TALKING TRENDS
Economy and markets
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2. In focus: how damper mechanism stabilises petroleum product prices _29

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

1. Monthly summary

- Inflation rose to 2.5% in March after hitting a low of 2.3% in February. A substantial rouble weakening coupled with a one-off spike in demand for some nonperishable goods temporarily pushed overall consumer price inflation up despite a drop in demand for other goods and services. A new episode of temporary inflation acceleration is taking place amid lower household and business inflation expectations than those seen in 2018. This helps a greater tolerance of monetary policy for a short-term increase in the pace of price rises provided that financial markets stabilise. Over a medium-term horizon, disinflationary risks prevail over pro-inflationary ones in an environment of low demand, dragged down by a clear global and Russian economic slowdown. This provides an opportunity for conducting countercyclical policy.

  o The Russian economy has entered the period of turbulence triggered by the coronavirus pandemic, the onset of global recession, and the oil price slump, with fairly adequate reserves of strength. Household income growth has translated into consumer spending expansion, evident, among other things, in retail sales of goods and services. The scaling up of budget expenditure has provided an additional stimulus to domestic demand.

  o External and domestic constraints on business activity and consumption stemming from the coronavirus pandemic are bringing about a temporary output and consumption decline. The turbulence in financial markets amplifies this effect, all of which results in a dramatic but transient economic activity weakening. The transition of the coronavirus pandemic into an attenuation phase, with restrictions gradually lifted, will bring the global and Russian economies back to a growth path.

  o March saw global financial markets, the Russian market among them, exposed to the liquidity squeeze in US and other countries’ financial systems. Government measures to support the economy and steps taken by central banks to shore up lending and financial markets, help stabilise the situation.

  o The regulators’ key economic task in today’s situation is to mitigate, to the extent possible, the impact of the newly-emerged constraints and self-imposed restraints on companies’ creditworthiness, lending, and household income, with financial stability ensured. This requires joint and coordinated action by governments and financial market regulators.

2. In focus: how the damper mechanism stabilises refined petroleum product prices

- The damper mechanism substantially reduces the sensitivity of domestic petrol and diesel prices to world price movements, helping bring down inflation volatility going forward.
• In the periods of high oil prices, the budget subsidises domestic consumers through reimbursing a part of excise taxes to petroleum refining companies. That said, consumers are not supposed to enjoy all the benefits of a fall in world prices because the effective excise tax going to the budget increases in the period of low prices.

• Unlike petrol and diesel, the damper mechanism for aviation fuel has an asymmetric effect, limiting aviation fuel price rises as world oil prices go up but allowing them to decline or stabilise as world prices fall.
1. MONTHLY SUMMARY

1.1. Inflation

Inflation accelerated to 2.5% in March after hitting a low of 2.3% in February, driven by
short-term pro-inflationary factors coupled with gradually mounting inflationary pressure in
response to fiscal stimulus and monetary loosening in 2019.

A significant rouble weakening in the wake of the oil price slump as well as a temporary
surge in household demand for nonperishable goods are having an effect on inflation, but this
effect will be transient and short-lived. At the same time, the inflation expectations decline
over recent years and rising self-sustainment for some types of agricultural produce
moderate the secondary effects of this inflation acceleration.

Following the expected acceleration, inflation is set to stabilise close to the target in
2021, thanks to, among other things, monetary policy. The expected partial rebound of oil
prices and a moderate consumer demand form an overall disinflationary environment on the
medium-term horizon.

1.1.1. Balance of short-term risks shifted towards pro-inflationary factors in
March

- Annual inflation inched down to 2.3% in February from 2.4% in January. As the impact
  of temporary factors restraining price rises continued, the estimates of modified core
  inflation indicators suggested the maintenance of reduced inflationary pressure.

- March, however, saw a price rise acceleration, prompted by a significant worsening of
  external conditions. Indeed, a surge in demand for some food goods arose from fears
  about the spread of the coronavirus, while a higher demand for non-food goods
  stemmed from expectations of price rises due to rouble weakening following the oil
  price slump.

- Monthly inflation stood at 0.6% MoM in seasonally adjusted terms in March. Therefore,
  short-term pro-inflationary factors brought price rises to a level exceeding 4% in
  annualised terms. This drove annual inflation higher to 2.5%. Nevertheless, this monthly
  inflation acceleration is transient, with the balance of risks shifting towards
  disinflationary factors over a medium-term horizon.

Annual inflation hit a low of 2.31% in February after 2.42% in January (Figure 1). The
key restraining effect on consumer prices continued to stem from last year’s rouble
strengthening and steady output growth in some food markets. An additional input to
moderate inflation is likely to have come from slowed expansion in unsecured consumer
lending, which may have affected the structure of consumer demand.
Prices rose 0.33% MoM in February (Figure 2). We estimate seasonally adjusted inflation at 0.21% MoM for February, below a path corresponding to 4% in annualised terms and generally in line with the range of price growth seen from the middle of 2019.

As temporary factors restrained price rises in February, the estimates of modified core inflation indicators continued to suggest the maintenance of low inflationary pressure (Figure 4). But rouble weakening in March triggered a significant price rise acceleration.

As early as March, weakly average daily price rises moved far above the level corresponding to an inflation rate of 4% in annualised terms. In seasonally adjusted terms,\(^1\) prices went up 0.6% MoM in March (Figure 3), with annual inflation edging up to 2.5%.

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\(^1\) Here and further on, the inflation estimates are preliminary.
The pace of price rises was uneven during the month. A significant rouble weakening and panic buying of some food items gave a strong impetus to the weekly pace of price growth in the middle of March. The last week of the month saw price rises slow, though (Figure 5).

The rate of fruit and vegetable price rises was fairly moderate in March, generally in line with the seasonal pattern typical of this month (Figure 6). We estimate that the seasonally adjusted pace of fruit and vegetable price growth slowed to 0.4% MoM from 1.3% MoM in February. The price moves of the “borsht mix”\(^2\) exerted a notable downward pressure on prices of these items in the first half of the month. But as early as March 17, fruit and vegetable price growth accelerated, driven by a seasonal increase in the share of imports\(^3\) as the rouble weakened. Prices may accelerate further in this category going forward. At the same time, the early arrival of the spring this year may improve the situation somewhat: according to Fruit and Vegetable Union reports, unless severe ground frosts intervene, farmers in the south of Russia may try to produce two harvests, one in the middle of June, the other late in September.\(^4\)

\(^2\) Weekly monitoring covers potatoes, onions, green cabbages, and carrots.

\(^3\) The stock of domestically grown vegetables comes to an end roughly from March to June.

\(^4\) RBC. [Retailers assessed the chances of food price rises driven by the rouble exchange rate. 10.03.2020.](https://www.rbc.ru/economics/10/03/2020/5e9e47d8b252f173d7f0e89e)
In addition to rouble depreciation to date, pro-inflationary factors on the side of supply may arise from disruptions in deliveries from other countries.

*On the one hand*, mounting inflationary pressure fuelled by temporary factors will help a faster return of inflation to 4% than could have been expected earlier. *On the other hand*, the Russian economy is confronted with a new challenge under much lower inflation expectations than in the first years of inflation targeting, whereas moderate demand has shifted the balance of medium-term risks towards disinflationary factors. This in turn provides grounds for the Bank of Russia’s greater tolerance for the short-term inflation acceleration, but requires balanced monetary policy decisions which would take account of not only short-term but also medium-term factors of inflation, coupled with regulatory measures to support lending to the economy with inflation kept close to the target.

1.1.2. Bloomberg consensus forecast: rouble weakening implications will be moderate, inflation will keep close to 4% over medium-term horizon

- Professional analysts’ short-term inflation expectations rose substantially, according to Bloomberg polls. The sharp inflation acceleration in March was driven by rouble depreciation amid the oil price fall and escalating external uncertainty along with a temporary surge in household demand for unperishable and durable goods.
- The experts polled, however, believe that unless new unanticipated external shocks emerge, inflation can be expected to stabilise close to the target in 2021. This emphasises that professional analysts’ medium-term inflation expectations are still anchored to the Bank of Russia target.

Figure 6. Analysts’ expectations of the BoR key rate

![Figure 6. Analysts’ expectations of the BoR key rate](source: Bloomberg Finance L.P.)
1.2. Economic performance

A decline in external demand accompanied by a fall in prices of Russian exports accelerated dramatically in the first quarter of 2020. Meanwhile, Russia’s domestic demand enjoyed an upward trend in January–February: household consumption was on the rise, helped by a real wage growth acceleration, and the stepped up budget spending had a positive effect on overall demand in the economy.

At the same time, March saw internal constraints on business activity and consumption emerge in Russia as the coronavirus pandemic broke out. The leading indicators suggest that this has already brought about a temporary output contraction and worsening of consumer sentiment in the Russian economy as the global economy was sliding into a recession. The extension of the so-called “days-off” in Russia until the end of April is set to have a restraining effect on economic activity in the short term. This measure is, however, vital to containing the spread of the coronavirus. The depth and duration of the downturn are hard to assess accurately at the moment, since this in large part depends on how the situation with the pandemic will unfold and what action many countries’ governments will take to curb the spread of the virus. Given the massive support from governments and central banks to their respective economies, one can assume that after the pandemic has been curtailed, the recovery of the Russian and global economies may be fairly fast.

1.2.1. Possible implications of COVID-19 for global and Russian economies

- The global economy is expected to face a much more severe fallout from the coronavirus pandemic than from atypical pneumonia (SARS, 2003) and the Middle East respiratory syndrome (MERS, 2015).

- The spread of the coronavirus and steps to curb it are having an adverse effect on countries’ economies. This effect varies across different sectors of economy. It makes itself felt through various channels and is realized in several stages, which may also vary across countries.

- As regards the Russian economy, the key channel at the first stage is an external one. Economic, cultural and humanitarian ties with countries experiencing a rapid expansion of the epidemic are disrupted or broken off. On top of that, export demand, primarily from countries where the epidemic broke out earlier than elsewhere, declines. This goes along with a fall in commodity prices. As the pandemic spreads, the global economy suffers a further drop in demand, which provokes a slump in global financial markets, entraining local financial markets and the financial sector of individual countries.

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5 Global recession is implicitly deemed to be global GDP growth at a slower rate than 2.4%. 
• At the second stage, when massive constraints and self-imposed restraints are applied to contain the spread of the coronavirus within a country, the internal channel becomes a key one. This causes negative effects hurting the economy to rise in scale and spread across a wide range of industries.

• In most countries, the services sector (including transportation) bears the brunt of the pandemic and is hit the hardest, which is already evidenced by a dramatic deterioration in this sector’s business activity surveys in various countries.

• Further on, in the course of transition to the second stage, expanding negative effects emerge in most other sectors, including industry.

• From the perspective of a government support package, it is important to ensure the stabilisation of economic activity, above all in the services sector. The purpose of support is to minimise negative effects caused by a sharp but temporary drop in demand and companies’ income. That said, it is worthwhile not so much to shore up demand at this stage as to compensate for a part of an income shortfall and to provide support in reducing expenses, including through loan restructuring.

• The most acute phase of the impact of the coronavirus spread on the global economy will likely last no longer than two quarters. This is due to the specifics of the pandemic as well as improvements in the therapy of COVID-19 and prevention of a further spread of the virus.

• Overall, the negative effect of the spread of the coronavirus on the economy is mostly temporary in nature. Also, the fiscal rule in place smooths out the impact of external shocks. For the Russian economy, the current situation is therefore substantially different from the previous episodes of deterioration in external conditions driven by a steady shift of oil prices to lower levels and requiring a significant restructuring of the economy as a result of change in relative prices and reallocation of resources among sectors.

• In the medium term (a possible third stage), some countries would likely see a deterioration in public finances and the emergence of debt servicing problems. A number of emerging market economies falling under the category of frontier markets are already dealing with this stage.

The pace of the spread of the coronavirus and its consequences for the global economy are expected to be much faster and more serious than those of atypical pneumonia (SARS, 2003) and the Middle East respiratory syndrome (MERS, 2015), which seriously affected economic activity in a limited number of countries for a short time. The negative impact of SARS и MERS on global economic growth can be estimated at 0.1-0.2 pp and less than 0.05 pp, respectively. The rapid spread of the coronavirus is driven by both medical characteristics and transportation expansion in recent decades, as well as closer economic ties among countries.
The baseline scenario assumes that the main blow to the global economy will be dealt in the first half of 2020. China, which was the epicentre of the pandemic and adopted tough restrictive measures, was able to get the spread of the virus under control within 1.5-2 months (mid-January – beginning of March). The price it paid was a steep economic activity drop in January–February, followed by a gradual rebound as early as March. In addition to a fall in retail sales and passenger traffic posted in 2003 (SARS), this year’s epidemic triggered an industrial output and investment contraction, which was minor in 2003.

Most other countries faced an intensive spread of the virus with a 2-4-week lag. The peak of short-term and severe negative effects on the entire global economy is expected at the end of the first quarter – the second quarter. Meanwhile, secondary effects, such as an increase in financial burden on budgets to meet health care expenses, a long period of unemployment for a part of the population, may continue to take a toll in the third quarter.

The most acute phase of the coronavirus spread impact on the global economy may last about two quarters. A number of arguments can be offered to support this hypothesis. First, there is reason to believe that the coronavirus virulence and contagiousness will decline as air temperatures and people’s immunity rise (as ARVI and flu suggest), with the arrival of the summer restraining much of the spread of the coronavirus. Second, measures to combat the spread of the virus will be constantly improved, with the most efficient techniques selected and tested on focus groups. Third, health care institutions’ therapy and rehabilitation potential is expanding, countries’ cooperation, sharing of best practices, and exchange of medical experts are being stepped up. Therefore, as the situation stabilises and gets fully under control, to say the least, many countries will be gradually removing restrictions imposed. Hence, under a moderately optimistic scenario, global economic recovery can be expected to start as early as the third quarter, helped by deferred consumption and accelerated output growth to replenish inventories and restore a normal pace of product deliveries to customers.

At the same time, one cannot rule out a second outbreak of the coronavirus epidemic by the end of 2020, with the advent of a new season of colds and respiratory diseases. Moreover, an “exhaustion” of the economy by outlays seeking to prevent the spread and to eliminate the virus may also contribute to it.

From the perspective of a cross-country analysis, we believe that, all other things being equal, the potentially negative impact of the coronavirus can be alleviated by, above all, the degree of preparedness for combatting the epidemic.

The Russian economy can be exposed to the impact of the coronavirus spread through the following channels as the pandemic intensifies globally and in Russia.

**Stage 1**
- A decline in external demand for Russian exports owing to global economic slowdown. This channel emerged as the epidemic broke out in China. Global economic slowdown significantly reduced the consumption of commodities, bringing down their prices drastically. Oil prices were dealt a double blow due to a rise in supply in OPEC+ countries. Similarly to the expected change in the coronavirus impact on global
economic growth, one can assume a maximum negative effect on commodities demand and prices at the end of the first quarter and during the second quarter, to be followed by their subsequent stabilisation, whose pace will depend on, among other things, supply adjustment.

- **Problems with the delivery of imported components and raw materials for domestic production and investment.** PMI survey data has indicated that the stoppage of production in China and other countries has already deteriorated suppliers’ operations and lengthened the time of contract performance in February–March. Critical to Russia is the situation in European countries from which a fairly large quantity of machinery and equipment deliveries comes.

- **Worsening of the situation in financial markets.** Flight from risk after the coronavirus epidemic developed into a pandemic and the magnitude of economic implications became clear, caused a significant repricing of assets of emerging market economies, including Russia. The OFZ yield curve moved upwards, the rouble weakened. This may have a negative effect on lending due to rising borrowing costs and on opportunities for raising finance on corporate debt and equity markets. Negative effects also come from an overall rise in uncertainty and risk assessment.

**Stage 2**

- **The spread of the coronavirus in Russia.** The macroeconomic effect comes not so much from the pandemic itself as from steps to prevent its spread: the cancellation of public events, restrictions on travel, as well as quarantines. In Russia, “a week-off” from March 30 to April 3 was initially announced, to be extended until April 30 subsequently. Many Russian regions imposed restrictions: locked down shopping centers, drastically limited the services sector operations and people’s travel within individual cities.

**Stage 3 (medium-term)**

- **Impact on public finance.** Russia has a low level of public debt and quite significant savings accumulated in the National Wealth Fund, the Unified Treasury Account, and commercial bank accounts, which ensures high stability of public finances. The fiscal rule also provides a stabilising effect. The commodity price slump and global economic slowdown take a toll on budget revenue in the short-term. Still, only under the most severe risk scenarios of the global economy’s protracted exit from a recession brought about by restrictions imposed to contain the coronavirus, can one in theory expect the economic consequences of the coronavirus to have a major impact on government and central bank reserves, or a rise in risk premium and hence some increase in the spread between short-term and long-term yields of government debt.

Individual sectors of the economy expected to be hurt the most include services as a whole, mining and quarrying, manufacturing (in both export-oriented industries and those depending on imports), transportation (freight and passenger), retail and wholesale trade (excluding FMCG).
The March readings of PMI IHS Markit in European countries and the US, posted a plunge to record lows in the services sector (Figure 8).

The manufacturing indexes, meanwhile, declined much less. This suggests that developed countries with the prevalent share of services in their economic structure will face a deeper downturn than less developed countries taking equally tough measures to contain the spread of the coronavirus. That said, the Chinese and Italian experiences show that quarantine toughening may aggravate an economic activity decline in industry.

**Figure 7. Global services PMI for March and change relative to average December–February reading**

[Graph showing PMI changes for various countries]

*Source: IHS Markit, Bloomberg Finance L.P.*

Moreover, the services sector has an especially large share of micro- and small businesses, which are the most vulnerable in this situation. One should also bear in mind that such businesses do not have an even minimal financial safety cushion. Therefore, measures to support sole proprietorships and small businesses will be the most effective in minimising damage to the economy.

From the perspective of government measures of support, it is important to ensure the stabilisation of economic activity, above all in the services sector. The purpose of support is to minimise negative consequences caused by a sharp but temporary decline in demand and businesses’ income. That said, it is worthwhile not so much to shore up demand at this stage as to compensate for a part of income shortfall and provide support in cutting costs, including by loan restructuring.

Overall, the negative effect of the coronavirus spread on the economy is mostly transient in nature. Also, the fiscal rule smooths out the impact of external shocks. For the Russian economy, therefore, the current situation is much different from the previous episodes of deterioration in external conditions driven by a steady shift of oil prices onto
much lower levels and calling for economy restructuring due to a change in relative prices and reallocation of resources among sectors.

1.2.2. February’s global economic shocks did not hurt Russian industry

- Industrial output growth accelerated to 3.3% YoY in February from 1.1% YoY in January, largely helped by the calendar effect of the leap-year. Adjusted for the calendar effect, growth was more modest at 1.5% YoY in February.

- Industries meeting investment demand, petroleum refining and manufacture of food products remained on an upward trend.

- The disruption of the Chinese and European supply chains may hurt the output of motor vehicles and industries meeting investment demand. February, however, only saw a significant impact in the manufacture of motor vehicles.

- Tough restrictions aiming to contain the spread of the coronavirus in many countries will likely bring down both external demand for Russian industrial goods (a demand-side shock) and a shutdown of or an output fall in some production facilities owing to the problems of component and equipment supply (a supply-side shock).

Industrial output growth accelerated to 3.3% YoY in February, rising 0.3% MoM SA from January, with improvement posted in all major sectors of industry (Figure 9). An important input to year-on-year growth acceleration came from an additional calendar day in February (the leap-year effect). Adjusted for this effect, growth would have come in at 1.5% YoY in February, according to our estimate.

Mining and quarrying posted an upward trend at 2.3% YoY in February. We estimate, however, that the sector’s output adjusted for the calendar effect, contracted marginally by 0.2%. Compared with January, extraction climbed 0.2% MoM SA, with daily oil production remaining stable against a backdrop of extraction limits under the OPEC+ deal. Extraction will likely remain close to the February level in March but may expand 0.3-0.5 million barrels per day, up 3-4% from the current level.

Coal extraction decline slowed from -8.8% YoY to -5.4% YoY (Figure 12) as indicated by rail shipments. To provide incentives to coal exports amid low demand, Russian Railways cut prices for westward deliveries and shipments to China via Kazakhstan.

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6 This section mostly analyses annual industrial output data. Estimates of month-on-month figures will be revised, since Rosstat has not so far released full data series because of a change to a new baseline year.
Manufacturing output added 5.5% YoY in February. Compared with January, production climbed 0.4% MoM SA. Adjusted for the calendar effect, output expanded more modestly at 3.5% YoY, according to our estimate, suggesting a growth slowdown from 3.9% YoY in January. The overwhelming majority of manufacturing industries showed growth in February.

Manufacture of electronic products, which increased output by 39.2% YoY, contributed the most to the manufacturing sector’s annual upward trend (Figure 11). According to revised Rosstat data, 2019 saw an upward trend emerge in some industries meeting investment demand (manufacture of machinery and equipment, electrical and electronic equipment). These industries maintained their upward trend in February this year. But given their strong dependence on the import of components from China and the EU, their output may see a downward correction in the spring.

Gaining 5.2% YoY, a major petroleum refining industry also made an important positive contribution to manufacturing performance in February. The upward trend which emerged in the autumn of last year and is continuing, may be driven by the reallocation of oil deliveries to the domestic market on the back of export contraction (Figure 10). The rise in the output of refined petroleum products also affected their exports. The end of 2019 saw spikes in petroleum product exports, which have not yet developed into a sustainable upward trend, however.

Worth noting among other industries meeting intermediate demand is manufacture of chemical products with an output rise of 9% YoY in February. Further capacity expansion in this industry is set to shore it up.

The largest industry meeting consumer demand, manufacture of food products, maintains its fast growth pace, registering an output gain of 9.5% YoY in February and 11% YoY in January thanks to a rise in the manufacture of meat products. Output of dairy products also shows a positive change, having posted a year-on-year gain since last December, in contrast to a prior decline for more than 12 months running. A slowdown in
pharmaceutical output growth in January proved to be temporary, as the industry resumed its growth at double digits in February, up 17.4% YoY. One can assume that the upward trend will continue in the months to come.

Figure 10. Individual industries’ contribution to manufacturing growth in February 2020, % YoY

Figure 11. Individual industries’ contribution to mining and quarrying growth in February 2020, % YoY

An output decline continues in the manufacture of motor vehicles, down 10.6% YoY. The disruption of supply chains in the face of negative trends in the Chinese and European economies may further aggravate this industry’s situation in the coming months.

1.2.3. PMI indexes: negative impact of COVID-19 on economic activity in March

- PMI indexes point to an economic activity plunge in March in the face of external and internal restrictions aiming to contain the spread of COVID-19
- The services sector was hit harder by the restrictions: it bore the brunt of the demand-side shock triggered by these measures. A similar picture is seen in other countries.
- Coupled with the demand-side shocks are supply-side shocks, which bring down economic activity due to the disruption of global supply chains.
- The extension of “days off” until the end of April is set to have a restraining effect on economic activity in the short term. This measure is, however, vital to combatting the spread of the coronavirus and a subsequent fast economic recovery.
The composite PMI index for output suffered a severe fall in March amid output contraction in manufacturing and the services sector, plunging from 50.9 to 39.5 (Figure 13). This is the largest contraction in total business activity over the last 11 years. We note that the IHS survey was held in the middle of the month, hence index calculation did not include the last week of March, when a “week off” was announced and restrictions aiming to contain the spread of the coronavirus were toughened in many regions. Indirect indicators and the news flow suggest that economic activity may have fallen even deeper in March. The extension of the “week off” until the end of April is set to have a substantial restraining effect on economic activity in the short term. This measure is, however, vital to combating the spread of the virus in Russia and will help a faster return of the economy to the potential pace of growth.

The change in the manufacturing PMI index points to a situation deterioration in the sector in March after its gradual recovery over recent months. The index declined below its December reading to 47.5 (Figure 14). This was generally expected in light of the restrictions imposed by then and uncertainty over the prospects of the global and Russian economies after the outbreak of the coronavirus. Still, the magnitude of decline was relatively small compared with other countries.

The key factor of the business activity drop in manufacturing was an output decline, with the relevant index sliding from 47.9 to 46.4, and a shrinkage in new orders (the index slipped from 48.1 to 44.8). The manufacturers surveyed cite difficulties caused by the epidemic and a general fall in demand as the key factors of the business activity decline. External demand also continues to weaken on the back of the COVID-19 outbreak, bringing down economic activity in all of the respondents’ key trading partner countries.
A plunge in the index of suppliers’ delivery times (46.3) and the index of quantity of purchase (44.2) in March points to problems with raw materials supply (Figure 16): in addition to the weakening of demand, the manufacturing sector faces a supply-side shock triggered by the problems with supply chains.

Despite weak output figures, there was no employment contraction, with employment headcount remaining almost unchanged (49.9). That said, downbeat perceptions of the current situation in the sector caused the perceptions of output prospects for the coming 12 months to fall precipitously from 64.4 to 51.8 (Figure 17). In formal terms, companies continue to expect an output expansion within a year, but the level of optimism is at its eight-year low. Rosstat’s business confidence index also shows a decline in the perceptions of

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7 Suppliers’ delivery times.
output prospects, which is also true of the Institute for Economic Policy index of industrial forecasts, which fell to its lowest level since 2009.

The IHS services PMI index stood at 37.1 in March (Figure 15). The IHS services PMI plunged deeper than the manufacturing index, since the services sector was the first to suffer from the spread of COVID-19 both within and outside of Russia: even before the end of March – beginning of April a “week off” was announced, demand for passenger transportation, hotel accommodation, and food services fell sharply. Both domestic and export orders plummeted from 53.5 to 35.4 and from 52.2 to 34.9, respectively. In the face of it, companies had to promptly cut employment (the index dropped from 50.5 to 45.5), with the pace of lay-offs accelerating in March to reach the highest level since the start of 2016.

A similar picture is seen in other countries – the services sector bore the brunt of the demand-side shock arising from restrictions imposed to contain the spread of the coronavirus pandemic.

High uncertainty about the duration of the virus outbreak along with the restrictive measures affected business expectation for the coming 12 months, with the index plummeting to 35.2. Business expectations in the services sector became negative for the first time since the start of 2016 (a reading below 50), hitting the lowest level in the entire history of observations.

1.2.4. Retail sales growth gained pace at the start of the year but trend reversal is likely going forward

- Retail sales growth sharply accelerated to 4.7% YoY in February from 2.7% YoY in January. Our updated estimate puts the positive effect of the leap-year on retail sales in February at 1.4 pp of annual growth. Thus, retail sales growth adjusted for the leap-year effect accelerated to 3.3% YoY.

- Growth acceleration was posted in both food and non-food categories. Adjusted for the seasonal and calendar effects, sales in both segments added 0.1% MoM and 0.7% MoM, respectively.

- February’s retail sales growth was registered amid inflation easing and gradual consumption improvement and was supported by the fast pace of a real wage rise.

- With the coronavirus situation aggravating and rouble weakening significantly in March, growth can be expected to gain momentum in both the food and non-food segments, prompting inflation acceleration. Still, given the impact of restrictions on consumption, especially in the non-food segment, the retail sales trend may turn around as early at the start of the second quarter after a temporary surge in demand in March,

Retail sales growth accelerated sharply to 4.7% YoY in February from 2.7% YoY in January to reach the highest level since December 2014 (Figure 18). Growth this strong was
in large part due to one more calendar day, which added 1.4 pp to annual retail sales expansion in February. Adjusted for the leap-year effect, retail sales growth accelerated to 3.3% YoY, according to our estimate, helped by both food and non-food sales gain of 3.0% YoY and 3.6% YoY, respectively.\(^8\)

Seasonally adjusted monthly growth in retail sales stood at 0.4% MoM (Figure 19). Non-food sales showed a stronger 0.7% MoM growth, while food sales climbed just 0.1% MoM in February.

The very favourable sales growth figures were registered amid inflation easing in February and supported by the fast growth rate of real wages (Figure 20). Moreover, research holding company Romir data\(^9\) confirms a surge in household daily expenditure in February (Figure 21), which was the highest since 2015 for this month.

\(^{8}\) Unadjusted for the leap-year effect, food and non-food retail sales growth accelerated to 4.1% YoY and 5.3% YoY, respectively, in February.

\(^{9}\) Russian household expenditure hit a February high. Research holding company Romir. 16.03.2020.
The aggravation of the coronavirus situation triggered panic buying of FMCG goods at the start of March.\textsuperscript{10} According to Nielsen research data,\textsuperscript{11} sales of nonperishable goods and antiseptics rose at double digits in physical terms in the first week of March (2–8 March) alone compared with the same period of last year. A spike in demand for these goods will be temporary. Further on, retail sales growth will lose much of its momentum, but the current situation may give a strong impetus to online trade: consumers may form new habits of ordering food products and ready-to-eat food online. Moreover, the government has already legalized online sales of non-prescription pharmaceuticals, and an active discussion about the acceleration of approving legislation on online sales of alcohol is underway.

It is worth noting that the current rouble depreciation raises concern over rising prices of many non-food goods, such as pharmaceuticals, cars, household and electronic appliances, and clothes. The second week of March already saw a substantial growth in expenditure on household and electronic appliances. According to a real-time estimate of household consumption from Sberbank,\textsuperscript{12} demand for this category of goods soared in the period from 7 to 13 March, with spending on them rising by roughly a quarter over this week compared with January–February. Many consumers started to realize deferred demand for expensive appliances before prices rose.

March is expected to see a temporary sales growth in both food and non-food segments, boosting inflation. The retail sales trend may, however, turn around as early as the start of the second quarter, dragged down by the impact of restrictions on consumption.

\textsuperscript{10} The FMCG (Fast Moving Consumer Goods) market includes food products, beverages, household chemical products, personal care items and cosmetics, baby-food, pet food, and medications.

\textsuperscript{11} \textit{COVID-19: How are consumers getting ready for the pandemic?} Nielsen. 18.03.2020.

\textsuperscript{12} \textit{Real-time estimate of Russian households’ consumption.} Sberdata. 20.03.2020.
The data of inFOM survey\textsuperscript{13} conducted from 2 to 11 March 2020 may fail to fully reflect the current consumer sentiment, since most of the respondents were polled before the aggravation of the situation with the coronavirus spread and rouble depreciation. According to survey data, the consumer sentiment index remained on a high level, edging up 1 point from February (Figure 22). The most significant improvement was posted in the perceptions of the respondents’ current financial position and whether conditions were good for large purchases. The index of expectations for future income remains above 100, but the negative news flow and restrictions on economic activity aiming to combat the spread of the coronavirus are set to deteriorate consumer sentiment going forward.

1.2.5. Corporate lending dwindled in February, with retail lending edging up

- Retail lending growth gained momentum in February, reflecting a confident rise in domestic demand over recent months.
- Corporate rouble lending declined for the second consecutive month. This may be driven by both borrowers’ partial reorientation to the bond market and the stepping up of budget expenditure.

Rouble retail lending growth gained pace to 1.6% MoM in February from 1.4% MoM in January\textsuperscript{14} (Figure 27). Large banks continued to rely on retail lending in 2020, forecasting this sector’s growth at double digits. On the demand side, lending was shored up by reduced interest rates (Figure 28), spurring demand for at least mortgage loans. Mortgage lending continued to post confident growth in February. According to initial estimates, the portfolio

\textsuperscript{13} Based on real-time March data.
\textsuperscript{14} Unless otherwise specified, here and further on, monthly growth rates are provided for credit organizations which operated as of the last reporting date.
expansion inched down from 1.2% MoM to 1.1% MoM but remained somewhat above the average growth level of the second half of 2019.

A total of new mortgage loans provided and their number continued to exceed last year’s for the third month running (Figure 27). Statistics showed massive growth to continue in the segment of loans taken to refinance outstanding debt, with a total of 25.1 billion roubles provided compared with 8.1 billion roubles in February 2019. These loans do not affect a total mortgage loan portfolio debt but relieve borrowers’ debt burden. An upward trend also continues in the segment of lending under the contracts of shared-equity construction (88 billion roubles after 74.3 billion roubles in February 2019) and other mortgage lending types (149.7 billion roubles after 144.3 billion roubles).

Mortgage loan rates remained on a downtrend in February. In March, however, some banks started to raise mortgage loan rates as OFZ yields went up. This may somewhat reduce demand for debt refinancing and mortgage loans.

Unsecured consumer lending expansion gained pace in February to rise from 1.3% MoM to 1.7% MoM in seasonally adjusted terms (Figure 25). Growth acceleration may have partly been driven by extra demand for some non-food goods and cars amid a drastic decline in the rouble exchange rate and reports about delays of deliveries from foreign countries on account of restrictions imposed in them.

The structure of loans issued in February 2020 shows a large share of those provided at a high effective interest rate (from 20% to 25% and from 25% to 30%), for which a borrower’s debt service to income ratio is not measured, as well as those with a low effective interest rate (from 10% to 15%) but with a borrower’s high debt service to income ratio (over 80%) (Figure 26). A large share of loans to borrowers with a high debt service to income ratio in total loans is determined primarily by the financials of systemically important banks with acceptable capital adequacy ratios. That said, small banks enjoying high capital adequacy account for the prevalent share of loans provided to borrowers with a high debt service to
income ratio and at a low effective interest rate in a total amount of unsecured consumer loans.

A further retail lending trend will depend on the macroeconomic situation, therefore one cannot rule out that it will slow more notably than previously thought. So far, rouble loan portfolio growth slowed from 18.3% YoY to 18.2% YoY in February, with a total retail loan portfolio expansion edging down from 18% YoY to 17.9% YoY.

Corporate lending posted a decrease in both rouble-denominated and total portfolio for the second consecutive month (Figure 27). Seasonally adjusted, corporate loan portfolio growth contracted 0.5% MoM, while the total portfolio shrank 0.4% MoM. In annual terms, a corporate loan portfolio rise eased from 3.4% YoY to 2.2% YoY, the rouble corporate portfolio growth softened from 5.6% YoY to 4% YoY.

Credit Register data shows that the largest negative inputs to a slowdown in loan debt growth in December–January came from the manufacture of refined petroleum products and coke (down 0.7 pp), retail trade (a fall of 0.4 pp), research and development (-0.2 pp), manufacture of road vehicles (a drop of 0.2 pp), machinery and equipment (a 0.1 pp decline) (Figure 29). A loan debt contraction in the first two of the above industries may have been driven by large borrowers’ reorientation to the bond market. A total of outstanding corporate bonds continued to rise at double digits in February, up 13.9% YoY, according to Cbonds data. The tension in financial markets may change the situation. But the deterioration in growth prospects for the Russian economy and likely profit weakening may bring down demand for investment and, accordingly, corporate lending.

The elevated pace of debt reduction in some sectors may be owed to the YoY acceleration of budget spending growth in recent months. The stepping up of budget expenditure provided for a rise in non-financial organizations’ deposits (Figure 28), which probably was one reason for a corporate lending slowdown in December 2019 – the start of 2020. Demand for loans, especially those to finance working capital, may have plummeted.
after the arrival of budget funds. It appears that this trend continued in February: corporate deposits climbed 1.2% MoM in seasonally adjusted terms.

**Figure 26. Annualized 3-month average credit growth rates, %**

![Chart showing annualized 3-month average credit growth rates from January 2017 to December 2019.](chart)

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

**Figure 28. Components of money supply growth in December–January, %**

![Chart showing components of money supply growth in December–January for various segments.](chart)

*Source: Review of the Banking System, R&F Department estimates*

**Figure 29. Contribution to loan debt growth in December–January**

*Breakdown by industry, OKVED-2 (economic activity classifier), pp*

![Bar chart showing contribution to loan debt growth in December–January by industry.](chart)

*Source: Credit Register data*

1.2.6. **Change in seasonal pattern of expenditure and fiscal stimulus provide support to economy**

- General government surplus declined to 1.9% of GDP in 2019, while the impact of the budget on GDP growth was generally neutral.
The start of 2020 saw an extensive budget expenditure growth, including on the national projects, along with slowed growth in annual revenue expansion (adjusted for one-off factors), with a positive impact on GDP growth.

In the face of growing negative impact of the coronavirus and the oil price slump, fiscal stimulus should come to the fore. Low gross and net government debt should allow conducting countercyclical policy with no risks to the fiscal sustainability.

The year 2019. The faster pace of expenditure growth than that of revenue (Figure 30) caused general government surplus to dwindle by 1.0 pp to 1.9% of GDP in 2019. At the same time, non-oil and gas primary deficit narrowed by 0.3 pp to 4.6% of GDP (Figure 31).

The rise in expenditure had a positive effect on GDP growth for the year, given, among other things, a change in the expenditure structure (faster growth in the economic block’s expenditure, including investment). The positive effect would have been stronger, if the expenditure had not underperformed. GDP growth was restrained by an increase in the removal of funds from the private sector via the fiscal channel, with time lags, among other things, taken into account. Estimates using fiscal multipliers\(^\text{15}\) show a minor 0.1-0.3 pp direct restraining effect of the budget\(^\text{16}\) on GDP growth. The direct effect may, however, have been compensated by a positive indirect impact via an enhancement of economic agents’ confidence in government fiscal policy.

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\(^{16}\) Change in budget revenue and expenditure.
We note that highly uneven government spending during the year (a poor expenditure performance, above all for the national projects), in the first half of the year caused a shift in effects on GDP growth and inflation: a restraining effect for the first half of the year and an incomplete realisation of deferred effects in the second half of the year.

The start of 2020 saw an extensive budget spending. General government non-interest expenditure rose 24% YoY\(^{17}\) in real terms in January (Figure 33). A significant gain in capital expenditure (from a low base of 2019) and final consumption is noteworthy. The expenditure increase stems from a rise in expenditure planned for this year (by 1 pp of GDP), and more even spending within a year, including on the national projects.\(^{18}\)

An annual revenue increase remained modest (Figure 32). Non-oil and gas revenue added 10% YoY, but this was largely driven by one-off factors, such as a rise in revenue from the sale of rights to use water resources (up 0.1 trillion roubles) and a low base of VAT, which was still paid at a rate of 18% in the first quarter of 2019 (up 0.05 trillion roubles). Net of the above factors, the increase in non-oil and gas revenue would have been marginal.

The faster expenditure growth (a 12-month rolling average) than that of revenue further reduced the ratio of total and non-oil and gas primary balance of general government to GDP\(^{19}\) (Figure 30, Figure 31).

A significant revenue rise coupled with a shift in their structure towards capital expenditure and spending on final consumption along with a minor increase in collection of funds from the private sector, had a positive effect on GDP growth in January, based on an initial estimate.

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\(^{17}\) A deflator analogue we use is the mean between the consumer price index and the producer price index (1% YoY in January).

\(^{18}\) Financing of the national projects rose 2.6 times YoY to 0.26 trillion roubles in January–February.

\(^{19}\) GDP data for January 2019 and January 2020 from RF Finance Ministry.
The remaining months of 2020 will see a decline in general government revenue (a 12-month rolling average) and a rise in expenditure. Change in the key budget indicators will largely depend on the gravity of the coronavirus spread consequences as well as the depth and duration of the slump in commodity prices, above all those of oil.

In the current situation, with the restrictions still in place, the effectiveness of monetary measures to support demand is limited. Hence fiscal policy should come to the fore. This would allow prompt and targeted allocation of resources to the most vulnerable industries, regions, and social groups. The government has already taken a number of steps, offering tax and social payment deferrals to hardest hit industries and to small and medium-sized enterprises (SMEs). SMEs have also been granted rent payment deferrals for government and municipal property, as well as an open-ended cut of social insurance contributions from 30% to 15% for wages above the official subsistence level. Payments for children under seven years of age as well as unemployment and sick-leave benefits have been raised. Import duties or pharmaceuticals and medical products have been reduced to zero, some requirements have been eased for government purchasing contracts. All of this will is set to reduce budget revenue and scale up expenditure in 2020, thereby enhancing the countercyclical support for the economy through fiscal policy (these measures are generally neutral for the budget balance in the medium term).

Federal budget expenditure is protected under the fiscal rule this year. We assume that a possible revenue reduction from the planned level will be compensated by an expansion in finance sources, in particular the National Wealth Fund (the RF Finance Ministry transferred 2019 extra oil and gas revenue to the Fund in March).

The budget system surplus is set to give place to a deficit in 2020. Nevertheless, the low gross and net public debt should allow of countercyclical fiscal policy with no risks to public finance stability involved.

We assume that the use of budget appropriations will be more even in 2020 than in 2019. Compared with the weak performance in 2019, this factor should help a relatively stronger expenditure growth in the first half of 2020, supporting overall GDP performance in this period.

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20 Tourism, air transport services, sports, culture, cinema.
2. In focus: how damper mechanism stabilises petroleum product prices

- The damper mechanism significantly reduces the sensitivity of domestic petrol and diesel prices to world price fluctuations, helping reduce inflation volatility.

- In the periods of high oil prices, the budget subsidises domestic users via a partial reimbursement of excise tax to petroleum refining companies. That said, in the periods of low prices, consumers do not enjoy all the benefits of a world price decline, because the effective sum of excise tax paid to the budget increases.

- Unlike petrol and diesel, the damper mechanism has an asymmetric effect on the aviation fuel price, limiting increases in aviation fuel prices when the world oil price rises while not preventing their decline or stabilisation when the world price falls.

Pricing mechanisms in the Russian petroleum product market are undergoing significant changes associated with two key factors: a reduction in the sensitivity of the rouble exchange rate to oil price fluctuations and the tax manoeuvre.

A notable decrease in the dependence of the rouble exchange rate on oil price fluctuations after the introduction of the fiscal rule (Figure 55) has increased the sensitivity of domestic (rouble) oil and petroleum product prices to price changes in the global market: exchange rate movements no longer smooth dollar price fluctuations. This caused a rapid rise in domestic oil and petroleum product prices in 2018 (Figure 56): a rise in world oil prices was amplified by a concurrent rouble depreciation, triggered by a new round of sanctions. As a result, the profitability of oil and petroleum product exports increased so much that domestic prices also responded by a significant rise, in keeping with the law of “unified price”. Seeking to stabilise domestic prices, the government took emergency measures, cutting excise taxes on petrol and diesel by three thousand and two thousand roubles, respectively, and striking an agreement with the major oil companies that they fix prices temporarily in the consumer market and comply with a requirement to supply petroleum products to the domestic market.

These measures being temporary, the government later replaced them with a permanent technique for stabilising domestic oil product prices. A damper mechanism was introduced, which was a supplementary element of the tax manoeuvre. The damper mechanism allows compensating a part of losses sustained in supplying petroleum products to the domestic market amid rising export prices, thus enabling a rise in domestic prices to be limited. The damper mechanism parameters, as well as those of the tax manoeuvre, were specified to last until 2024 (see the box The damper mechanism parameters at the end of this section).
The tax manoeuvre in the oil and gas industry started in 2019 and is planned to be fully completed in 2024. It seeks to enhance the efficiency of the oil and gas sector, to simplify the system of its administration, and to harmonise the structure of customs duty payments by the Eurasian Economic Union member countries. The manoeuvre itself provides for a gradual reduction in duties on the export of oil and refined petroleum products until their full abolishment, and a concurrent raise of the mineral extraction tax on crude oil and gas condensate extraction (hereafter MET). It is assumed that additional budget revenue from the MET hike will significantly exceed losses from this reform (10.8 trillion roubles versus 3.4 trillion roubles,\(^{21}\) according to the estimate of the legislation drafters).

The key impact of the tax manoeuvre on inflation is achieved by reducing duties on the export of crude oil and refined petroleum products. This raises the level of domestic prices to ensure their netback parity. The concurrent rise in oil extraction costs on the back of the MET hike should not spur inflation, since it will in large part be offset by a higher return on exports.

All other things being equal, a gradual reduction in export duties to zero will increase a netback parity price and hence domestic prices (Figure 36). This is true of the domestic price of both oil and petroleum products. Given that the oil export duty is much higher than duties on light petroleum products, cutting export duties to zero should, all other things being equal, increase the domestic netback parity price of oil more than the petroleum product price. This may bring down the margins of petroleum refining for deliveries to the domestic market. To reduce the impact of the tax manoeuvre on oil companies’ costs, reverse excise tax on crude oil was introduced,\(^{22}\) effectively compensating for the direct rise in prices on the back of export duty cuts to zero. The formula of this excise tax includes a coefficient which ensures its gradual rise in 2019–2024 in proportion to cuts in export duties. Reverse tax, which is in fact an implicit subsidising mechanism, allows smoothing the impact of tax changes on petroleum refining companies’ margins.

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\(^{21}\) TASS. *How does the oil industry benefit from the tax manoeuvre.* 24.07.2018.

\(^{22}\) RF Tax Code, part 2, Article 193, section 8, and Article 200, section 27.
Our estimates show that before the start of 2018, domestic wholesale prices generally allowed petroleum refining companies to maintain margins comparable with those of exports (Figure 37). But a sharp increase in world oil prices and a concurrent rouble depreciation in 2018 along with steps taken to stabilise domestic petroleum product prices, unbalanced the situation. A damper mechanism came into effect at the start of 2019, but its parameters had yet to be refined. Since the export prices of petrol were low at the start of 2019, the damper mechanism worked in the opposite direction: oil companies had to pay tax to the budget. This situation prompted an adjustment to the damper mechanism parameters, which then took effect in the middle of the year: a conditional cut-off price was reduced, with the compensation coefficient increased and the compensation premium cut to zero.

Under the current parameters of the damper mechanism, the conditional wholesale selling prices of petrol and diesel will increase at an annual rate of 5% in 2020–2024, while compensation coefficients will be revised down.
Our estimates indicate that with the fiscal rule in place, the adjustment to the damper mechanism parameters significantly reduces the sensitivity of domestic petroleum product prices to world oil price movements (Figure 38). For example, under a scenario of a high oil price (USD75/bbl), the damper mechanism would indeed help contain a rise in domestic petrol and diesel prices on the level of the inflation target or below. If, however, prices stabilise at USD50/bbl as early as 2021, the conditional average wholesale selling prices of petrol and diesel used to calculate the damper mechanism parameters will exceed the price of the export alternative, thus creating a situation similar to that of early 2019. If oil prices stabilise at USD25/bbl, this will occur as early as 2020. The damper mechanism will then start to work in the opposite direction: petroleum refining companies will have to pay to the budget a part of the difference from the conditional price in delivering petroleum products to the domestic market. The budget therefore subsidises domestic consumers via compensation payments to petroleum refining companies in the periods of high oil prices, and receives a higher excise tax in the periods of low prices.

We estimate that the impact of the damper mechanism on the petrol (diesel) price will be neutral if the oil price gradually rises from USD57 (55)/bbl in 2020 to USD71 (69)/bbl in 2024.

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23 With an average annual oil price of USD63.7/bbl in 2019, payments from the budget under the reverse excise tax and damper mechanisms totalled 424.6 billion roubles.
Figure 38. Forecast of change in wholesale netback parity price of AI-92 petrol and diesel

Al-92 petrol

- Oil price of USD50/bbl without damper mechanism
- Oil price of USD50/bbl with damper mechanism
- Oil price of USD75/bbl without damper mechanism
- Oil price of USD75/bbl with damper mechanism
- Oil price of USD25/bbl without damper mechanism
- Oil price of USD25/bbl with damper mechanism

Diesel

- Oil price of USD50/bbl without damper mechanism
- Oil price of USD50/bbl with damper mechanism
- Oil price of USD75/bbl without damper mechanism
- Oil price of USD75/bbl with damper mechanism
- Oil price of USD25/bbl without damper mechanism
- Oil price of USD25/bbl with damper mechanism

*Calculated based on July–December data.
Source: Federal Antimonopoly Service, R&F Department estimates

The tables below present our estimates of an average annual (2020–2022) rise in the wholesale netback parity price of petrol with various oil prices and exchange rates (Table 1) With no damper mechanism in place, if the oil price falls to USD20/bbl (and the dollar exchange rate rises to 75-80 roubles per dollar), the wholesale netback parity petrol price will decline about 46-48% from the average 2019 level. If the above numbers further stabilise at the same level, the wholesale price will rise 2.3% annually. With the damper mechanism in place, wholesale price movements will be much less volatile: they will decline about 13-14% in 2020, rising about 4% annually in subsequent years. Under any scenario, the damper mechanism in fact reduces the volatility of the wholesale netback parity price. Numbers highlighted by green in Table 1 show the range in which the pace of price rises will have a neutral effect on inflation (3-5%) with the damper mechanism in place, which provides an argument for its use from the perspective of neutralising the effect of world oil price fluctuations on inflation in Russia.

It is also worth noting that the damper mechanism smooths out changes in extra oil and gas budget revenue (or its shortfall). Under a high world oil price, extra oil and gas revenue rises, but the government pays a compensation to petroleum refining companies via the damper mechanism, thus reducing extra oil and gas revenue. A low oil price reverses the situation: extra oil and gas revenue declines, but this decline is partially compensated by the damper component which petroleum refining companies pay to the budget.
Table 1. Average annual rise in domestic wholesale netback parity price of AI-92 petrol over 2020–2022, %

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Source: R&F Department estimates

Aviation fuel

The damper mechanism is also applied to aviation fuel. It went into effect in August 2019. Its key purpose was to stabilise aviation fuel prices and airfares, whose significant rise resulted from world oil price movements (Figure 39).

The damper mechanism for aviation fuel is similar to those used for petrol and diesel, but with some changes introduced, making its application more asymmetric: it will contain domestic price rises when world oil price increase but will not prevent their decline or stabilisation when world oil prices fall.
The current damper mechanisms has not allowed air companies to receive reverse excise tax: the netback parity price stayed far below the conditional cut-off price used for calculation (Figure 40). We estimate that even if the oil price rises to USD75/bbl, the price of the export alternative will remain below the conditional cut-off price.

**Fuel oil**

The movements of fuel oil prices will in the short-term be determined, first, by international restrictions which came into effect as of January this year (IMO 2020), and second, excise tax on fuel oil, effective as of 1 April.

The new stringent regulations International Maritime Organization (IMO) of the UN impose limits on the use of marine fuel with sulphur content in excess of 0.5%. The previous sulphur cap was 3.5%.

This change is set to have a notable effect on the Russian petroleum refining market, because fuel oil accounts for over half of Russia’s total output of dark petroleum products. To eliminate sulphur from dark petroleum products, a refinery is supposed to have a unit for hydrocracking or hydrotreatment of vacuum gasoils, while a total capacity of these units in Russia is 17.5 million tons, with crude oil distillation at over 270 million tons annually and a fuel oil output at about 50 million tons.
This means that most of Russia’s refineries will have to continue producing high-sulphur fuel oil although its prices have declined notably (Figure 41). At the same time, some companies have already reported their plans to cut production (based on Kommersant Daily data, LUKOIL may cut fuel oil production in Russia by a quarter in 2020 and by half in the company’s foreign refineries; Gazprom Neft is going to stop producing fuel oil by 2024).

Industry experts estimate that the inventories of high-sulphur fuel oil, which most vessels can no longer use after IMO 2020 have been imposed, are about twice as large as the consumption of heating oil in Russia, which may pave the way for a fall in prices of high-sulphur heating oil. Energy companies, industrial enterprises and municipal and housing facilities use large quantities of heating oil as their key or reserve fuel.

The imposition of excise tax on fuel oil will have an opposite effect. All dark petroleum products, including fuel oil, which were previously deemed unexcisable, became excisable as of 1 April 2020 and are now regarded as middle distillates. This measure was taken to prevent trading in middle distillate substitutes in the guise fuel oil and vacuum gasoil.

According to the RF Tax Code, as of 1 April 2020, the excise tax rate applied to middle distillates ($E_{md}$), is calculated from the formula:

$$E_{md} = (E_d + 750) - D_d \times C_{d\_comp},$$

where $E_d$ is the rate of excise tax on diesel imposed for a tax period;

$$D_d = P_{dex} - P_{d\_cond} \quad (P_{dex} – average export price of class 5 diesel 5; P_{d\_cond} – conditional average wholesale selling price of class 5 diesel in the Russian Federation).$$

If $D_d$ comes out higher than zero, $D_d$ is taken as equal to zero;

$C_{d\_comp} = 0.65$ as of 1 January 2020.

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24 Kommersant Daily. 50 shades of sulphur. 29.11.2019.
Excise tax on diesel in 2020 is 8,835 roubles per ton. Given that the price of fuel oil on the St Petersburg International Commodity Exchange fluctuated from 5 to 6 thousand roubles, the imposition of the excise tax may change the level of prices for this fuel significantly. The Russian Union of Industrialists and Entrepreneurs believes this will have an especially significant effect on industrial companies operating in northern territories, since their machinery and equipment use fuel oil as the key fuel.

Therefore, on the one hand, the imposition of excise tax may increase the domestic price of fuel oil, but on the other hand, the emergence of an export barrier should prompt a substantial inflow of fuel, pulling prices down.

The damper mechanism is applied to petrol, diesel and aviation fuel.

The size of compensation per ton is a difference between the price of the export alternative \((P_{\text{ex}})\) and a conditional average wholesale selling price \((P_{\text{cond}})\) multiplied by the compensation coefficient \((C_{\text{comp}})\):

\[
\text{Compensation per ton} = (P_{\text{ex}} - P_{\text{cond}}) \times C_{\text{comp}}
\]

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As part of this procedure, the netback parity price is defined as follows:

For petrol and diesel:

\[
P_{\text{ex}} = ((P_{\pi} - T_{m} - ED) \times R + E) \times (1 + R_{\text{vat}}),
\]

26 Based on the RF Tax Code, part 2, Article 200, section 21, section 27.
where $P_{rt}$ is the tax-period average (over all trading days) price in the Rotterdam Oil Market in terms of USD/ton;

$T_M$ is the tax-period average costs of maritime transportation and port transhipment of 1 ton from sea ports in the Russian Federation located in the North-Western Federal District, to the Rotterdam Oil Market of oil raw materials in terms of USD/ton;

$ED$ is the rate of export duty in terms of USD/ton;

$R$ is the average USD/rouble exchange rate;

$E$ is the excise tax rate;

$Rvat$ is the VAT rate.

*For aviation fuel, the calculation excludes the excise tax rate ($E$):*

$$P_{ex} = ((P_{rt} - T_m - ED) \times R) \times (1 + Rvat).$$
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