MONITORING OF RUSSIA'S ECONOMIC OUTLOOK:

TRENDS AND CHALLENGES OF SOCIO-ECONOMIC DEVELOPMENT

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2. DYNAMIC OF INVESTMENT GOODS IMPORTS AMID PANDEMIC P. Pavlov	. ON THE IMPACT OF PANDEMIC ON EDUCATION ECONOMICS A. Tischenko	3
IN THE WAKE OF THE CRISIS A. Grebenkina, N. Makeeva, E. Sinelnikova-Muryleva		8
S. Belev, T. Tischenko5. UNCONVENTIONAL MEASURES OF MONETARY POLICY AMID THE NEW MACROECONOMIC ENVIRONMENT	N THE WAKE OF THE CRISIS	14
MACROECONOMIC ENVIRONMENT		18
E. Goryunov		.23

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Monitoring of Russia's Economic Outlook

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1. ON THE IMPACT OF PANDEMIC ON EDUCATION ECONOMICS

Alexey Tischenko, Candidate of economic sciences, Senior researcher of the Center for continuing education, IAES RANEPA

The restrictive measures imposed in connection with the coronavirus pandemic, including the ban on outdoors events and the population movement, significantly change the traditional format of educational activities.

In order to ensure sanitary and epidemiological well-being, Executive Orders of the President of the Russian Federation No. 206 of March 26, 2020 and No. 239 of April 2, 2020, declared non-working days, securing salaries of the employees. Moreover, regional authorities are entitled to decide local restrictions on the activities of educational institutions in cooperation with the federal government. Thus, depending on the situation in a particular region, various modes of functioning are permissible for educational institutions.

From March 23, all Russian schools have announced vacation or switched to distance learning. Students of professional educational institutions and universities transitioned to distant learning likewise. The Ministry of Education of the Russian Federation sent methodological recommendations to the regions on implementation of basic general and secondary vocational education programs, as well as additional general educational programs using e-learning and distance educational technologies.

It was decided that kindergartens, schools, centers of extended education, colleges cannot not give classes at their premises, as they did earlier; the educative process should involve distance learning technologies. At the same time, regional leaders are entitled to decide the way of organization of the educative process, approve restrictive measures for educational institutions activities aligning them with the federal government.

As executive authorities and certain organizations and industries did not stop working on declared non-working days, some parents continue working at their respective places of employment and do not have the opportunity to leave their children under supervision. In this case, attendance of kindergartens and elementary schools is regarded an extreme necessity for these children, and teachers can give classes only on-site. The Minister of Education informed that special groups operate for those children whose parents work at all-important jobs. However, it is not clear how kindergarten employees can assess the compliance of different organizations activity with the vitally important spheres, taking into account the generalized description of these spheres in the Executive Order of the President, which criteria they will use, even if there are documents available proving the nature of parents' employment.

Special groups up to 12 children are accessible not only in kindergartens but also at elementary schools for grades 1–4. Other regions are free to follow this lead. Private schools can use the practice of the Moscow educational system in order to present arguments to continue on-site education in junior classes taking into consideration small number of children typical for such groups. Education authorities are well aware about this fact, as almost every private school has less children in a class compared to a public general academic school.

The Ministry of education explained that if a child does not attend classes for some days, the payment for these days is not to be charged. Due to low fiscal capacity in most of the municipalities and in absence of any additional financial support, kindergartens can significantly raise parents' fees or increase costs for additional services aimed to compensate revenues that they have not received during the pandemic.

Spheres of activity that have been mostly affected by the spread of coronavirus infection, were determined by the government commission on improvement of sustainability of the Russian economy. Organizations and individual entrepreneurs conducting their main activities in such spheres will benefit from priority, targeted support. It is important to note that revenues of the majority of organizations operating in the spheres determined by the commission, depend on the provision of services to individuals. The amount of paid services provided to the population in the education system accounts for Rb 655.5bn. Therefore, losses resulted from non-provision of such services will not Rb 54.6bn for one lockdown month.

Among affected educational spheres are institutions of extended education and non-state educational institutions, as well as conferences and exhibitions. For most educational organizations, revenues from public events represent a small part of total income and, therefore, losses in this area do not pose a risk to the sustainability of the education system.

In accordance with the Executive Order of the President of the Russian Federation No. 239, the activities of organizations, including individual entrepreneurs, have been suspended regardless of the legal form and form of ownership. Budget funds is the main source of income for state and municipal educational institutions. Since there are no plans to reduce budgetary education costs due to the pandemic, the financial situation in the public sector organizations will be relatively stable

Private educational institutions survive mainly because they provide paid services to the population, however, the budget share of their revenues is not significant and/or stable, as it depends on participation in projects and grants according to the competition procedures. Therefore, risks for private institutions associated with the pandemic, are notably higher than for the state sector.

During the restrictions on full-time studies, one-time short-term services provided by the organizations in the sphere of extended education significantly reduce (developing classes for children, practical courses and master classes). Revenues from paid services provided by organizations of extended education for children, proving their respective official status by providing reporting to the Ministry of Education, amount to Rb 18.8bn, including Rb 14bn in the public sector and Rb 4.8bn in the private institutions. Thus, the losses of such entities for one lockdown month will not exceed Rb 1.5bn, including possible losses of the private sector worth Rb 0.4bn.

Additional paid services provided to the population constitute a small share of 5.4% in the revenues obtained by the state and municipal organizations

Private organizations focusing on extended education services will appear the most vulnerable, as there will be no revenues from the population, being the main source of funds to support their activities. At the same time, the essential part of commercial institutions providing extended education services operate without licenses. A significant part of such institutions conduct their main activities according to OKVED codes, included specifically in the groups "72. Scientific research and development", "74. Professional, academic and tech-

1. On the impact of pandemic on education economics

nical, etc. activity", "90. Creative art and entertainment activity", "93. Sports, leisure and entertainment activity", rather than group "85. Education".

Many private institutions providing services of extended education cannot be considered educational organizations in absence of license or respective code of activity in their constitutional documents, and, therefore, they will be compelled to close down their activity, not expecting any support from the state.

The larger the city, the higher the epidemiological risks and the tougher the lockdown. Moreover, paid education is concentrated in large cities. The population coverage of paid services is much higher in large cities even in the sphere of extended education for children, where the economies of scale do not play a major role. The share of families paying for extended education is as follows: it is 50% in Moscow, 38% in the million-plus cities, 32% in the cities with between 100 thousand to 1 million residents, less than a quarter in small towns, settlements and villages. That is the reason why most of private educational institutions will not be able to avoid restrictive measures and associated financial losses. According to a sample survey of household budgets, 9.5% of the population spending on education has not been determined by level of education. Since the costs of extended education do not correlate with any level of education, then, taking into account the results of this survey, the total amount of paid services in the sphere of extended education can be estimated at Rb 62.3bn, while the losses resulted from one month lockdown will not exceed Rb 5.2bn. At the same time, it is important to consider that a substantial part of the paid services related to extended education is already being provided or can be quickly transitioned to the online format.

Therefore, losses in the sphere of extended education may be significantly lower.

Demand for online education sharply increases under lockdown. It is evident that growth in paid online education will be the largest in the sector focused on such services, and temporary growth will not be able to improve the position of those organizations that provide basic services in full-time mode. Some classes can be given or be effective only based on direct interaction with the teacher and availability of specialized equipment and conditions.

Beyond that, distance services are cheaper than similar full-time classes, and therefore, during the lockdown, the majority will not agree to pay for online tuition at full-time prices. At the same time, transitioning of classes from full-time to online format ensures the ongoing educational process. Maintaining relationships with clients will help organizations engage teachers and technical staff, as well as enable to complete educational activities on time.

Conducting the planned face-to-face events in the online format can be justified by force majeure and, therefore, be the reason for refusing to compensate funds for paid services, as other requirements and terms can be met. It is important to note that FAS Russia recognizes the COVID-19 coronavirus pandemic as a force majeure event and will be guided so in their activities.

During the period of non-working days (from March 30 to April 30), public and private kindergartens may fall short in parental fees, since such payments are usually made on a monthly basis and calculated depending on actual days of attendance. The amount of the parental fee charged by the founder of preschool educational institution constituted monthly fee of Rb 2159 in QIV 2018 on average in the Russian Federation, taking into account the number and age of children, the mode of their stay as well as the focus of their group.

Taking into consideration the index of consumer prices for services of preschool education in the period of 2019 to February 2020 (1.052), the average parental fee estimated to Rb 2271. Given the number of children accounting for 7.58 million, the kindergartens shortfall in revenues related to losses of parental fees for one lockdown month will not exceed Rb 17.2bn. The losses will be lower, as some children will still attend special groups in the kindergartens.

It is critical to note that incomes of the state preschool educational institutions are generated mainly by budget funds (70%), and the parental fee accounts for less than a quarter (23%) of the total funding. Parental fee is the main source of revenues for private kindergartens, which is as a rule much higher compared to the municipal preschool educational institutions, amounting to around 75% of total revenues.

Financial position of private schools, colleges and universities is estimated as relatively sustainable if they provide distance lessons during the lockdown until April 30, as prevailing share of services provided to the population by these institutions suggest education aimed at principal educational programs. These services are long term and it is not reasonable to interrupt them for school children. General education is compulsory and it is extremely difficult to change private school for the state one under lockdown and other restrictive measures. Only single cases of such changes can be possible, as most of parents will fail to solve organizational matters. It has to be noted that tuition fees have to be settled at the universities and colleges prior to the respective period of education and, therefore, risks of financial losses for these institutions carry over to the beginning of the next academic year.

Some of the full-time classes cannot be effectively substituted by distance learning. The enhancement of full-time classes when the lockdown finished, can compensate for only a short period of distance learning. Prolongation of restriction on full-rime classes for another month, until the end of May, poses a risk to sustainability of either private or state sectors of education, as it may involve significant shift of terms in the implementation of basic educational programs, resulting in major losses for educational system and demanding substantial increase in funding. That is why it is so important to mitigate the impact of the pandemic on the educational outcomes and transition to the next levels of education. According to Decree № 104 dated March, 202 by the Ministry of Education of Russia, measures aimed to provide safe conditions for learning and education, including unscheduled vacations and distance learning technologies, have been suggested for general education as well as for implementation of the intermediate vocational educational programs, respective extended vocational education and extended educational programs. This Decree states that the implementation of educational programs shall be full and complete.

The recommendations worked out by the Ministry of Education of Russia aimed at implementation of the educative process for senior students by institutions conducting programs of the intermediate vocational education suggest that educative process should be completed at the time specified by such programs, thereby changing the form of organization of such educational activity. Authorization has been granted to organize practical training and the State final examination using distance learning technologies and e-learning if they are technically feasible. It is suggested to work on the graduation thesis and (or) papers for the state exams while doing practical training. If necessary, it is recommended to switch to an individual curriculum, including accelerated learning within the framework of an educational program under consideration.

1. On the impact of pandemic on education economics

At the same time, if use of distance educational technologies and distant identity verification is not feasible, the Ministry of Education of Russia allows to postpone the State final examination to time- frame after the quarantine ended.

When the lockdown ended, there may be a reduction in the volume of paid educational services to the population relative to the pre-crisis level due to the general economic situation. However, it is not unlikely that deferred demand will mitigate the negative consequences.

Services of extended education will remain most vulnerable as they are neither mandatory, nor of prime importance, requiring ongoing participation, and, essentially, they can be significantly reduced if provided for a fee. Most of the students will undertake further studies, however, the influx of new students will drastically reduce and unable to compensate the fall. Therefore, certain private institutions maintaining their activity primarily at the expense of paid services of extended education, can close down, having failed to cover their losses for the lockdown period, and facing the ensuing decrease in demand and lack of state support, as well as due to formal/legal reasons.

The decline in population incomes can have a significant impact on the transitioning of high school children and students to the next levels of education and their access to labor market. However, the demand for paid tuition at universities, especially at masters and postgraduates departments, can noticeably decrease. In addition, the incomes obtained from education of foreign students can significantly shrink. The coronavirus pandemic swept almost all countries and caused severe economic damage, thus, its consequences affect the scope of international educational services as well.

Some potential applicants from foreign countries may reconsider or postpone the decision to get an education in Russia, while those already studying at paid departments cannot find the required funds.

The financial situation in the education system will be, basically, stable against the restrictions in force at the beginning of April 2020, provided they are lifted in mid-May. At the same time, preschool and extended education and especially, private institutions, may suffer significant financial losses during a lockdown period from March 30 to April 20. A longer period of restrictive measures may do damage to the overall system of education due to derailing of the final examination and rescheduling current and the next school years.

2. DYNAMIC OF INVESTMENT GOODS IMPORTS AMID PANDEMIC

Pavel Pavlov, senior researcher, Laboratory for Systemic Analysis of Sectoral Markets and Infrastructure, Institute of Sectoral Markets and Infrastructure, RANEPA

Fixed investment is one of fundamental factors for ensuring long-term economic growth and for the economic recovery following the surmounting of business activity decline, crises and recessions. The Russian economy rather strongly depends on imports of investment goods, for example, in January-February 2020 the share of machinery, equipment, and means of transport accounted for around 40% of the total Russia's imports¹. The task of reducing dependence from imports remains urgent in the wake of COVID-19 pandemic when slowdown of business activity worldwide raises risks for restrictions on shipments of required nomenclature of investment goods.

Commencing from Q2 2020, Russia due to the development of coronavirus pandemic outbreak and implementation of a number of restriction measures demonstrates the decline in business activity and expects slowdown of economic growth, decline in real disposable cash income and corporate net sales^{2,3}. As of mid-April 2020, Russia's economic outlook despite deployed measures did not so far enter the phase of contained pandemic spread⁴, consequently, the highest slowdown of business activity can be expected in the months to come. According to VEB projection [1], in 2020 GDP will decrease to nearly 3.8%, the most severe output reduction is expected in Q2 2020 and will constitute – 18% quarter-on-quarter of the previous year⁵.

The collapse of the OPEC+ deal in March 2020 has triggered a plunge in the global oil prices and decline in the ruble exchange rate (*Fig. 1*). OPEC+ pulled off in April 2020 an agreement to cut oil output by 9.7 mn bpd from May 2020 [2] which although has slightly stabilized crude prices, however, can be insufficient: according to Goldman Sachs estimates, decline of demand for crude oil in April-May 2020 in the wake of the coronavirus pandemic amounted to 19 mn bpd [3].

Calculations on data released by FCS of Russia [7]. For calculation of import volumes of investment goods, the following commodity groups were taken TN VED8401–8907.

Economic slowdown was due to the commencement from March 30, 2020 of stay-at-home orders in the wake of coronavirus pandemic. See: Executive Order of the President of the Russian Federation dated 25.03.2020 No. 206 "On Announcement of Non-working Days in the Russian Federation", Executive Order of the President of the Russian Federation dated 02.04.2020 No. 239 "On the Measures for Securing Sanitary and Epidemiological Welfare of the Population on the Territory of the Russian Federation Due to the Spread of the New Coronavirus Infection (COVID-19)"). As of the moment of this memo drafting, "stay-at-home" orders were extended till April 30. "Stay-at-home" regime does not engulf solely workers of certain type of organizations: continues action; securing provision of food products and essential goods; executing urgent work in the wake of emergency situations; doing urgent repair and handling operations.

Preliminary projection of output and real disposable cash income for 2020 is given, for example, in the VEB report [1].

There are four phases of epidemiological situation: I phase – lack of disease registration, II phase – registration of isolated cases, III phase – controlled spread, localization of the sick and contacts tracing; IV phase – uncontrolled spread of the pandemic, emergence of pandemic hot spots. "Restart" of the economy is better to carry out amid transition from phase III to phase II.

Decline in the real disposable cash income in Q2 2020 can amount to -17.5% to the corresponding period of the previous year.

2. Dynamic of investment goods imports amid pandemic

According to empirical estimates of demand model for imports¹, Russian consumers (companies and population) react stronger to comparable (interest) changes in the exchange rate on the national currency than to the changes in income. For example, decline in the ruble exchange rate (up against import prices) by 1% results in the decrease of investment goods imports by 1.4%, and decline in the income growth indicator in manufacturing industry by 1%-to a decrease of investment goods imports by 0.4-0.6% [6]. That said, commodity



Fig. 1. Basic index of real effective ruble exchange rate to foreign currencies (2010 =100)

Sources: Bank for International Settlements [4], CB of RF [5].

groups differentiate by sensitivity to the fluctuations in currency rate; as much as anything else, products of transportation machinery is very sensitive towards fluctuations in the exchange rate².

Weakening in the national currency, decline in businesses' net sales and population income is an essential factor of the decline in imports of investment goods: machinery, equipment, and means of transportation. Depreciation in the national currency in early 2020 creates favorable conditions for stepping up of import phase-out policy regarding certain groups of investment goods that demonstrate high sensitivity towards fluctuations of the ruble exchange rate.

Dynamic of import of investment goods

In January and February 2019 we analyzed large groups of investment goods with monthly imports above \$ 100mn in order to determine an upcoming trend in import phase-out. For January and February 2020 year-on-year we have calculated imports growth rates. *Tables 1–2* demonstrate percentage deviation of imports: month-on-month.

Despite the weakening in the national currency in early 2020, the index of real effective exchange rate in January 2020 still stood at 10% above that seen in January 2019 (*Fig. 11*). Nevertheless, imports growth of investment goods (group CNFEA 8401–8907) in January 2020 year-on-year constituted less than 1%. Having said that, as can be seen on *Table 11*, in January 2020 y-o-y the demand in a number of major groups of investment goods plunged including: automobiles and trucks, spare parts for motor vehicles and foreign made ships. In the next month, imports of a number of major groups of investment goods demonstrated a downward trend (*Table 2*).

¹ See Pavlov P., Kaukin A. Import substitution of investment goods in Russia // Voprosy Ekonomiki. – 2017. – No. 8. – P. 92–103. [6]; Idrisov G. I. Factors of demand for imported goods for investment purpose to Russia // Research Papers / Gaidar Institute for Economic Policy. – 2010. – No. 138P. [8].

² Examples of such commodity groups with high elasticity of demand to the ruble exchange rate: other motor means of transportation for cargo traffic with conventional engine with spark-plug ignition with total weight of not more than 5 t (code CN FEA 870431, elasticity estimate 6.6); other mechanical spades, excavators and tractor loaders (code CN FEA 842959, elasticity estimate 6.4); tractors on wheels for semitrailers (code CN FEA 870120, elasticity estimate 5.7) (see [6]). Indicated elasticity estimates demonstrate that in case of ruble's depreciation by 1% imports will decreased by 5.7–6.6%.

8(110) 2020

Table 1

Dynamic of imports of investment goods (commodity groups above \$ 100mn in January 2019)

Codes CN FEA 8401–8907 (investment goods)	Imports in January 2019, USD mn	Imports in January 2020, USD mn	Deviation in%
8708-spare parts and components to motor vehicles	637.199	606.806	-4.8
8517-telephone receivers, including mobile phones	588.214	756.69	28.6
8471-computers and their components; magnetic or optical reading devices	409.487	462.103	12.8
8703-automobiles and other motor vehicles	358.06	266.048	-25.7
8901- cruisers, excursion ships, ferries, freighters, tow boats	347.974	17.3969	-95.0
8707-bodyworks, (including cabs) for motor vehicles)	174.327	166.272	-4.6
8481-taps, valves, wing valves and similar pipeline fitting, gophers	142.324	143.32	0.7
8704-heavy vehicles	129.867	81.412	-37.3
8407-conventional engines with spark- plug ignition	111.612	111.564	0.0
8421-centrifuges including spin driers	107.353	111.804	4.1
8516-flow-type or tank-type electric heaters (capacitance-type)	107.111	123.862	15.6
8429-straight bulldozers and with angled blade, graders, levelers	104.858	117.571	12.1
Total	6 295.395	6 357.053	0.98

Source: Federal Customs Service of Russia [7].

Table 2

Dynamic of imports of investment goods (commodity groups above \$ 100mn in February 2019)

Codes CN FEA 8401–8907 (investment goods)	Imports in February 2019 USD mn	Imports in February 2020 USD mn	Deviation in%
8708- spare parts and components to motor vehicles	654.750	608.170	-7.1
8517- telephone receivers, including mobile phones	554.813	529.071	-4.6
8703- automobiles and other motor vehicles	509.552	436.205	-14.4
8471- computers and their components	339.791	332.206	-2.2
8707- bodyworks, (including cabs) for motor vehicles	183.377	140.368	-23.5
8481- taps, valves, wing valves and similar pipeline fitting, gophers	182.661	172.907	-5.3
8704- heavy vehicles	167.896	93.606	-44.2
8429- straight bulldozers and with angled blade, graders, levelers	145.356	108.460	-25.4
9018-instruments and equipment used in medicine, surgery, dentistry	131.527	146.547	11.4

2. Dynamic of investment goods imports amid pandemic

Окончание табл. 2

Codes CN FEA 8401–8907 (investment goods)	Imports in February 2019 USD mn	Imports in February 2020 USD mn	Deviation in%
8516- flow-type or tank-type electric heaters (capacitance-type)	125.554	135.089	7.6
8421- centrifuges including spin driers	116.612	138.701	18.9
8413-fluid pumps with and without meters; pulling units	111.699	117.770	5.4
8407- conventional engines with spark-plug ignition, with rotating or	111.070	108.047	-2.7
8701-tractors (except tractors in commodity group 8709)	110.909	83.371	-24.8
8479-machinery and mechanical devices with individual functions	108.707	121.900	12.1
8414-air pumps or vacuum pumps, air gas compressors	103.313	107.348	3.9
8536-electrical equipment for cross-plugging or protection of electric circuits	100.592	97.460	-3.1
Total	6 824.368	6728.620	-1.4

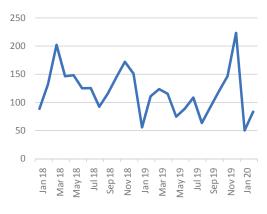
Source: Federal Customs Service of Russia [7].

In February 2020, the ruble real effective exchange rate index decreased by 2% relative to January. Having said that, in February 2020 year-on-year decline in imports of investment goods was observed by 1.4% that affected a significant number of major commodity groups1: February 2020 demonstrated a downward trend in demand for import of automobile industry goods (especially regarding heavy vehicles and spare parts to motor vehicles), additionally demand for import construction, road and agricultural equipment, including bulldozers, graders and tractors plummeted. It is worth noting that could have been triggered by corresponding larger-scale purchases made in December 2019 and can reflect only a sporadic shift in demand due to the features of business-plans implementation by companies-consumers (Fig. 2).

The motor transport segment has not registered significant "December" upsurge of demand that would have reflected its possible overhaul in the future, which attests to the conclusions on a stable decline in imports of those commodity groups (Fig. 3)

Data on foreign trade statistics is released on average with around 40 days' lag post termination of the reporting month and thus by the time of drafting this memo foreign trade statistics for February 2020 was unavailable. Therefore, data on the real effective exchange rate of the ruble is released with nearly

8701-TRACTORS (EXCEPT TRACTORS IN COMMODITY GROUP 8709)



8429-STRAIGHT BULLDOZERS AND WI TH ANGLED BLADE, GRADERS, LEVELE RS..

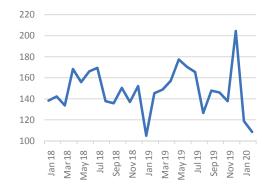


Fig. 2. Value of commodity groups imports 8701, 8429, USD mn

Source: own calculation on data released by FCS of Russia [7].

The ruble real effective exchange rate in February 2020 stayed above the values seen in February 2019 by 5.7%.

Monitoring of Russia's Economic Outlook

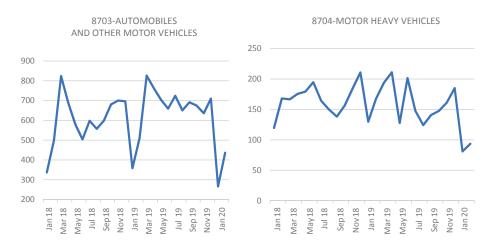


Fig. 3. Value of commodity groups imports 8703, 8704, USD mn

Source: own calculations on data released by FCS of Russia [7].

10–15 days' lag post termination of the reporting month. To date, March 2020 demonstrated the ongoing downward trend of the real effective exchange rate of the ruble to foreign currencies and amounted to 11.4% year-on-year. [5]. In this context, one should expect a downward trend regarding investment goods import and revealed commodity groups should be analyzed as targets for the implementation of import phase-out policy.

* * *

In early 2020, favorable prerequisites for the acceleration of industrial policy to prop up the domestic transport machinery building complex and promotion of import phase-out policy in post-acute pandemic phase in Russia have been formed against the backdrop of business activity slowdown, weakening in the national currency and demand plunge for a number of investment goods import. The state industrial policy can be especially effective in case of the following major commodity groups: automobiles and heavy vehicles. In future, subject to new data on foreign trade statistics regarding the observed trends, the latter can be supplemented by road, construction, and agricultural machinery (tractors).

Over previous years, the Ministry of industry and trade of Russia implemented state programs to buttress the domestic automobile industry by way of preferential automobile lending ("First automobile", "Family automobile"). In 2020 decline of households' income will forward a significant restrictive factor and in against this backdrop it is reasonable to raise government support per one sold automobile within those programs in order to maintain sustainable demand for domestically produced automobiles. Support of domestic automobile sector will correspond social aid targets in certain mono-cities (for example, Togliatti). Programs of state purchases of automobiles and trucks can be alternative mechanism to buttress the sector.

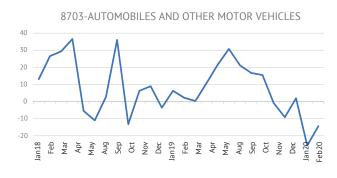
Similar measures aimed at boosting demand by way of preferential lending and state purchases at the transition from phase III to phase II of epidemiological situation in Russia will be applied in buttressing domestic production of heavy vehicles (upon confirmation of observed trend by new data).

2. Dynamic of investment goods imports amid pandemic

References

- 1. Vneshekonombank Institute. 2020. Trends in the development of Russian economy amid coronavirus pandemic and feasible anticrisis measures. http://inveb.ru/ru/products/product-02/247-tendentsiirazvitiya-rossijskoj-ekonomiki-v-usloviyakh-pandemii-koronavirusa-ivozmozhnye-antikrizisnye-mery
- 2. The 10th (Extraordinary) OPEC and non-OPEC Ministerial Meeting concludes // OPEC. 2020. URL: https://www.opec.org/opec web/en/ press room/5891.htm (date of reference: 12.04.2020).
- 3. Goldman Sachs still sees crude prices falling after OPEC+ deal // REUTERS. 2020. URL: https://www.reuters.com/article/us-globaloil-opec-goldman/goldman-sachs-still-sees-crude-prices-falling-afteropec-deal-idUSKCN21V07H (date of reference: 14.04.2020).
- 4. Effective exchange rate indices (monthly) // Bank for International Settlements. 2020. URL: https://www.bis.org/statistics/full_data_sets. htm (date of reference: 11.04.2020).
- 5. Major production indicators of the ruble exchange rate movement // Bank of Russia. 2020. URL: https://www.cbr.ru/statistics/macro_itm/ svs/ (date of reference: 15.04.2020).
- 6. Pavlov P., Kaukin A. Import substituion of investment goods in Russia //Voprosy ekonomiki. 2017. No. 8. P. 92–103.
- 7. Federal Customs Service of Russia: [websiter]. [2020]. URL: http://stat. customs.ru/ (date of reference: 11.04.2020).
- Idrisov G.I. Factors of demand for imported goods for investment purposes to Russia // Research papers / Gaidar Institute for Economic policy. 2010. № . 138P.

Annex





8704-MOTOR HEAVY VEHICLES

Fig. 4. Value of commodity groups imports, growth rates in % (month-on-month)

Source: own calculations based on data released by FCS of Russia [7].

3. INFLATIONARY PROCESSES IN THE RUSSIAN FEDERATION IN THE WAKE OF THE CRISIS

Alina Grebenkina, junior researcher, Center for Central Banks Issues, IAES, RANEPA;

Natalya Makeeva, junior researcher, Center for Central Banks Issues, IAES, RANEPA; Elena Sinelnikova-Muryleva, Candidate of sciences (Economics), senior researcher, Center for Central Banks Issues, IAES, RANEPA

Inflation in Russia over a prolonged period of time stays below the target which opens the door for the implementation of accommodative monetary policy. Moderate inflation target growth amid the crisis positively impacts the economy. Inflation target at 4% rate according to estimates remains optimal and there are no reasons for its revision at the moment.

Coronavirus pandemic-induced crisis already compare with the Great Depression, the Great Recession and call according to the new IMF report "The Great Lockdown" [1]. According to the IMF forecast, Russian economy will contract by -5.5% of GDP (or -5.4% per capita on PPP), however economic recovery in 2012 according to the same projections will hit 3.5% (or 3.6% per capita on PPP).

Severe decline of economic activity has been observed worldwide and in this context, despite the fact that it has a temporary character, the most dangerous economic fallout can be deflation. Deflation observed in the US during the Great Depression resulted in price slump by 33% and liquidity trap. Remembering the lessons taught by the Great Depression the monetary authorities of advanced economies very attentively observed the slowdown of inflation during the 2008–2009 crisis and deployed the large scale measures (including quantitative easing) for avoiding deflation in the economy. Consequently, despite the fact that non-economic shock has triggered the current crisis outbreak, the central banks face a complicated task to maintain an optimal rate of inflation, balanced financial system and deployment of short-term economic stimulus.

In March 2020, the Russian economy observed a short-term demand growth for a number of food products and essential goods as the Russian population was getting ready for the "stay-at-home" orders. Positive shock from demand and ruble's depreciation amid oil prices plunge and capital outflow resulted in inflation acceleration to 2.5% year-on-year (against 2.3% in February 2020). From now on, one can expect an aggregate demand decline due to first of all by the fall of economic agents' income. The level of uncertainty regarding the future economic outlook is high and the negative demand shocks will continue for at least till the lockdown measures are lifted. Against this backdrop, the Bank of Russia has sent out message of a feasible cut of the key rate in late April 2020 for pump priming [2].

Theoretically, instantaneous collapse of aggregate supply and demand can result both in growth and decline of the general price level in the economy. To date, inflation in Russia stays below the target and the Bank of Russia points out to the predominance of disinflationary factors in medium-term due to the restrictive measured deployed by the majority of countries, slowdown of the global demand and high uncertainty[3]. As shown in *Fig. 1*, the slowdown of the

3. Inflationary processes in the Russian Federation in the wake of the crisis

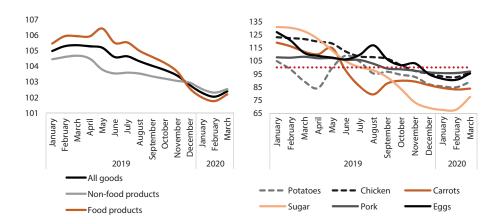


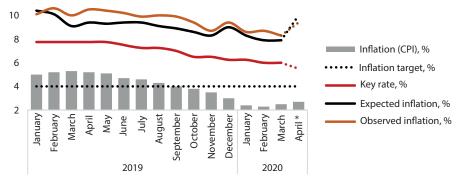
Fig. 1. CPI across commodity groups in Russia in 2019–2020 and example of food products which demonstrate disinflation, in % month-on-month of previous year

Sources: own calculation on the data released by Rosstat, UISIS.

consumer prices growth rate in Russia has been observed for over a year. On top of that, food products face a significant deflation risk, and from late 2019 deflation has already been observed among certain commodity groups.

Prolonged disinflation and deflation are detrimental to the economy due to such negative consequences as unemployment growth over the natural rate, consumption postponement and decline of demand for consumer lending, price hike on the real cost of production factors and forced refusal of firms from recruitment of workers [4].

To date, there are also pro-inflationary factors. First of all, they include ruble's depreciation. According to data released by the Bank of Russia, in 2016–2017 transfer pricing declined to 0.06 p.p. of the inflation rate as the ruble exchange rate fell by 1% [5]. However, according to our estimates, as in the case with the 2014–2015 crisis, the pass-through effect (PTE) can rise to around 0.1 p.p. To a certain extent, these concerns have been reflected in the forecast released by the Ministry of Economic Development on inflation in April 2020 (expected inflation growth to 2.6–2.7% month-on-month of the previous year [6]) and feasible rise of expected and observed inflation (according to preliminary findings from economic agents' surveys) (*Fig. 2*). Meanwhile, in the event average annual Urals crude prices stay in the range of \$ 25–30 per barrel, we do not expect ruble's depreciation on average per year below Rb 80–85 per



^{*} Projected value.

Fig. 2. Actual, expected and observed inflation in Russia, %

Sources: own calculations on materials released by Bank of Russia «inFOM» Agency[7].

USD, and inflation – above 5–6% at the year-end. At the same time, deflationary pressure will increase.

Therefore, in this context implementation of accommodative monetary policy aimed at sticking to inflation targeting is justified. Our analysis has demonstrated that the inflation targeting at 4% rate selected by the monetary authorities remains optimal for the Russian economy. According to calculations made within the analysis of the money market and money demand (quarterly data for 2000–2019), the Bank of Russia transition to the inflation targeting framework and the target at 4% rate has reduced welfare costs of inflation.¹ As can be seen on *Table 1*, the selected inflation target corresponds to the experience accumulated by other countries, retains flexibility of monetary policy towards easing, stands as a factor for reducing the feasibility of disinflation across certain commodity groups as well as sends a clear message to economic agents that the regulator does not envisage to deploy excessively tough monetary policy which is urgent in the context of the crisis.

Factors containing change of the current inflation targeting

• Priority of retention of the gradual monetary policy implementation aimed at effective

Adverse experience of countries with destabilizing fallout of unprecedented change of

Table 1
Factors for retaining inflation targeting in Russia at 4% rate

"anchorage" of inflationary expectations;

inflation target (Turkey, Brazil, and China);

future volatility of infla • Positive experience of a longed period of time (a)	refusing to change the rate of inflation targeting in order to avoid tion expectations (Canada, USA); countries successfully deploying inflation targeting rate for pro- Australia, Canada, RSA, and Chile); ndings confirming validity of target ([8])
Factors containing setting the rate below 4%	Factors containing setting of inflation target above 4%
 Need to control deflation risk in certain sectors of economy; Retaining room for applying flexibility to interest rate policy easing in the context of Bank of Russia nonuse of tools for offstandard monetary policy; Undesirability of excessive prolongation of disinflation Hpolicy requiring tough monetary conditions. 	• Ensure convergence of inflation target with countries—major trade partners (Figure 3); China (around 3%) Germany (до 2%) Netherlands (up to 2%) Belarus (around 5%) Italy (up to 2%) USA (2%) Republic of Korea (2%) Poland (2.5% +/-1 pp.) Figure 3. Share of Russia's trade turnover with major trade partners and their inflation target, % Source: own calculations on Bank of Russia materials [9]. Positive real neutral interest rate [10]; Averting spread growth of inflation expectations.
Source: updated by authors	of earlier materials [11].

Therefore, we consider justified cautious reduction of the key rate by the Bank of Russia² taking into consideration the financial market outlook in favor

The earlier version of estimates was released in [12].
 In March-April key interest rates were reduced in Brazil, India, Mexico, RSA and other countries with emerging markets.

3. Inflationary processes in the Russian Federation in the wake of the crisis

of stimulating aggregate demand which should exert an upward pressure on the money mass in the economy (despite slight cash demand growth as a precaution¹, to date there is no evidence of the retail deposits volume decline in the banking sector and money multiplier).

References

- 1. IMF, "World Economic Outlook. Chapter 1. The Great Lockdown," International Monetary Fund, April 2020.
- 2. Bank of Russia. Elvira Nabiullina, Chearwoman of the Bank of Russia, statement at press-conference dated 17.042020 URL: https://cbr.ru/press/event/?id=6656 (Statement dated: April 18,2020).
- 3. Bank of Russia. Monetary policy department. Dynamics of consumer prices. Information and analytical commentary. March 2020. No. 3 (51).
- 4. Schmitt-Grohé S., Uribe M. The Optimal Rate of Inflation // In: Handbook of Monetary Economics. 2011. P. 653–722.
- 5. Bank of Russia. Bulletin of the Bank of Russia // Publications of the Bank of Russia. December 2019. No. 77–78 (2129–2130). P. 1–119.
- 6. Ministry of Economic Development. Picture of inflation. April 2020 // Publications of MED 2020. P. 1–2.
- 7. JSC «инФОМ». Measurement of inflation expectations and consumer sentiments on the basis of population surveys // Analytical report of инФОМ commissioned by the Bank of Russia. March 2020. P. 1–50.
- 8. Perevyshina E. The impact of inflation on the econmic growth rates // Finance and Credit. No. 9. 2016. P. 16–28.
- Bank of Russia. External sector statisticsa 2020. URL: http://www.cbr.ru/ statistics/macro_itm/svs/#highlight=статистика%7Свнешнего%7Ссект ора%7Сстатистики
- 10. Grafe C., Grut S., and Rigon L. Neutral Interest Rates in CEEMEA Moving in Tandem with Global Factors // Money and Finance. 2018. Vol. 77. No. 1. P. 6–25.
- 11. Sinelnikova-Muryleva E.V., Grebenkina A.M. Optimal Inflation and Inflation Targeting: country experience // Финансы: теория и практика. 2019. Vol. 23. No. 1.
- 12. Drobyshevsky S.M., et.all. Estimation of Welfare Costs of Inflation: The Case of Russia // Voprosy ekomokimi. 2019. No. 9. P. 55–69.
- 13. Bank of Russia. Indicators of lending institutions' performance 2020. URL: https://cbr.ru/statistics/bank_sector/pdko_sub/ (date of reference: April 18, 2020).

¹ According to Bank of Russia data [13], in March 2020 the amount of cash in circulation (aggregator M0) increased by 1.9% to February and by 2.9% from late 2019.

4. EXECUTION OF THE FEDERAL BUDGET IN Q1 2020

Sergey Belev, Budget Policy Research Laboratory, RANEPA; Head of Budget Policy Department, Gaidar Institute;

Tatiana Tischenko, senior researcher, Budget policy Research Laboratory, RANEPA

At the period-end of Q1 2020, the federal budget ran a slight surplus, however it was a temporary result because oil and gas revenues go into the budget in a timely manner and they record a downturn against Q1 2019. Non-oil and gas revenues although went up but that was due to the fact that they are received with a quarterly lag. On the whole, the situation with the pandemic spread sets a junction for the fiscal policy: to finance the shortfall of non-oil and gas revenues (potentially for regions' budgets coupled with extrabudgetary funds) primarily from borrowings (in accordance with the current fiscal rule) or by extensive use of the NWF funds (deviating from the fiscal rule).

In Q1 2020, the federal budget revenues moved up by Rb 140.3bn on the back of the non-oil and gas revenues growth by Rb 345.9bn and contraction of oil and gas revenues by Rb 205.6 bn relative to January-March 2019. The federal budget expenditures over the first three months of the current year went up by Rb 793.9bn to three months of 2019. Nevertheless, the budget was executed with a surplus of Rb 12.4bn.

According to the real-time data, released by the Federal treasury, the federal budget revenues in Q1 2020 increased by 1.0 p.p. of GDP up to 19.4% of GDP (*Table 1*) compared to the same period of the previous year. The world oil prices plunge¹ has resulted in the contraction of the oil and gas revenues by 0.7 p.p. of GDP over three months of the current year to January-March of 2019. Mainly that was due to the shortfall from export customs duties (down by 0.7 p.p. of GDP or down by Rb 178.7bn), meanwhile MET returns declined slightly (down by Rb 26.9bn)². The fall of the oil and gas revenues in the federal budget was solely partially offset by ruble/dollar exchange rate³: at the end of the day returns from the crude oil export contracted to Rb 44.0bn in March 2020 against Rb80.1bn in March 2019, proceeds from gas export calculated on the basis of the fiscal rule according to the Finance Ministry of Russia over January-March of the current year came to Rb 1,217.9bn against Rb 1,320.6bn for the same period of 2019.

Non-oil and gas revenues in the federal budget over Q12020 went up by Rb345.9bn or by 1.7% of GDP compared to Q12019, including:

- on corporate profits tax by 0.3 p.p. Of GDP or by Rb 72.9bn mainly due
 to the implementation of agreements on the development of oil and
 gas deposits from Rb12.0bn to Rb 91.6bn; the revenues generated by
 the corporate profits tax contributed Rb 146.7bn to the federal budget
 at corresponding rates marking a decrease from Rb 168.2bn in Q1 2019;
- on domestic VAT by 0.3 p.p. of GDP or by Rb 54.1bn;

¹ Urals crude price averaged: January-March 2020 to January-March 2019 \$ 48.18 and \$ 63.17 per barrel; March 2020 to March 2019 \$ 29.17 and \$ 65.98 per barrel.

² Taking into account excise repayment put in place from January 1, 2019 while pumping crude oil for refining.

³ The ruble exchange rate to dollar: as on March 1, 2020.— 66.99, as on March 31, 2020–77.73 (Source: the Bank of Russia).

4. Execution of the Federal budget in Q1 2020

(110) 202

Table 1

Main federal budget parameters for January-March 2019–2020

		January-March 2019	2019		January-March 2020	2020	Deviation, 2	Deviation, 2020 to 2019
	Rbbn	% of GDP	Cash execution, %	Rbbn.	% of GDP	Cash execution, %	Rbbn	% of GDP
Revenues, including:	4 590.0	18.4	22.7	4 730.3	19.4	23.0	140.3	1.0
– oil and gas, including	1 993.5	8.0	24.6	1 787.9	7.3	23.8	-205.6	-0.7
• MET	1 413.9	5.7	24.2	1387.0	5.7	23.4	-26.9	0.0
 Export customs duties 	579.6	2.3	25.5	400.9	1.6	24.1	-178.7	-0.7
– non-oil and gas revenues, including:	2 596.5	10.4	21.4	2 942.4	12.1	22.5	345.9	1.7
Corporate income tax	254.7	1.0	21.5	327.6	1.3	26.9	72.9	0.3
VAT on goods sold in RF	1 062.1	4.3	24.9	1 116.2	4.6	24.5	54.1	0.3
 VAT on goods imported on RF territory 	611.1	2.5	21.5	614.4	2.5	20.3	3.3	0.0
 Excises on goods sold on RF territory 	126.4	0.5	24.2	198.1	0.8	20.6	71.7	0.3
 import customs duties 	154.7	9.0	21.8	152.8	9.0	23.0	-1.9	0.0
other revenues	387.5	1.5	20.2	533.3	2.3	20.1	145.8	0.8
Expenditures, including:	3 924.0	15.7	21.5	4 717.9	19.3	24.0	793.9	3.6
– interest expense	158.7	9.0	21.7	171.4	0.7	19.0	12.7	0.1
– non-interest expense	3 765.3	15.1	20.4	4 546.5	18.6	24.2	781.2	3.5
Budget surplus (deficit)	0.999	2.7		12.4	0.1		-653.6	-2.6
Non-oil and gas deficit	-1 327.5	-5.3		-1 775.5	-7.2		-448.0	-1.9
GDP (in current prices) Rbbn.		24 945			24 400			

Sources: Ministry of Finance of Russia, Federal treasury, Rosstat, own calculations.

- on excises on goods sold on the RF territory by 0.3 p.p. of GDP or by Rb 71.7bn:
- on other tax and non-tax revenues growth came to 0.8 p.p. of GDP or by Rb 145.8bn;
- on import VAT and import customs duties receipts relative to GDP stayed flat.

Growth of tax revenues amid the pandemic-related decline in economic activity in March 2020 was due to the temporary lag regarding payment timeline and features of advance payments. As a result, non-oil and gas revenues brought to the budget in Q1 2020 reflect the outcome of the real sector performance during the pre-crisis period. Therefore, contraction of non-oil and gas revenues in the federal budget over subsequent two quarters are inevitable even in the wake of recovery of the business activity in the months to come.

The cash execution of the federal budget on oil and gas and non-oil and gas revenues at Q1-end of 2020 to Q1 2019 remains in the comparable values.

The federal budget expenditure in Q1 2020 against Q1 2019 increased by Rb 793.9bn or by 3.6 p.p. of GDP including across sections (*Table 2*):

- "health care" by 1.0 p.p. of GDP or by Rb 225.7bn;
- "national defense" by 0.6 p.p. of GDP or by Rb 115.2bn;
- "social policy" by 0.4 p.p. of GDP or by Rb 74.3bn;
- "national economy" and "general questions" by 0.3 p.p. of GDP or by Rb 72.0bn and Rb 67.2bn, respectively;

On other sections – within the range of 0.1–0.2 p.p. of GDP.

The level of cash execution over Q1 2020 in general is similar to the last year's value. That said, the accelerated budget disbursement already commenced in February 2020 prior to the WHO announcement of the global pandemic and went on in March regarding the following types of expenditure (cash execution in% relative to the adopted budget appropriations for 2020): ensure holding of elections and referendums (85.3%), cinematography (66.6%), other issues in the sphere of health care (59.6%) and in the sphere of housing and utilities sector (56.5%), applied scientific research in the sphere of health care (52.7%), social safety net (40.0%), storage, processing, conservation and safety provision for donor blood (35.4%). On the whole, growth of spending on these strands is correlated to the planned activities (for example, holding elections on the amendments to the RF Constitution) and the need to finance anti-virus measures.

At Q1-end of 2020, the federal budget ran a surplus only nominally (budget balance amounted to Rb12.4bn which in shares of GDP comes to around 0.05%), and this notably below the level reported last year (2.7% of GDP). Simultaneously, non-oil and gas deficit went up — from minus 5.3% of GDP to minus 7.2% of GDP. Upon the flow of funds of the federal budget taken as a source to cover budget deficit over the period January-March 2020 one should note accelerated redemption of bonds placed on domestic markets which amounted to 47.2% of the annual values or Rb 276.0bn and contraction by Rb 199.9bn of surplus balance of the federal budget on deposits.

The amount of the Wealth National Fund (NWF) over Q1 2020 increased by Rb 5.1 trillion mainly due to the additional oil and gas revenues generated in 2019¹ and totaled Rb 12.8 trillion at Q1 2020. In order to raise liquidity a

¹ Order of Finance Ministry of Russia dated March 13, 2020 No. 109 "On the use of additional oil and gas revenues of the federal budget generated in 2019 for the

4. Execution of the Federal budget in Q1 2020

(110) 2020

 Table 2

 Federal budget expenditures over January-March 2019–2020

		N	0700		N .	1.000	Devi	Deviation,
		January-IMarch 2019	6107		January-March 2020	0.20.2	2020	2020 to 2019
	Rb bn	% of GDP	Cash execution, %	Rb bn	% of GDP	Cash execution, %	Rb bn	% of GDP
Total expenditures, including:	3 924.0	15.7	21.5	4717.9	19.3	22.7	793.9	3.6
General state issues	244.9	1.0	17.9	312.1	1.3	17.9	67.2	0.3
National defense	802.5	3.2	26.8	917.7	3.8	27.6	115.2	9.0
National security and law enforcement activities	404.2	1.6	19.4	446.5	1.8	17.9	42.3	0.2
National economy	289.1	1.2	10.2	361.1	1.5	12.4	72.0	0.3
Housing and utilities sector	41.2	0.2	14.5	92.4	0.4	29.7	51.2	0.2
Environmental conservation	62.4	0.2	31.6	84.9	0.3	23.7	22.5	0.1
Education	165.4	0.7	20.0	201.4	0.8	19.5	36.0	0.1
Culture, cinematography	19.0	0.1	15.5	29.0	0.1	19.1	10.0	0.0
Health care	160.4	9:0	22.5	386.1	1.6	33.8	225.7	1.0
Social policy	1 344.3	5.4	27.5	1418.6	5.8	27.4	74.3	0.4
Physical fitness and sports	6.9	0.0	8.5	6.6	0.0	12.5	3.0	0.0
Mass media	12.8	0.0	12.4	17.8	0.1	18.7	5.0	0.1
Servicing state and municipal debt	158.7	9:0	21.7	171.4	0.7	19.1	12.7	0.1
Inter-budget fiscal transfers	212.2	6:0	21.2	769.0	1.1	24.7	56.8	0.2

Sources: Ministry of Finance of Russia (online data), Federal treasury, own calculations.

small part of the NWF's funds deposited at VEB.RF for the implementation of nationally-important projects has been withdrawn ahead of schedule in March this year and deposited at the Bank of Russia. At the same time, already early in April 2020, the government of the Russian Federation purchased from the Bank of Russia shares of Sberbank which were deposited at NWF that, in its turn, decreased the amount of liquid balance of the fund by over Rb 2.1 trillion.

* * *

Therefore, due to the deferred character of accruals on non-oil and gas revenues the effect from the imposition of lockdown measures and plunge of crude oil prices will be fully revealed already in Q2 and subsequent quarters of the current year. Currently in force fiscal rule envisages the use of the NWF funds primarily to offset a shortfall of oil and gas revenues. Significant exception against this backdrop is the purchase of Sberbank shares that allows to transfer to the federal budget a portion of the Bank of Russia profit from that deal (up to Rb 1 trillion in 2020).

However, according to our estimates, the amount of shortfall of non-oil and gas revenues on a year-on-year basis can amount to Rb 2.5–3.0 trillion depending on the duration of the lockdown measures and the pace of economic recovery after the end of pandemic. On top of this, contraction of non-oil and gas revenues will impact both regions' budgets and the budgets of extra-budgetary funds¹. From this perspective, there arises a basic need in debt-fueled financing which is a serious challenge for the budgetary system. That is why, it makes sense to ease the fiscal rule already in 2020 by introducing in it a widespread in the world practice "reservation about emergency circumstances," allowing the government to incur expenses exceeding the originally targeted limits and adopted in the budget law in compliance with the fiscal rule. However, in the long-term in the interests of higher flexibility of the fiscal rule and raising its reliability, the government of the Russian Federation should define more precisely the current structure of the fiscal rule by envisaging in addition to the indicated reservation the sources of financing of shortfall of non-oil and gas revenues.

formation of the National Wealth Fund" on formation in NWF assets in foreign currencies totaling \$ 20.6bn, € 18.4bn, and £ 3,6bn, acquired from the federal budget funds in the amount of additional oil and gas revenues of the federal budget over 2019, credited to an account for registering the NWF funds denominated in foreign currencies. The exact amount transferred to NWF in Russian rubles is unavailable. The Federal treasury website does not give information of cash flow regarding NWF for January-March 2020 (as on 21.04.2020).

¹ It's worth noting, one should expect balancing transfer from the federal budget due to the reduction of insurance contribution rates for employees in small and medium-sized businesses on the remuneration above the minimum wage to 15% which will lead to additional shortfall to the tune of Rb 350bn in 2020.

5. UNCONVENTIONAL MEASURES OF MONETARY POLICY AMID THE NEW MACROECONOMIC ENVIRONMENT

Evgeniy Goryunov, researcher, International Department of Mathematical Modeling of Economic Processes, Gaidar Institute; lecturer at the Chair of Finance and Currency-credit Relations, RFTA under the Ministry of Economic Development

Coronavirus-induced global crises has already severely changed monetary policy in developed countries. Although some unconventional measures of monetary policy were implemented in the context of the 2008 crisis, it was supposed that they would have a limited and short-term nature. However, today there are grounds to believe that unconventional monetary policy is a far cry from short-term nature due to the new global crisis. It is rather probable that the change of the conventional monetary policy will be happening (including in forms analyzed below) in the course of the coming decade. In the meantime, for various reasons, unconventional policy measures should not be analyzed as timely for emerging market economies including the Russian economy.

The period from mid-1980s through 2008 was called Great moderation in economic literature which was explained by a low volatility of output and inflation in that period compared to the period of Great inflation of 1970s. In the period of Great moderation, a presumption took shape on the inflation targeting framework as of optimal design for the monetary policy, which allows to level effectively fluctuations in output and ensure predictable price dynamic with low inflation rate. Inflation targeting was a symbol of the so called Taylor rule, which presumes that the economy is affected through the change in the nominal key rate set by the central bank.

This framework has demonstrated its efficiency which resulted in its accelerated spread not only in advanced economies but in emerging market economies as well. There was a slowdown in consumer price growth worldwide which to some extent is explained by mass change-over to a more responsible and reticent monetary policy.² Introduction of inflation targeting helped to reduce structural inflation and nail down inflationary expectations at a rather low level, however, along with this, this made advance economies more prone to the risk of falling into a liquidity trap when the interest rate policy becomes ineffective.

Brand new period in the monetary policy commenced in 2008–2009 when in the wake of the global financial and economic crisis, the possibilities of the interest rate policy were exhausted.³ The developed countries have departed from the conventional monetary policy framework but by that time it was assumed that the use of unconventional policy measures would be provisional and limited,⁴ and subsequently when the interest rates and inflation recover,

¹ See: Bernanke, B. S. (2012). The Great Moderation. Hoover Institution, Stanford University Book Chapters.

² See: Rogoff, K. (2003). Globalization and global disinflation. Economic Review-Federal Reserve Bank of Kansas City, 88(4), 45–80.

³ Note, that previously in 2004–2006 the Bank of Japan resorted to quantitative easing in the context when interest rates declined to zero level but at that time the application of such measures was an exception.

⁴ Japan in 2004–2006, as well as Sweden and Canada in 2008–2010 pursued a full circle of monetary policy which included widescale buying of securities in the period of the acute stage

they will succeed to return to traditional monetary policy array of tools. Weak macroeconomic dynamic and extremely low inflation in Japan, the US, Eurozone countries, Great Britain, Switzerland, and some other countries observed in the post-crisis decade demanded from central banks implementation of additional rounds of quantitative easing.

Urgent bailout and stimulus package being implemented to date in the developed countries without failure include monetary easing. Key rates were lowered to practically zero level by the Bank of Canada, Bank of England, FRS of the USA, the Reserve Bank of Australia, and the Central Bank of Norway. Having said that, the initial interest rates level from where the decline took place had already been lower than normal. In above mentioned countries the highest rates seen at early 2020 were in Canada and the USA and stood at 1.75%. By early 2020, interest rates in Eurozone, Japan, Sweden, and Switzerland were already at zero or even in the red and with the outbreak of the crisis remained at the same level.

Consequently, stimulative effect from lowered rates will be limited in current conditions when executive authorities are resolved to try all available tools in order to avoid economic collapse. This means that to date unconventional measures of the monetary policy become the main tool available to the monetary authorities and first of all in developed countries, the key element of which is a large-scale purchase of financial assets (quantitative easing) and loosening of requirements to financial institutions when obtaining credits from the regulator with simultaneous expansion of refinancing (credit easing).

The approach to the monetary policy with high probability will be revised in developed countries on the back of COVID-19-induced economic crisis. Unconventional monetary policy measures which monetary authorities in developed counties were forced to opt for the renewal of economic growth in the wake of the global financial crisis of 2008–2009 will become the main instrument for central banks' policy, provided that the list of unconventional measures will be augmented with previously unused new instruments.

One can single out the following trends and directions of the monetary policy transformation in developed countries, which, probably, will be revealed in the coming decade. First of all, it relates to Japan, the USA, Great Britain, and European countries, however, one should not exclude that these trends and transformations will get a wider circulation.

Firstly, the usefulness of the interest rate policy remains rather limited. In the course of recovery of economic activity with inflation rate approaching target, the central banks will be raising key rates, however, highly likely they will be returning to zero rate in the periods of recession. It is highly unlikely that in the coming decade macroeconomic conditions will normalize and will allow central banks in the developed countries to return to traditional inflation targeting framework with nominal rate as the principal and single tool. In the new environment, the interest rate policy will be supplemented with regulation policy of bank reserves on which central banks will accrue interest payments. Change in the volume of reserves will be achieved mainly via purchase of

of the crisis with the subsequent their sale implement as far as the inflation returns to the targeted level and interest rates to positive values.

¹ Regarding such authorities' policy for decisive measures, the expert community coined the phrase "whatever it takes" (WIT). This phrase was originally coined by Mario Draghi Chairman of the European Central Bank in order to persuade markets in the regulator's resolve to implement an all-out stimulation for achievement of inflation target and enact a recovery economy growth.

5. Unconventional measures of monetary policy

securities on the open market. Accrual of interest on reserves allows monetary authorities to influence the volume of assets on the corresponding accounts notwithstanding the value of the key rate,¹ which is the deposit rate of the central bank.² Heavy use of negative rates is unlikely to gain wide circulation due to fear of an all-out escape into cash.

Secondly, monetary financing of fiscal deficit will expand, in other words, the share of the public debt will be piling up on the balance of central bank. In the current situation when interest rates are at near zero, monetary financing of fiscal deficit practically does not differ from financing via placement of bonds on the open market.³ Given that many countries banned direct central bank financing of fiscal deficit, implementation of monetary financing policy will require either technical evasion of such ban (as happened in Great Britain) or amending current legislation.⁴ In view of this, the developed countries will continue close coordination of activities between monetary and fiscal authorities.

Thirdly, the most likely scenario anticipates that inflation will be near zero⁵ and economic activity will be recovering slowly. Analysis of the previous crises demonstrates that usually the recession is not followed by the return of GDP to the preceding trend. Moreover, restoration of pre-crisis growth rates happens only in every third case.⁶ As a rule, economic recession is followed by a period of low economic growth rates (so called "effect of super-hysteresis") and current economic crisis will unlikely be an exception.

The decade that followed the global financial crisis has demonstrated that sever economic slump and growth of unemployment seen in developed countries has not led to the fall into deflationary spiral, in other words price fall was moderate and thereafter inflation became positive. Similarly, recovery of economic growth and reduction of unemployment has not triggered inflation growth. We observe downturn in the slope of Phillip's curve, in other words, reduction of sensibility of inflation to a stage of economic cycle measured by deviation of unemployment from natural level or GDP gap index. Economists explain this phenomenon, called missing inflation, by firmly anchored inflationary expectations and features of price and wages rigidity. From this perspective it is natural to suppose that under the current crisis inflation will not get far enough into the red.

Fourthly, one can expect that in the near future, versions of transformation of the two-tier banking system and system of money circulation will be developed, the result of which will be a possibility for individuals and legal entities who are not part of the banking system to keep accounts directly with central bank. This will allow monetary authorities to incentivize aggregate demand

¹ See Borio, C., Disyatat, P., & Zabai, A. (2016). Helicopter money: The illusion of a free lunch. VoxeEU.org, 24.

² Similar system exists in Norway for a long time, where structural liquidity surplus and the key rate is sight deposit rate in the Central Bank of Norway (Norges bank sight deposit rate).

See URL: https://www.bruegel.org/2020/04/monetisation-do-not-panic/

⁴ Reichlin L., Turner A., Woodford M. Helicopter money as a policy option // VoxEU.org. May. 2013. Vol. 20.

⁵ Expert community coined a special expression "lowflation", which implies a period of low inflation. See: Moghadam, Reza, Ranjit Teja and Pelin Berkmen (2014). Euro Area – «Deflation Versus "Lowflation". IMFdirect, The international Monetary Fund's global economy forum, March 4. URL: http://blog-imfdirect.imf.org/2014/03/04/euro-area-deflation-versus-lowflation/

⁶ See: Blanchard, O., Cerutti, E., & Summers, L. Inflation and activity – two explorations and their monetary policy implications. Inflation and unemployment in Europe, 25.

⁷ See: URL: https://voxeu.org/article/inflation-expectations-and-missing-disinflation; URL: https://voxeu.org/article/new-models-macroeconomic-policy; Lindé, Jesper, and Mathias Trabandt. "Resolving the missing deflation and inflation puzzles". URL: https://voxeu.org/article/resolving-missing-deflation-and-inflation-puzzles

Monitoring of Russia's Economic Outlook

via direct payments to privet non-banking sector.¹ By emitting non-cash digital money equivalent to cash national currency, central banks in practice can implement the policy of "helicopter money" which previously was considered exclusively in abstract theoretical context. In the situation of zero rates, this can become an effective instrument for direct propping-up of demand. It looks natural that the introduction of electronic money by central banks in order to boost economic growth and transition to payment of universal basic income will be part of a unified complex for the new macroeconomic regulation. This will require certain revision of traditional views on the interaction and division of spheres of monetary and fiscal policy.

Advantage of emerging market economies where Russia pertains consists in the fact that macroeconomic conditions in those countries do not require special unconventional measures and thus the framework of inflation targeting can be used further on without significant adjustment. Furthermore, inflationary expectations in Russia so far are not firmly anchored at the low level which makes falling into liquidity trap less feasible than falling into stagflation especially taking into account possible shocks of demand and exchange rate pass-through in the periods on ruble's weakening.

¹ See: Bernanke, B. S. (2016). What tools does the Fed have left? Part 3: Helicopter money. Brookings Institution; Coronado, J., & Potter, S. M. (2020). Securing Macroeconomic and Monetary Stability with a Federal Reserve-Backed Digital Currency; Coronado, J., & Potter, S. (2020). Reviving the potency of monetary policy with recession insurance bonds (No. PB20-5).