ECONOMIC POLICY =

Post-Pandemic Recovery: The Russian Economy and the Transition to Sustainable Social and Economic Development

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Abstract—The article contemplates and evaluates the changes in the Russian economy precipitated by the epidemic of a new coronavirus. The key constraints of the development of the Russian economy in the medium and long term perspectives are analyzed. The basic action strategies and a set of economic policy measures to strengthen the potential for economic growth in Russia are introduced. The sources and instruments of financing economic growth in current conditions are substantiated.

Keywords: economic growth, coronavirus, economic recovery, investment, economic policy

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Overcoming the socio-economic implications of the **COVID-19 virus pandemic.** The scale of the upheavals in the world and Russian economies allows us to consider them as a global cataclysm comparable to a military crisis [1, 2]. Quarantine measures that were used by most countries of the world [3], including Russia, made it possible to reduce mortality from a pandemic and distribute the load on the healthcare system in time, but this has to be paid for by a serious economic recession [4]. In Russia, according to the results of 2020, the decline in GDP may exceed 5%, the number of poor can increase from 18 million to 20-21 million people. Under these conditions, all the problems and development restrictions that have accumulated in the Russian economy over the past decade are exacerbated (for more details see: [5]).

Since 2013, the Russian economy has been in a state of stagnation, which has both internal and external causes. The average annual GDP growth rate in 2016—2019 amounted to only 0.8%, which led to a drop in real disposable cash incomes of the population to the level of 2011. In the crisis of 2020, this problem became even more acute. The situation is aggravated by the long-term trend of a decrease in the working-age population and a new depopulation that began in 2018, the uncertainty in hydrocarbon price dynamics, the continued effect of sanctions by developed countries against Russia, and the consequences for our country of a possible reduction in the global economy [6, 7].

The modern crisis brought new losses and tests, but at the same time created a "window of opportunity" not only for recovery, but also for the transition to an economic recovery, the solution of problems that had accumulated in the previous decade. The established low prices for hydrocarbons compel us to look for ways to form a new type of economy that can develop and provide a high level of income not due to natural and market rents, but to knowledge-based, highly productive and energy-efficient production. The transition to a new socio-innovative-ecological model of economic development is becoming the only possible alternative to stagnation and weakening of Russia's position in the world [6]. What is needed now is not so much targeted design and incentive measures as a systematic policy of economic breakthrough and social renewal.

Measures of transition to economic recovery and over-coming the implications of a pandemic and shock in world commodity markets. The measures taken by the government, including the National Action Plan for the Restoration of Employment and Incomes of the Population, Economic Growth and Long-Term Structural Changes, will help reduce the decline in GDP in 2020 by 1.0–1.5 pp and support the real incomes of the population. However, these measures are not enough to neutralize most of the crisis losses and the transition to sustainable economic growth (Table 1).

The package of measures taken "costs" about 2.0—2.4% of GDP and is at times inferior to the relative scales of anticrisis measures of the leading economies of the world and the anticrisis program in Russia in 2009 (Table 2). Despite the ongoing and planned actions, the growth of the Russian economy in the near future will not exceed 3% per year, which will be lower than the expected global dynamics.

To restore the economy and its transition to active recovery, larger-scale stimulus measures are required

Table 1. Dynamics of the GDP components in the inertial scenario of economic development in 2020–2023, % growth

Rate of increase	2020	2021	2022	2023
GDP	-5.3	2.9	2.2	2.0
Household consumption	-6.2	3.2	1.2	1.8
Government consumption	0.6	0.4	1.1	1.4
Fixed capital formation	-9.4	1.2	1.8	0.5
Export	-8.0	3.6	3.3	3.0
Import	-13.1	3.5	2.1	2.1

Source: Institute of Economic Forecasting (IEF) RAS calculations.

at the level of 5-8% of GDP, which means the need to change the budget rule and to suspend its contemporary version. There are necessary funds in the economy. It will be necessary to use a significant part of the NWF funds and increase domestic debt (including guarantees) to 18-20% of GDP.

There is reason to believe that the rate of decline in industrial production at the end of 2020 may be less than the expected decline in GDP, which makes it possible to use the real sector of the economy as a driver for the restoration of economic activity, helping to increase the effectiveness of support measures and modernizing the structure of the Russian economy. Under these conditions, for enterprises in the real sector of the economy, key parameters for the restoration of activity will be not direct support, but demand parameters, both internal and external.

The declared actions to directly support citizens' incomes are already being implemented and will have their effect. However, it is not necessary to rely on such support to launch full-scale recovery growth.

The uniqueness of the current crisis lies in the fact that it has made the situation most difficult for that part of the population that has an average income level and is not employed in the public sector. These are the people who work mainly in the services sector and before the crisis showed massive demand for durable goods, hotel and restaurant services, and used air and rail transport.

Table 2. Costs to implement anticrisis programs in 2008–2009 and 2020, % of GDP

Country	2008-2009	2020
Germany	3.5	33.0
Japan	2.2	21.0
France	1.4	14.6
Great Britain	1.5	14.5
United States	4.9	12.1
Canada	2.8	11.8
India	1.2	10.0
South Africa	2.9	8.6
Brazil	0.6	5.5
China	13.0	4.5
Russia	10.1	2.4

Source: [8].

To restore their demand is possible only under one condition, that is, a large-scale launch of economic growth. Having increased the profitability of the real sector, one can count on a sustainable recovery in the services sector, where most of the middle-income citizens work.

Two directions are key. *First*, ensuring basic demand through the public procurement system for federal, regional and municipal services. *Second*, subsidizing loans for the purchase by the population of durable goods of domestic production and mortgages. It is also important to restart the investment cycle by solving the accumulated infrastructure problems. The programs of liquidation of emergency housing stock, modernization of communal networks not only in large but also in medium and small cities of Russia can have a big effect.

An effective structural adjustment of the economy during the period of postcrisis recovery should be facilitated by the reconfiguration of the system of national projects by redistributing funds both to ensure demand for products of competitive industries and to intensify investments in the development of technologies and human capital.

The Russian economy will have to work for a long time in new, more severe and relatively worse conditions than before, with less budgetary resources. At the same time, continuity in solving the tasks that were set at the end of the previous decade remains. Key challenges remaining are: improving the level and quality of life of the population on the basis of technological modernization of the basic core of the Russian economy, the development of high-tech industries, and the creation of a modern knowledge and health economy.

Changing the situation on world commodity markets is highly likely to require new decisions regarding the development of the raw material sectors of the Russian economy, including within the framework of the tax system, price regulation, the formation of modern development institutions, etc. The key direction of the impact of the commodity sector on economic growth should be an increase in demand for high-tech domestic products [9].

Industrial development requires a redistribution of resources in favor of those sectors of the economy that have the greatest growth potential in the medium term.

Support is needed for technological restructuring in activities critical for the future of the Russian economy: microelectronics, pharmaceuticals, and investment engineering.

The development of human capital and the increase in the level of scientific and technological development require the redistribution of public expenditures in the field of education, healthcare, research and development. On this basis, the requirements for created jobs and the level of remuneration should change. The main goal of medium-term economic policy should be a significant increase in the level of well-being of all segments of the population.

Structural reforms and incentives critical to resume sustainable economic growth. National projects adopted in accordance with the Decree of the President of Russia dated May 7, 2018, No. 204, New Proposals for Accelerating Economic Growth, formulated in the Address of the President of the Russian Federation to the Federal Assembly of January 15, 2020, measures outlined by the Government of Russia for postcrisis economic recovery are, of course, necessary and able to support the development of the economy in the postcrisis period. However, these measures are not enough to ensure sustainable socioeconomic development from a strategic perspective. Existing national projects cannot increase the medium-term GDP growth rate by more than 0.6 pp, and this is not enough to outstrip the global dynamics of development.

The stability and dynamism of the development of the Russian economy in the medium and long term will be ensured by a set of structural transformations aimed at: 1) the accelerated development of human capital, the modern economy of knowledge and health; 2) the technological growth of the Russian economy and the formation of an innovative competitive economy at the global level; 3) socially oriented development of the economy and the transition to the well-being of a society that meets the standards of developed countries.

Within the framework of the this complex of structural transformations, in addition to the development of existing state management tools for socioeconomic development and in order to mobilize the main driver of socioeconomic development, investment in human capital and technological reequipment of the economy, the following is proposed.

Firstly, it is necessary to carry out the reconfiguration (reformatting) of the existing state programs and the package of national projects aimed at a qualitative strengthening and strengthening of state support for the role of the knowledge economy (R&D, education, information and communication technologies, biotechnologies and healthcare). At the same time, based on the lessons of the pandemic crisis of 2020 and the long-term trend of growth of biosocial risks resulting

from it, priority in this support should be given to the health sector (in its broadest sense), including: basic medical science and biomedicine, applied research and the development of medical equipment and technology, including biotechnology and ICT, as well as the education and training of medical personnel.

In this regard, it is necessary to increase the financing of health care and the entire sphere of the knowledge economy, which in Russia are 2.5-3 times less than the leading economies of the world in terms of share of GDP. At the same time, from 2020–2025, increase the share of investment in GDP (%): in healthcare from 5.1 to 6–6.5, R&D from 1.1 to 1.7; education from 4 to 5.5, ICT from 3.9 to 4.9–5.8, respectively, which will require annually at least 2 trillion rubles, or 13% growth of the total volume of investments in the knowledge economy as a whole and will ensure an increase in the contribution of this sphere from 14 to 18–20%. Leading growth rates of investments in the sphere of the knowledge economy and in the development of human capital as a whole are a necessary condition for ensuring the effectiveness of investments in modernizing the economy and social stability.

In addition, it is of fundamental importance to raise the status of the scientist and researcher—including specialists in the field of the complex of human sciences, whose role is in assessing, predicting and counteracting current and emerging threats to human health and well-being—in order that sustainable development of the economy and society, and national security in general, will only grow.

Secondly, it is proposed to further develop and adopt two comprehensive programs related to the technological modernization of the country's economic complex and the formation of an innovative competitive national economy.

(1) Technological modernization of the basic sectors of the real sector. The problems of the development of the Russian economy and continuing stagnation trends are based on technological lag, primarily in the basic sectors of the real sector, as well as in infrastructure [10]. The solution to the problems of its updating is substantially covered by the comprehensive plan for the development of the main infrastructure, which is in force as part of national projects. The focus of the special project should be on the modernization of the real sector of the economy to solve the key task of updating, on a modern technological basis, two-thirds of its fixed assets over the next 15 years. This will make it possible to increase labor productivity by a factor of three, halve the energy intensity of production, and maximally approach efficiency in developed countries.

Calculations show that at least two-thirds of the total current volume of investments in fixed assets should be directed toward solving the problem of tech-

nological updating, with the required annual investment growth of at least 10%. At the same time, the share of costs for machinery and equipment, especially energy-efficient ones, should gradually increase in the structure of investments in fixed assets, the use of which will allow us to reduce production costs, improve the quality and update the range of products, reduce the environmental burden, and improve the environment and the quality of life in general.

(2) Accelerated development of new high-tech industries. The share of high-tech industries in the economy of the country in the next 15 years needs to be increased three to four times, creating a revenue stream comparable to income from oil and gas production. We are talking about high-tech industries in mechanical engineering, the production of semiconductors and computer equipment, information and communication technologies, instrument engineering, modern medical devices and equipment, pharmaceuticals, genetic and biological technologies, modern synthetic materials and high-tech chemistry, space and nuclear technology, fuel cells, the use of quantum technology and artificial intelligence.

Particular attention should be paid to the development of "green" technologies and environmentally friendly industries: in the energy and industry, including the development and production of environmental equipment (water, air, waste treatment) and environmentally friendly vehicles; in construction and housing and communal services, including the use of green standards of residential and industrial premises, as well as modern technologies of wooden housing construction [11]. In the agricultural sector, emphasis should be placed on the selection of climate-resistant plant varieties, the production of bioadditives and biological plant protection products and animals; complex mineral fertilizers; organic products, etc. Green technologies are not only and not so much alternative types of energy as the efficient use and capitalization of Russia's natural advantages in the form of water, forest, soil resources, the value of which and competition for their possession in the world will only intensify.

It is advisable to increase the average annual growth rate of high-tech industries in the next 2–4 years to an average of 15%. The capacity of the domestic market allows us to solve this problem. For its implementation, it is necessary to formulate a program agreed by business and the state, which would rely on government agreements with national corporations and involve cofinancing of research and engineering work.

In the process of socially oriented development of the Russian economy, which implies a transition to a society of well-being that meets the standards of developed countries, it is necessary to continue to concentrate on combating poverty and maintaining the standard of living of pensioners; raising the level of remuneration in the public sector, primarily in science, education and healthcare; the formation of equal

working conditions for highly skilled employees of the public sector in various regions of the country. It is necessary by 2024 to raise the level of pensions from 32% of the average wage to 40% and in the long term, 60–70%, allowing early retirement at age 55–60. Special measures of social protection are necessary for legal migrants working in Russia, which should provide decent conditions for their work and life [12]. Considering the severity of the unemployment problem, which increased during the crisis and, apparently, after emerging from it, it is advisable to increase the level of unemployment benefits to a living wage. In the long run, as the economy improves, it is necessary to create conditions for guaranteed receipt by all citizens of Russia of a part of the national natural and economic rent or basic social income.

Sources of additional funding of investments in fixed assets and the development of national human potential. The shortage of investments in the Russian economy is "adjacent" to excess savings from business, the state and the population. Although in the fight against the current crisis, state reserves will be partially used to finance the current budget deficit, business and popu-

current crisis, state reserves will be partially used to finance the current budget deficit, business and population reserves will be reduced, they will continue to be a powerful potential source of financing long-term strategic projects based on return principles.

A large additional source of investment may be part of the free liquidity of Russian banks (over three trillion rubles) the use of which will lead to an increase in the share of investment credit in bank assets. About 60–70% of the entire banking system of Russia today is stateowned banks or banks under state control. Sberbank alone has assets of more than 30 trillion rubles, which is 1.5 times more than the federal budget. State-owned banks could increase investment loans by at least three times.

Loans for the creation of new capacities, primarily in the field of high-tech industries, should be no more than 1.5% per annum in real terms, given the average return on investment for these purposes of 10–12 years. For commercial infrastructure projects with a payback period of 20–25 years, the percentage for an investment loan should be reduced to a near-zero real rate. Such financial conditions can be ensured only by a powerful system of development institutions, which will require significant capitalization and an increase in the degree of conjugation and focus of their activities on the strategic program and design tasks of the state.

An important condition for the implementation of additional and existing national projects is the continued reduction of the Central Bank's key rate to 1% in real terms (after the end of the pandemic shock).

Prior to this, investment loans could be provided for projects of national programs under 3–5% per annum in nominal terms, paying banks part of the interest rate at the expense of the state budget. According to our esti-

mates, this will require 300-500 billion rubles annually, which is not enough at the state level. The indicated funds can be mobilized by the *budget at the expense of replacing direct budget financing of the national economy with debt*.

It is time for the formation in Russia of powerful non-bank funds of "long money" and a developed financial market (pension funds, insurance companies, guarantee instruments, the market for corporate bonds, stocks and other debt instruments) following the example of other countries of the world.

The state can increase its debt and provide these borrowed funds in the form of an additional investment loan. External debt in the amount of up to 60% of GDP throughout the world is considered quite acceptable (when establishing specific boundaries for increasing the debt burden). Such a high level of external debt is not needed for Russia, but up to 30–40% of GDP in the long term, it can be gradually increased, and thereby accelerate the pace of economic growth and human well-being.

Major reforms are needed in the domestic public finance system, primarily in the direction of a consistent *reduction of the tax burden* for effectively run businesses, giving the tax system not only a fiscal but also a *stimulating and redistributive function*.

Enterprises implementing large-scale modernization and participating in national projects, should be exempt from taxation as part of the investment tax exemption, i.e., give them a tax break. Then they will be interested in increasing their profits and investing a large share of them in investments. According to estimates, this measure can give at least 1 trillion rubles of additional investments per year.

It is also necessary to revise the depreciation policy, reducing depreciation terms by 1.5–2 times. This will increase the depreciation fund, which will increase investment by another 1 trillion rubles per year and will serve as an additional incentive for updating equipment and machines.

It should be borne in mind that investment in human capital increases the potential for economic growth in the medium and long term. The development of human capital is impossible without increasing private investment, the key limitation of which is the low income level of most of the population. In this regard, it would be advisable to consider measures to increase incomes as a key part of the plan to increase investment in human potential.

On the way to investment and economic growth, obstacles will always arise, primarily administrative ones. To remove them, you should be prepared for serious *institutional and structural transformations*. First of all, it is necessary to ensure the effective legal

protection of all legal forms of entrepreneurial activity, as well as protect the entrepreneur's right to risk.

If the set trends for technical reequipment and forced investments in fixed and human capital, calculated for the period up to 2024, continue until 2030—2035, then the share of the knowledge economy in GDP may increase to 30—35%. In 2030, a transition to new qualitative characteristics of economic development may begin, which will allow Russia to stand up to the level of economic and social indicators with the countries of Western Europe. At the same time, our country will be able, as provided for by Presidential Decree No. 204 of 2018, maintain its position in the top five leading economies in the world.

For this, in the period until 2024, one could temporarily, following the example of many successful economies of the world, *move to a moderately deficit budget*. This will require a revision of the parameters of the budget rule regarding the formation of budget expenditures. Among other things, thanks to the additional issue of government securities, this will give an impetus to the development of the Russian financial system, which is lagging behind so far.

Expected outcomes in the medium term (by 2025) and next steps: imperatives of strategic planning and the role of science. According to the calculations of the Institute of Economic Forecasting, RAS, Russia has resources and capabilities from 2022–2023 to reach the average annual GDP growth rate of 3%, and in 2024–2025, 4–5%. At the same time, the share of investments in fixed assets in GDP may increase to 25% by 2025, and the share of the knowledge economy, up to 22%.

Economic growth will ensure the rise and development of the country's financial system, given that every percent of economic growth by 2025 will give an increase in financial resources by 1.5–2 trillion rubles in a year. Accordingly, a 4% increase will increase the volume of resources by 6–8 trillion rubles, significantly expanding the possibilities of maneuvering resources when conducting economic policy. By 2030, it will be necessary to reach a level of health spending of 8–9% of GDP, education 7% of GDP, and R&D 2.5–3% of GDP. In terms of per capita income, Russia should reach the level of developed European countries.

The concentration of the existing national development potential in the most promising areas of action, providing the greatest multiplier effect and the best results for the country's economy as a whole requires, along with the development of private initiative, the formation of an *effective strategic management system*.

It is necessary to immediately begin work on the full implementation of the Federal Law of June 28, 2014, On Strategic Planning in the Russian Federation. The historical experience of Russia and the experience of other countries shows that sustainable devel-

opment is impossible without *full strategic planning* adapted to the realities of the modern socioeconomic system of Russia.

It is the state programs of the Russian Federation that include a set of tools that allow pursuing a general state policy in industries and sectors of the economy, while national projects should be focused on activating individual growth points and solving the most acute problems should be considered the main tool for achieving the socioeconomic development of the Russian Federation.

Joint implementation of federal projects within the framework of state programs of the Russian Federation and national projects at the federal and regional level will give a synergistic effect, enhancing their effectiveness.

The growing responsibility of the regions in achieving the goals of economic development implies an increase in their financial capabilities and greater independence in the formation of regional economic policies. This will require the redistribution of income in favor of regional budgets and, apparently, the transfer to the regional budgets of all income tax or parts of VAT, the new principles of separation between the federal center and the MET regions. Actions are required to differentiate income tax depending on the type of activity. The transition from a supercentralized to a federal budget system will become a financial incentive for regional diversity and the formation of a multipolar development system in Russia, in accordance with a qualitatively updated Strategy for Spatial Development. A system of new measures is needed to lift the deep regions of Russia, the new development of Siberia, especially Central and Eastern. The Arctic belt of Russia can be an example of development based on a balance between the development of natural resources and the preservation of a fragile unique ecosystem.

Strategic programs and state projects at the federal and regional levels should be aligned with the strategies and programs of state corporations, as well as take into account private business plans.

The dialogue of the state with business, its associations and unions, trade unions and workers' associations should create an economic dimension *civil society or citizen economics*. This balance of interests is more important than the search for the optimal proportion of public and private property.

Strategic planning will allow society and the state to solve pressing development problems that go beyond the boundaries of profit and private corporate interests, and are subordinate to the development priorities of the country as a whole. In terms of health care, this means restructuring the system of insurance medicine and creating a system of medical reserves (infrastructure) aimed at counteracting possible epidemics and medical

care for all citizens, regardless of their income. Education and science, with all the requirements of efficiency, cannot be only a service sector, but must have the organizational and financial capabilities of accelerated development and creation of conditions for human development and knowledge of nature.

The effective implementation of the proposed set of programmatic measures for postpandemic economic recovery and Russia's transition to sustainable socioeconomic development requires the active participation of science, the scientific and expert community, and the engineering community. It is necessary to complete the formation of an integrated and flexible system of strategic planning and forecasting, including risk assessment (implementation consequences), means for harmonizing industry, private and regional interests, subordinate to the development tasks of the country as a whole. The transition has come to a new system of five-year indicative plans and programs, which should not be an appendage of the budget, but a basic independent tool of state economic policy.

Building a system of scientific, engineering, environmental expertise of decisions made, practical implementation of high-tech projects of technological modernization of basic and development of high-tech industries, the formation of an economy focused on human health and well-being, is impossible without the active participation of a professional community of Russian researchers, engineers and specialists, including scientists of the Russian Academy of Sciences. Russia is a country of great opportunities, an educated population, and there is every reason not only to believe in the bright future of our country, but also to make its present attractive, turning Russia into an example of creative development, combining efficiency with justice and freedom, with responsibility and solidarity.

CONFLICT OF INTEREST

The authors declare that they have no conflicts of interest.

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