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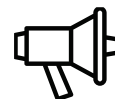


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FOREIGN EXPERIENCE IN ENSURING COMPETITIVE ADVANTAGE THROUGH INTERREGIONAL DIVERSIFICATION OF INDUSTRIAL SECTORS

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Abstract. This article analyzes the role of industrial sectors in the sustainable development of the regional economy, as well as the importance of interregional diversification and clustering in enhancing competitiveness. The theoretical foundations of the cluster approach to forming competitive advantages are highlighted, and innovative development is justified as a key factor determining production efficiency. In addition, foreign experience, particularly the United States model, is examined to explore mechanisms for increasing the competitiveness of industrial enterprises through the development of information and communication technologies and the expansion of digital infrastructure. The findings of the study demonstrate the significant role of regional diversification and innovation policy in ensuring regional economic stability.

Keywords: interregional diversification, industrial sectors, clustering, competitiveness, innovative development, digital infrastructure, foreign experience.

Annotatsiya. Mazkur maqolada mintqa iqtisodiyotining barqaror rivojlanishida sanoat tarmoqlarining o'рни, shuningdek, hududlararo diversifikatsiya va klasterlashuvning raqobatbardoshlikni oshirishdagi ahamiyati tahlil qilingan. Raqobat ustunligini shakllantirishda klaster yondashuvining nazariy asoslari yoritilib, innovatsion rivojlanish ishlab chiqarish samaradorligini belgilovchi muhim omil sifatida asoslab berilgan. Shuningdek, xorijiy tajriba, xususan, AQSh modeli misolida axborot-kommunikatsiya texnologiyalarini rivojlantirish va raqamli infratuzilmani kengaytirish orqali sanoat korxonalarining raqobatbardoshligini oshirish mexanizmlari ko'rib chiqilgan. Tadqiqot natijalari hududiy diversifikatsiya va innovatsion siyosatning mintaqaviy iqtisodiy barqarorlikni ta'minlashdagi muhim rolini ko'rsatadi.

Kalit so'zlar: hududlararo diversifikatsiya, sanoat tarmoqlari, klasterlashuv, raqobatbardoshlik, innovatsion rivojlanish, raqamli infratuzilma, xorijiy tajriba.

Аннотация. В данной статье анализируется роль отраслей промышленности в устойчивом развитии региональной экономики, а также значение межрегиональной диверсификации и кластеризации в повышении конкурентоспособности. Рассмотрены теоретические основы кластерного подхода к формированию конкурентных преимуществ, а инновационное развитие обосновано как важный фактор, определяющий эффективность производства. Кроме того, на примере зарубежного опыта, в частности американской модели, исследуются механизмы повышения конкурентоспособности промышленных предприятий посредством развития информационно-коммуникационных технологий и расширения цифровой инфраструктуры. Результаты исследования подтверждают важную роль региональной политики диверсификации и инновационного развития в обеспечении устойчивости региональной экономики.

Ключевые слова: межрегиональная диверсификация, отрасли промышленности, кластеризация, конкурентоспособность, инновационное развитие, цифровая инфраструктура, зарубежный опыт.

INTRODUCTION

Although the sustainable development of a regional economy depends on the balanced and efficient performance of all sectors and industries, industry occupies a strategically important position as the core component of the real sector. The level of industrial development and the competitiveness of industrial sectors are considered among the key indicators of regional economic stability. From this perspective, interregional

diversification and clustering are emerging as modern strategic instruments for industrial development.

One of the scholars who significantly contributed to the theoretical foundations of the cluster approach in enhancing competitiveness is Michael Porter. According to his view, the competitiveness of a country or region is determined not by exchange rates, interest rates, budget deficits, cheap labor, or natural resources, but by the level of production efficiency. Porter defines a cluster as a geographically concentrated group of interconnected and complementary enterprises, along with supporting institutions, which facilitate innovation and deepen the value chain.

Under modern economic conditions, innovative development has become one of the main factors determining economic competitiveness. This process has been extensively studied by both foreign and domestic scholars, who regard innovation as a crucial source for increasing production efficiency, creating new products and services, and achieving competitive advantages in the global market.

Foreign experience, particularly the model of the United States, represents an effective practical example of the formation of an innovation-driven economy. In the United States, priority attention has been given to the development of information and communication technologies in order to enhance the competitiveness of industrial enterprises. Numerous empirical studies have shown that the expansion of digital infrastructure and the introduction of innovative technologies have significantly increased production efficiency and labor productivity. In particular, the high average annual growth rates observed in high-technology industries clearly demonstrate the effectiveness of innovation-oriented policies.

LITERATURE REVIEW

Issues related to the interregional diversification of industrial sectors and the achievement of competitive advantage have been extensively studied in economic theory within the frameworks of clustering, innovative development, and regional policy concepts. The theoretical foundations of competitiveness were developed by Michael Porter, whose cluster approach and “diamond model” systematically explain the influence of regional factors, innovation infrastructure, and the domestic competitive environment on production efficiency. This concept serves as an important methodological basis for explaining the role of regional diversification and clustering in shaping the competitive advantages of enterprises.

The theory of regional development and agglomeration effects was further developed in the works of Alfred Weber and representatives of the new economic geography, particularly Paul Krugman. According to their scientific views, the territorial concentration of industry, economies of scale, and specialization not only increase production efficiency but also accelerate innovation exchange processes. The author of the growth pole theory, François Perroux, scientifically substantiated the balancing role of regional policy by analyzing the formation of economic activity in specific territories and the mechanisms through which it spreads to other regions.

In studies devoted to foreign experience, the innovation model of the United States is particularly emphasized. Within this model, the “Triple Helix” approach, based on cooperation among government, business, and scientific institutions, is regarded as an effective mechanism for the commercialization of innovative products and the formation of high value-added chains. Academic literature notes that the development of digital infrastructure and high-technology industries in the United States has significantly contributed to increasing industrial efficiency and labor productivity.

Studies focusing on the experience of Germany particularly examine regional cluster policy and mechanisms aimed at supporting economically less-developed regions. It is emphasized that the support of research and development activities through federal grant programs, as well as the strengthening of efficiency and commercialization requirements, has contributed to increasing industrial competitiveness.

In the case of Japan, export-oriented industrial policy, subcontracting cooperation, and technological modernization mechanisms are regarded as key factors ensuring the territorial specialization of industrial sectors and their competitiveness in global markets. Scientific studies identify the Japanese model as a successful example of achieving economic efficiency through the integration of advanced technologies into production processes and the development of industrial cooperation.

RESEARCH METHODOLOGY

This study is aimed at analyzing foreign experience in the interregional diversification of industrial sectors and the achievement of competitive advantage. The theoretical foundation of the research is based on the concepts of clustering, regional economic theory, and approaches to innovative development.

During the research process, comparative analysis, a systematic approach, analytical methods, and generalization techniques were employed. In particular, the experiences of the United States, Germany,

and Japan were comparatively examined from the perspectives of institutional mechanisms, innovation infrastructure, cluster policy, and government support instruments.

ANALYSIS AND RESULTS

According to researchers, the competitiveness of regions and industries is largely determined by the level of development of industrial and innovation clusters. The cluster approach strengthens regional competitiveness through a number of resource-saving and efficiency-enhancing factors. These include capital efficiency, integrated utilization of resources, rational allocation of labor resources, reduction of operating costs, strengthening of intersectoral integration, and improvement of regional governance systems, all of which are regarded as important advantages of clustering.

An analysis of foreign experience in interregional industrial diversification and the achievement of competitive advantage demonstrates that different countries have effectively utilized specific institutional, financial, and organizational mechanisms in industrial development. In particular, the experience of developed and newly industrialized countries shows that the development of innovation infrastructure, support for research and development activities, implementation of cluster policies, and expansion of cooperation between the public and private sectors have emerged as key factors in increasing industrial competitiveness.

The following table systematically summarizes the main challenges encountered in the process of improving industrial competitiveness in developed and newly industrialized countries, the mechanisms applied to overcome these challenges, and the outcomes achieved.

The analysis of the table makes it possible to identify typical institutional and structural problems arising during the process of regional diversification and to comparatively evaluate their practical solutions. At the same time, these experiences help identify promising strategic directions that can be adapted for the regions of Uzbekistan, particularly for territories with developing industrial potential (Table 1).

Table 1

Problems encountered in foreign experience of interregional industrial diversification and ensuring competitive advantage, and their solutions¹

Country	Main Problem	Applied Mechanism (Solution)	Result	Implications for the Regions of Uzbekistan
United States	Slow commercialization of scientific research	Federal grant system, Bayh–Dole Act, attraction of venture capital, technology transfer offices	Strengthened integration of “science–business–industry”; rapid startup development	It is necessary to establish technology transfer centers in the regions
Germany	Lagging industrial development of eastern regions	Federal cluster programs, regional innovation strategies, grant-based support mechanisms	Policies aimed at supporting less-developed regions proved effective	Selective cluster policies should be developed at the regional level
Japan	Low efficiency of small enterprises	Subcontracting system, export promotion, government credit support	Integration between large and small businesses strengthened	Mechanisms linking small businesses with large industrial clusters should be enhanced
South Korea	Weak diversification of industrial structure	Five-year planning, selective credit policy, support for chaebols	Export-oriented high-technology sectors were formed	It is important to identify priority sectors and introduce long-term strategic planning
Finland	Limited scientific and technological resources	Large-scale investment in R&D, ICT clusters	An innovation-driven economy was formed	Regional scientific potential should be identified and specialization strengthened

1 Author's development

Canada	Regional innovation disparities	Technological cluster initiatives, state-regional cooperation	More than 50 high-technology clusters were established	Regional cluster initiatives should be actively supported
Austria	Limited domestic market capacity	Cross-border cluster policy	Innovative synergy effects emerged	Export-oriented clusters can be established in border regions
Russia	High dependence on raw material exports	Deepening processing industries, development of value chains	Industrial diversification process accelerated	Greater emphasis should be placed on deep processing of raw materials
Sweden	Pressure from global technological competition	National innovation system, private financing of R&D activities	The share of R&D reached a high level	Broader involvement of the private sector in innovation activities is necessary

The data presented in Table 1 demonstrate that the institutional role of the state and the level of development of innovation infrastructure are decisive factors in enhancing industrial competitiveness. In particular:

The experience of the United States demonstrates the high effectiveness of innovation commercialization and venture capital mechanisms. The transformation of scientific results into economic outcomes has served as a key factor in creating competitive advantages.

The model of Germany highlights the effectiveness of mechanisms aimed at reducing regional disparities and supporting economically less-developed regions through cluster policy. This approach plays an important role in ensuring regional industrial balance.

The experiences of Japan and South Korea confirm the importance of selective industrial policy, export-oriented production, and cooperation between large and small businesses. Long-term strategic planning and government support have accelerated the diversification of industrial structures.

In the cases of Finland and Sweden, the high level of investment directed toward innovation systems and research and development (R&D) activities has enabled industrial sectors to transition toward high-technology segments.

The experience of Russia demonstrates the necessity of deepening value chains and developing processing industries in order to reduce excessive dependence on raw material exports.

In general, the main conclusion derived from the table analysis is that the success of interregional industrial diversification depends on the integration of the following factors:

- Innovation infrastructure and scientific potential;
- Commercialization and investment mechanisms;
- Clustering and cooperation;
- Strategic and selective government policy;
- Specialization in high value-added industries.

Only through the effective integration of these factors can a sustainable competitive advantage of regional industry be achieved and long-term economic stability ensured. Therefore, based on foreign experience, deepening cluster policy at the regional level, improving mechanisms for financing innovation, and expanding value chains represent some of the most important priorities under the conditions of Uzbekistan.

The issue of interregional industrial diversification and the formation of competitive advantage is emerging as one of the priority directions of modern regional economics. The experience of foreign countries demonstrates that the sustainability of regional industrial development is closely linked to the efficient utilization of available resources, the deepening of value chains, the formation of innovation infrastructure, and the broad implementation of clustering mechanisms.

Analyzing this approach through the example of Qashqadaryo Region has important scientific and practical significance for identifying opportunities to develop the region's existing industrial potential through diversification and transform it into a sustainable competitive advantage.

CONCLUSION AND RECOMMENDATIONS

The comparative analyses conducted in this study demonstrate that interregional industrial diversification and clustering are among the key institutional and structural mechanisms for enhancing regional competitiveness. Foreign experience, including that of the United States, Germany, Japan, South Korea, Finland, and Sweden,

confirms that industrial competitiveness is formed on the basis of innovation infrastructure, commercialization of scientific outcomes, selective industrial policy, and cooperation between the public and private sectors. In particular, clustering has proven to be an effective mechanism for increasing production efficiency, ensuring integrated utilization of resources, deepening value chains, and reducing regional disparities.

Therefore, under the conditions of Uzbekistan, particularly in the case of Qashqadaryo Region, it is advisable to further deepen regional industrial policy through cluster-based approaches. In this regard, establishing technology transfer centers aimed at the commercialization of scientific results, strengthening specialization in high value-added industries, and integrating small business entities with large industrial enterprises through cooperative mechanisms are of particular importance.

In addition, the introduction of selective credit and investment incentive mechanisms, the development of regional innovation infrastructure, and the deepening of value chains will contribute to strengthening the long-term competitiveness of industrial sectors. These measures will serve as important factors in ensuring sustainable regional economic development, expanding export potential, and forming a modern industrial system.

REFERENCES

1. Michael Porter. *Competitive Strategy: Techniques for Analyzing Industries and Competitors*. – New York: Free Press, 1980. – 396 p.
2. Michael Porter. *The Competitive Advantage of Nations*. – New York: Free Press, 1990. – 855 p.
3. Alfred Weber. *Theory of the Location of Industries*. – Chicago: University of Chicago Press, 1929. – 256 p.
4. Paul Krugman. *Geography and Trade*. – Cambridge (MA): MIT Press, 1991. – 142 p.
5. Masahisa Fujita, Paul Krugman, & Anthony J. Venables. *The Spatial Economy: Cities, Regions and International Trade*. – Cambridge (MA): MIT Press, 1999. – 367 p.
6. François Perroux. *Economic Space: Theory and Applications // Quarterly Journal of Economics*. – 1950. – Vol. 64, No. 1. – P. 89–104.
7. Henry Etzkowitz, & Loet Leydesdorff. *The Triple Helix – University-Industry-Government Relations: A Laboratory for Knowledge-Based Economic Development // EASST Review*. – 1995. – Vol. 14, No. 1. – P. 14–19.
8. Richard R. Nelson (Ed.). *National Innovation Systems: A Comparative Analysis*. – New York: Oxford University Press, 1993. – 541 p.
9. [OECD Publishing](#). *Innovation-Driven Growth in Regions: The Role of Clusters*. – Paris: OECD Publishing, 2007. – 312 p.
10. Statistics Agency under the President of the Republic of Uzbekistan. *Statistical Collection of Industrial Indicators of the Republic of Uzbekistan*. – Tashkent, 2023. – 210 p.

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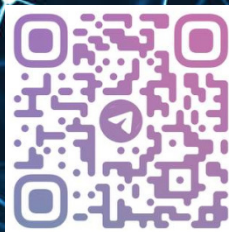
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