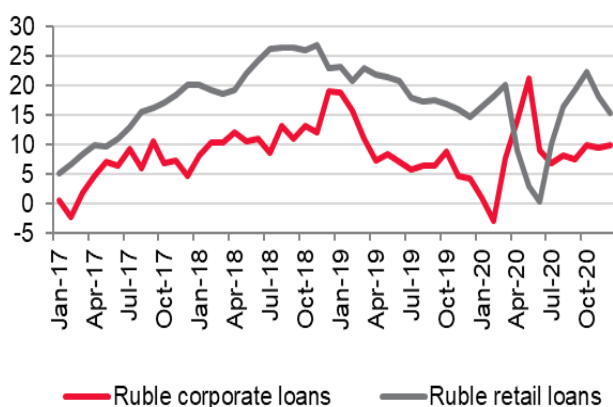
¹³ The First Car and Family Car programmes.

lending, all kinds of regulatory easing for banks regarding macroprudential policy,¹⁴ credit quality assessment, and provisions. As a result, the continuing bank lending expansion provided an important support to economic activity, contributing to the neutralisation of medium-term disinflationary risks sparked by the coronavirus crisis.

The retail lending portfolio growth slowed somewhat to 13.5% YoY in 2020 from 18.9% in 2019. Consistent retail lending growth continued at the end of 2020, accelerating to 1.0% MoM SA in December from 0.6% MoM SA in November (Figure 25, Figure 26).

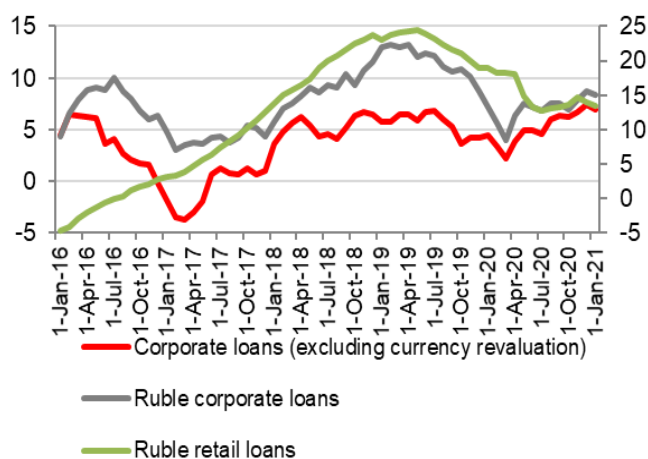
According to [National Bureau of Credit Histories](#) data, household borrowers' personal credit rating continued to decline in December 2020, most notably for consumer and auto loans, which may be attributed to the credit vacation period coming to an end. The relevant segments recorded a [decline in the rate of loan application approvals](#) in 2020, reflecting the maintenance of banks' conservative approach to risk assessment in an environment of increased uncertainty.

Figure 25. Lending performance, 3-month annualized average, %



Source: Bank of Russia.

Figure 26. Banks' credit growth % YoY



Source: Bank of Russia.

The mortgage loan segment, however, posted a rise in loan application approvals. Monetary easing by the Bank of Russia and subsidized mortgage lending programmes constituted a significant support primarily in the period of the worst economic implications of the pandemic. At the same time, bank reporting data for the second and third quarters indicates an increase in the share of mortgage loans in which borrowers' debt service ratio was less than 50%. This, in our view, indirectly reflects the fact that higher-income groups are extensively taking advantage of the current favourable terms of mortgage lending. This is especially typical of the largest Russian cities, which have low housing availability under the generally accepted international standards. Better-off households mostly have their own housing by now, therefore, their motivation for buying more housing is investment. According to independent expert estimates, a risk of price hikes in the new housing market stemming from its possible

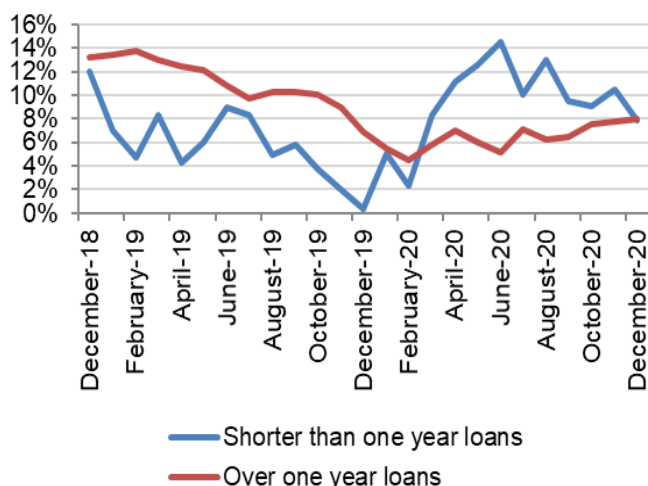
¹⁴ The Bank of Russia eased its macroprudential policy at the end of the first quarter, reducing risk weights for a number of requirements, including a reduction or cancellation of add-on to risk weights for some loan requirements in the mortgage and unsecured consumer lending segments.

overheating already now exceeds the benefits from the cuts of interest rates on mortgage loans, at least in large urban agglomerations.

The unsecured lending segment posted less notable interest rate cuts than other segments did in 2020, since the effect of monetary easing was partially offset by upward pressure on interest rates from rising lending risks.

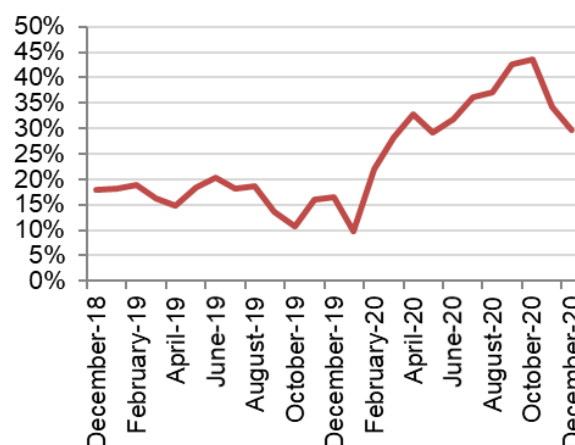
Ruble corporate lending growth gained pace marginally to 8.4% in 2020 from 7.2% in 2019 (Figure 27). Growth accelerated in the middle of the year thanks to short-term loans, but its pace corrected down somewhat towards the end of the year as subsidized loan programmes came to an end and a part of subsidized loans were written off. That said, the continued growth acceleration in medium- and long-term loans, which are gradually replacing short-term loans as business activity comes back to normal after the most acute phase of the crisis had been passed in the second quarter, provides support to investment activity.

Figure 27. Loans to non-financial organisations, % YoY



Source: Bank of Russia

Figure 28. Loans to financial organisations, % YoY



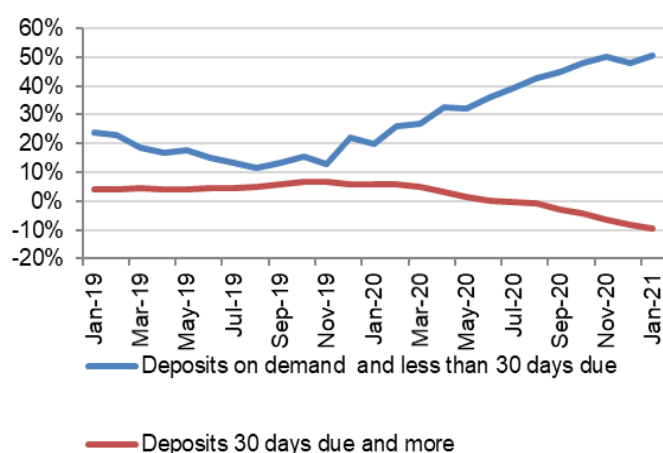
Source: Bank of Russia

Average household ruble deposit expansion in 2020 stayed on approximately the 2019 level at 0.8% MoM SA. The deposit structure, however, changed substantially: *First*, the balances of escrow accounts rose extensively by almost 1 trillion rubles.¹⁵ Net of these, average monthly deposit growth slowed from 0.8% MoM SA in 2019 to 0.5% MoM SA in 2020. *Second*, the term structure of deposits changed (Figure 29). Elevated uncertainty coupled with the cuts of interest rates on long-term deposits amid monetary easing led households to shift their preferences towards short-term deposits. For this reason, many banks started to offer easy-access savings accounts, rates on which are not much different from those on time deposits.

¹⁵ Balances of escrow accounts totalled 1,117 billion rubles as of end-2020, standing at 139 billion rubles at the end of 2019.

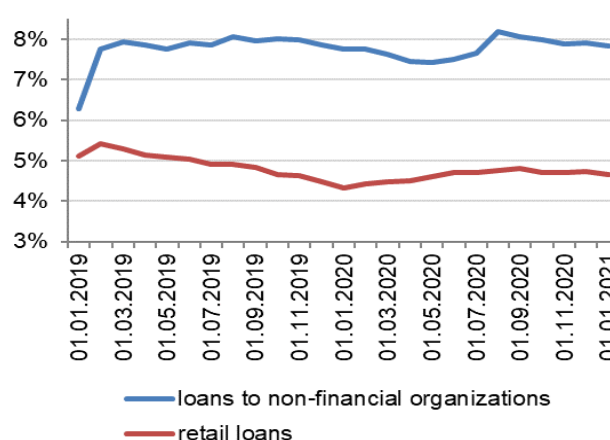
Loan servicing quality remained generally close to the 2019 level in 2020, thanks to, among other things, [restructuring and loan vacation programmes](#).¹⁶ Loan-loss provisions¹⁷ expanded as of end-2020. Provisions growth was fuelled by a rise in uncertainty, borrowers' deteriorating financial position and exchange rate fluctuations. There is still elevated uncertainty over further credit quality changes as regulatory easing comes to an end in 2021. Many borrowers' solvency deteriorated in 2020. Part of them will face fairly persistent implications of the pandemic and structural changes in demand which it has brought about. The presentation in banks' balance sheets of borrowers' true financial positions will help avoid the accumulation of problems going forward but may limit some banks' potential to expand lending in the short-term.

Figure 29. Annual deposit growth, by maturity, % YoY



Source: Bank of Russia

Figure 30. Share of past-due loans, %



Source: Bank of Russia

Still, the relatively high level of profit earned by the banking sector in 2020 may smooth over possible negative consequences of regulatory easing cessation. At 1.6 trillion rubles, the 2020 profit was just 6.3% below the 2019 number, largely due to its low amount in the first half of the year. The banking sector's 2020 financial result was buttressed by net interest income and net fees and commissions income, up 8.4% and 10%, respectively.

The interest rate cuts affected both interest income and interest expense, but the interest expense decline was so far more significant: the maturity of banks' liabilities is shorter than that of assets, hence they respond to interest rate changes more promptly. In expectation of a potential interest income drop, banks built up fees and commissions income via payment and cash services, fund transfers, and intermediary services under brokerage and similar agreements. One should bear in mind that banks' 2020 financial result was supported by foreign currency and precious metal operations, which more than quadrupled last year.

¹⁶ [According to a business survey of credit institutions](#), 0.86 trillion of retail loans (for 75 largest credit institutions) were restructured, with debt on restructured corporate loans totalling 5.1 trillion rubles (for 33 largest credit institutions).

¹⁷ Adjusted for IFRS9.

IN FOCUS. Structured bonds as a potential alternative to deposits: not all is gold that glitters

- Households' interest in stock market instruments, including high-risk assets, have surged in the past year. The inflow of funds to structured bonds was spurred by the cuts of interest rates on bank deposits amid monetary easing by the Bank of Russia during 2020, with rising stock market volatility against a background of elevated uncertainty over the pandemic also playing a part: banks tended to offer structured bonds as a safe alternative to deposits.
- A significant part of structured bonds in retail investors' portfolios was represented by domestic bonds with full protection of capital, with extra returns linked to foreign share prices or indices (stock market or OTC indices). One of the key risks of investing in structured bonds is that they are a complex non-linear combination of, let's say, a deposit and options, which complicates the assessment of their fair value. They also carry an issuer's credit risks, including a possibility of bankruptcy and delay in payments, as well as liquidity risks and market risks inherent in selling these bonds in secondary market.
- Adjusted for this risk and sales (subscription) fees explicitly or implicitly paid by customers, returns on these products will highly likely be lower than what investments in conventional instruments offer. Indeed, realized returns of redeemed structured bonds in 2020 were much lower than what deposits opened in 2019 offered. If novice investors find themselves disappointed in returns on such investments, demand for new issues will drop following a decline in the popularity of these products, with investor confidence in the stock market taking a hit. This carries risks of heightening financial market volatility, since household fund inflows and outflows thus become increasingly non-uniform.
- In this environment, it is important to give individuals with no experience of investments in the stock market a proper insight into all risks inherent in changing their status from depositors to investors, because, unlike insured deposits, investments in structured bonds may involve a possible loss of returns and invested funds. Therefore, it makes sense for retail investors not to buy complex investment products whose risks they are unable to fully assess.

Soaring household interest in financial market instruments

The year 2020 saw not only the periods of elevated financial market volatility fanned by the pandemic but also countries' large-scale monetary easing aiming to combat the fallout of this crisis. In emerging economies, this resulted in substantial cuts of interest rates on deposits and traditional bank depositors' outflow into alternative instruments.

The development of remote identification technology, mobile applications for people investing on their own, and brokers' current low fees sparked a retail investor boom in the Russian stock market.¹⁸ Amid the high volatility, investors targeted high-risk assets: domestic

¹⁸ For example, the number of retail investors on Moscow Exchange, increased 2.3 times to 8.8 million in 2020.

and foreign stocks (including those issued in IPOs), foreign currency, options, various funds and hybrid products, for instance, structured bonds.

Last year saw retail investors' growing interest in stocks and foreign exchange instruments. More conservative bank customers who were not prepared to tap the stock market often sought higher returns within banks themselves. A number of banks, meanwhile, were willing to meet household demand by offering various investment products under the guise of deposits, which may have triggered a rise in the incidence of mis-selling. Indeed, layman clients may have well failed to realize that from depositors they were turning into investors

Aware of this, the Bank of Russia sent market participants [an information letter](#), recommending that they not sell complex products, and in January 2021 drew up a [draft directive](#) banning their sale until mandatory testing was introduced. On top of that, the State Duma is already discussing [draft legislation](#) on limiting the sale of complex financial products to untrained investors.

Under the current legislation¹⁹, a structured bond is deemed to be a bond in which payment is subject to the occurrence of certain events or their failure to occur and may be lower than its par value (a bond with partial protection of capital). That said, recent years have seen a wide acceptance of the so-called "investment" bonds with full protection of capital, where the performance of underlying assets (stocks, interest rates, currency exchange rates, indices, etc.) only gives rise to the payment of extra returns rather than that of par value. Unlike classic bonds, they have a non-uniform structure with complex formulas for calculating extra returns and attendant risks. For the purposes of this study, partially and fully capital protected bonds are deemed to be structured bonds.

In recent years, structured bonds have remained one channel of depositors' outflow into the stock market. In 2020, banks and brokers extensively promoted both structured bonds issued by residents (as a rule, instruments with full protection of capital²⁰), and structured bonds of foreign issuers (with full or partial protection of capital). The bulk of bonds from resident issuers were issued by major banks, while bonds from non-residents were issued by both the largest investment banks and small companies with a low credit rating or unrated. Most of the year, bonds of both types listed in Russian stock exchanges²¹ were available for untrained investors. In most cases, the stated (expected) return on these bonds is higher than on bank deposits, but it is not emphasized that this estimate is based on the results of previous periods, does not guarantee of future returns and is only realized upon the occurrence of special conditions. As a result, actual (realized) returns often fail to match expected returns, falling far below them (or those on bank deposits).

¹⁹ Article 27.1-1 of Federal Law No 39 FZ of 22.04.1996, On the Securities Market.

²⁰ Full protection of capital in structured bonds provides for an issuer's obligation to repay a total of invested funds upon redemption. The repayment of funds is not, however, guaranteed by the government.

²¹ Moscow Exchange ruled in December 2020 to suspend untrained investors' access to trading in securities of the largest foreign issuer of structured bonds, <https://www.moex.com/n31861/?nt=106>.

Individuals as buyers of structured bonds

The participation of individuals in the structured bond market has increased several times in recent years (Figure A-1). As of 30.11, 2020, private individuals held in Russian depository accounts 503 billion rubles of structured bonds (up 58% from the start of the year), including 242 billion rubles of foreign bonds, 213 billion rubles of domestic bonds, 49 rubles of bonds of foreign issuers making up the same group with a Russian financial intermediary. Net inflow of retail investors' funds (unadjusted for foreign exchange revaluation) to structured foreign bonds totalled 40 billion rubles over 11 months of 2020, an inflow to domestic bonds – 84 billion rubles, to structured bonds of foreign investors making up one group with a Russian financial intermediary – 17 billion rubles. Instruments with full protection of capital (variable return) account for the bulk of structured bonds, whereas structured bonds from foreign issuers have various risk profiles.²²

Also, structured bonds are used as an underlying investment in a number of large standard strategies of asset management. The largest of them (holding 57 billion rubles of private individuals' portfolios as of 30.11.2020) invests funds totally in structured bonds of its own financial group. A client in fact pays a double fee: for asset management and a structured bond (which prices in a fee for the organisation of the structure). This strategy has now suspended customer acquisition. A number of brokers and asset managers also offer structured products in the form of over-the-counter agreements and derivative financial instruments, with the latest estimate putting a total of these structured products at 105 billion rubles.

Key underlying assets of structured bonds

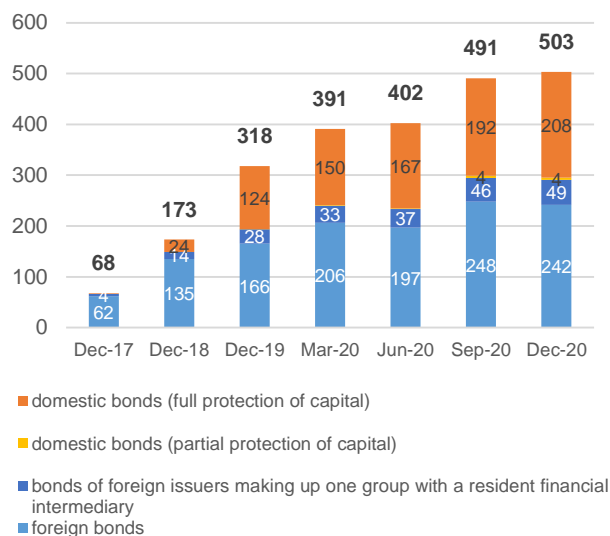
The analysis of the underlying assets of residents' structured bonds²³ suggests that extra returns on these bonds is linked mainly to the performance of foreign equities (Figure A-2). This is largely owed to a long period of global equity market growth, leading the customers to count (unreasonably) on the continuation of this trend in the future. Structured bonds linked to Russian equities, synthetic foreign indices,²⁴ and oil, gold, and industrial metals also gained increasing popularity in 2020. By contrast, the share of securities linked to foreign currency exchange rates declined. Rising popularity of bonds whose coupon is linked to foreign equities (mainly technological companies) stems from both rouble weakening and high volatility in equities last year. A sharp fall in March, followed by a rebound, as well as a rapid expansion in the shares of some industries benefitting from the pandemic may have given rise to investor expectations of making a fast gain upon buying these securities.

²² For example, foreign securities often include instruments with capital participation): with a link to a basket of instruments, embedded barrier options, and possibility of early redemption below par based on the performance of the worst asset in the basket (Worst of Autocallable Notes), and also those linked to credit risk (a default event) of any of securities in the bond basket (Credit Linked Notes).

²³ Comprehensive information on foreign issuers' structured bonds is not available for analysis, which is another factor complicating their fair valuation.

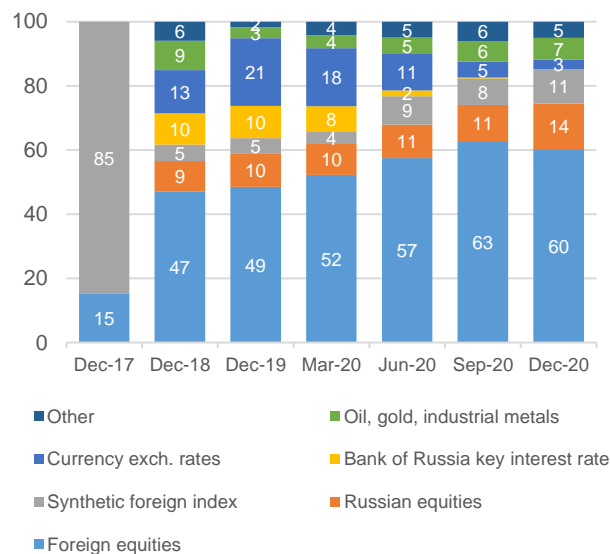
²⁴ The class Synthetic Foreign Indices includes indices for various combinations of foreign equities, sovereign bonds, and other assets, implying, among other things, active management (dynamic weights of individual index components are revised based on their returns or volatility).

Figure A-1. Total of structured bonds in retail investors' accounts, by issue type, billion rubles



Sources: Bank of Russia, Cbonds.

Figure A-2. Total of structured bonds in retail investors' accounts, by underlying asset type, %



Sources: Bank of Russia, Cbonds.

Returns on structured bonds

Realized returns²⁵ on redeemed issues have steadily declined in the last two years (Figure A-3). The 2019 results are, however, not so representative because the volume of redemptions was small (Figure A-4). The largest number of redemptions took place in Q2–Q4 2020, when returns were the lowest. The market's overall weighted average return came in at just 3.8% in 2020, one and a half times as low as [returns on deposits](#) opened at the end of 2019 and almost one third lower than inflation for that year.

Actual returns on investments in structured bonds may come out lower if a *front-end fee* for the purchase of a product charged in some cases is factored in. This fee may reach 2% of foreign structured bonds' par value, whereas it is not charged in the case of a conventional bank deposit.

As can be seen from Figure 5-A, low realized returns are most often paid by structured bonds linked to currency exchange rates which were extensively issued in 2019 – the start of 2020. The extra return calculation formula for these instruments provided for a narrow range of exchange rate fluctuations, therefore a rise in volatility produced a minimal extra return. Retail investors may have failed to fully understand the specifics of the product they were buying, and it is therefore very likely that realized returns failed to meet their expectations based on exchange rate performance.

Many bonds issued in 2019–2020 have a maturity of up to five years, and therefore the main results of investing in structured bonds will only be known in 2024–2025. For a novice investor, this is a long time compared with a bank deposit, and it is very likely that part of retail

²⁵ Realized returns were weighted by a total of investments in retail investors' accounts and calculated based on an assumption that bonds were bought at par and held to redemption.

investors will want to sell bonds early in the secondary market, most probably at a discount to par value.

Figure A-3. Weighted average realized returns on redeemed structured domestic bonds, % p.a.

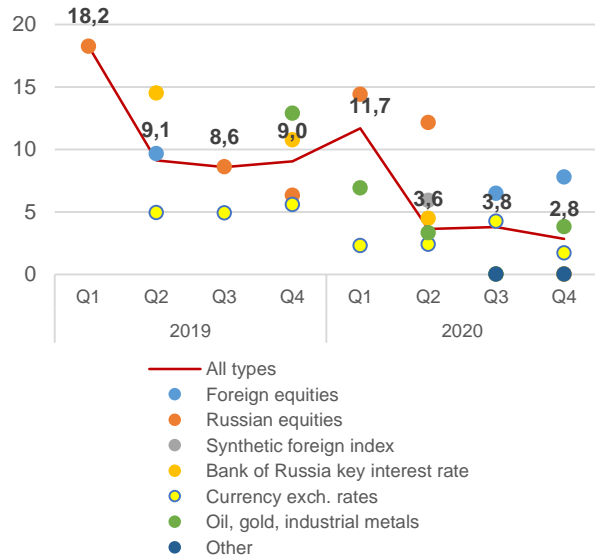
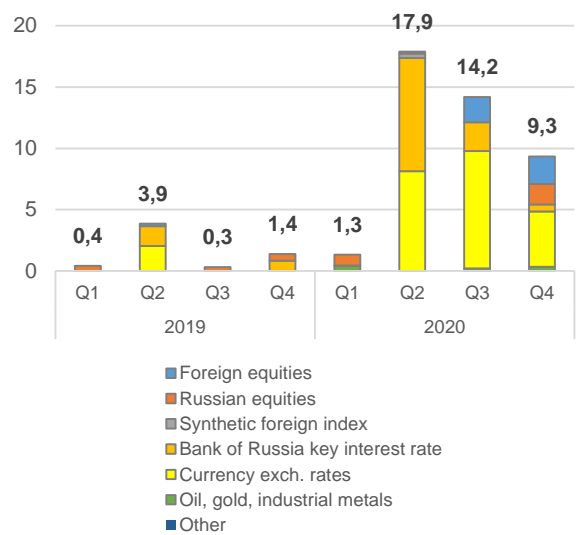


Figure A-4. Total of redeemed structured domestic bonds, billion rubles



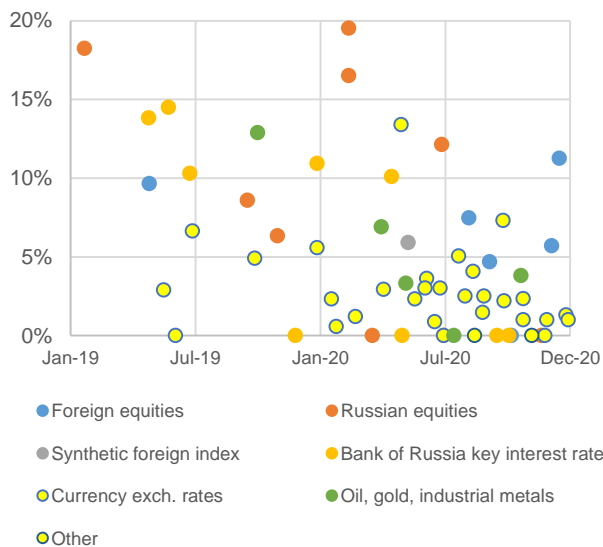
Note: Returns are weighted based on a retail investor holdings on depositary accounts as of the last date before the redemption.

Note: A total of redeemed bond issues includes retail investor holdings on depositary accounts as of the last days before the redemption.

Sources: Bank of Russia, Cbonds, Centre for Corporate Information Disclosure.

Sources: Bank of Russia, Cbonds.

Figure A-5. Realized returns of some of residents' redeemed structured bond issues, % p.a.



Note. Issues with non-zero retail investor holdings.

Sources: Bank of Russia, Cbonds, Centre for Corporate Information Disclosure.

Specifics of structured bonds with protection of capital

Despite the ostensible simplicity of structured bonds with protection of capital, the calculation of extra returns on them is extremely complicated. This makes it difficult not only for untrained investors but even for professional traders to assess their fair value. Algorithms most often used in the formula for calculating extra returns in relation to underlying assets are presented in Table A (see Appendix).

In choosing an underlying asset and a calculation formula, structured bond issuers seek to strike a balance between the attractiveness of the product to investors and a desired profit for themselves. This may result in an intended complication of calculation formulas and wrong investor expectations regarding future returns. *It is very hard to value structured bonds because most of them are “black boxes” for investors not only at the time of purchase but also at the time of redemption.* Because of the intricate calculation formula, realized returns on structured bonds may be very different from investor expectations, which are based on underlying assets' performance. As a result, novice investors' disappointment in structured bonds aggravates their mistrust of the stock market in general.

Professional traders are also not always able to accurately assess structured products' fair value: their valuation requires knowledge of relevant markets' segments, spreads, and liquidity, as well as expertise in valuing the components of options or other derivative instruments, etc. This is reflected in the prices of the secondary market for structured bonds with its low liquidity and a wide spread between bid and offer prices. The only participants of the structured bond market which in most cases receive income are the issuer and an underwriter, which are, as a rule, the members of the same financial group. They receive an investment fee, front-end fee or an opportunity to raise inexpensive funding for their own financial group.

Structured bonds' differences from bank deposits

Wishing to participate in growth of a particular asset through buying a structured bond, untrained investors in fact buy an intricate combination of a deposit and derivative financial instruments, in particular, options which are used by issuers to implement an embedded formula for calculating extra returns. The key differences between a classic deposit and structured bonds are presented in Table B, from which it can be seen that a bond with full protection of capital can hardly be regarded as a comparable alternative to bank deposits (see Appendix).

Structured bonds with partial protection of capital carry a clear risk for an untrained investor to lose a part of initially invested funds. At the same time, structured bonds with full protection of capital involve a high risk of return being underpaid compared with conventional deposits, given the complicated formula for calculating extra returns on such bonds. This paves the way for mis-selling.

Conclusions

Most structured products are sold through the offices of credit institutions: either as a stand-alone product or as part of combined products (a deposit plus an investment component). Customers are not, however, always aware that they are buying structured bonds, because sales agents use terms such as an investment deposit, a guarantee of capital protection, guaranteed returns, etc., without specifying what is actually meant. These products can be misperceived as a usual bank deposit agreement. Also, it is not mentioned that an early withdrawal of funds from structured bonds is only possible via selling them in the secondary market at a discount. Moreover, a considerable volume of structured bonds maturing in five years heightens the probability of an early sale. All this may mislead potential customers.

On top of this, structured bonds carry credit risks associated with a bond issuer. In buying these products, untrained investors are guided by their intuition rather than by rational expectations. In this context, the issue of protecting the rights of untrained retail investors becomes especially relevant and can be addressed by mandatorily testing untrained customers of professional securities market participants for knowledge of investment products.

Appendix

Table A

Key characteristics of formulas for calculating extra returns on capital protected structured bonds

| Formula specifics | Description | How complicated is assessment and formation of expectations for future returns |
|--|---|--|
| Requirement for an underlying asset to stay within a limited price range (corridor). | The range of an underlying asset's price fluctuation allowing extra returns to be paid is limited to a narrow corridor. | Amid elevated volatility, the price of an underlying asset breaks through the corridor, and extra returns are not paid even if an investor "guessed" the direction of the underlying asset's price movement right. |
| Requirement for several underlying assets not to fall below a certain level. | For extra returns to be paid, several (4–5) underlying assets should stay within a certain price range, e.g., above 100% of initial value. | Probability of all underlying assets staying within a certain range is lower than it seems at first sight. Asset prices can move in one or several directions, while price changes not necessarily match normal distribution. Under these circumstances, an attempt to predict the behaviour of a portfolio of, say, 4–5 underlying assets looks more like a lottery. This can be compared with an attempt to come up with all "tails" in tossing a coin several times in a row. |
| Using underlying asset prices as a trigger for the payment of returns. | It means that underlying assets should stay within a certain price range. The calculation of extra returns does not, however, directly use underlying asset prices. | An investor's maximum return is limited to a formula and does not allow full "participation" in an underlying asset rise. Underlying asset prices in fact only act as triggers for receiving or failure to receive returns, which resembles a wager deal with an uncertain wager. |
| Using underlying assets or private indices with "intransparent" quotes. | Using illiquid, rarely quoted foreign companies' shares or a private index with an issuer or a related person acting as its administrator. | Private indices are not generally accepted or reliable, the methodology of their calculation may be adjusted at any point, with the history of its values revised. Information about the quotes of such indices may be non-public or provided for a special fee. As a result, the extra return calculation formula becomes a "black box". |
| Using a variable parameter in the formula. | The formula includes a parameter directly affecting the size of extra returns and allowed to be changed by an issuer during a bond offering. | An investor subscribing to a bond does not know a maximum size of future returns, because the issuer can adjust the parameter based on its own idea of product marginality. Information about marginality is not disclosed, however. |
| Using a parameter for realization of a "memory effect". | The formula includes a parameter defining, for example, the number of preceding valuation dates on which extra returns equalled zero. | Relationship between the size of extra returns and underlying asset prices is conditional and non-linear. |

Note: the type of underlying asset "Bank of Russia key interest rate" is not reviewed, since there were no securities linked to this underlying asset on retail investors' accounts as of 30.11.2020.

Sources: Bank of Russia, Cbonds.

Table B

Comparative characteristics of a bank deposit and structured bonds

| Criterion | Conventional bank deposit | Classic bank bond | Structured bonds with full protection of capital | Structured bond with partial protection of capital |
|---|---|-------------------|--|--|
| Fixed return | + | | + | (as a rule, 0.01%) |
| Extra return | | - | +/- | (is calculated post factum for individual coupon periods under a predetermined formula, depends on the performance of underlying assets) |
| Government guarantee of repayment of funds | + (up to 1.4 million rubles, including interest) | | - | |
| Early termination and repayment of initial sum | + | | - | (sale at a discount in secondary market is, as a rule, only possible) |
| Guarantee of initial sum repayment at maturity | | + | | - |
| Use of agent scheme (seller and issuer are different persons) | - | | + | |
| Fees (broker, depository, <i>front-end fee</i>) | - | | + | |
| Market risk | - | | + | (if sold before maturity) |
| Income taxation at 13% | - (up to 1 million rubles * key interest rate as of the start of the year) | | + | |

Source: Bank of Russia.

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