

Economy of Russian regions in the context of the coronavirus epidemic

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Abstract. For the global economy, the shock caused by Covid-19 was faster and more severe than the global financial crisis of 2008. Unlike other economic downturns, the drop-in output during today's crisis is not caused by demand: it is an inevitable consequence of measures taken to contain the spread of the disease. Against the backdrop of the growing Covid-19 pandemic, a review of numerous public and private sector models shows that the global economy is facing significantly lower growth rates in 2020. In the near future, both the set of factors of production and their content will change. The technologies that will ensure an efficient future for the entire economy will benefit. This will be a very important moment that cannot be missed in any way. In this sense, Russia has a huge competitive advantage over other countries. The article examines the impact of the coronavirus epidemic on the state of the economy, considers the measures taken for business on the example of Russian regions. It analyzes the new way of life and economy that will replace the previous one after the end of the pandemic, will open up completely new opportunities for life and even prosperity.

1. Introduction

The coronavirus epidemic, called COVID-19, seriously scared the population of the entire planet, caused concern to the governments of countries that began to actively develop measures to prevent its spread [1]. However, along with the threat to human life and health, the virus poses serious problems for the development of the world economy.

According to the analysis center Oxford Economics, the loss of global GDP from the spread of a new type of coronavirus may amount to \$ 1.1 trillion in 2020. Such damage will mean a decrease in the level of global GDP by 1.3 % (compared to the previous forecast for 2020 by the analytical center). The Oxford Economics report says that the forecast will be fulfilled if the outbreak of pneumonia, which is caused by a new type of coronavirus, becomes a global pandemic.

Analysts estimated the loss of global GDP from coronavirus at \$ 1 trillion. [2], which will lead to a decrease in demand for energy and a drop-in world petroleum price. According to Bloomberg, this year petroleum has fallen by 21% – information about the disease hit the already crowded goods market [3]. Investors began to withdraw from risky assets out of fear of a deterioration in the situation.

The suspension of enterprises due to quarantine measures has affected the economic indicators of recent months. Consumer demand declined by almost 20 %, and industrial production, according to Rosstat, sank by 6.6 %. The decline was less deep than experts expected. Since mid-May, the



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economy has started to revive following the resumption of business operations, and Russian regions are looking for a variety of growth points for their economies.

2. Research methods

In connection with the pandemic, a large - scale anti-virus program was launched in Russia - a package of measures to support citizens and businesses [4].

Thus, in the Leningrad region, they rely on the agro-industrial complex. The region occupies a leading position in the country in many indicators: the first place - in egg production and dairy productivity of cows, the second - in poultry, and the third - in trout farming. However, the authorities admit that such effective indicators were achieved with the help of state support [5].

Since the beginning of the year, 2.5 billion rubles have been allocated to agricultural producers in the Leningrad region, which is 500 million rubles more than last year. This allowed farms to operate in the normal mode, to continue the implementation of investment projects, the purchase of modern machinery and equipment.

For Saint Petersburg, the priority remains the construction of social facilities, which is very low compared to the volume of housing commissioned, and the implementation of major infrastructure projects. Last year, at the St. Petersburg international economic forum, 27 agreements were signed for a total of 182 billion rubles, including the development of Kronstadt and the construction of a high-speed Latitudinal highway. It was planned to allocate one billion rubles from the city budget for this project in 2020. But the transport reform in connection with the coronavirus pandemic had to be abandoned, and this saved the city treasury about 10 billion. The city's targeted investment program is being reduced by 33.2 billion rubles.

In the Vologda region, a whole anti-crisis project called "Growth synergy 2.0" has been developed to restore the economy. With its help, it is planned to keep small and medium-sized businesses afloat.

The project is based on combining large, medium and small businesses in order to ensure a synergistic effect from their joint activities. The regional government is interested in developing intra-regional cooperation, increasing the volume of goods purchases and services between large, medium and small businesses operating in our region.

It is planned to establish cooperation with the help of the digital platform "Electronic business cooperation", today, it has already placed more than 18 thousand orders from major companies in the Vologda region. In the future, state and municipal orders will also be placed here, and large Vologda holdings that have production sites in other regions of the Russian Federation are invited to tighten them as well.

But in the Pskov region, it seems, most of all hope for help from the Federal budget. The region has already received 250 million rubles from the state treasury, and is counting on a whole anti-crisis package of support measures. For example, by expanding the list of the most affected industries, Pskov residents propose to include light industry enterprises, as well as companies that sell non-food products at retail, and organizations that are still subject to restrictive measures.

The "COVID-19" restrictions almost did not affect the construction pace of powerful production facilities in the Far East, which even before commissioning became points of growth in the far Eastern Federal district. A gas processing plant has been under construction in the Amur region near the city of Svobodny since October 2015. The company will become one of the largest in the world: its design capacity is 42 billion cubic meters of gas per year. According to Alexey Miller, chairman of the Gazprom management board, the amount of investment in the Amur gas processing plant, together with the entire infrastructure, will amount to 950 billion rubles. For this facility, the company raised the largest project financing in its history, taking 786 billion.

The plant is already more than 60% ready. Two of the six production lines are undergoing commissioning and will be commissioned in 2021. Two more are equipped with gas separation equipment. Meanwhile, at the end of May, modules of the cold block of raw gas and compressors for the fourth line were shipped to Bremen, Germany. This batch of oversized cargo will arrive in the Amur region in three months.

In the South of the country, they are building the "Economy of the future": when developing the "Strategy 2030" the government of the Rostov region stated that the region intends to build a new type of economy based on the most promising and most marginal sectors of the economy in the XXI century. Among them there are industry and logistics, wholesale trade, as well as agro-industrial complex and green energy [6]. The latter two areas are growing even in the context of a slowdown in the Russian and global economy [7].

Russia's income from agricultural exports exceeds the revenue from the sale of weapons [7]. At the same time, the President set a goal to double the revenue of AgroExport by 2024. And the Rostov region, which is the country's largest agro-exporting region, naturally relies on agriculture. The main directions are deep processing of grain, vegetable growing and processing of vegetables [9], dairy [10] and meat livestock [11].

Over the past year, several major projects have been frozen. The construction of a large plant for the production of amino acids from wheat and a complex for the production of Turkey has been postponed. But there is no doubt that these projects will be implemented. There is a demand for their products both in Russia and abroad. Especially interesting for the Rostov region are the Maghreb countries, the Arab States, as well as Indonesia, Thailand and Vietnam.

The region does not have its own petroleum and gas, so the authorities pay great attention to the development of "green" energy. Today, five industrial wind farms with a total installed capacity of 440 MW are being built here. However, the Rostov region is an energy-deficit region even without these five wind farms. According to the head of the region Vasily Golubev, the Don river today produces 29.9 billion kWh of electricity annually (mainly due to the operation of the Rostov nuclear power plant), and consumes only 12.6. But due to the fact that electricity is sold on the "federal" market, new projects will not have problems with sales. Deliveries of the first "ecological electricity" from the Rostov region to the general network began in the spring of this year.

The first Russian industrial cluster is being created in the region, which unites enterprises that produce equipment for wind power plants [12]. As noted by Igor Burakov, general director of the investment development agency of the Rostov region, this will not be a commercial cluster in the usual sense - its participants represent different commercial companies, and production facilities are scattered throughout the region. The region will localize production of almost all key components and units for wind farms and will also be able to sell them throughout Russia and for export (there are already preliminary agreements with neighboring countries).

3. Results

In modern conditions, the growing importance of information technologies and the digital economy is becoming increasingly important, thus displacing the old norms in all areas of public policy [13]. Creation of digital platforms for managing the economy is a strategically important task, the solution of which can not only restore material production, lay the foundation for the introduction of future innovations, but also ensure the rapid development of the Russian Federation, which is now only catching up with advanced Western countries [14]. In general, all traditional factors of production will now undergo a fundamental transformation. Russia is justly proud of its vast expanses and rich mineral resources. But their value in terms of competitiveness will only decrease over time.

New directions are the state analysis of scientific potential in the main areas of research, activities assessment of scientific organizations in the current market conditions [15]. Future is for robotic vertical farms, which do not require large areas. Modern urbanists are already putting such projects in the plans of new cities. Research was conducted with a lot of experts in the agro-industrial complex and related industries [16]. It turned out that in the next 7-10 years, traditional agriculture will only make sense in terms of attracting tourists. And to do this, we need robots, digitalization, and the same artificial intelligence that processes big data coming from the earth, plants, and animals. Agriculture can become one of the most technologically advanced industries [17]. Now it's time for a super-intensive agricultural industry [18].

Now two multidirectional trends will develop simultaneously. In the near future, we will see a great demand for manual labor. According to the International labor organization, more than one and a half billion people may be out of work due to the pandemic. In fact, probably much less, but still there will be free hands, ready to work for a little money. And at this moment, it is probably impractical to actively introduce robotics, leaving hungry people without work, at least from a social point of view. But a little later, in 2-3 years, when the acute period has passed, all routine operations will be entrusted to machines. Just because they do a better job, there is virtually no marriage at work. High efficiency will solve everything. Of course, the robot can't work on its own. But the employment profile will change. Drones fly over pipelines and fields, monitor performance and safety. Logistics - whether it is working in warehouses or delivering goods between cities - is also gradually moving to digital technologies. Even in education, it turned out that with the help of online technologies, you can introduce completely new forms and types of classes. Of course, artificial intelligence takes on a significant part of the responsibilities in the field of control and security. The nature of human labor is changing. And labor resources may soon be too much for the needs of the economy.

Companies that have been using this practice for a long time have done the best job of organizing remote work [19]. At the same time, the employee's effectiveness depends largely on the employer [20]. Many companies that helped create the portal care about the psychophysical state of employees and motivation for teamwork no less than about its organization and accounting for efficiency.

4. Conclusion

Major changes in the economy are inevitable, but many of them are just beginning. For example, our consumption is becoming more digital, but now people have less money to buy. However, these trends should provoke the emergence of appropriate proposals from business and they should be supported by the state - to overcome regulatory barriers in the field of digital consumption. It is too early to talk about the mass transition of the population to remote employment. Changes in the structure of employment is of a temporary nature. But in a crisis in the labor market, competition for jobs inevitably increases. For each person, it becomes relevant to increase their own capitalization. This includes developing the skills and competencies (and possibly getting a new "digital" profession) that are most in demand in the "remote" economy. Therefore, it is now important not only to provide direct financial assistance from the state to individual companies and sectors of the economy, but also to quickly train and retrain people to work in new conditions. There can be many tools for developing mass digital literacy, such as the Digital literacy portal.rf, up to personal digital certificates from the state for free training in "digital" professions. And they have already been launched as part of the national program " Digital economy of the Russian Federation".

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