THE EFFECT OF INNOVATION CLUSTERS ON INVESTMENT ATTRACTIVENESS GROWTH IN RUSSIA

EL EFECTO DE LOS CLÚSTERES DE INNOVACIÓN EN EL CRECIMIENTO DEL ATRACTIVO DE INVERSIÓN EN RUSIA

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ABSTRACT

The issue of developing the most efficient approach of funding innovation actions at the present phase of the implementation of cluster policy in the Russia federation is highly important. Exotic direct investments contribute to the triggering the investment procedure in the global economy, indirectly resulting in a rise in sustainability and quality. This study aims to analyze the impact of innovation clusters in the Russian Federation throughout the growth of investment attractiveness and triggering exotic economic integration. The structural, logical, system-functional and comparative analysis are utilized to meet that aim. Given the results, regional investments' methods on the basis of the cluster means greatly affect investment attractions from huge investors. Nonetheless, investments in individual huge organizations aren't as constructive as anticipated. It seems completely rational to think that the outcomes of the present shortages of innovation financing are uneven. 2020 was rather challenging for business throughout the globe. The innovative businesses weren't any exceptions, even though implementing and developing new tools didn't end and quiche end in some arenas. The investigation of the special literature on the matter under observation permits us to conclude that it is absolutely vital to evaluate the issues of Russian cluster policy and the investment attractiveness of innovative clusters.

Keywords: Foreign economic integration; cluster policy; investment attractiveness; innovative development; cluster approach.

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RESUMEN

La cuestión de desarrollar el enfoque más eficiente para financiar acciones de innovación en la fase actual de implementación de la política de clústeres en la federación de Rusia es muy importante. Las inversiones directas exóticas contribuyen a desencadenar el proceso de inversión en la economía global, lo que indirectamente resulta en un aumento de la sostenibilidad y la calidad. Este estudio tiene como objetivo analizar el impacto de los clústeres de innovación en la Federación Rusa a lo largo del crecimiento del atractivo de inversión y el desencadenamiento de una integración económica exótica. El análisis estructural, lógico, sistema-funcional y comparativo se utilizan para cumplir con ese objetivo. Dados los resultados, los métodos de inversión regionales sobre la base de los medios de clúster afectan en gran medida las atracciones de inversión de los grandes inversores. Sin embargo, las inversiones en grandes empresas individuales no son tan positivas como se esperaba. Parece completamente racional pensar que los resultados de la escasez actual de financiación de la innovación son desiguales. 2020 fue bastante desafiante para los negocios en todo el mundo. Las empresas innovadoras no fueron una excepción, aunque la implementación y el desarrollo de nuevas herramientas no terminaron y terminaron quiche en algunos ámbitos. La investigación de la literatura especial sobre el tema bajo observación nos permite concluir que es absolutamente vital evaluar los problemas de la política de clústeres rusa y el atractivo de inversión de los clústeres innovadores.

Palabras clave: Integración económica exterior; política de clústeres; atracción de inversiones; desarrollo innovador; enfoque de clústeres.

INTRODUCTION

Nowadays, it appears unlikely to conceive of the integral growth of any state without a global innovation system growth and expansion, which is an indispensable element of the economy growth provision. Given the fact that the global market for high-tech goods is expanding 2.5 times quicker than the global economy, you can express the efficiency of the present innovation system and its innate procedures of innovation development (Kashukoev et al., 2020).

Among the means for an efficient development of innovation system is innovation clusters, featured by dynamic self-growth and properly conduct the function of a growth point for the region's economy in which they are positioned. Moreover, the development and creation of innovative territorial clusters is without a doubt a completely efficient system for absorbing exotic direct investment and boosting exotic economic integration (Babkin et al., 2019).

Hence, one is able confidently discuss a straight relation between the clusters number (innovative and industrial) in the nation and the chances throughout the generation and enhancement of innovations. That tendency is approved by the relations between the clusters' number and the nation's innovative growth index (Govdya et al., 2017).

Innovation clusters demonstrate an efficient tools of fast growth of contemporary technologies in a particular direction. That outcome is accomplished by a thorough blend of scientific and theoretical and feasible development in the various production of the latest services and products in a partially

tiny geographic area (Piterskaya et al., 2019). Furthermore, the concentration of attempts in backwards areas ensures economic impact and progress, as long as there exists a favorable results of point successes. To put it another way, an actual breakthrough occurs in particular regions (Korsak & Surdo, 2018).

The current study mainly attempts to to examine the effect of innovation clusters in the Russian federation over the course of the development of investment attractiveness and triggering exotic economic integration.

Grasping the relation of the issue of an efficient system growth for innovative activities' funding at the current phase of implementation of cluster policy in the Russian federation propelled us to investigate the issue profoundly and elaborately.

MATERIALS AND METHODS

The methodological and theoretical basis of the survey is on the basis of the general scientific methods of the institutional method primary provisions, the results of pioneer Russian and foreign researchers in the creation and growth of innovative clusters.

To gratify the study's aim, an interdisciplinary and systemic method are utilized to study the procedure under examination. Plus, the methods of structural, logical, comparative analysis unity, system-functional and general scientific approaches, including synthesis and analysis, induction and deduction, generalization, as well as comparison are taken into consideration.

RESULTS AND DISCUSSION

In the prevailing era, the Russian federation is regarded as the 43rd of 141 nations in the ranking by worldwide competitiveness report, demonstrating clearly the poorness and inadequacy of its innovations approach. That can be justified by the reality that innovation cluster has been the subject of state economic regulation in the Russian federation somewhat recently, for nearly ten years, however, it has been growing fast over the last few years.

Over the course of 2012, Economic Development Ministry of the Russia, according to the guidance from the Russia's President and Government, executed a plan to support and advocate innovative territorial cluster (ITC). Based on the competition outcomes, twenty five clusters have been chosen from ninety for participants, which have been assigned the proper status by the Government Order of the Russia Number DM-P8-5060 (August 27, 2012). In the following years, that list was extended to twenty seven ones, and today, merely eleven pilot ITC are recognized. Those clusters are mainly featured by several territorial organization forms, and have various shares of technical, scientific, and production action ratio in the their employment structure. Indeed, there existed no substantial drop in the clusters' number, given the fact that individual clusters have been inregrated into consortia (Adamenko, 2017; Govdya et al., 2015; Kesyan, 2014; Govdya et al., 2017; Kashukoev et al., 2020; Makarenko et al., 2018).

All of the clusters propose a synergistic impact. In other words, the capacity of a single cluster remarkably surpasses the overall of the capacities of its single elements. That is a common outcome of efficient collaboration among several cluster members, which permits utilizing the abilities of

a partner, the manufacturer proximity and the consumer, and so on. As a consequence, the cluster blends intelligently 2 procedures: cooperation and competition (Figure 1).

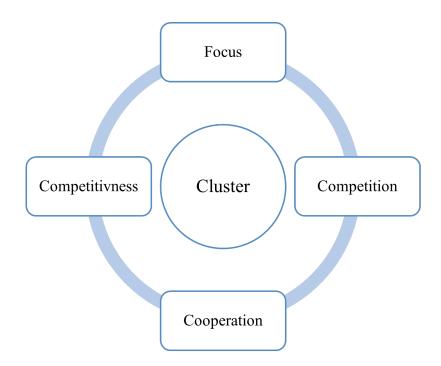


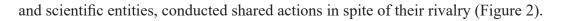
Figure 1. Cluster as a set of transformations

Owing to the systematic exchange of information, technologies, ideas, experts, the shared utilization of common opportunities and resources, cluster members attain substantial advantages, and growth. Nowadays, there stands a common and prevalent notion that the areas on the territory of which clusters are shaped get the undeniable pioneers of economic growth, and those areas define the national economies competitiveness (Babkin & Novikov, 2016; Shutov, 2014; Prokhorova et al., 2017). As a result, the various nations' competitiveness shall not be observed from the individual firms' competitiveness, but merely by the clusters' competitiveness.

The clusters' functions in nearly all of the regions confirm the regional systems' functions. Hence, properly operating clusters raise the region's competitive status, both in international and Russian arena, hence assisting in the provision of economic security of the area. Given the their innovative components, clusters enhance the area in the transformations of economy's post-industrial era. The essence of cluster communications also help elevate the effectiveness of regional management.

The means enhancing the clusters' development in the Russian Federation supply for the utilization of essentially monetary measures. The primary element of public financing, intended to support of clusters, is applied for the educational infrastructure expansion, innovative development, and to boost the special cluster organizations' activities. Having said that, simultaneously, the supports' direction kept entirely unclaimed, allowing consulting the members of cluster on the growth of investment plans in the area of innovation. Innovations seem usually and at various levels in clusters. Nevertheless it is the innovative clusters' formation that significantly contribute to the territories' capitalization (Babkin & Tashenova, 2017; Kungurtseva & Titov, 2018).

The innovation clusters are a set of relevant special organizations in several industries, government



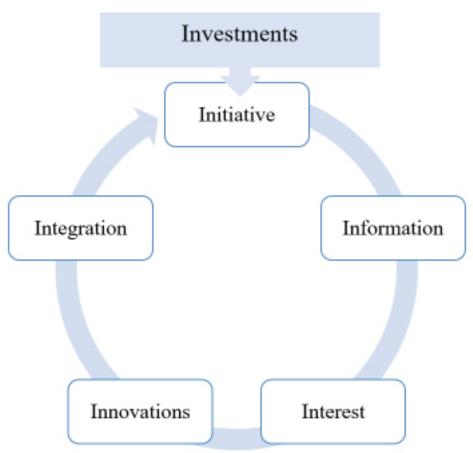


Figure 2. The structure of innovation cluster

The formation and development of that kind of innovative organizations seems vital for the sustainable implementation and development of innovative solutions and tools, resulting in constant growth of services and products. The creation of innovation clusters is entirely dependent on the creativity and intelligence of the government and private organizations. The being of a robust research nature can be a substantially significant element for the constant growth of innovation clusters, covering a vast range of applied and fundamental research that can guarantee the innovative goods growth (Zdolnikova, 2016; Kuznetsova, 2022).

Let's regard the primary duties of several kinds of ITCs growth in the Russian federation and the top choices of their state support. hence, the clusters' duties shaped based on of anchor high technology organizations, are the innovative development, production, energy, and transport infrastructures. The following duty is overcoming reliance on the orders of government, technological inadequacy and implementing the open innovation pattern. Plus, it seems highly substantial to seek new arenas of current competence applications, and also to prevent concentrating on cnevtional sales markets with low productivity and expansion rate (Korsak & Surdo, 2018).

Nowadays, a wide range of tools and techniques are employed to spark and encourage innovation (Piterskaya et al., 2019; Babkin et al., 2019). Among the most efficient ones is the policy of well-thought-out innovation cluster, which regards the utilization of the systems and techniques below:

- programs and strategies for innovative growth of the regional, interdepartmental and interregional levels;

- government supporting of scientific studies;
- actively stimulating the need for cluster goods;

- guaranteeing a desirable business ambiance for effortless and proper actions of active-innovative industrial organizations. To that end, it is suggested to decrease the tax amount, monetary support for current cluster schemes; fall in the public administration degree, and so on;

- strict and thorough supervision and constant monitoring of innovative action growth;
- creating and expansion of robust partnerships among governments, science and business;
- communications and infrastructure development;

It is worth noting that that the emergence of innovative cluster in the Russian federation faces several hard issues along the way, specific and general for the nations' financial status. As predicted, prevalent issues comprises substantial shortages of monetary resources, qualified and experienced staff in all parts, a low production culture, and an adequate material bases. Regarding that, it appears somewhat likely to see a position while regional officials call completely any associations of organizations a cluster to report on the formation of new clusters on their area (Kungurtseva & Titov, 2018; Khachaturyan, 2016; Prokhorova et al., 2017).

The innovation clusters are observed as the most favorable ambiance for making investments and are capable of taking on the solution of some substantial government duties, including the formation of new professions and enhancement of socio-economic indexes (Napolskikh, 2021).

The indicators demonstrating and featuring the investment appeal of the clusters and the territory of its base are regarded as the evaluation of the cluster infrastructure preparedness to invest additionally, the mechanisms' availability for absorbing and drawing and supporting investments in the area where the clusters are positioned. In the meantime, based on this file, one of the main cluster growth outcomes is the reinforcing of the competitiveness of clusters, such as those related to the probabilities of finishing and accomplishing the cluster chain's added value growth by drawing exotic direct investments.

Considering the data in 2020, while there was a huge recession in the world economy, we own several reasons to state that the present dilemma has dealt a perceptible blow to the arena of innovation. Over the course of 2018, expending on scientific studies and several sorts of development elevated by nearly 5.2%, which substantially surpassed the development rate of world GDP, and the utilization of intellectual property objects arrived at the peak level. It is worth mentioning that this has been made easier by the powerful political will to boost innovation over the last years (Morozova et al., 2022).

In the prevailing era, the primary concentration is mainly on supporting businesses. In other words, those approaches aren't particularly intended to finance innovations and the state has not made innovations its priority yet as the element of brand-new approaches to spark and boost its economy. The healthcare is merely an exception. A lot of budgets are going to that sector, as in several other nations.

Besides to the healthcare sector, 2020 hold an actual investment activity blooming in virtual educational logistics and services, which can't be pictured now beyond digitalization procedures.

CONCLUSION

The development and creation of the system of cluster in the Russian federation in general, its primary concentration upon economic effectiveness and innovative specializations, begins to hold a substantial effect upon the Russia's strategy development. Having said that, it shall be grasped that the Russian innovation clusters' system would be incredibly efficient if only big development schemes are executed nationally. Initially, there must be a chance for that to utilize the nations' industrial, scientific, and human resources.

It appears crucial to attempt to implement the appearance of these technologies and tools that are being generated, to assess them across the nation fast and get to the global market with those goods. Investors generate a more desirable version of the future for themselves and for the nation on the whole.

Large-scale implementation of the objectives in the sphere of innovation is likely provided the development and creation of innovative people occurs who is capable of using the accomplishments and results of technology and science entirely, who is concentrated upon generating innovation and their introduction into all areas of public life. To put it another way, innovativeness have to be in thinking, and even the most daring notions on the basis of technological modernization of fundamental sectors can be executed and define the place and role of the Russian federation in the global economy.

REFERENCES

- Adamenko, A. A. (2017). Competition in meso-level cluster formations developed with the participation of small and medium-sized enterprises. Economics. IAW. Printing. KSEI Bulletin. 73-74 (1-2), 128-132.
- Babkin, A.V., & Novikov, A. O. (2016). Cluster as the economy subject: essence, current state, development Scientific and technical statements of the St. Petersburg State Polytechnic University. Economics. 1 (235), 9-29.
- Babkin, A.V., & Tashenova, L. V. (2017). A backbone innovative-active industrial cluster in the context of digital transformation: concept, essence, features. Proceedings of the correspondence conference Economics and Management in Digitalization (December 7, 2017) / St. Petersburg Polytechnic University Publishing House, 301-313. DOI: 10.18720/IEP/2017.7/35.
- Babkin, A., Tashenova, L., Mamrayeva, D., & Azimov, P. (2019, October). Development of algorithm to measure digital potential of high-tech industrial cluster. In Proceedings of the 2019 International SPBPU Scientific Conference on Innovations in Digital Economy (pp. 1-7).
- Govdya, V. V. (2015). State policy of the cluster form of organizing the interaction of agrarian formations. Political network electronic scientific journal of the Kuban State Agrarian University, (112), 1353-1369.
- Govdya, V. V., Khromova, I. N., Vasilieva, N. K., Sigidov, Y. I., & Polutina, T. N. (2017). Decomposition approach to formation of accounting and analytical system of cost management in agricultural enterprises. Journal of experimental biology and agricultural sciences, 5(6), 818-830.
- Kashukoev, M. V., Tyupakov, K. E., MARIEVA, M. A., MUSAYEVA, B. M., & Misakov, A. V. (2020). Features of model building for an inter-sectoral agro-industrial cluster as a quasi-integrated structure. AD ALTA: Journal of Interdisciplinary Research, 10(2 S12), 126-128.
- Kesyan, S. V. Cluster approach to the organization of integration interaction of agro-industrial complex subjects of the meso-level. Bulletin of the Adyghe State University. Series, 5, 225-232.
- Korsak, M. M., & Surdo, A. P. (2018). Formation of a conceptual model of the organizational and economic mechanism of management. Economic Bulletin of the University. 37 (1), 90-96. DOI: 10.5281/ zenodo.1220880
- Khachaturyan, M. V. (2016). Specificity of the study of the organizational and economic mechanism of industrial policy management in a modern market economy // Bulletin of the RUE named after G.V.

Plekhanov. 1 (85), 81-87.

- Kungurtseva, V. S., & Titov, A. B. (2018). Trends and problems of innovative development of information and communication systems in the digital economy. Scientific and technical bulletin of SPbSPU. Economics. 11, 54-63. DOI: 10.18721/JE.11105
- Kuznetsova, O. V. (2022). Creative Industries Development in Russia: A Way to Transform the Urban Environment. In Proceedings of the International Conference Engineering Innovations and Sustainable Development (pp. 545-553). Springer, Cham.
- Makarenko, S. A., Sukhina, N. Y., Krymov, S. M., Martynenko, S. V., & Adamenko, A. A. (2018). Testing economic systems of capitalist countries by the world economic crisis. Espacios, 39(31), 37-52.
- Mindlin, Y. B., Novikov, S. V., Kireev, S. V., Adamenko, A. A., & Belitskaya, O. V. (2016). Innovative territorial clusters. International Journal of Economics and Financial Issues, 6(8), 251-256.
- Morozova, I. A., Kuzmina, E., Volkov, S. K., & Shevchenko, S. A. (2022). Innovative Cluster as a Structuring Element of Sustainable Spatial Development in the Region. In Cooperation and Sustainable Development (pp. 1579-1587). Springer, Cham.
- Napolskikh, D. (2021, March). Transformation of the Volga region's economic space based on the development of innovation clusters in the conditions of digital economy. In IV International Scientific and Practical Conference (pp. 1-4).
- Piterskaya, L. Y., Zinisha, O. S., Avdeeva, R. A., & Goncharova, N. A. (2019). Development of a model to increase the investment attractiveness of an enterprise. International Journal of Innovative Technology and Exploring Engineering, 9(1), 3961-3964.
- Prokhorova, V. V., Adamenko, A. A., Tupchienko, V. A., Shalatov, V. V., Vasnev, S. A., & Blaginin, V. A. (2017). Clustering of modern economic processes:" Pros" and" Cons". International Journal of Applied Business and Economic Research, 15(12), 225-232.
- Shutov, P. P. (2014). Innovation cluster: problems and development prospects. Bulletin of the Samara State University. 4 (115), 79-83.
- Zdolnikova, S. V. (2016). Organizational and economic mechanism for managing the innovative potential of integrated industrial structures. Scientific and technical statements of SPbSPU. Economics. 4 (256), 109-122.