

# Efficiency of tax incentives for innovation in the development of the industrial economy (on the example of the chemical and pharmaceutical sphere)

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## Abstract

Today, the world is on the threshold of the Fourth industrial revolution ("Industry 4.0"), which is expected to have an impact on the entire world economy, mainly due to digital technologies. The chemical and pharmaceutical enterprise is a powerful engine of innovation and creativity. It is not only a supplier of products and solutions to other industries; it is also a stimulating enterprise that implements technological innovations throughout the value chain. "The fundamental and global nature of this revolution means that it will become an integral part of all countries, economies, industries and people." At the same time, scientists, political scientists and statesmen of economically developed countries agree that success in the digital economy will directly depend on the technical and technological start-up capabilities of the industry in these countries. This means that in Russia, on the way to realizing the potential of "Industry 4.0" and establishing digital production, there is an urgent need to restore its industrial base, which was lost during the years of "reforms", that is, the need for reindustrialization. Attracting investment to the Russian economy for reindustrialization and transition to "Industry 4.0" is an urgent goal of economic policy. This research is devoted to analyzing the effectiveness of tax incentives for investment and innovation, and considering the prospects for further transformations in taxation that would contribute to a real technological breakthrough, which Russia has no alternative to.

**Keywords:** innovation, the chemical and pharmaceutical sphere, investment, reindustrialization, tax policy, tax incentives, tax competitiveness.

## INTRODUCTION

The most important way to fully revive the industrial sector and increase our country's competitiveness on the world stage is, first of all, to invest in modern production, digital and innovative technologies (HSE, 2018). The conditions or prerequisites that directly determine the investment process are: the state of the investment climate and tax attractiveness. The investment climate, as we know, is a set of socio-economic, infrastructural, natural, environmental, political, legislative and other conditions that determine the scale and pace of attracting investment (Balenko, 2018; Melnikov et al., 2019). Tax attractiveness for investors directly depends on the level of tax burden, the structure of tax concessions and incentives.

New technologies are used in many industries in various countries around the world (Gapsalamov et al., 2020;

Abramovich et al., 2019; Puryaev et al., 2019; Bukharina et al., 2014). They are also successfully used in the chemical industry, which has traditionally been a powerful engine of innovation, not only delivering products and solutions to other industries, but also stimulating the introduction of technological innovations throughout the value chain. The chemical industry is represented by the production of chemicals and chemical products for industrial enterprises, household chemicals, personal respiratory protection equipment, rubber and plastic products, as well as the production of pharmaceuticals and materials, medicines, antiseptics, medical products and phytoproducts.

## METHOD OF RESEARCH

The work is based on the collection and generalization (synthesis method), systematization (system method) and

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comparative analysis (complex and comparative analytical methods) of materials obtained from official information resources, other sources of information, including normative legal acts, materials of interpretation of normative legal acts (formal legal method), and analysis of practice.

### RESULTS

As you know, the sources of investment are: self-financing, corporatization and other forms of equity and mixed participation, credit financing, budget financing and foreign investment. Analysis of the effectiveness of these sources revealed that the current situation is as follows: the country's own financial resources of enterprises are almost the only real source for investment, but they are not enough to achieve a significant growth (Meshkov, 2018; Movchan et al., 2019).

At the same time, not all enterprises have investment resources, but only 12-14% that have a stable financial position. As shown by a joint study of the Ministry of industry and trade and the company "Tcifra" incorporated into "Renova". " The cost of 55% of industrial enterprises in Russia for digitalization and development of its infrastructure does not exceed 1% of their budget, and only 6% of enterprises spend more than 5% of the budget. In Western industrial practice, this figure also rarely exceeds 5%."

Credit Bank financing, especially over the past five years, has been artificially constrained by the Bank of Russia's policy (Krivoshapko, 2019). In particular by the high discount rate, this leads to a reduction in the supply of money. Rates on loans for legal entities vary depending on the terms of lending from 9% ("Rosselkhozadzor") to 19% per annum (Bank "Vostochny"). Interest rates on loans for legal entities in Sberbank are from 14.52% per annum. It is clear that for most businesses, loans are unaffordable in a stagnant economy. It is necessary to draw the attention of legislators to the fact that there are practically no tax incentives for long-term lending to industries and agriculture, although in the 90s there were such incentives (Karnova, 2018; Rahman, 2017; Kashirskaya et al., 2020).

Over the past three years, the chemical industry has shown a growing trend. The growth in sales of chemical products compared to the previous year was 10%, the volume of exports increased by 1.5 %, according to Rosstat. Sales of pharmaceutical products increased by almost 37%. In 2021, it is planned to increase the economic activity of chemical industry enterprises by 20% by launching new production facilities, developing new types of products and increasing the range of products. The use of Industry 4.0 technologies will increase the efficiency of enterprises, knowledge intensity and competitiveness of products.

The chemical enterprise is a powerful engine of innovation and creativity. In conditions of budget deficit, the real sector of the economy does not have to rely on budget financing. "The factors of low investment activity in the economy have long been known to everyone, but over the past 2 years, we can highlight another one – the planned volume of Federal targeted programs, which form the main volume of public investment, has decreased by 3 times, from 1.5 trillion to 500 billion".

As for external borrowing, " Russia is losing competition for foreign capital with other countries and, above all, with dynamically developing new industrial countries, especially Asian and Latin American, which markets are more attractive to Western investors." Foreign direct investments in Russian companies in 2018-2019 were decreased by 11 times – from \$ 25.8 billion to \$ 2.4 billion. Foreign investors are afraid of an unstable economic situation, so they do not expect special profits from our projects (Minfin, 2019). In addition, the increase in the discount rate in the US has led to investors moving away from risky assets in developing

countries, as well as from Russia.

In the current circumstances, the formation of tax attractiveness should be given priority. It is necessary to create real incentives for reviving investment activity, as well as ensuring the country's tax competitiveness on the world stage (Turgaeva, et al., 2020; Kuzmin et al., 2016).

The existing list of tax incentives for investment and innovation activity, established in Russia at the federal level, is quite extensive. There is also a long-awaited opportunity to use the investment tax deduction when calculating corporate income tax. Since January 1, 2019, tax incentives have been established for oil refineries in order to stimulate the production of petroleum products.

One of the most ambitious projects to attract direct investment in priority economic activities has become special economic zones (SEZs) with preferential tax treatment and the possibility of applying the free customs zone regime. According to the Ministry of economic development of the Russian Federation, "there are 33 SEZs in Russia (15 industrial and production, 7 technical and innovation, 10 tourist and recreational, and 1 port) (Eurasiancommission, 2019). Over 15 years of operation, more than 778 residents have registered in the SEZ, including more than 144 companies with foreign capital from 41 countries (Ministry of economic development. 2020). Over these years, the total amount of declared investments amounted to more than 1 trillion rubles, taken-up investments were more than 440 billion rubles, more than 38 thousand jobs were created, about 100 billion rubles of tax payments were paid, customs deductions and deductions to extra-budgetary funds were paid." For comparison, according to experts, Russia's annual need for foreign direct investment is about 10-12 billion dollars, but the real income, as we see, is much less. According to the conclusions of the Department of industrial policy of the EEU.

Tax incentives are the most important tools for regulating investment flows, developing and implementing innovations. As shown in our previous research, we can state that the system of tax incentives for investment and innovation in Russia can be considered generally formed. Further improvements, although necessary, are no longer able to raise it to a qualitatively new level, and there are no major changes in the tax policy. At the same time, it should be noted that benefits are the most unstable element of taxation, since their composition and application are constantly "optimized". In addition, at the initial stage, tax benefits are a direct loss to the budget. Some benefits remain unclaimed, or ineffective, or lead to the opposite result and excessive attention from regulatory authorities. Let us give some examples.

Reducing tax rates does not motivate businesses to invest. Thus, the corporate income tax rate has been reduced from 38% (in the 90s) to 20% today, but this has not affected investment activity (Federal Tax service, 2020). The possibility of reducing the regional component of corporate income tax to 13.5 % gives the investor very little savings, and taking into account the timing of construction, launch at full capacity and payback of the project, this savings will be obtained in the distant future, i.e. the benefit does not affect the investment decision. In modern conditions, when about 10% of industrial enterprises are in a pre-bankruptcy state, or do not have a profit, reducing both the general and regional components of the income tax rate does not play any role for them at all (Schwab, 2016).

The reduction of the corporate property tax rate by regions is also not particularly attractive for investors, since the share of this tax in the total amount of taxes paid is on average small – about 3%. Another thing is the privilege to cancel taxation of movable property of organizations. It can have a considerable effect.

## Efficiency of tax incentives for innovation in the development of the industrial economy (on the example of the chemical and pharmaceutical sphere)

The VAT exemption for the implementation of intellectual property rights prescribed in the Tax Code allows you to reduce prices for products of such activities, and encourages R & d, but it does not directly affect investment.

An investment tax credit could have been an important effective tool for supporting investor organizations, but it did not (Banks for small and medium-sized businesses, 2020). "The main reasons why the use of INC in practice is difficult, is an unnecessarily complex administrative procedure for its application"(Federal Tax service, 2020).

Currently, the main recipients of tax benefits in accordance with the law are existing enterprises that make investments, but not new ones that are being created. The analysis of the effectiveness of business incubators and technology parks conducted by OJSC RBC has shown that its level is influenced by factors completely different from taxes, the main of which is the lack of investment and grant support for projects, as well as the shortage of technical specialists of different qualifications, low demand of Russian enterprises for innovative products, and others. As for taxes, business incubators and technology parks can use regional and local tax incentives, if they are defined by the legislation of the relevant subject of the Russian Federation. Such benefits do not affect the investment process. And investors and venture capital funds agree to invest in later stages of company development rather than in the early stages, which allows them to reduce risks (Schwab, 2016).

The tightening of tax administration, including the number of required documents for approving an investment project, cannot please potential investors at all. This tightening has been observed against the backdrop of a downturn in the economy and an increase in the tax burden over the past five years. Despite the unfavorable situation in the economy, the tax authorities annually report on the growth of tax collection: "... during the specified period, tax revenues to the consolidated budget showed a steady growth, and increased by 58.6% (almost 1.6 times).

In real terms, that is, taking into account inflation, this growth was 19.9%, while the accumulated GDP growth over 5 years was only 1.2%" (State Fund of funds Development institution Russian Federation, 2020). Analysts FTS the Russian Federation is associated 40% increase in tax revenue with an increase in oil prices, and 60% beginning in 2017, the recovery in the economy, positive dynamics of key macroeconomic indicators and tightening of tax administration. Then the key trends in tax revenue growth continued. For the following year, tax revenues to the consolidated budget of the Russian Federation were received by 23% more than for the same period in the previous year (17343.4 billion rubles and 21328.5 billion rubles, respectively). As a result of tax administration measures, namely, compulsory collection of tax arrears, an additional 150.3 billion rubles were received by the budget system (Chelysheva, 2019). It is clear that in such conditions, most enterprises simply do not have enough money to invest. In the current economic conditions, we should take a differentiated approach to collecting tax arrears from real-sector enterprises and simplify the procedures for applying deferred and installment payments.

### CONCLUSION

In the context of digitalization, profound changes must occur in the technical, economic and social spheres. Therefore, businesses and companies need to carefully review their current product and service portfolio and adjust their business models. It is necessary to develop a long-term industrial policy, creating a competitive environment for the development of the chemical industry. Among the main goals of the sovereign investment and industrial policy of a modern country are sustainable economic growth based on

closed models of internal development, innovation, the knowledge economy, and investment in new industries that meet the conditions of the new scientific and industrial revolution. It should be noted that the advanced development of chemical enterprises (namely pharmaceutical enterprises) is possible only with effective state support, the main tools of which are the mechanisms of cluster development and public-private partnership in the implementation of industrial and infrastructure projects, as well as various tools for tax and financial incentives for investment in industry.

The most important condition for tax attractiveness is the tax burden. Therefore, it is necessary to monitor it to identify which priority sectors are the most burdensome, and take all measures to reduce it. In a downturn and stagnation of the economy, the tax burden must be lowered, but in our country, it is, on the contrary, increased. Thus, it has increased significantly as a result of the transition to cadastral valuation of land and real estate for tax purposes, the abolition of a significant number of benefits for property taxes for legal entities and individuals, an increase in the VAT rate to 20%, and a constant increase in excise taxes. In March 2019, the government of the Russian Federation made a long-awaited decision: a moratorium on increasing the tax burden for the next six years, but it is more rational to increase this period taking into account the long-term nature of the return on investment.

To sum up, we can say that the reasons for the low return on tax incentives and preferences are seen in the absence of a comprehensive approach to their formation. Often decisions are made that contradict each other. For example, when VAT and excise rates increase, the profit of enterprises decreases, product prices increase, and thus the spiral of inflation is unwound.

In the current circumstances, it is necessary to rethink the effectiveness of tax law enforcement. It is necessary to select the means of tax regulation in such a way that they lead to a considerable result – industrial and scientific and technological development. At the present stage, effective tax support tools for investment and innovation can be:

- reducing the tax burden on the real sector of economy;
- introduction of a unified methodology for evaluating the effectiveness of tax incentives, taking into account their role and impact on investment and innovation processes;
- expanding the range of tax incentives for commercialization of scientific research;
- replacing a number of existing taxes with fundamentally new ones that meet the current conditions of economic functioning;
- establishment of tax incentives for credit organizations that provide long-term loans to businesses;
- inclusion in the methodology of the algorithm for calculating the tax burden of payments that currently have the status of mandatory non-tax payments;
- ordering the composition of mandatory payments that have a non-tax character, and giving some of them the status of taxes, with appropriate scientific and practical justification for such a decision.

As for the last proposal, such a step has already been taken and it was reflected in the "Main directions of tax policy for 2017-2019: "in order to reduce the administrative burden on business, it is planned to analyze all non-tax payments to identify payments that have a tax nature, and then transfer the basics of legal regulation of such payments to the Tax Code of the Russian Federation."

Also, it is long overdue to solve the problems of tax federalism in terms of increasing the standards of deductions from Federal taxes in favor of the subjects of the federation. This will increase their own sources of tax revenue for investment. In particular, it can be left from 25% to 50% of VAT receipts to the regions.

## Efficiency of tax incentives for innovation in the development of the industrial economy (on the example of the chemical and pharmaceutical sphere)

In modern conditions, the tax system should be adequate to the current economic situation and global challenges. It should play a major role in creating favorable conditions for the revival of domestic industry at a new technical and technological level and increasing its investment attractiveness.

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