The Social Significance of the Cluster in the Economy

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ABSTRACT

Transition of the Russian Federation’s policy to the innovative way of economic and social development is indispensable imperative to ensure its output to a leading position in the modern globalized world. Among the wide range of means, methods, forms, the mechanisms by which it is possible sharp acceleration of the process of formation of an innovative economy in our country, a special place belongs to the cluster approach. International scientific community is justified, and the practice of developed countries proved that the cluster approach to the structuring of the national economy and regional systems are an important source to improve production efficiency, increase its competitiveness, and increase public welfare. Questions of cluster formation and management of the development of the Russian economy in recent years, becomes the subject of numerous studies by Russian scientists - economists. Cluster policies are becoming increasingly recognized in public authorities. Moreover, there are already official documents, which examine the content and direction of the cluster policy.

Keywords: Society, Cluster, Economy, Innovation, Importance, Competitiveness

JEL Classifications: A19, O35, O30

1. INTRODUCTION

Globalization and informatization of the economy in terms of development of post-industrial society has led to significant changes in the economic structure. In the industrial economy, the main factor of economic growth was the deepening social division of labor, product, technology and professional expertise. In modern conditions the fore the inter-company and inter-branch scientific and industrial cooperation, consolidation and integration. Foreign trade of finished products increasingly supplemented and replaced by international cooperation in the development, production and marketing of the final product (Ha et al., 2015). The multi-level economy plays a special role meso-economic structures that act as middle management.

One of these structures are economic clusters are widely used in Europe, Asia and other countries. Finland, Sweden and some other countries on the basis of clustering achieved leadership in competitiveness. Formation of the market-oriented clusters in Russia will allow public authorities and local governments to stimulate the development of innovative business entities. Theory and practice of the cluster approach to the creation of organizational and economic forms of inter-sectoral national economic systems show that there cannot be universal methods in the implementation of the problem. In this context, the development of methodology and methods of formation of the cluster approach to the creation of cross-sectoral national economic system, taking into account the specifics of the region’s industries and is a very urgent task (Hausmann, 2016).

The global financial crisis, increased competition in the market of goods and services, resource constraints, the fall in demand, technological stagnation and so forth. Forced domestic theorists and practitioners to address the issue of innovation, which will allow territorial entity to gain a competitive advantage in the long term through active development of individual enterprises of a other territorial unit.
It can be argued that there is no universal concept of enterprise development and individual territorial units. Since each of them stands out for its characteristic features, it is particularly important local policy, and, above all, local strategy innovation progress, which is often formed thanks to the cluster approach. As stress researchers, understanding the ideology of the cluster in the global community is growing fast, and the clusters are becoming a key component of many social and economic policies.

The main idea of the cluster concept is the creation of cooperation between enterprises, manufacturers, contractors, suppliers and technology resources, as well as between research and financial and credit institutions. Such cooperation and specialization allow cluster members to increase their efficiency, faster to introduce new technologies and products, etc. Companies - participants of the cluster, on the one hand, compete with each other, and on the other - working together to find new ways to solve diverse problems (among them - the supply of resources, access to new markets, etc.). Thus, within the boundaries of the cluster uniquely combines competition and cooperation (Mullakhmetov et al., 2014). With this in mind, you can suggest the following definition (Peach and Petach, 2015): Cluster is a voluntary association of geographically concentrated, are independent from each other entities (companies, educational and research institutions, banks, insurance companies, etc.). And public authorities without creating a separate legal entity for joint activities in the field of entrepreneurship, for more efficient use of resources, stimulate innovation, and to obtain a synergistic effect.

The obvious growing interest in the clusters from the state in Russia. In addition to the concept of cluster development Ministry of Regional Development of the Russian Federation Innovative Development Strategy was developed in 2010 for the period until 2020, much of which is devoted to the clustering of regions of Russia. The document recorded the fact of beginning on a competitive basis to support the creation and development of innovative clusters. It laid the foundation of the new Russian “area of innovation” in Skolkovo, which creates an unprecedented legal regime that minimizes administrative barriers and tax burden for resident companies. To create a state system of co-financing innovative projects of private companies - control over the organization of the Skolkovo project, and, in the long term, through the Russian Foundation for Technological Development after its reorganization. With respect to state-owned companies formed a support system development and implementation of innovative development programs.

It is planned that the balanced development of federal and regional components of the innovation system will be implemented through a more efficient use of the existing institutions - technology-innovative special economic zones, industrial parks, as well as through increased support of innovation clusters in the framework of co-financing from the federal budget of regional programs to support small businesses (Osadchy and Akhmetshin, 2015), as well as through the development of additional federal support measures reggae ones, are actively investing in the creation of a regional innovation system. Coordinate activities to promote the innovative development of the Russian Ministry of Economic Development of Regions will be, and the main agencies involved in this work are Russian Ministry of Regional Development, Ministry of Education of Russia, Ministry of Transport of Russia, Russian Ministry of Energy, Ministry of Communications of Russia.

The implementation of cluster policy promotes the growth of competitiveness of business by realizing the potential of effective interaction of participants of the cluster associated with their geographically close proximity, including the expansion of access to innovation and technology “know-how,” specialized services and highly qualified personnel, as well as lower transaction costs, providing formation of the prerequisites for the implementation of joint cooperation projects and productive competition.

2. MATERIALS AND METHODS

Theoretical and methodological basis of writing was the work of the classics, economic and management publications to determine the social significance of the staff, the innovation cluster, domestic and foreign scientists in the field of innovation policy, social management, potential, overall organizational education innovation clusters, economic processes domestic and foreign policy activities innovation cluster.

The research methodology is based on the dialectical method, system and strategic approaches to the analyzed objects. Scientific provisions, conclusions and recommendations made in the thesis, based on the use of combined methods (Pink-Harper, 2015) of historical and logical analysis, comparison and synthesis, induction and deduction, economic-statistical method and expert assessments.

Information base of research were the laws of the Russian Federation, the official publication of the state statistics, management bodies of social and labor relations in the field of employment, the International Labor Organization, thematic collections and directories, information published in scientific journals and periodicals, internet resources.

When writing operation using data characterizing development trends of the organizational and social and labor relations in the innovation cluster (Wolman and Hincapie, 2014), a style of social management, both external and domestic labor market.

The validity of the results and the reliability of scientific statements, conclusions and recommendations contained in the thesis, supported by the use of scientific and special methods of research, information support representative, completeness analysis of the theoretical and practical developments, positive assessment at scientific conferences, and the implementation of research results.

3. DISCUSSIONS

The development of the cluster as an institution of post-industrial information economy and meso-economic framework to act as a tool for innovative management of the economy on the basis

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of localization and integration required for effective use of the benefits of globalization and informatization.

In writing the article summarizes the clusters of education experience in East Asia, India, Central and Eastern Europe and other dynamic regions of the world. They are to a large extent contributed to overcoming the consequences of the global crisis of 2008-2010, Growth of competitiveness and industrial cooperation in Asia, where China and Japan by 2011, consolidated their second and third places in the world in terms of gross domestic product (GDP). The origin of the clusters associated with the laws of development of the technology in the post-industrial era, social mobility, social modifications when more and more in many areas occupied by the universal physical and chemical and nanobiotechnology.

Among the objective reasons for the clustering of the economy, should include globalization, computerization and the transition to a post-industrial phase of social development of the country, the world stage. Consideration of these processes provided that they are very controversial and brings both benefits and losses of both developed and developing countries. Globalization, especially after Russia’s WTO accession will bring new benefits financial, transit, innovative and scientific centers of Russia, but will aggravate the lagging regions, specializing in the production of agro-raw materials and standard low - and medium technology industrial products, where China, India and several other countries have clear competitive advantage (Stennikov and Iakimetc, 2016).

Analysis of the formation of experience and the development of clusters in different countries has allowed to identify them as meso-economic structure characteristic of postindustrial society development in the context of globalization and information, formulate a definition of “economic cluster” concepts, indicating the kind of concepts (social institution, a form of meso-economic integration), contrast from other members of this genus (integrated business groups (IBG), strategic alliances, territorial and industrial complexes) and objectives of formation and development of clusters.

A definition of the economic cluster as a meso-economic network structure based on a combination of vertical and horizontal regional and interregional integration of legally independent enterprises in various technology-related industries under the leadership of the board members of these enterprises with the participation of regional authorities and the public (Vasilev and Akhmetshin, 2014). The development of clusters due to globalization, information technology and the formation of a post-industrial economy and aims at reducing transaction and organizational and administrative costs through the use of synergies network integration and management of the distribution of property rights.

In contrast to the IBG, the cluster does not provide for concentration of ownership in the hands of the state or a private owner. In contrast to the strategic alliance cluster does not limit the period of its existence the realization of concrete innovation and investment projects (Golkar and Cruz, 2015).

Clustering the economy means not only the evolution of the organizational forms of economic activity, but also structural reform of public institutions on the basis of public-private partnership, cooperation of large, medium and small businesses, government regulation of regionalization. The formation of clusters is not confined to the liberalization of the economy, which leads to a temporary acceleration of economic growth and increased demand for goods and services, but is often accompanied by a decline in investment activity in areas of high economic risk, which ultimately slows economic growth and calls for counter-reforms.

Of particular significance for the cluster concept is an understanding of the institutional integration. Inter-sectoral and inter-regional integration, rather than sectoral, technological cooperation and division of labor is determined in the present conditions the competitiveness of the economic system.

The backbone component of the cluster is the purpose of his creation. It differs from the private use of cluster members, for is not to maximize the profit of its members and to create the conditions, prerequisites, institutional and social opportunities for the sustainable development of the region, coordinating the interests of participants in the cluster.

Realization of this goal requires the creation of a special regulatory framework, including the regional laws, social standards and other regulations, as well as the organization of their application.

The concept of cluster as a social institution, based on the harmonization of interests and cooperation of different agents (Paik and Woo, 2014), not just on their competition, mergers and acquisitions, is opposed to competitive individualist paradigm in modern economics. The cluster as a social institution compensates for growing in the conditions of globalization the level of uncertainty of social processes, creates a specific information space, which forms the economic agents with new motivations, developing multi-dimensional economic space.

The transition from the economy of firms to cluster economy means a transition to a new form of collaborative effort, in which the coordination of the activities carried out on the basis of the free exchange of information horizontally, knowledge, abilities and skills, sharing of intangible assets. Transactions in the cluster may not be accompanied by market transactions for the transfer of property rights, and based on its sharing or transfer of certain powers in the detailed discussion of the joint distribution of proportions.

4. RESULTS

The set of ideas about how to cluster by improving the socio-economic security and overcome the threats posed by the increasing number of depressed regions, in terms of tightening global competition and gain competitive advantages of Russia’s southern neighbors.

Socio-economic security of the cluster associations of the country, the region is defined as a set of external and internal conditions that
ensure its sustainable development and effective use of strategic competitive factors.

The problem of regional socio-economic security deteriorated in the 1990s, when deregulation and increased the spontaneity of the market economy led to a sharp stratification of Russian regions, the degradation in the Far Eastern and southern regions began to threaten the collapse of the country.

A serious threat to the position of regional socio-economic security is a disproportion between the high Russian share in the global area sown area, nature-resource potential and the low percentage in terms of GDP, particularly in the per capita exports of medium and high-tech products, the backlog in the level and quality of life, for the development of the financial system (Lazonick, 2015).

Clustering helps to strengthen social and economic security and sustainable development of the regions, as promotes the growth of their competitiveness. The combination of competition and cooperation, regulated at the regional level, provided, despite increased global competition in the crisis, sustainable and safe development of such regions like Bangalore in India, Munich, Hamburg and Dresden in Germany, Moppele in France, Cambridge in the UK. Creating clusters in Leningrad and Nizhny Novgorod regions that do not have abundant natural resources, based on the use of logistics positions and qualified personnel for the development of systems that have a competitive advantage.

With different profiles clustering prerequisites are common areas - availability of modern infrastructure, human resource base, networks and associative structures and experience of regional self-government and planning, mutual trust businesses and local authorities.

5. CONCLUSIONS

Sustainable economic development in modern conditions require the use of strategic factors of competitiveness, based on the social orientation of economic growth, education, health, development, science and culture, human capital as the main wealth. Without this impossible informatization of the economy and the development of new technological order.

The relatively high rates of economic growth in Russia is still ensured at the expense of tactical, temporary competitive advantage - the use of scientific and technological capabilities, infrastructure and production capacities created in the previous decade, low wages, low prices of energy resources, non-compliance with social and environmental standards, and as opportunistic price increases on raw materials export.

This growth was accompanied by excessive stratification of society, the degradation of a number of eastern, southern, northern and central agricultural regions. As shown by international experience, constant growth of GDP and gross regional product, providing the achievement of a new quality of life and the effective employment of the population, while maintaining and improving the environment, cannot be achieved only through the development of primary industries, and requires diversification of the economy, the creation of inter-regional value chains including the development of processing industries and the widespread use of high technology. Therefore, in terms of modernization of the Russian economy and an important feature of its precondition of sustainable development is regional economic integration and clustering to ensure equal and mutually beneficial to include all regions in the world economy.

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REFERENCES