THE ROLE OF THE STATE IN ECONOMIC CLUSTERING: EUROPEAN EXPERIENCE AND UKRAINIAN REALITIES

РОЛЬ ДЕРЖАВИ У КЛАСТЕРИЗАЦІЇ ЕКОНОМІКИ: ЄВРОПЕЙСЬКИЙ ДОСВІД І РЕАЛІЇ В УКРАЇНІ

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The purpose of this paper is to study the specifics of cluster functioning in the EU and Ukraine and to highlight the role of the state in clustering the Ukrainian economy. The lack of attention from the state to support clusters in Ukraine reduces the possibility of effective use of such an important tool for organizing production in the context of military operations. The article defines the essence of a cluster as a form of production organization and the advantages of their use in an unstable economy in Ukraine. The foreign experience of cluster economy formation is presented. The main problems of clustering of the Ukrainian economy are indicated. The key instruments of cluster policy are defined depending on the role of the state in the processes of economic clustering. The necessity of increasing the role of the state in these processes in Ukraine is substantiated. As tools for clustering management, the list of certain support measures by regional and municipal governments in Ukraine is provided.

Key words: cluster; economic clustering; cluster policy; role of the state in the processes of economic clustering; support measures.
A general statement of the problem and its connection with important scientific or practical tasks. Russia’s full-scale aggression against Ukraine is causing significant damage to the Ukrainian economy, undermining macroeconomic stability and weakening its productive capital. The rapid decline in domestic markets, logistical problems, restrictions on exports, loss of staff, and power outages are all having a negative impact on the country’s businesses. Given the shortage of almost all resources (human, financial, material) caused by the destruction of supply chains, management systems and infrastructure of all kinds, clusters have proven to be an effective tool for overcoming problems and establishing interaction between business entities.

Analysis of the latest research and publications that have initiated the solution of this problem and on which the author relies. Clusters as a form of production organisation aimed at increasing the competitiveness of countries and regions attracted the attention of scientists in the 80s and 90s of the XX century.

The possibility of using market instruments in the process of cluster formation is highlighted in the works of well-known foreign economists. Defining the role of clusters and studying the effect of their introduction into the economy are the works of such Ukrainian scientists as M. Heets [1].

S. Sokolenko [2], R. Soroka [3], O. Kraynik [6], O. Rozgon [4]. The monograph edited by V. Voynarenko [7] considers the problems of economic clusters as a form of production organisation, the implementation of the principles of public-private partnership in the process of clustering, and highlights the practical aspects of implementing cluster development policy on the example of Poland. The study of the essence of cluster policy and the role of public authorities of different levels in the processes of its implementation is devoted to the work of S. Kovalenko [11] and Y. Fedotova [10]. Significant scientific interest in the issue of economic clustering confirms its relevance and emphasises the need to highlight the role of the state in these processes in Ukraine.

Highlighting the previously unresolved parts of the general problem to which this article is devoted. For Ukraine, clustering is one of the ways to develop the economy and maintain its proper level in the system of international economic relations. At the present stage, in the context of relocation of enterprises from the areas of military operations, there is an increase in activity within the framework of cluster initiatives in the western regions.

In most countries, the government plays a significant role in cluster development at the central or regional level. In Ukraine, unfortunately, the government has not yet paid sufficient attention to supporting the clustering of economic activity. This issue is quite important in today’s unstable conditions of existence of enterprises, but still remains insufficiently covered.

Formulation of the objectives of the article (statement of the task). The purpose of this paper is to study the peculiarities of cluster functioning in the EU countries and in Ukraine and to highlight the role of the state in clustering the Ukrainian economy.

Summary of the main research material. In the economic literature, a cluster is defined as an industrial complex formed on the basis of territorial concentration of networks of specialized suppliers, major producers and consumers, which are linked by a technological chain and are an alternative to the sectoral approach. The geographical size of a cluster can vary from the scale of a city to the level of a country or a group of neighboring countries. Clusters are found in a variety of industries. They are represented in large and small countries, at different political and administrative levels (e.g., country, region, capital, and city) [1, p. 244]. Scientists increasingly recognize the point of view that the regions where clusters are formed become leaders in economic and technological development. In particular, studies conducted by S. Sokolenko have shown that clusters in the context of increased competition in global markets are the fundamental organisational basis for the implementation of the key principles of national and regional economy formation and the corresponding development of strategies for socio-economic development of regions. Understanding the competitive advantages of new production systems and active formation of regional innovation clusters opens up new prospects for dynamic economic development and successful overcoming of «challenges» from competitors [2].

R. Soroka’s research has shown that the potential of cluster systems is enormous. Cluster systems can be classified at three levels: national innovation
clusters; regional production clusters; local clusters for the development of cities, districts, and groups of settlements [3].

Close coordination and partnerships among cluster members make it possible to achieve much greater benefits in a short time. The joint action of cluster members allows them to provide businesses with greater benefits than they would have received if they had operated separately (i.e., a synergistic effect). And, among other things, the cluster provides entrepreneurs with new opportunities and advantages for systematising emerging problems and choosing ways to overcome them [4].

Clusters have long proved to be an effective tool for promoting economic development of regions and increasing their competitiveness through better use of such production factors as materials, labour, information, and finance. According to EU data, enterprises united in advanced clusters have twice the labour productivity of those that are not. In addition, in Europe, clusters account for 40% of all jobs, 55% of wages, 50% of exports, and 87% of all patents [5]. Clusters are widely used around the world and are recognised as one of the most efficient production systems.

At the level of individual countries and regions of the EU, cluster policy has long been used quite successfully, and is seen as a key tool for attracting investment, increasing the competitiveness of regional industries, growing innovation potential and economic development. In the medium and long term, the EU plans to form a pan-European model that will stimulate and complement national and regional initiatives, including the development of cooperation between clusters.

Germany is a vivid example of the use of cluster policy for investment and innovation development of regions. Successful clusters include the automotive industry in Baden-Württemberg, the medical device industry in Tutlingen, the «chip region» around Dresden, and the biotechnology cluster in the Berlin-Brandenburg region. The participation of small and medium-sized enterprises in clusters is due to the fact that approximately 99.7% of all German firms are small and medium-sized enterprises (3.4 million in total), of which 31.4% are involved in manufacturing. Their advantages include the rapid implementation of scientific, technical and technological ideas into market products, international orientation, a high degree of specialisation and the ability to successfully find and occupy niches in the market [6].

The experience of Poland is interesting [7]. In Poland, as of the beginning of 2016, there were about 300 clusters and cluster initiatives. They all have different economic potential. Their range of activities is wide: from local clusters that influence the local economy of ecosystems, through key regional clusters that drive the development of individual regions, to national clusters.

The vast majority of Polish clusters are growing and developing at the expense of private investment, funds of private entrepreneurs, including those with foreign capital. However, public investment in infrastructure (including research and education) and other resources (knowledge, human capital, etc.) is essential for their development, where a critical share is achieved through the balanced and concentrated use of structural funds and national public funds. Public investment stimulates and often guarantees the inflow of domestic and foreign private investment.

According to experts of the European Cluster Alliance, clusters play a significant role in times of crisis. In particular, a cluster is [5]:

– a driver of economic development, both at the regional and sectoral levels;
– a tool for counteracting crisis phenomena;
– partner of the government, local communities and business in supporting critical infrastructure and critical industries;
– integrator and catalyst for innovative development in the value chain;
– an important institution and generator of new initiatives in recovery programmes.

International experience shows that clusters are a powerful tool for restructuring regional and national economies. Their activity is manifested in such systemic effects as concentration of economic activity, market expansion, growth of competitive advantages, and generation of new value chains [8].

Thus, clusters are able to help solve numerous challenges on the economic front, which positions them as the closest partners of the government in meeting the challenges of the war and post-war period. At the same time, Ukraine’s clusters themselves need the attention and support of the government.

The formation of the first cluster structures in Ukraine proved to be particularly problematic. The process took place in the absence of legislative support for clustering, as well as with the passivity of entrepreneurs, against the backdrop of haphazard economic reform, lack of consistency in the adoption and implementation of laws and codes that sometimes contradict each other.

The state still does not pay sufficient attention to supporting the clustering of economic activity. This function is performed by the Ukrainian Cluster Alliance (UCA), established on 24 March 2022 on the basis of the union of 16 clusters and cluster organisations in Ukraine, which has now joined the European Cluster Alliance and is actively working to establish relations with EU and US partners. The mission of the association is to accelerate the clustering of Ukraine’s economic sectors by
consolidating and growing the cluster movement and developing it in line with European best practices and standards. In times of war, the priority task of the UCA is to support clusters of critical industries responsible for food security, medicine, clothing, healthcare, and critical infrastructure [9].

The UCA is the culmination of the Clusters4Ukraine initiative, which, in turn, was born out of the Industry4Ukraine cluster committee. The main driver of this committee and the overall development of clusters on the Industry4Ukraine platform was the Association of Industrial Automation Enterprises of Ukraine (AIEU). Since the beginning of the war, the Clusters4Ukraine initiative has been actively supported by a number of other clusters and cluster organisations in Ukraine. These include the IAM (Engineering - Automation - Mechanical Engineering) clusters, the Ukrainian Association of Furniture Manufacturers, the Ukrainian Automotive Cluster, the Khmelnitksy and Lviv garment clusters, the Dniester 1362 Agro-Tourism Cluster, and the Poltava Agro-Food Cluster Initiative [9].

Thanks to the initiatives of the UCA and the Industry4Ukraine platform, the European network of Digital Innovation Hubs is developing in Ukraine, which now supports small and medium-sized enterprises in creating clusters and provides grants. Dozens of top experts from the country’s associations, universities, and research institutes have already been engaged to provide support. The development of these areas continues in direct dialogue and with the support of the European Commission. But this dialogue does not include representatives of the Ukrainian government [9].

Thus, despite the difficult circumstances and life under martial law, Ukrainian society, communities and the business community continue to make steady progress on the economic front. A striking example of this is the high interest of clusters in the development of small and medium-sized enterprises in Ukraine and the strengthening of cluster potential.

It should be noted that each country has its own specifics of cluster organisation and functioning. There are four typical variants of cluster policy depending on the role of the state [10].

First, there is the catalytic cluster policy. Under this policy, the government «nudges» stakeholders (e.g., private companies and research organisations) together, but provides only limited financial support for the clustering process.

Secondly, it is a supportive cluster policy. In this case, the government’s activities are complemented by its investments in regional infrastructure, education, training and marketing to stimulate cluster development.

The third type of cluster policy is prescriptive, when the government additionally implements special programmes aimed at transforming the specialisation of regions through the development of clusters.

The fourth type of cluster policy is interventionist. Under this policy, the government, along with its policy-making function, is responsible for deciding on the further development of clusters and shapes their specialisation through transfers, subsidies, restrictions or regulation, as well as active control over the firms participating in the cluster.

Further clustering of the economy in Ukraine requires more attention from the government. This applies, in particular, to the approval of regulations to support industrial clusters, the adoption of the National Cluster Development Programme until 2027, financial support for cluster structures, and the development of a strategy for integrating Ukrainian industrial clusters into European value chains.

It is important to use various support measures from the regional and municipal authorities and the formation of a favourable environment as clustering management tools, which, according to S. Kovalenko, involves [11]:

– creation of communication platforms and conditions for organising the processes of harmonization and coordination of interests of cluster members;
– formation of an institutional environment that ensures the free exchange of information, people, capital and services between cluster members;
– development and implementation of programmes for the development of small and medium-sized businesses, which forms the economic environment providing services for the main enterprises of the clusters;
– promoting the formation of human potential adequate to the requirements for the quality of personnel imposed by the cluster enterprises (training and retraining of personnel, attraction of highly qualified personnel, development of the education system);
– support and development of the infrastructure necessary for cluster development: social, innovation, production, transport, and information;
– presentation of clusters on the international and domestic markets;
– facilitating the integration of cluster enterprises into national economic processes;
– introduction of the institute of supervision of significant projects within the cluster; stimulation of the integration of cluster enterprises into general economic processes, assistance in the implementation of comprehensive technical re-equipment of potential cluster production facilities.

**Conclusions from this study and prospects for further research in this area.** The theory and practice of creating and operating clusters in the EU countries can be used in Ukraine. In this context,
one of the primary tasks of the Government of our country should be to develop the concept of clusters, generalise their sectoral and territorial essence, and determine the strategy for developing competitive advantages.

At the present stage, the main role of the state and its bodies in the development of clusters in Ukraine is to develop mechanisms to stimulate various types of cooperation in the regions: between enterprises, research and educational institutions, the public, regional public authorities and other entities with a view to establishing a long-term partnership. Only with the active mutual participation of all members, can a cluster develop and strengthen.

Given that, in addition to direct regulatory functions, public authorities may be participants in cluster formations, further research is needed to identify possible options for cooperation between the state and business within the framework of public-private partnerships.

REFERENCES:


