

# **RELAÇÕES INTERNACIONAIS NO MUNDO ATUAL**

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# APPLICATION OF FINANCIAL AND LEGAL INSTRUMENTS FOR THE DEVELOPMENT OF INNOVATION CLUSTERS

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#### **ABSTRACT**

**Purpose:** The purpose of this article is to study the issues of legislative regulation of innovation clusters in the system of financial and tax law. **Methods:** The authors proceeded from an interdisciplinary approach since the problem of the legal status of innovation clusters inevitably affects the subject of regulation of various branches of law and has both constitutional and legal, financial and legal, civil, administrative, and other aspects. **Results:** The article notes the underdevelopment of the legislative and legal field of clustering of the economy and the negative impact of the legislative factor on its full development. Legislation in the field of innovation (clustering) is not systemic, it is dominated by numerous disparate subordinate regulatory legal acts, including at the regional level. **Conclusion:** The main directions of financial and legal regulation of investment clusters include the budget vector, implemented through the effectiveness of the state as an investor through budget allocations. The tax regulation of innovation clusters, characterized by incentive-stimulating and mobilization orientation. The practical experience of the application of legislation in the field under consideration, as well as the most effective methods of stimulating innovation clusters, have been investigated.

**Keywords:** finance, financial law, innovation, tax benefits, innovation activity, innovation cluster.





# APLICAÇÃO DE INSTRUMENTOS FINANCEIROS E JURÍDICOS PARA O DESENVOLVIMENTO DE CLUSTERS DE INOVAÇÃO

#### **RESUMO**

Objetivo: O objetivo deste artigo é estudar as questões de regulação legislativa de clusters de inovação no sistema de direito financeiro e tributário. Métodos: Os autores partiram de uma abordagem interdisciplinar, uma vez que o problema do estatuto jurídico dos clusters de inovação afeta inevitavelmente o tema da regulação de vários ramos do direito e tem aspectos constitucionais e jurídicos, financeiros e jurídicos, civis, administrativos, entre outros. Resultados: O artigo constata o subdesenvolvimento do campo legislativo e jurídico de clusterização da economia e o impacto negativo do fator legislativo no seu pleno desenvolvimento. A legislação no campo da inovação (clustering) não é sistêmica, é dominada por inúmeros atos jurídicos regulatórios subordinados díspares, inclusive em nível regional. Conclusão: As principais direções de regulação financeira e jurídica dos clusters de investimento incluem o vetor orçamentário, implementado por meio da efetivação do Estado como investidor por meio de alocações orçamentárias. A regulação tributária dos clusters de inovação, caracterizada pela orientação incentivadora e mobilizadora. A experiência prática da aplicação da legislação no campo em consideração, bem como os métodos mais eficazes de estimular clusters de inovação, foram investigados.

Palavras-chave: finanças, direito financeiro, inovação, benefícios fiscais, atividade de inovação, cluster de inovação.

## 1. INTRODUCTION

Today, the clustering of economic activity is one of the main trends and tools for promoting an innovative economy around the world. Innovation clusters are spreading in different regions of the world and countries with different levels of economic development. For example, in countries. Clustering is popular in Western Europe and the United States of America, which has resulted in a fairly widespread of clusters, in particular, IT, pharmacy, and other industries. Innovation clusters contribute to the formation of a new innovative model of economic development based on technology and investment attractiveness (Stankevich et al., 2019).

Innovation clusters combine public and private interests in the field of business development, startup creation, and innovation support. It is necessary to highlight the most successful models of innovation clusters, showing a long-term effect and result.

The American model, which has existed for more than 50 years, is the most advanced and is widely used as a basic one. For the first time, the concept of clustering innovation was implemented in Silicon Valley in the USA, which was created based on Stanford





University, and still has no analogs in its competitiveness and importance for the development of the latest technologies. The first start-up of the Valley – Hewlett Packard company was created by Stanford graduates at the expense of a venture investor, a professor at the same university. Today, funds invested by Silicon Valley-based companies account for a third of national investments in the U.S. economy, and the companies themselves own 10% of all patents registered in the United States (Simson, 2012).

A characteristic feature of American innovation structures is that they are less based on public financing, and more on corporate, private, and stock investment (Esmaeilpoorarabi et al., 2018).

European innovative formations have their terminological features: they are called poles of competitiveness in France, innovation and technology centers in Germany, science parks in Holland, research parks in Belgium, business incubators, science parks, and innovation centers in the UK. European territorial entities are characterized by significant state support, which is implemented through direct financing and the establishment of tax benefits. The European approach is very similar to the Russian one, in which the share of state support is also quite high (Chen et al., 2021; Filippopoulos & Fotopoulos, 2022).

The largest innovative projects in Russia (Skolkovo and the National Technological Initiative – NTI, Vorobyovy Gory Valley) are implemented mainly through subsidies from budget funds, in the format of public-private partnership. The scientific and technological valley of Moscow State University "Vorobyovy Gory" is a unique lettered innovative project based on the campus of Moscow State University named after M.V. Lomonosov. The National Intellectual Development Foundation is working on the concept of the project. The cost of the valley is 149.9 billion rubles due to subsidies from budget funds in the format of public-private partnerships (Shestak & Tyutyunnik, 2017).

A trend has spread in the world recently to define such innovative formations through the category of "innovation clusters". Being perceived at the beginning by the next terminological trends, it has now formed into a concept that has been implemented at the EU level and fixed in the working document of the European Commission "The concept of clusters and cluster policy and their role for competitiveness and innovation" (Meshkov, 2020, p. 182).

The purpose of the study is to conduct an up-to-date analysis of legislative trends accompanying innovation clusters. The research contributes to the formation of approaches regarding the value, effectiveness, and targeting of financial and legal incentives that affect the development of innovation clusters.





### 2. MATERIALS AND METHODS

The analysis of publications over the last decade shows the lack of scientific monographic studies devoted to the issues of financial and legal regulation of innovation clusters. The topic of innovation clusters is intersectoral, based on the achievements of economics and law. The works of Russian and foreign scholars were studied in the course of the research. We used acts of various legal systems selecting sources of foreign law. Foreign sources were studied solely for a better understanding of the Russian experience of the development of innovation clusters, but not to identify defects and contradictions of foreign legislation.

The problem of the formation and development of innovation clusters remains insufficiently developed despite the relevance and practical significance of the cluster approach to the development of the innovation economy.

The study of the financial and legal foundations of innovation clusters is important in modern conditions of the digital economy development, which creates new challenges for innovation.

The methodological basis of the study of the legal regime of innovation clusters was a set of research methods: theoretical methods – analysis and study of regulatory legal acts that determine the introduction and development of innovation clusters in the economy; theoretical analysis and synthesis, analysis of the state of legal approaches to regulating innovation clusters in the world, methods of logical inference; general scientific methods – modeling of possible options for providing state financial support and stimulating the activities of innovation clusters, analysis, synthesis, generalization, systematization, classification; empirical methods – observation, survey methods, monographic research, methods of statistical processing and qualitative analysis of the results of scientific research (Klyukovskaya et al., 2018).

#### 3. RESULTS

The history of social development has repeatedly proved that the effective functioning of the economy directly depends on the state regulation of its elements. The current situation in the state indicates the shortcomings of the existing system and requires immediate intervention and improvement. The last two years have been eventful. Forced measures of self-isolation in connection with the pandemic of the virus indicated the unpreparedness of





the economy of Russia for shocks of this kind. This, in turn, indicates an increased need for innovation, absolutely in all areas. This should be perceived as a challenge to state regulation of investment and innovation spheres in the current realities.

The legislation of the Russian Federation is characterized by the need to improve the methods of tax regulation of investment and innovation spheres and increase investment activity on the territory of Russia. Further development is impossible without ensuring the well-being of the population, characterized by a high level and the creation of a stable economic system. Achieving these goals directly depends on increasing the investment attractiveness of the state and the transition of the economy to an innovative development model, which, in turn, is impossible without an effective system of tax regulation tools.

The state policy is aimed at improving and increasing the level of functioning of these two spheres, interrelated and mutually dependent. This is expressed in the impossibility of stimulating investment and innovation activities separately, since the quality and efficiency of both decrease. Investments should be made in priority areas to give the economy an innovative orientation.

State regulation of these areas is possible both by direct and indirect methods. Direct one implies immediate financing by the state of investment projects, the development of knowledge-intensive industries, and high technologies. Indirect method – stimulates this activity with the help of tax methods – taxes and legal exemption from them.

It is carried out based on taxes and their functions. Concerning innovation clusters, tax regulation is manifested in the provision of special tax rates, benefits, vacations, as well as an investment tax credit to the entities implementing them (Ivus et al., 2021; Kaplinsky & Kraemer-Mbula, 2022).

In this regard, Decree of the President of the Republic of Belarus No. 12 dated September 22, 2005 "On the Hi-Tech Park" and Decree of the President of the Republic of Belarus No. 392 dated August 30, 2012 "On certain issues of taxation of residents of the Hi-Tech Park" are of interest (Tereshchenko, 2014). According to these regulatory legal acts, residents of the Hi-Tech Park are exempt from income tax; value-added tax on turnover from the sale of goods (works, services, property rights) in the territory of the Republic of Belarus; payment of import customs duties and value-added tax collected by the customs authorities when importing goods into the customs territory of the Republic of Belarus according to the list approved by this Decree (Apanasovich et al., 2016).

States should not underestimate the importance of tax regulation of innovation clusters. At the moment, the economy of Russia cannot function effectively in the old ways,





new ways of its functioning must be improved and developed. This requires a legislative framework. The Russian tax system of regulation and incentives is not sufficiently effective and developed.

For example, the preferences provided for income tax have high fiscal significance and regulatory potential. However, they are not fully implemented, although they play a significant role in influencing the attractiveness of innovation clusters.

The investment tax credit is also of great economic importance. It is quite effective in the implementation of investment and innovation spheres. The state, by providing an investment tax credit, enables the taxpayer to direct funds for the implementation of its activities, and the state with its help solves the tasks of the state investment and innovation policy. However, this instrument of tax regulation has not acquired special attractiveness.

Along with this, it should be noted that the use of a large part of tax instruments gives a positive result for the first 3-5 years, then they begin to bring the opposite effect. This indicates that with a certain periodicity it is necessary to search for new tax instruments – to develop own, and adopt foreign experience.

### 4. DISCUSSION

The impact of financial and legal incentives on the development of innovation clusters is assessed very inconsistently. Two approaches can be distinguished. Proponents of the first approach consider the result of the influence of financial and legal incentives to be short-term and exclude the possibility of waiting for a long-term result. Direct government subsidies favor firms in the short term, but hinder their innovation activities in the long term, while allocating separate fiscal instruments, for example, a tax credit that provides a comprehensive result (Zhang & Guan, 2018; Ferreira, Xavier, Polónia, 2019).

The second approach expresses the absolute prospects and effectiveness of financial incentives for the development of innovation clusters (Yigitcanlar et al., 2019; Alm, Liu, Zhang, 2019).

All the existing discussions are united by solidarity in the profitability of investments in innovation since the specifics of the innovation economy consist not only in the ability to generate new ideas continuously at a new price but also in the quality of human potential (Tran-Nam, Evans, 2014; Chadee, Roxas, 2013).





### 5. CONCLUSION

As a result of the conducted research, we propose the main conclusions to integrate scientific knowledge and empirical grounds for determining the place and role of innovation clusters in the system of financial and tax law.

The main task of the Russian Federation at the moment is to improve the sources of replenishment of the budget, especially previously not in demand. The innovation sphere has a huge potential in this matter. The most important way to implement state policy is tax incentives for innovation, which should be implemented in conjunction with other measures. Changes in the tax system are needed, which would be aimed at reducing the tax burden. It is tax incentives that are one of the most important conditions for the implementation of the current state policy and the creation of a favorable environment for the activities of innovation clusters.

The essence of tax incentives is understood as the application of such tax instruments to the activities of innovative clusters as tax rates, benefits, vacations, applied to influence the state on economic and social processes in society. The tax legislation of the Russian Federation provides for a fairly extensive list of tax benefits and preferences. The application of existing measures of tax incentives for innovation clusters is not quite effective, due to the lack of a comprehensive system for their use and insufficient elaboration of the benefits themselves. These imperfections hinder the implementation of the policy set by the state, complicate the activities of the subjects of innovation clusters.

Thus, it is extremely necessary to take measures aimed at supporting and stimulating the development of innovative clusters at the present stage of development of the Russian economy, which is impossible without improving its tax regulation and incentives. In this regard, an important task is to reform and amend tax legislation in terms of providing tax benefits to entities engaged in this activity. That is, it is necessary for the state to actively intervene in the legal issues of the procedure for implementing innovative activities, especially in the conditions of world digitalization.

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