



TALKING TRENDS Economy and markets

Research and Forecasting Department Bulletin

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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 dip1@cbr.ru

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Executive summary

MONTHLY SUMMARY

- Based on leading indicators, the Russian economy was back on a solid growth path in late 2021. Aggregate data suggest most industries recorded a meaningful acceleration in growth. As before, credit made a significant contribution to rising consumer and aggregate demand. This came with high growth rates of consumer prices seen between December and early January, including their most stable components. This may cause a slight rise in annual inflation in January and slow a lowering of inflation expectations of households and businesses, which are still high.
 - The steady growth in domestic and external demand continues to outpace the
 potential expansion in production of good and services, in the context of persistent
 logistical problems which result in longer delivery times and increased delivery costs
 and anti-pandemic requirements. Unemployment (seasonally adjusted) hit a record
 low, leading to stronger tensions in the labour market and skills shortages. Growth in
 lending, especially in retail lending, is still very high, in defiance of gradually rising loan
 rates.
 - The persistent demand and supply gap both in the national economy and globally is fuelling overly high growth in consumer prices. The inflation trend has yet to give way to disinflationary forces. The January indexation of some administered prices and rates at the level significantly above the inflation target may well become a further driver of inflation expectations. That being said, as slower growing demand reaches more moderate and steady levels following the tightening of monetary policy, the demand and supply imbalance will level up, gradually setting prices on a slower growth path. The ongoing progressive improvements in global production and logistics chains will ensure a normalisation of logistics costs over a medium-term horizon.
 - The tightening in monetary conditions was ongoing. The rises in the key rate propelled loan and deposit rates higher. Russian financial markets slumped in January against the backdrop of rising geopolitical tensions. The significant rise in bond yields suggests that recent weeks have been marked with a more significant tightening in monetary conditions.

IN FOCUS. Economies and inflation both grow above expectations in 2021

In 2021, the global economy started off with wide mobility restrictions. Consumer activity
was expected to recover gradually, with the need still in place to extend incentive
measures in large part. With the unprecedented nature of crisis events and persistently
high uncertainty about global epidemiological developments and their implications for the
global economy, it was difficult to forecast key macroeconomic indicators.

- Economic growth in 2021 came in considerably above forecasts. Businesses and households adjusted to the change in conditions faster than expected, while stimulus packages proved excessive in some cases, entailing an overheating of the economy.
- Business had limited capacities to ramp up output in the context of ongoing anti-pandemic restrictions and their ill-preparedness to rapidly increase product demand. This created a demand and supply imbalance, enabling producers to pass increased costs through into consumer prices. Growth in inflation expectations was reported in countries where they are unanchored, which necessitated a further easing of monetary conditions and fuelled both consumer activity and prices.

1. Inflation

Inflationary pressure remains elevated. Prices have not yet shown signs of a sustainable disinflationary trend. A strong rise in domestic demand is still evident, fuelled by a continued fast pace of lending growth, which accelerated further at the end of 2021, and by high household and business inflation expectations. The expanding practice of automatic indexation of regulated services prices and wages for actual inflation gives rise to additional inflationary pressure, threatening to set off an inflation spiral: prices—wages—prices.

A dramatic inflation acceleration in the US and Euro zone, covering a wide range of goods, is aggravating cost-push inflationary pressure in the global economy. In Russia, this factor also gives impetus to inflation expectations, hampering transition to sustainable inflation deceleration.

Despite the impact of these proinflationary factors, the ongoing interest rate hikes in the Russian economy will make consumption growth more sustainable in the short term, including by encouraging households' savings behaviour. Macroprudential policy measures will further contain growth in the riskiest segments of retail lending. The disinflationary effect of decisions taken in 2020 will, with lags inherent in the impact of monetary and macroprudential policy, gradually strengthen. The attenuation of the effect of one-off proinflationary factors which made itself felt in some markets for goods and services will boost disinflationary trends further.

1.1. Annual inflation gains pace in January

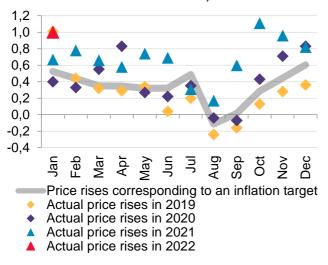
- Month-on-month price rises slowed in December, helped largely by a reversal of some one-off factors' impact which made price hikes accelerate in November.
- The pace of price rises remained elevated in a wide range of goods and services at the start of January. This will likely send annual inflation higher for January.
- Price growth also remains elevated in some of stable inflation components, showing no signs of subsiding so far. A strong rise in demand still allows producers to pass their costs through to consumers. We have yet to see a change of trend from inflationary to disinflationary.
- At the same time, the expected slowdown in retail lending growth and a further rise in households' savings activity in the wake of loan and deposit rate increases are set to weaken proinflationary pressure from demand, helping consumer price growth slow further.

December saw consumer prices go up 0.82% in seasonally unadjusted terms (Figure 1). Annual inflation remained unchanged from the end of November at 8.39% (Figure 2).

Seasonally adjusted consumer price growth slowed to 6.82% MoM SAAR in December (Figure 3), thanks to, above all, temporary and one-off factors, such as catching up with the

usual fruit and vegetable harvesting schedule and foreign travel prices coming back to normal. That said, based on our estimate, the contribution of the stable components to inflation stayed far above 4% as against a background of continuing supply-side constraints and elevated demand, fuelled by, among other things, elevated inflation expectations, which allows producers to pass through costs to prices.

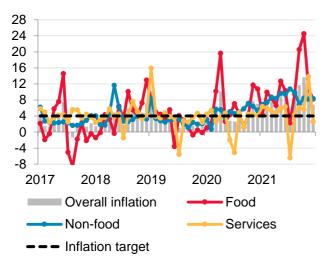
Figure 1. Price rises corresponding to an inflation rate of 4%, % MoM



Note. January 2022 - preliminary estimate.

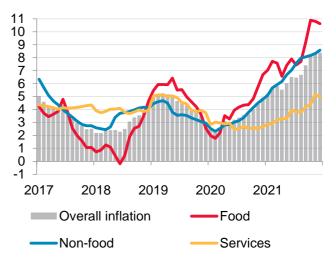
Source: Rosstat.

Figure 3. Seasonally adjusted inflation, % MoM SAAR



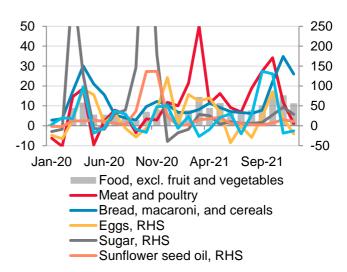
Source: Rosstat, R&F Department estimates.

Figure 2. Inflation and its components, % YoY



Source: Rosstat

Figure 4. Seasonally adjusted price rises for some food products, % MoM SAAR



Source: Rosstat, R&F Department estimates.

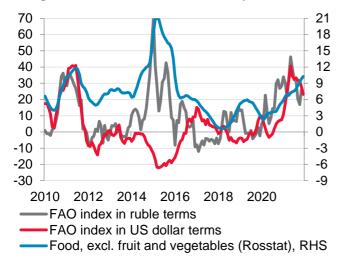
Monthly food price rises slowed to 8.21% MoM SAAR, driven by meat and poultry which have a substantial weight in the consumer basket (Figure 3, Figure 4). An important disinflationary contribution continues to come from a slower than seasonally normal rise in fruit and vegetable prices after their faster than usual growth at the end of the summer - start of the autumn. Net of them, an increase in food prices slowed somewhat in December, remaining,

however, elevated across a wide range of foodstuffs. Pressure of global markets on domestic food prices remains significant (Figure 5).

The non-food segment's price growth has stabilised in the past three months, staying close to 8% MoM SAAR. It came in at 8.35% MoM SAAR in December (Figure 3). As the shortage of components continues, both imported and domestically produced passenger cars remain the key factor of price growth. Fuel price rises remain overly fast. Wholesale petrol prices resumed their growth in the second half of December in the wake of world petroleum price rises (Figure 6). Given the scheduled rise in the conditional cutoff price as part of calculating a price increase for 2022 under the damper mechanism, pressure on retail petrol prices may continue in the weeks to come.

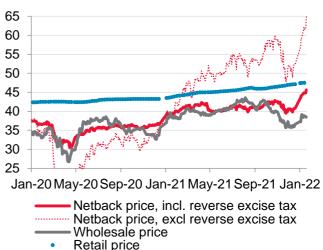
The services sector's price rises slowed sharply to 2.60% MoM SAAR in December from 13.84% MoM SAAR in November on the back of a decline in the prices of travel to Turkey after their temporary increase at the end of November, when the New-Year tour¹ prices were included in calculation (Figure 3). The volatility of individual components remains considerable in the services sector.

Figure 5. World and domestic food prices % YoY



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

Figure 6. Al-92 petrol price, rub/litre

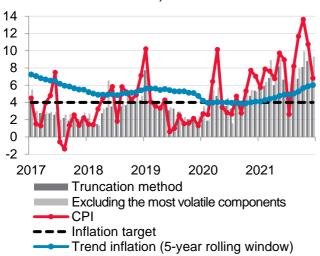


Sources: St Petersburg International Commodity Exchange, Rosstat, R&F Department estimates.

The analytical indicators of sustainable price movements continue to go up at a pace which is far above an annualised rate of 4% (Figure 7, Figure 8). This suggests the continued contribution of stable components to overall price growth. Trend inflation rose to 6.01% in December. The average core inflation indicators and the distribution median inched down from their October and November peaks but remained above 8% MoM SAAR and 5% MoM SAAR, respectively. Therefore, we have not so far seen a change from an inflationary to a disinflationary trend.

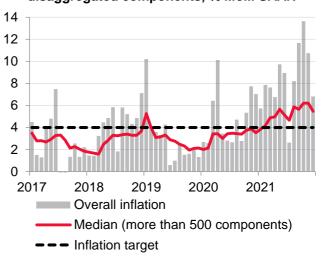
¹ The price index calculation includes lower prices of tours in January.

Figure 7. Modified core inflation indicators and trend inflation estimates, % in annual terms



Source: Rosstat, R&F Department estimates.

Figure 8. Median distribution estimated on disaggregated components, % MoM SAAR



Source: Rosstat, R&F Department estimates.

Inflationary pressure remained elevated at the start of 2022 (Figure 9). Consumer prices climbed 0.88% over the 1–21 January period, with an annual inflation estimate standing at 8.6%.

An indexation of excise taxes and regulated public services prices² normally affects price rises at the start of January. A 6% increase in public transport prices may buttress household inflation expectations. New car price tags which rose an average 1.86% over the reporting period made a substantial contribution to this. The input of the above components to price increases from the start of the month came in at 0.14 pp. Fruit and vegetable prices went up 4.9% over the first three weeks of January, generally in line with a normal seasonal change (Figure 10). An elevated pace of price rises continues across a wide range of categories.

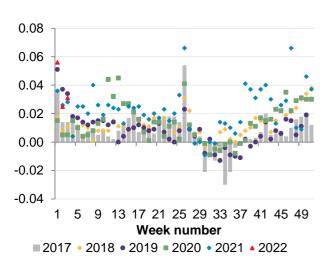
Based on real-time data, price rises will likely come in close to 1.0% MoM NSA for the whole of January (Figure 1, an estimate of 10% MoM SAAR) (taking into account a one-off "technical" contribution of a methodology revision by Rosstat³). This corresponds to annual inflation acceleration to 8.7%–8.9% in January.

Price statistics reflect the continuation of a clear proinflationary effect of rising demand in a situation where the supply of goods and services fails to increase in line with demand. At the same time, a continued increase in loan and deposit rates will put a brake on retail lending growth, boosting household savings activity. This is set to weaken proinflationary pressure from demand and slow down consumer price growth.

² Public transport prices rose 6.2% compared with the end of December, housing services prices climbed 2.4%, petrol prices added 0.6%.

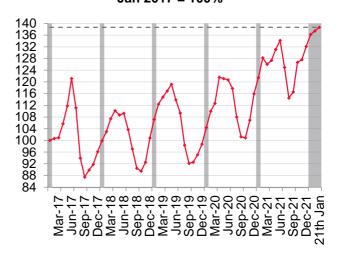
³ Price registration to be used for estimating monthly CPI moves will, from now on, be carried out in the last five days of a month instead of the 20th–25th days, which may provide an additional one-off "technical" contribution of about 0.1 pp to an overall price increase in January because of additional six days: prices on 26–31 January will be compared with those on 25–31 December, i.e., over an average of 37 days. Rosstat may, however, include price rises over the last days of 2021 and estimate January's price growth relative to data thus included.

Figure 9. Average daily price rises, %



Source: Rosstat, R&F Department estimates.

Figure 10. Fruit and vegetable prices, Jan 2017 = 100%



Note. Up to December 2021 inclusive – monthly data, then weekly data.

Source: Rosstat, R&F Department estimates.

2. Economic activity

The acceleration of Russia's economic growth at the end of 2021 has increased the statistical base effect, laying a stronger foundation for GDP growth to come closer to the upper limit of the Bank of Russia's forecast range in 2022. Also, given the inertia of the current strong economic performance extending over all of the largest segments of Russia's economy, its confident growth seems to be continuing into Q1 2022, helped also by strong lending activity in both the retail and corporate segment at the end of 2021.

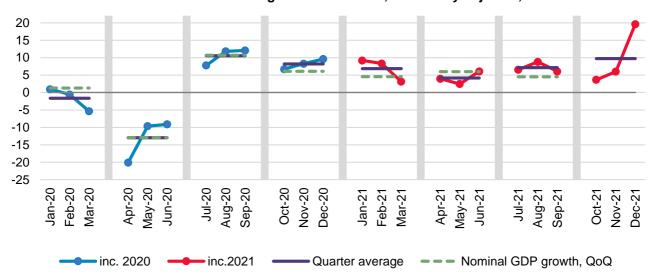
Amid strong demand growth, the Russian and global economies are experiencing an increasing load on production, transport, and other logistics chains whose development fails to match a rise in demand. Excess demand which the economy is unable to meet in the face of the above constraints, creates additional inflationary pressure. The realisation of substantial geopolitical risks may hamper growth prospects. Another risk factor is a rapid spread of the COVID-19 Omicron variant: if a considerable share of personnel get infected simultaneously, disruptions in production and provision of services may arise. The shortage of personnel so far makes itself felt on the level of individual professional skills and businesses but is gradually covering an increasingly large number of businesses. This may become a factor limiting growth of the economy at large, given all-time lows of unemployment.

2.1. Solid economic growth at end-2021

 The Russian economy successfully finished the year 2021. Moreover, real-time indicators suggested an acceleration of business activity growth at the end of Q4.

- Indeed, the performance of PMI indices suggests that activity growth in December was supported by manufacturing expansion and a slowdown in the services sector decline (Figure 14, Figure 15), where the recovery was restrained by an adverse epidemic situation.
- Data on individual industries' financial flows in turn indicated a progressive increase in the pace of incoming payment growth throughout Q4 in all of enlarged groups of industries (Figure 11). Confident growth in financial flows continued into January, judging by realtime data for the first weeks of the month.
- Price rises continue to play an important part in financial flows' nominal expansion. But the economy's rising payments also reflect business activity changes to a great extent. Recent months have seen a notable increase in the number of industries showing a nominal quarter-on-quarter payment growth. Importantly, the growing uniformity in the performance of payment flows on the individual industries' level goes along with a rise in payments on the regional level. This indirectly bears out the stability of financial flows, which offers beneficial prospects for the continuation of confident business activity growth in the months to come. A gradual growth stabilisation close to sustainable long-term levels is expected in the subsequent period.
- At the same time, the performance of financial flows may become volatile in the face of the negative structural consequences of the coronavirus, as well as the continuing uncertainty over the future epidemic situation development and the rising geopolitical risks. Should this be the case, economic growth stabilisation will take longer.
- The current elevated pace of demand growth in the Russian economy is still accompanied by a number of supply-side constraints. Indeed, as economic growth accelerated at the end of last year, the restraining effect of slower expansion of production potential became more obvious. One of the supply-side constraints is limited labour supply. The unemployment rate stabilised at an all-time low of 4.3% SA at the end of the year, while business surveys are indicating problems with personnel shortages in manufacturing: the balance of perceptions regarding the sufficiency of production capacity and personnel in an Institute for Economic Policy survey dropped to lowest level on record.
- The shortage of personnel amid growth in demand, the improving financial result, and elevated inflation expectations, triggers "wage competition". i.e., a significant rise in wages seeking to attract new workers who are in short supply and/or keep those currently employed. It appears from a Bank of Russia business survey, that this process is so far segmented and confined to individual professional skills and enterprises. But wage expectations are rising, just as businesses' willingness to raise wages more than planned earlier.
- Given the economy's return to the pre-COVID trend, as well as recent monetary policy decisions and fiscal policy's return to normal, we expect economic growth to return to potential in 2022.

Figure 11. Growth⁴ in incoming payments relative to the previous quarter's average, weighted by the share of industries in gross value added, seasonally adjusted, %



Source: Individual industries financial flows monitoring.

Figure 12. Nominal weekly household everyday expenditure, thousand rubles

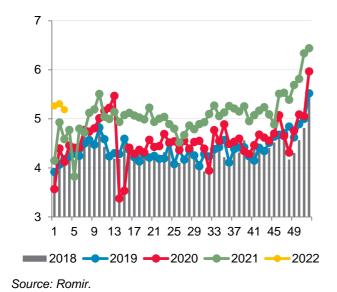
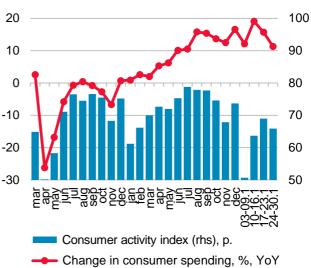


Figure 13. Spending on goods and services and the consumer activity index



Source: SberIndex.

⁴ The pace of economic growth means an increase in the required value in percentage terms: $g = \frac{(x_1 - x_0)}{x_0} * 100$.



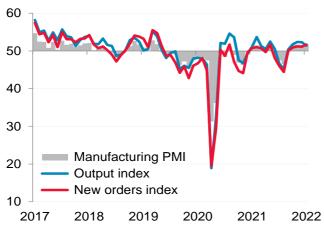
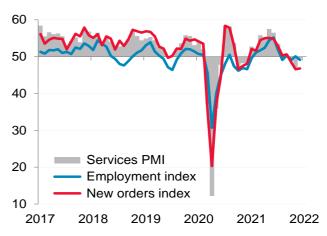


Figure 15. Russia PMI Services indices, p.



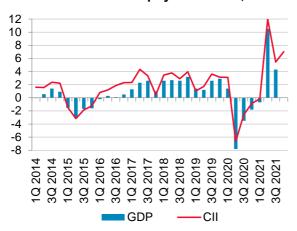
Source: IHS Markit. Source: IHS Markit.

The final estimate of economic growth in 2021 may exceed 5%

Economic growth for the whole of 2021 may come in above 4.5%. Economic growth accumulated over the first three quarters of 2021 already stands at 4.6% YoY. That said, the performance of the core industries' index for October–November suggests a possible acceleration of annual GDP growth in Q4 (Figure 16).

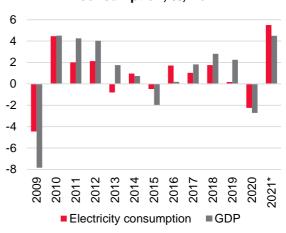
Economic growth which was beating expectations throughout 2021, increases the base effect for GDP growth in 2022. Even if quarterly growth slows down to zero throughout 2022, GDP for the whole year will, according to our estimate, come in 1.4% above the 2021 result. That said, the estimate of 2021 GDP is very likely to be revised up subsequently. This is, for example, evidenced by the figures of electricity consumption. In the periods of growth, its expansion is usually slower than that for the economy at large (Figure 17). Electricity consumption is to a certain extent an indicator of how much the final estimate of 2021 GDP growth may be revised in the years to come.

Figure 16. Quarterly index of GDP and core industries' index in physical terms, % YoY



Sources: Rosstat, R&F Department estimates.

Figure 16. GDP growth and electricity consumption, %, YoY



* Electricity consumption estimate based on the Russia SO UES data. Upper limit for Bank of Russia GDP growth forecast. Source: SO UES, Rosstat.

At the end of 2021, Rosstat revised up the estimate of the economy's growth for 2019, revising down the estimate of how steep was its decline in 2020. As a result, GDP trajectory rose 0.5 pp over these two years, which indirectly suggests that the potential of economic growth in the pre-pandemic period stood close to 2%.

2.2. Lending continues to make significant contribution to demand growth in Russian economy

- Recent monetary and macroprudential policy decisions have yet to translate into the level
 of loan rates and loan issuance in full. Retail and corporate loan portfolio expansion
 remained elevated at the end of 2021. Therefore, a substantial contribution of lending to
 a rise in domestic demand and overall economic activity continued.
- The banking sector's capital adequacy against a background of a strong net profit creates conditions for further lending expansion, which will, however, occur at more moderate pace than in 2021.
- The effect of the deposit channel of the monetary policy transmission mechanism is seen increasingly more clearly. This is corroborated by an acceleration of household time deposit growth.
- The expected slowdown of retail lending growth following monetary tightening and owed to macroprudential measures, as well as a rise in the attractiveness of deposits which is sending the savings ratio higher will help inflation deceleration in 2022.

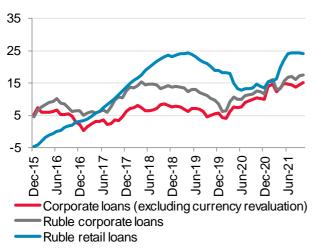
The pace of retail lending expansion remained elevated at the end of 2021, accelerating from 1.2% MoM SA to 1.7% MoM SA (Figure 19). With a part of the mortgage pool written off the banking sector's balance sheet for securitisation, acceleration was not that strong: 1.8% MoM SA after 1.7% MoM SA in November. Some banks' real-time data suggest that elevated retail lending growth was posted in both key segments: mortgage and unsecured consumer lending.

Lending continues to provide an important input to consumer demand growth. The credit impulse of retail lending hit a new local high at the end oa the year, reflecting its substantial contribution to consumer demand expansion (Figure 21). This was chiefly owed to unsecured consumer loans.

That said, it should be borne in mind that monetary policy decisions taken in 2021 have not yet fully translated into interest rates for end borrowers, while the existence of subsidised programmes slows this process somewhat, although not so much as in the first half of the year (Figure 20, Figure 23). The elevated pace of lending growth expansion is driven by both rising inflation expectations and expectations for further hikes of loan rates. This also explains the lagged effect of monetary policy tightening by the Bank of Russia. The share of loans to borrowers with the debt service ratio from 50% to 80% in a total of unsecured consumer loans declined somewhat in November.

We expect a gradual cooling of the retail lending market in the coming months following the transmission of monetary policy decisions reinforced by further macroprudential policy measures.⁵ Bank surveys also give reason to expect a lending growth slowdown, driven by demand and supply alike. Indeed, the toughening of bank lending terms and conditions started as early as Q2 2021 (Figure 22). What is more, in Q3, banks expected retail loan demand to fall on a six-month horizon, with these expectations rising further in Q4.

Figure 17. Banks' credit growth % YoY



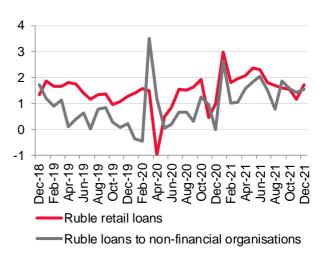
Sources: Bank of Russia, R&F Department estimates.

Figure 20. Interest rates, rise from January to November 2021, pp



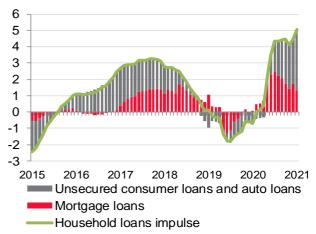
Sources: Bank of Russia, R&F Department estimates.

Figure 18. Banks' ruble credit growth, % MoM SA



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

Figure 21. Credit impulse in retail segment *



* Based on data of forms 101 and 316 including those on MBS. Monthly data are used to calculate the annual credit impulse, i.e., an increase in annual lending growth in absolute terms. It is calculated relative to GDP by end use.

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

⁵ As of 1 January 2022, the Bank of Russia toughened the methodology of assessing borrowers' income using Bureau of Credit Histories data. Imputed income based on Bureau of Credit Histories data will be calculated as an average monthly amount of a borrower's actual payment on earlier taken loans increased 1.5 times (earlier – 2 times). On top of that, to limit the issuance of long-term (longer than 5 years) consumer loans, the Bank of Russia as of 1 February 2022 amended rules for calculating borrowers' debt service ratio, which will raise the debt service ratio for such loans. This will increase banks' capital requirements for long-term consumer loans, making their provision less lucrative.

Growth in ruble loans to non-financial organisations net of sole proprietorships also accelerated somewhat from 1.4% to 1.6% MoM SA (Figure 18).⁶ Corporate lending was buoyed by <u>rebounding business activity in industries producing investment goods, an increase in companies' sales, and by an improvement in business conditions in manufacturing industries. The resumption of subsidised programmes seems to have also played a role. Loans to financial institutions contracted 1.7% MoM SA.</u>

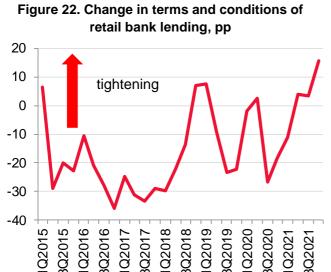


Figure 23. Total of subsidised mortgage loan issuance, billion rubles

800

400

200

Jan-20 May-20 Sep-20 Jan-21 May-21 Sep-21

Mortgage loans net of shared equity projects

Mortgage loans under shared equity schemes

Far East mortgage loans

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

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

Family mortgage loansSubsidised mortgage loans

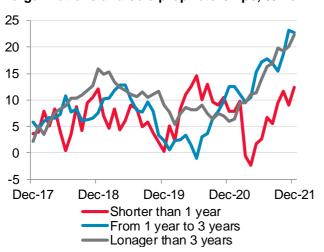
The deposit channel of the monetary policy transmission mechanism is now operating more extensively than the credit one. Growth in household funds on bank accounts and deposits accelerated dramatically from 0.8% to 1.8% MoM SA in December, probably as end-of-the-year bonus payments expanded. A total of deposits with maturities from 31 days to 1 year and from 1 to 3 years is rising in year-on-year terms. Ruble household funds added 7.0% YoY for 2021, up just marginally from 6.6% in 2020. The structure of growth has changed significantly: as interest rates rose, the attractiveness of time deposits increased (Figure 25).

Growth in corporate customers' funds slowed somewhat from 3.2% to 3.0% MoM SA in December. The continuation of elevated growth pace may suggest that the non-financial sector is maintaining its strong profits but may also result from a rise in budget spending at the end of the year. Based on real-time data, consolidated budget revenue was far larger in December than a year earlier. Corporate ruble deposits expanded 22.7% YoY for the whole of 2021 and 17.0% YoY when adjusted for foreign exchange revaluation.

The banking sector's net profit hit a record high of over 2.3 trillion rubles for 2021. The banking sector's profit is buttressed by <u>net fee and commission income and net interest income</u>. That said, the stable quality of the loan portfolio helped reduce provisions significantly.

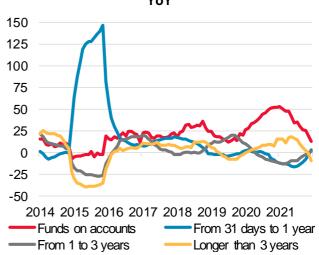
⁶ Growth in credits to sole proprietorships accelerated from 2.4 to 4.7% MoM SA.

Figure 19. Growth of loans to nonfinancial organizations and sole proprietorships, % YoY



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

Figure 20. Household ruble funds at banks, % YoY



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

Interest rate raises and economic growth slowdown may cause a minor rise in provisions going forward. Still, bank capital accumulated by now will support lending throughout 2022. However, exposed to the tightening of monetary policy and macroprudential policy measures, the pace of lending expansion will correct gradually, slowing to more moderate but also more sustainable levels.

IN FOCUS. GDP and inflation both grow above expectations in 2021

In 2021, the global economy started off with wide mobility restrictions. Consumer activity
was expected to recover gradually, with the need still in place to prolong support
measures in large part. With the unprecedented nature of crisis events and persistently
high uncertainty about global epidemiological developments and their implications for the
global economy, it was difficult to forecast key macroeconomic indicators.

- Economic growth in 2021 came in considerably above forecasts. Businesses and households adjusted to the change in conditions faster than expected, while stimulus packages proved excessive in some cases, entailing an overheating of the economy.
- Business had limited capacities to ramp up output in the context of ongoing anti-pandemic
 restrictions and their ill-preparedness to meet a rapid increase in product demand. This
 created a demand and supply imbalance, enabling producers to pass increased costs
 through into consumer prices. Growth in inflation expectations was reported in countries
 where they are unanchored, which necessitated a further easing of monetary conditions
 and fueled both consumer activity and prices.

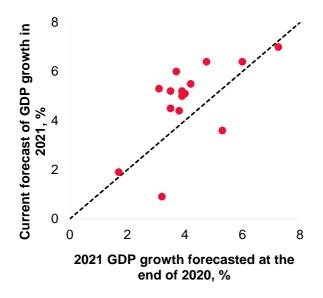
The uniqueness of the coronavirus crisis largely made it impossible for economists to rely on historic experience in forecasting future economic performance even under a scenario of the gradual normalization of the epidemic situation. As a result, the forecasts of key global macroeconomic indicators for 2021 prepared by government or international organizations and analysts far deviated from actual numbers. At the start of 2022 the uncertainty regarding the prospects for the neutralization of the pandemic's impact on production and sales chains, migration processes, global trade, and commodity market conditions is still high.

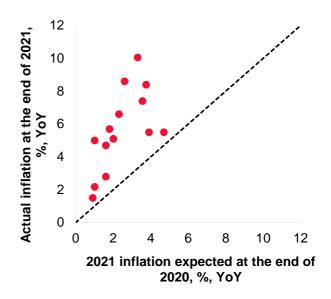
The forecast estimates of economic growth in 2021 prepared by the IMF a year earlier came in 1.3 pp below the estimates of actual growth for advanced and 0.4 pp below those for emerging markets. Central banks underestimated the pace of economic recovery in their respective countries by more than 1 pp in China (2.3 pp), Poland (2.2 pp), SAR (1.7 pp), the US (1.3 pp), the Eurozone and Canada (1.1 pp) (Figure 26). The official estimates of Russia's economic growth in 2021 equaled 3.0%–4.0%, whereas the current estimates expect actual growth at 4.5%. Of all members of the sample,⁷ only the regulators of Thailand and Indonesia, whose economies heavily depend on tourist activity, which remained low due to the closure of borders, overestimated their economies' growth.

⁷ Comprised of the US, the Eurozone, the UK, The Czech Republic, Canada, China, Brazil, SAR, Hungary, Poland, Thailand, and two subgroups: Advanced Countries and Emerging Markets under the IMF definition.

Figure 26. Growth expected in 2021 at the end of 2020 and the current 2021 growth forecast, %

Figure 27. 2021 inflation expected at the end of 2020 and the actual 2021 inflation, %





Source: Press releases of central banks and IMF WEO.

Source: Press releases of central banks and IMF WEO.

One can pinpoint the following key reasons for underestimating economies' growth:

- Conservative nature of forecasts. Although the global economy showed signs of returning to the path of recovery-induced growth at the end of 2020, the majority of macroeconomic forecasts quite justifiably conveyed cautious optimism. Economists expected smooth acceleration of economic growth as industry and the services sector adjusted to operating amid new restrictions which looked inevitable, given a rapid spread of the COVID-19 Delta variant. In fact, this adaptation to the new environment was much faster: population mobility substantially recovered towards the middle of the year, to never drop back to the 2020 level.
- Difficulties in calibrating stimulus during the acute phase of the crisis and the pace of its subsequent tapering. Massive fiscal and monetary stimulus which staved off an even greater squeeze of global economic activity in 2020, brought about an overheating of a number of economies, triggering a sharper rise in commodity prices than in previous cycles, sometimes to their all-time highs. Coupled with the lingering supply-side constraints and fueled by massive household savings built up in 2020, all this gave rise to one of the highest rates of global consumption growth over the past decade.
- Problems with forecast models "learning". Econometric models employed by economists and central banks are not accurate enough in predicting the pace and scale of change in indicators during the periods of heavy turbulence. Apart from that, unlike traditional cyclical fluctuations caused by economic processes, the coronavirus crisis did not arise from built-up imbalances, was non-economic in nature, and therefore, failed to

⁸ <u>A World Bank analysis shows</u> that since 1970s the stage of a commodity price rise has usually been longer than that of a fall.

fit in the logic of existing models adequately. Amid the crisis unprecedented in the speed and nature of developments, standard forecasting models which many agencies still employed underestimated both the depth of their respective economies' fall and the pace of their recovery. New techniques of estimating the current change in economic activity and the speed of shock propagation through <u>intersectoral linkages</u> helped address this problem in part.

Soaring inflation turned out to be an even bigger surprise in 2021. Already at the end of 2020, global inflation showed an acceleration trend amid a price rally in global food and industrial metal markets (Figure 28). But the estimates of pressure from consumer demand remained moderate despite the massive fiscal and monetary stimulus, since its greater part was accumulated as savings. On top of that, disrupted production and logistics chains were expected to gradually recover.

Figure 28. Bloomberg Commodity price indices (01.01.2019 = 100)

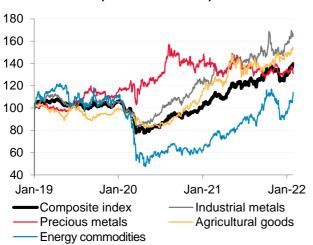
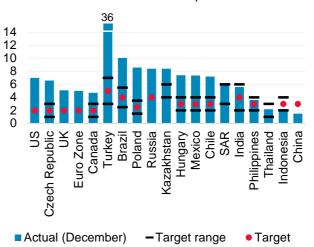


Figure 29. Headline inflation and inflation targets in selected countries, % YoY



Sources: Bloomberg Finance L.P., R&F Department estimates.

Source: Bloomberg Finance L.P.

Actual 2021 year-end inflation came in 3 pp above the forecast of year-end 2020 in the majority of advanced countries (3.9 pp in the US, 4.0 pp in the Euro Zone) and two times above the forecast in some emerging markets (6.8 pp in Brazil, 6.0 pp in Poland) (Figure 27). The pace of price rises in 2021 accelerated to 8.4% YoY in Russia, with the initial forecast standing at 3.5%–4.0%. The concurrent effects of demand-side and supply-side factors propelled actual 2021 inflation levels to 30-year and 10-year highs in advanced countries and emerging economies, respectively. Price rises came in far above the target in many emerging economies (Figure 29), which gave a rise to inflation expectations.

The global nature of inflation acceleration boosted price rises via the foreign trade channel in many countries.

One can pinpoint five main causes behind the significant deviation of actual figures from the 2021 inflation forecast:

Income recovery and the consumer behaviour model. A much faster recovery of household income and consumer sentiment than in previous years helped realise pent-up demand, bringing down the savings ratio. That said, expectations for the reopening of borders and a change to the pre-coronavirus consumer behaviour model together with a rise in spending in the services sector have failed to materialise in full.⁹ This pushed up price pressure in markets for goods, especially in countries which at normal times posted a services balance deficit.

- Structural changes in the labour market. Despite expectations, the labour market saw
 pressure mounting towards the middle of 2021: the labour market participation rate
 declined,¹⁰ many countries remained closed to migrant workers, although the need to hire
 workers in a variety of labour-intensive industries (assembly and delivery of orders, IT),
 increased significantly.¹¹
- Global factors of inflation. A rapid recovery of energy markets in the wake of accelerated rebound of economic activity has amplified the effect of global proinflationary factors. Mounting protectionism in a number of countries seeking to protect domestic food and energy markets and some industrial sectors from external price fluctuations also played an important part in this process.
- Disruption of logistics chains. Problems with production chains are lingering, continuing to contain the recovery of supply of goods and a part of services (to say nothing of its fast expansion). That said, additional demand from producers may have reflected their eagerness to accumulate inventories out of caution, to insure themselves against possible delivery disruptions in the future.¹² In this environment, producer costs rose dramatically. Still, given abnormally strong demand, producers were able to pass the rising costs on to prices.
- Mounting inflation expectations. Unlike previous episodes, the ongoing crisis has seen major secondary effects of price rises. The most vulnerable to this problem are emerging markets, where inflation expectations are poorly anchored. Inflation acceleration spurred by confident recovery of income and demand outpacing supply affected, among other things, socially important goods. Taken together, this drove inflation expectation to elevated levels and pushed up medium-term proinflationary risks, which required the majority of central banks to timely tighten monetary policy.

Estimates presented in Figure 30 bear out the point about the uniqueness of the ongoing crisis lying in the fact that demand-side and supply-side factors are acting simultaneously. Their concurrent and unidirectional effect has caused inflationary pressure to rise beyond

⁹ Some segments of the global services sector have yet to recover their sales to the pre-crisis levels, whereas retail sales have long risen above the pre-coronavirus numbers.

¹⁰ Among factors behind this are departure of personnel because of an elevated mortality rate, reorientation of population to shorter working hours, fear of contagion, restrictions on hiring unvaccinated workers, and others.

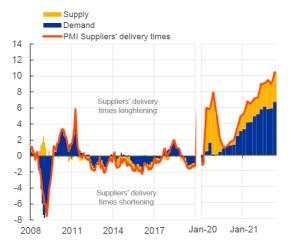
¹¹ According to the ILO, there are currently 1.8% more unemployed people (or 21 million) around the world than there were in 2019. The unemployment rate in OECD countries has risen an average 2%, while vacancies have contracted by 20 million.

¹² Fedulova, Chernyadyev, Porshakov (2020). Restructuring of global production chains; from efficiency to stability. Analytical note. Bank of Russia.

expectations. An analysis of the impact of demand-side and supply-side factors on the subindex of producers' output prices in Russian manufacturing suggests a similar conclusion (Figure 31).

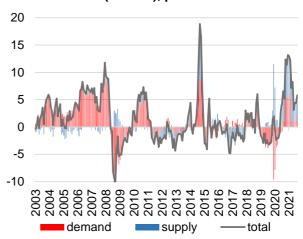
The relative effect of demand and supply factors on delivery times and output prices changes with time. Whereas the effect of supply-side factors prevailed in 2020, demand-side factors came to the fore in 2021.

Figure 30. Decomposition of PMI global suppliers' delivery times index into demand and supply shocks (factors), points



Source: ECB.

Figure 31. Decomposition of PMI Russia output price index into demand and supply shocks (factors), points¹³



Sources: IHS Markit, R&F Department estimates.

The coronavirus crisis forced governments of most countries to conduct their policies in a situation of high uncertainty, in a new, unprecedented environment. Massive monetary and fiscal stimulus helped the global economy grow faster than expected in 2021, but this came at the cost of mounting inflationary pressure. At the beginning of 2022 most countries globally are facing risks associated with the possible implications of new COVID-19 variants' spread, persistently high inflation, stability of government debt, and higher income disparity.

In Russia the balance of inflationary risks leans notably towards proinflationary effects, given the continued significant contribution of enduring demand-side factors to an elevated pace of price rises and an increase in inflation expectations. The Bank of Russia's monetary policy seeks to restrain the risks of a longer upward deviation of inflation from the target, returning it to 4%.

¹³ Estimates are obtained using BVAR models with sign restrictions.

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