

# Implementation of Investment Projects in Industry as a Factor of Ensuring the Economic and Spatial Development of Russian Regions

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## ABSTRACT

The national security of Russia depends on achieving the breakthrough in socio-economic development ensured by the use of innovations and revealing the spatial potential of the country. The economic growth of regions and countries is currently ensured with the inflow of investments into large infrastructure projects, as well as into projects that provide for the development of industry. Industry remains the basis for the development of the economic system and for the increase in the resource provision of the countries of the world economy. In addition, it is impossible to ignore the current changes in the economy and the society. Thus, the development of the digital economy, Industry 4.0, the Internet of Things, the improvement of artificial intelligence and the emergence of supercomputers radically change our understanding of the innovative environment that should provide for the development of the state targeted at a qualitative increase in the standard of living and well-being of its citizens. The analysis carried out in the article reveals the intricacy of ensuring the economic and spatial development of the country. In the economy of the XXI century, the achievement of intensive economic growth is expected through the implementation of large investment projects in industry. It is these projects that provide the necessary multiplier effect that will reveal the human, logistic and economic potential of the territories. The research work analyzes the experience of large industrial centers such as Moscow and Nizhny Novgorod, which are currently the leaders in the innovative development of Russia. Also there is the analysis of the existing and planned for implementation mechanisms necessary for the development of industry and attracting investment (both Russian and foreign) in production spheres. The formulated conclusions highlight the need to make rational management decisions at all government levels, which ensure strategic forecasting and effective use of available resources, as well as their increase in the short and long term. Obviously, it is impossible to achieve economic growth, including in industry, without the participation of the state, it is especially true for Russia.

**Keywords:** *industry, investment projects, economic and spatial development, regional economy*

## 1. INTRODUCTION

Currently, the rapid development of the global economy and centers of economic growth depends on the development of a consumer society and an increase in the share of the service sector in the economy. At the same time, the role of production and industry is increasingly growing against this background; it acquires utmost importance in solving the problems of innovative breakthrough

development. Industry produces resources that are indispensable for present-day society (goods, services, energy, fuel, various types of materials and products, and many other types of products).

The world history saw the rapid growth of industry during the periods of global large-scale infrastructure projects implementation (construction of roads, cities, scientific clusters and centers, factories) [1]. Since the beginning of the 21st century, the eminent American economist

J.M. Keynes has done a tremendous amount of work, revealing the influence of the state and of investment projects on the economy. The state should actively invest in infrastructure and industrial projects, creating a multiplier effect due to the involvement of actors from related sectors of the economy in economic development [2].

State investment is a powerful tool for economic development, which was underestimated by the classics of economic theory, but without which the present-day economy and its crisis-free state are inconceivable. Given the proven cyclical nature of the economy, it is especially hard to avoid crises and to move to new technological paradigms without the participation of the state [3].

A huge economic potential of Russia consists of labor, material and innovation resources. The totality of the resources available to the country allows it to develop rapidly. But, despite the above, the problem of inefficient use of resources can result in Russia remaining among developing countries that will not be able to use the tools and mechanisms of economic development of the future (the use of supercomputers, the use of cryptocurrencies, the development of a “green economy”, establishing innovative industries in breakthrough economy areas).

These conditions predetermine the need for developing the industry, since in the 1st quarter of 2021, its GRP share decreased by 1.3% if compared to the same period of the previous year (to 32.5%) despite the declared recovery of the economy from the crisis (indeed, the growth of industrial production in the 1st half of this year relative to the same period of the previous year amounted to 4.0%, the share of manufacturing increased by 6.4% while the indicator for the extraction of minerals remained at the level of the previous year) [4].

Industrial development is achieved through an effective investment policy; it contributes to the implementation of projects that ensure growth in priority sectors of the economy. The government of the Russian Federation is currently trying to accelerate economic growth. A unified plan is being developed to achieve the national goals of the Russian Federation until 2024 and 2030; the main attention is paid to the implementation of national projects. If worked over properly in regards to all the existing risks, national projects can become the drivers of economic growth.

However, in Russia there are risks caused by the internal and external environment. Thus, corruption

slows down almost all processes from decision-making at all levels of government to the ineffective implementation of large infrastructure projects. The Russian bureaucratic system, evidently, tangles any development thus ultimately leading to an irrational use of resources

The development of the small and medium-sized business sector and modern industries focused on inclusion in the agenda of the fourth industrial revolution, as well as improvement and renewal of the judicial system, enhancement of the country’s spatial development are factors of economic growth in present-day Russia, without them it is extremely difficult to develop the economy, particularly the industrial production [5].

## **2. MATERIALS AND METHODS**

During the research, statistical methods of data collection, the method of analyzing socio-economic processes in the regions, as well as comparative and benchmarking analysis were widely used. The data of the copyright SWOT analysis and PEST analysis, internal and external economic analysis of the region were actively used. The legal framework in the research sphere was studied. Many conclusions are drawn on the basis of the materials of the Ministry of Economic Development of the Russian Federation in regards to the regional agenda and industrial development of the country.

## **3. RESULTS**

The beginning of the third decade of the 21st century is accompanied by rapid changes in the global economy. Thus, the COVID-19 pandemic has accelerated the development of the digital economy and the transition of society to interaction based on new communication mechanisms (Internet, social networks, and various information systems). In addition, there is a trend for the development of “green” energy, which radically changes the future role of the coal, oil and gas industries. Also, the development of electric transport and the introduction of restrictions on the use of traditional fuels in the form of gasoline and oil lead to a revolution in the automotive industry [5].

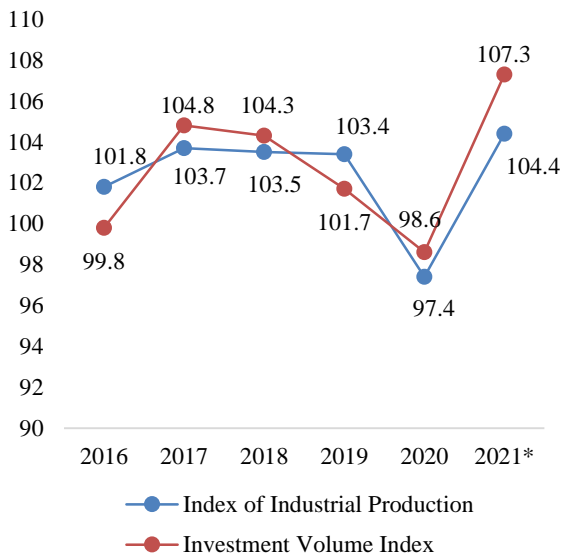
That is why the role of the atom, other types of alternative energy, as well as chemical and electronic industries will grow rapidly and have a strong impact on the structure of the economy.

Despite the transformation of the economy, industry remains an important tool for achieving

Russia's national goals. In January-July 2021, industrial production increased by 4.4% compared to the same period in 2020, mining increased by 1.5%, and manufacturing increased by 5.6%. In January-July 2021, shipments of manufacturing industries increased by 33.8% compared to the same period in 2020 [4].

In addition, in January-June 2021, investments in fixed assets increased by 7.3% (compared to the same period of the previous year) and amounted to 6235.2 billion rubles. The main share of investment was in machinery, equipment, vehicles (38.6%) [4].

The index of industrial production and the index of the investment volume in fixed assets are interrelated (Figure 1): for example, it is impossible to achieve growth in industrial production without an increase in investment.



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**Figure 1.** Dynamics of indices of industrial production and investment volume, Russian Federation, in % over the same period

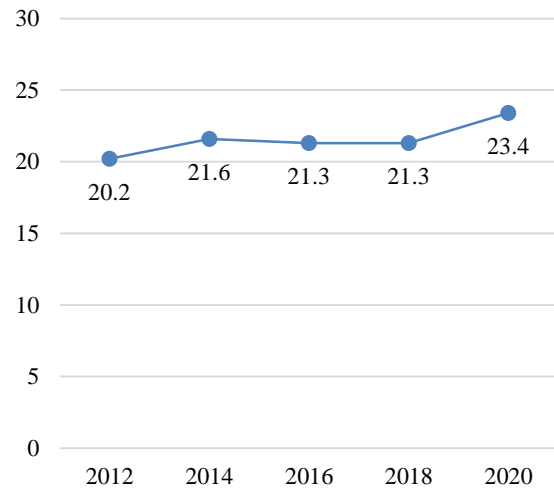
Source: [4]

It is worth saying that the present-day economy is considerably changing towards an increase in the share of the service sector and a decrease in the share of industry. This trend also affects investment flows: the highest growth in investment is obvious in the service sector, since the return on this type of investment is greater. For example, in 2020 the share of the service sector in Russia's GDP was 54.1%, whereas the share of industry was 32.4%, i.e. the excess is almost two times, and this situation is typical for the entire global economy.

However, it must be borne in mind that the

industry is not ceasing, but rather, on the contrary, is beginning to play a key role in the development of the economy. This is due to the fact that complex technologies for the up-to-date production require a well-built and efficient system. The demand for the development of a high-quality and high-tech industry will only increase in the coming years. This is caused, first of all, by the digitalization and automation of the spheres of the economy, as well as by the growing need for highly qualified personnel, for which an effective practice-oriented education system is required [6, 7].

In Russia, the share of high-tech and knowledge-intensive industrial products in GDP at the end of 2020 amounted to 23.4%, which is 3.2% more than in 2012 [4]. The dynamic for this indicator is not positive because of insignificant growth in the last decade (Figure 2). Besides, the development of high-tech production takes place at the expense of the military-industrial complex, which occupies a leading position in the world.



**Figure 2.** Share of products of high-tech and knowledge-intensive industries in GDP in 2012-2020, Russia, %

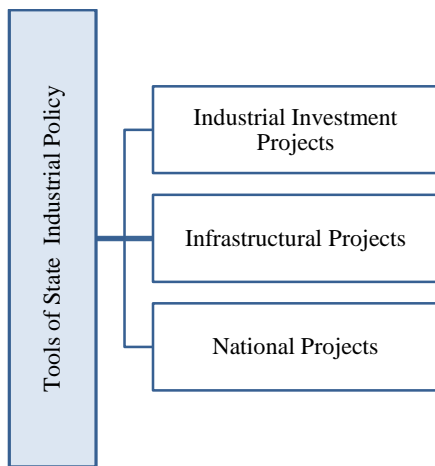
Source: [4]

We argue that industry will ensure the growth of the economy and the production of resources necessary for actual development (new types of energy and fuel, new materials, electronics, equipment, etc.). Without industry, no state will be able to realize its economic potential, because opportunities for high-tech imports are diminishing in the coming years. That is why developed countries are actively applying sanctions policy, as well as methods of information war.

If to speak about investments in the economy, it becomes obvious that the role of state investments in

industry is decisive, since large infrastructure investment projects can be implemented only at the expense of the state as a pioneer in the transition of the economy to innovative development provided not by the service sector, but by a new type of industry.

The state potentially has three key tools of industrial policy to make a breakthrough in industrial development (Figure 3). These tools, in our opinion, will allow the development of a new type of industry.



**Figure 3.** Tools of State Industrial Policy

Source: Compiled by the authors using an open data from the Government of the Russian Federation

The availability of the necessary development tools calls for the intense improvement of the mechanism for supporting the industry as a whole and separate investment projects in this sphere. In particular, it is important to ensure effective public-private partnership [8].

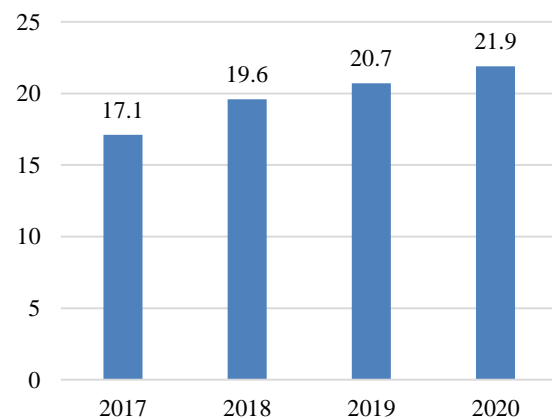
In the long term, economic growth will be determined by the efficiency of resource use and the creation of a system for their renewal. The industry of a new type should provide for this task. Another issue that is particularly important for Russia is spatial development. As mentioned above, the growth of the service sector is inevitable; it will attract major investments and give profits. The role of this area is extremely important. A state claiming high positions in the world in the economic and political aspects should find a balance between the development of the service sector and industry, which will ensure a uniform innovative development of the economy [9]. The mechanisms and laws of a market economy are not able to balance the economy and overcome economic crises. Besides, the role of the state in the Russian economy is traditionally colossal. That is why it is necessary to

make balanced and effective management decisions for the development of economic sectors.

Taking into account the above, as well as the increasing role of the agglomeration development of Russia, it is important to create agglomerations that will increase the population density and, as a result, increase the efficiency of resource use and the possibility of raising the standard of living through investment. The main development tool is private investment with the assistance of the state in terms of creating a favorable investment microclimate and a balanced regulatory framework.

If it is impossible to achieve development through private investment, it is necessary to develop industry (individual enterprises, clusters, industrial centers, science cities). In this case, the key development tool is government investments in industrial projects; it will guarantee the stability and sustainability of the investment project. Industrial investment projects should provide for a certain direction of up-to-date development. In addition, it is necessary to increase the return on each ruble of investments in fixed assets.

Thus, the state ensures the creation of new jobs, an increase in wages and, as a consequence, the attraction of private investment and the development of the service sector, which, in its turn, will lead to an increase in the level of well-being of citizens. It is imperative to create high-tech jobs while automating mundane, low-productivity processes. In 2020, there are 21.9 million high-tech jobs in Russia with a total of 72.1 million (Figure 4) [4]. This indicator, given the value of labor resources, due to the low density of regions, is extremely low (only 30.4% of jobs).



**Figure 4.** The number of high-tech jobs in Russia, mln

Source: [4]

In the coming years, national projects will be actively implemented (a total sum of 26 trillion

rubles); in each region, infrastructure projects will be financed by the National Wealth Fund (hereinafter – NWF) (as of September 1, 2021, the total amount of NWF funds amounted to about 14 trillion rubles); in the opinion of the Government of the Russian Federation, it can result in breakthrough infrastructure development, which will become an effective platform for the development of a new type of industry.

Russia has all the possibilities (natural and material, as well as labor resources) to become the defining economic force of the new decade.

At the moment, there are two regions, which are intensively developing due to the implementation of infrastructure projects. Moscow and Nizhegorodsky Region are leaders in industrial and investment development. In the first half of 2021, industrial production in Moscow and Nizhny Novgorod increased by 25.3% and 14.7%, respectively, investments in fixed assets – by 20.9% and 26.8%, respectively, compared to the same period of the previous year. These regions are also intensively developing the IT sector, which guarantees the stability of the economy in the future.

In addition, Moscow and Nizhny Novgorod are large educational centers, which attract young people and promising personnel.

Also, Moscow and Nizhny Novgorod are actively using the mechanism for the implementation of large industrial infrastructure projects. For example, the project of the Moscow Central Ring or the establishing of a preferential treatment, as well as an IT-block on the territory of Nizhny Novgorod attract investments in the development of modern industries by creating a favorable investment microclimate in the region that takes into account all the difficulties and risks of the economy.

In Russia, there are other examples of active development of regions (Moscow region, Sverdlovsk region, St. Petersburg, Kaliningrad region, etc.); however, it was the above-mentioned regions that managed to enter the trend of intensive spatial and innovative economic development.

#### **4. DISCUSSION**

The expert community is currently actively discussing models of economic growth. The traditional approach to economic development, based on the model of the classical free market economy, is not working anymore; moreover, it has

become counterproductive, because without the participation of the state, it is impossible to neutralize the risks of crises and to achieve the long term intensive economic development. The COVID-19 pandemic has confirmed the inevitability of government intervention in the economy.

Some leading Russian economists (S.Yu. Glazyev, A.L. Kudrin) emphasize the importance of state investment in ensuring the rise of economic growth above the world average rate.

Industrial investment projects can provide a multiplier effect that will lead to an increase in the well-being of Russian citizens.

There are also discussions on the creation of agglomerations, the consolidation of regions, and the creation of industrial science cities in Siberia.

Special attention is paid to the environmental agenda and alternative fuels, as well as to the economy in the period of the fourth industrial revolution [5].

Besides, the expert community estimates the cost of the risks of transition to new models of economic development. For example, the transition from traditional types of energy to alternative ones will require concentration of efforts to create a new competitive environment and a favorable microclimate for the implementation of projects in this sphere.

#### **5. CONCLUSION**

Taking into account the research results, one can say that developed industrial production will allow Russia to solve the problems of the new decade (reducing energy dependence, developing deep processing of raw materials and achieving import independence). In addition, the implementation of industrial investment projects will reveal the national spatial potential.

The challenges of the internal environment (corruption, bureaucracy, underdevelopment of the judicial system, the meager role of small and medium-sized businesses, etc.) and the external environment (sanctions, conflicts, competition in the energy market, hybrid wars, etc.) emphasize the need to consolidate society, the state apparatus and civil society institutions to achieve national development goals.

The authors consider that Russia should:

- 1) develop agglomerations and cities, creating conditions for the inflow of domestic and

foreign private investment in adjacent to industry spheres of economy;

- 2) develop concentrated industrial centers, clusters, science cities in single-industry towns, cities and promising territories, as well as preferential treatment through public investment with the further involvement of the private sector;
- 3) bring national projects to practical intensive implementation, develop infrastructure in the constituent entities, thereby creating the opportunity and conditions for the innovative development of the economy throughout the country;
- 4) provide education system with a practical basis for training highly qualified personnel;
- 5) develop a unified policy for the implementation of investment projects in industry, which will create a mechanism for encouraging and protecting investment in this area, as well as ensure the interest of investors through preferential and tax policies in the development of both industrial projects and related projects near industrial centers;
- 6) build up the small and medium-sized business sector.

Industrial projects are extremely important for Russia; they provide an opportunity to create jobs with high productivity and income growth; ultimately, it will directly and indirectly affect the level of well-being of citizens.

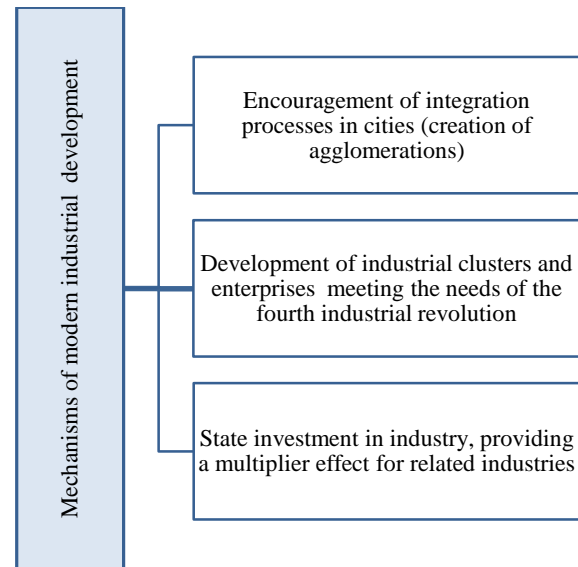
Besides, the given research touches on the historical problem of Russia's dependence on raw materials. It is industrial projects that contribute to the development of deep processing of resources and the production of modern types of goods and equipment.

The most important issue is the development of the education system. Today, developed educational institutions and organizations are drivers and points of economic growth [10]. The education system in Russia does not meet the latest requirements. The development of practice-oriented education and the training of highly qualified personnel, including for industry, is a national goal in the medium and long term run.

Thus, three blocks of industrial economy development in the long term can be singled out (Figure 5).

Integration processes and their activation will make it possible to achieve the spatial development

of Russia. The local development of modern industry contributes to economic growth and the inflow of investment, ensuring the implementation of projects aimed at improving the living standards of citizens. In addition, it becomes obvious that the state in the modern economy is a key subject of economic and innovative development.



**Figure 5.** Mechanisms of development of modern industry

Source: Compiled by the authors

Despite all the difficulties, Russia has all the prerequisites to enter the top 5 economies of the world and become the largest pole of the global economy. This is due to the country's economic and industrial potential, as well as its role in international politics. Besides, we consider that Russia should find a balance between the market and administrative economic systems.

**AUTHORS' CONTRIBUTIONS**

Mikhail Ya. Veselovsky: general project management, analysis and contribution to the text of the article. Vladislav I. Nikolaev and Vladimir A. Trifonov: collection and processing of materials, making of the initial version of the text.

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