

■ РОЗВИТОК ПРОДУКТИВНИХ СИЛ І ВИРОБНИЧИХ ВІДНОСИН

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**SPATIAL ORGANIZATION OF
REGIONAL ECONOMIC
DEVELOPMENT ©**

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The scientific and theoretical principles of the spatial organization of the regional economy within the framework of new concepts of regionalism and scientific theories of foreign and domestic scientists are examined. The conceptual content of the categories “economic development” and “spatial development”, their difference and informative characteristics are analyzed. The forms of spatial organization of economy and resettlement as well as scientific approaches to the placement of elements of economic systems in space are thoroughly outlined in the article.

The scientific concepts of the formation of economic systems with the definition of their basic elements, such as the local economic area, based on the principles of concentration of production in the separate locations and their cities are additionally analyzed. In the publication the quality of the economic space is determined by the complex of the definite characteristics (density, location, etc.), while the spatial development is characterized by a number of specific features of the system development (synergy, irreversibility, fluctuation, etc.). New trends in the spatial organization of the regional economy produce a new vision and content of the development of regional economic systems in accordance with the requirements of the generalized theory of “new regionalism”.

Keywords: space, organization, regional economy, concepts, theories, forms, quality, features, trends, regionalism, development.

Fig. 2. Lit. 15.

Problem setting. Spatial development of the society is one of the fundamental and applied problems of humanity during the whole historical period of its existence, since any society always faced the task of searching the perfect and expedient model of its spatial organization.

The main factors causing peculiarities of the spatial organization of society were: natural and resource advantages of certain parts of the territory of an individual country; economic preconditions that determined the directions of production activity of these territories from the point of view of economic feasibility; spatial features of social and

infrastructural development; ensuring the most complete and reliable defence from negative external influences etc. Diverse resources as a natural basis of economic activity, which organically includes mineral, land, water, forest, recreational, climatic natural resources of the regions, as well as quantitative and qualitative characteristics of the population living within them has always acted as the precondition for spatial development. Human-created preconditions for spatial development include: production potential, forms of social and territorial organization of the economy, social and, above all, economic relations both in regional and national and international networks, social infrastructure that provides intellectual, physical and spiritual development of the population as the main productive force of the society. The main characteristics of the economic space depend on the objects it includes and the processes and phenomena occurring in it. However, the conceptual content of the category “economic space” is currently being formed by scientists and there is still no single view on this economic phenomenon.

Analysis of recent studies and publications. Numerous works of well-known Ukrainian scientists, such as M.I. Dolishnii, S.I. Dorohuntsov, V.M. Heits, H.M. Kaletnik, M.M. Palamarchuk, A.Marshalova and many others were devoted to the problem of spacious organization of the economy. However, this topic is rather extensive and complex, and therefore requires further scientific research, especially in terms of arrangement of economic space.

Setting the aims of the article. The purpose of this study is to carry out the systematic analysis of the theoretical foundations of the development of economic space in regional economic systems and outline the main directions and content of its arrangement within the existing theories of regionalism.

Presentation of the main material. Modern domestic and foreign scientific theories, concepts and hypotheses that try to explain the trends of the development of productive forces in the process of their evolution became the methodological basis of the spatial development of regional systems.

In relation to the development of the theoretical and methodological basis of the spatial organization it should be noted that American scientist S. Cohen is considered to be the founder of this scientific direction. Further development of spacial concepts was made in the synthetic theories of new researchers of this subject (of geoeconomic space), as well as geopolitical, communication, social, geocultural and other directions. To a large extent, the study of space is currently included into the research of the general scientific global picture.

It should be accepted as a definition that in the theory the spatial organization of economy is structural-parametric and spatio-temporal arrangement and coordination of elements and connections of space, which provides the efficiency of using its potential [1]. In other words, the spatial organization of the region is a function of the use of regional opportunities and interests, which is largely determined by the peculiarities of the territory, the actions of external and internal factors. Adding to this concept the complex of measures of a structural-functional organization, that is, the power and administrative-territorial division of the territory, we should obtain a more voluminous content – spatial arrangement. The quality of spatial organization of the region, that is, its ability to efficient reproduction processes depends on the understanding of the content and the tendency of development of such basic categorical notions as “economic space” and “spatial development”.

Understanding of the indivisibility (continuity) of the economic space, what causes disputes in the scientific circles, is principally important both for theory and for the practice. The structural division of space in economic practice depends on how this notion is treated. A number of scientists [2] consider economic space to be indivisible and heterogeneous, in which the following poles exist:

The pole of the transnational post-industrial North.

The pole of the highly industrial West as a complex of industrially developed states.

The pole of the new East, which has been developing mainly due to exploitation of natural resources.

The belt of the deep South, showing the tendency to the collapse of the states.

The belt of the post-socialist states of the former Soviet Union with a transitional economy.

Other scientists [3] emphasize that each region has its own internal economic space and connections with the rest of the world. Herewith, they distinguish two types of internal spatial structure of the region: homogeneous and nodal, which, in turn, are divided into a number of typical elements (point, node, core, and periphery), as well as four types of regional spatial structures: focused, evenly-nodal and agglomeration-nodal.

M. Rybiantseva offers a slightly different definition of economic space. She examines economic space as a multi-level structure, which should include: the macroeconomic space of the global level; economic spaces of international business associations; state economic space; sectoral economic space; regional economic space of the local self-governing entity [4].

In our opinion, the idea of the indivisibility of space, like its antithesis, have the right to exist, as they result from the characteristic that lies in the existence of the dialectical unity of discontinuity and continuity, as well as the very essence of the systems operating in economic space, stipulate its existence and determine its properties.

The definition of the structure of economic space itself, which has a two-way solution, should be considered an important scientific problem [5]. The first approach is based on the direct coordination of economic relations, processes and phenomena in the space, and their limitation to the clearly defined spatial frameworks (like geographic space). In practice, we are talking about the economic space of a settlement, an administrative district, a region, an economic region, a country as a whole, group of countries, continents, etc.

The second approach lies in indirect projection of economic relations, processes and phenomena, occurring in economic space, on its coordinates. In practical terms, spatial boundaries may be indistinct, go beyond territorial units, cross or overlay, since the interests of business entities are not limited by the boundaries of a locality, region or country in the whole.

Modern domestic economic theory examines economic space as a dynamic system, which includes flows of available development resources (labor resources, information, production forces, etc.) and infrastructure objects (engineering, communication-informational, cultural), by which these flows are moved. These include the localized centers of political management of those flows [6]. In another interpretation, economic space is an intense territory, which contains many objects and interlinks: settlements, industrial enterprises, economically engaged and recreational areas, transport and engineering networks, etc. It is not difficult to understand that in the first case we are dealing with the dynamic component of this economic category, burdened with the managerial activity, and in the second – with the statistical one, although they are identical in terms of structural arrangement. In this case, we perceive the second definition as more precise, since economic space itself can not be called a reproductive system.

Characterizing economic space as a field of activity, clear approaches to its features, specifics and phenomena should be defined. Herewith, it is important to distinguish between the practical expediency of its division into separate territorial constituents: economic space of the local economy (administrative district), economic space of the administrative region (oblast) and single economic space of a complex of homogeneous regions (economic region) and economic space of the complex of countries as a specific entity with a single goals and functions (Customs Union, European Union).

Economic space of the country is organically included in the concept of the global economic space, being its component. In this regard it is important to find a place for the economic potential of regions and regional formations of states in the global economy. We are speaking about globalization as the principle of forming a single, integrated economic supersystem due to:

- deregulation of financial markets of states and the related activities;
- introduction of achievements of scientific and technical progress, which allows placing the newest production facilities in different countries and regions of the world on the basis of reducing the cost of production and services;
- the growing institutionalization of financial markets.

In relation to the internal construction of regions, domestic regionalism defines two of their types: homogeneous and nodal. The congeneric (homogeneous) region does not have large internal differences by the essential criteria, for example, according to natural conditions, population density, incomes per capita, etc. It is evident that a completely homogeneous region is an abstraction, in reality there are no completely homogeneous regions. Even if, according to many criteria, the region is relatively homogeneous, by some other – it is definitely heterogeneous. In particular, the presence in the region of any special natural object (water source, mineral deposits, etc.) or a large city makes the region heterogeneous by many criteria.

The concept of a congeneric (homogeneous) region mainly has conceptual and methodological significance. Therefore, the analysis of the national economy as a system of regions focuses on the differences between regions and suggests that the internal differences of regions are not essential factors, that is, each region is conditionally homogeneous.

The assumptions of homogeneity of regions are implicitly present in the macroeconomic theories and models of regional development. It is completely evident that this concept is quite harmful for understanding the current trends in the development of regional economic communities, since it serves as the basis for a single economic policy of the state in relation to the regions without taking into account their features and trends.

The nodal region has one or more nodes (centers) connecting the rest of the space. A region of this type is also called central, polarized. In our opinion, the formation of this kind should not be identified as the region, since the content of the administrative-economic region in its traditionally accepted sense is being “blurred”. The nodal city (local center) is an economic territory by its content, having a number of elements: a point, an object, internal dimensions, a center, periphery, etc., but does not fall under the complex of region-forming systemic features.

In economic space it is accepted to determine the diversity of forms of organization of economy and resettlement. An elementary spatial object – a location – is a locality (“small territory”) having one of the objects. It can be a compact settlement, enterprise,

community, that is, location can be settler, transport, recreational, etc. The combinations of locations make the specific forms of spatial organization of economy and resettlement, the main function of which is to increase the efficiency of economic activity and the use of local resources (Fig. 1).

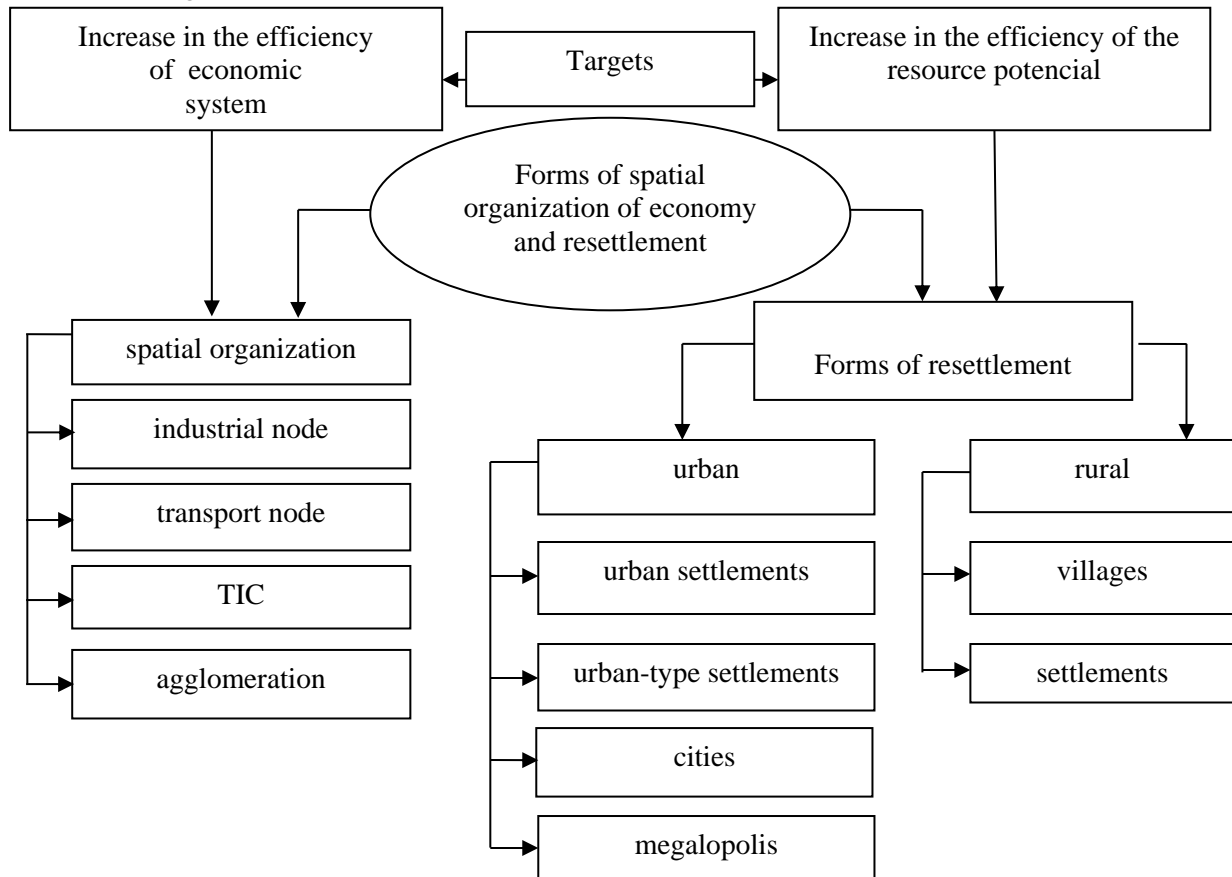


Fig. 1. Forms of spatial organization of economy and resettlement

Source: developed by the authors

The spatial forms presented at Fig. 1 can be perceived as elements of the general theory of placement and as the basic elements of formation of a new concept for the development of economic activity in the territory.

The mentioned above spatial organization of the regional economy is quite obvious and methodically proved for characterization of regional systems of the post-socialist period. The steady conceptual imagery of the region as an integral part of the national economy, with the impact on its efficiency on the part of the central government is seen in it.

At the same time, if we analyze organizational aspects of spatial organization in relation to the new economic conditions, then we discover the other realities. It is known that according to most researchers and practitioners, the term “local economy” coincides with the notion “local subordinate territory”. Local economy is treated in the same way by local governments as well.

In reality, it is not like that at all. Economic territory, as it has been stated above, consists of economic components, including the place of work and residence of the workforce of this territory, it does not depend on the boundaries of the administrative district and the location of economic structures. Economic territory itself is static.

However, if an element (location) of a spatial organization (industrial node, transport node, TIC) is combined with the form of resettlement (village, settlement, urban-type settlement, city nodes, urban settlements), then we can get local economic territory.

Then the economic space can be considered as a complex of economic territories. However, this is not the economy yet, as such environment is not self-sufficient, that is, it is not able to independently carry out the reproductive process and produce competitive products and services.

In these conditions, difficulties in placing the elements of economic systems in space may arise. The essence of the problem is in dividing the territory into homogeneous places and finding the optimal combination of functions for them which are manifested in: a) development of natural and raw resources; b) production of certain goods and services; c) resettlement of the population as consumers and as the workforce. It is typically that the farther away from the optimal place one or another element of the economic system is located, the greater “pressure of the place” it feels. Under the influence of this, mobile elements of the economic system (labor, consumers) can change their location, while immobile (fixed assets) – their properties.

According to R. Barr [7], economic space in the narrow sense is a parameter of the action and influence of the economic unit, and in the broader sense it is a system of relations that makes the essence of existence of this unit, in particular in the market – it is a system of relations which provides getting the highest profits with the least possible losses.

F. Perroux examines economic space as:

- 1) the content of the plan (program);
- 2) a homogeneous ensemble belonging to one price system;
- 3) the field of forces formed by the “poles of growth” [8].

Business space is a variety of economic space in market conditions [9]. The most active part of it is the market, the market space, where the recognition of the public utility of industrial products (goods) takes place. In general, this happens on a competitive basis. And the main characteristics of the market space are the price and consumer potential.

The process of formation of economic systems is based on the theory of territorial concentration of production, in particular the “growth poles” according to J. Budville and F. Perroux as well as the theory of “growth axis” according to P. Pottier [10]. Herewith, the central places where the economic growth takes place are especially highlighted.

On the other hand, the process of regionalization of socio-economic systems is based on the scientific theories of A. Weber, I. Isard, A. Lesh and I. Thuenen on the strict abstraction of the economic space as a factor of economic growth. These studies provide the idea of the broader nature of the polarized economic development, when the shifts in the dynamics of economic processes lead to the emergence of the points of concentration of capital and production in a spatial dimension, which become the generators of the growth of the local economy. In particular, I. Thuenen in his study “The Isolated State” (1826) first defined the space as an economic phenomenon and marked cities with concentric circles around which agrarian enterprises are located, taking into account such factors as transport costs, the demand of urban dwellers for products, etc. [11]. In the continuation of this subject, W. Isard believed that in the science of regions the central place will be taken by the district and inter-district ones [12].

Hence, if the city is the centre of economic territories and economic activity is centralized in and around it, we are dealing with the local economic district.

The identified local economic district is a complex integrated system with the high degree of interdependence between economic, social, institutional and household activities.

We should agree with the opinion of O.P. Kovalev who said that such a center has a significantly higher rank in comparison with other nodal cities of the district and a territorial organization will be characterized by symmetry of similarity [13]. Moreover, in the process of regionalization of economic space, the local economic district can be self-limiting, and then the so-called “interregional” space remains, which is not subordinate to the economic center – the city. The above mentioned fact suggests that the economic and administrative boundaries of the local economic district may not coincide. At the same time, for business practice, we consider a local economic district within the boundaries of the administrative district, otherwise the possibility of regulating the reproductive processes by the local authorities and self-government in the definite territory is lost.

Some researchers deny the idea that local economic districts are based on cities, they state that there are strong economic zones within the entire national economy. However “rural areas” do not exist [14]. This means that the entire local economy is firmly connected to some city core. If so, then geographically the entire territory of Ukraine should be fully divided into local economic districts or regions within the administrative boundaries of the regions.

The suggested considerations concerning the essence of the notion of the local economic districts allow to characterize them as:

- centers of economic growth through the sources of new ideas, technologies and innovations both within the district itself and the regional economy;
- the basic components of the regional economy, providing its organizational arrangement and development;
- centers of local government and making managerial decisions.

Surely, local economic districts should not be understood as self-sufficient, since they are open systems and their productivity and efficiency depends on the flows of products, innovations, ideas and information from a higher-level of the economic system. Regional specialization and the growth of reliability of ties with other local structures are converted in direct proportion to the growing interdependence within the broader system of local economic districts. In this case we are talking about the economic region.

The notion “spatial development” can be considered as a derivative from the economic space, which should be perceived as the reproductive process of the elements of space, functioning as the system of real energy flows (raw materials, goods and services, organizational, financial and human capital, etc.) and a complex of organizational measures for the management of elements and links of the territory [15].

According to the theory of economic systems, spatial development has a number of system-forming features (Fig. 2).

Their availability should be found in modern theoretical studies, analyzing, in particular, the evolutionary component of the theory of spatial development.

As you know, the first studies of geographic space and its influence on the development of territorial-economic systems are present in the writings of A. Weber, I. Isard, A. Lesh, W. Bung, J. Harvey, where the emphasis is made mainly on the analysis of the efficiency of economic activity in a certain territory. The theory of Thuenen allowed ascertain isolation of space and, essentially, its idealization, referring to the factors of production as the dominant placement of productive forces.

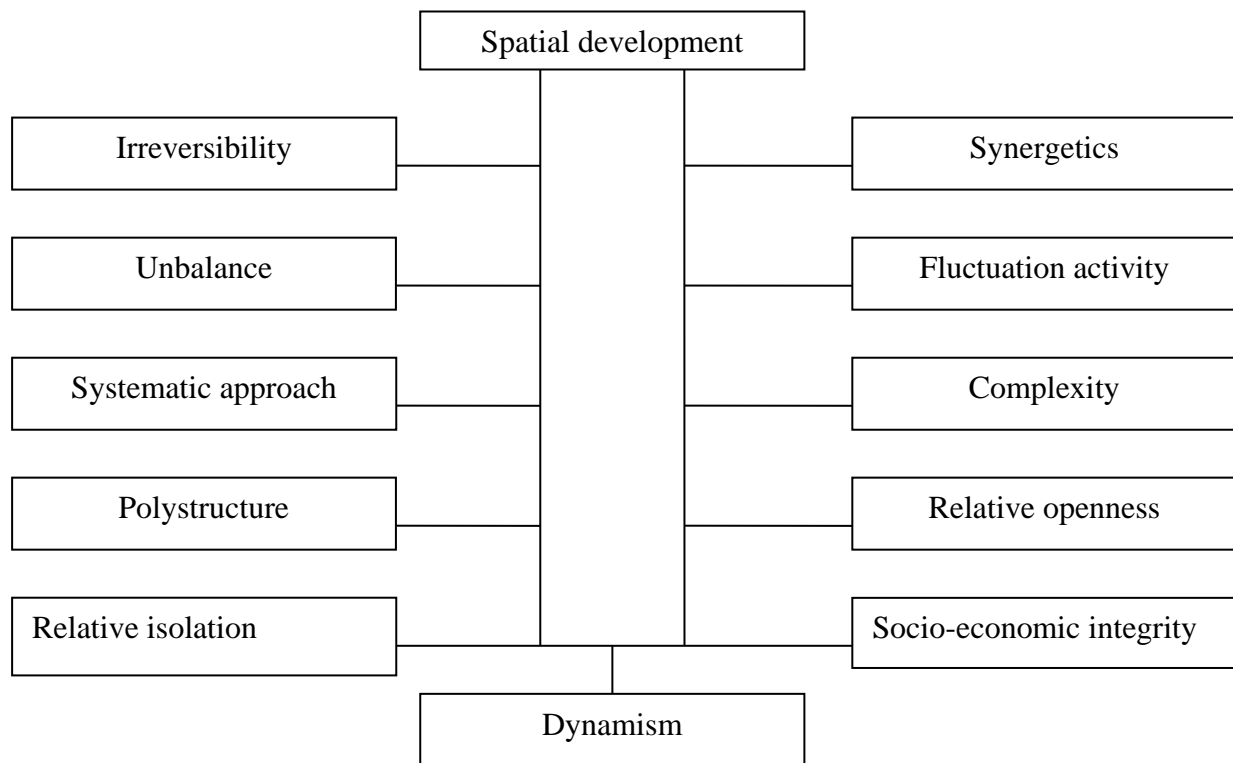


Fig. 2. System-forming features of spatial development

Source: developed by the authors

On the contrary, the authors of the theory of socio-cultural systems (Thompson, Wildavskii) explain the trends in the development and placement of productive forces within socio-cultural formations. They believe, that the same economic action or process can differently manifest itself in different dimensions of the socio-cultural condition of the territory. In other words, the socio-cultural space determines the time and peculiarities of the course of certain economic actions.

More modern theories of spatial development are based on the principles of geopolitics. The theory of placement of economic forms and the spatial division of labor in the world economy, which was laid in the late nineteenth century by such scientists as G. Brown and A. Muller, became the basis for this direction. In these theories the rethinking and review of existing theoretical concepts that explain the development and placement of productive forces take place.

If in most of the previous theoretical developments the opinion on the leading role of capital in spatial development was expressed, then in modern economic science the importance of key factors (resources) of development such forms as: natural resources, fixed assets, industrial enterprises, investments, innovations, infrastructure, as well as knowledge, information and possessing technologies gradually increases.

The mentioned theories, depending on the form and factors of influence, has generated a variety of scientific approaches to spatial development, the most famous of which are the concepts of post-industrial, informational and network society.

The author of the concept of the industrial society J. Galbraith believes that the new sources of energy and the possibility of their use in the processes of production and distribution in future will become the basis of spatial development.

The concept of a post-industrial society (D. Rismen) determines scientific and technological progress as the main source of growth, and productivity – as a technology of knowledge generation, information processing and symbolic communication (transmission). His followers (F. Machlup, W. Martin, V. Masuda) generally believe that the production of an information product is a priority in the creation of material wealth, emphasizing the key role of knowledge, that is, knowledge acquired by the person, and not existing in general, beyond his/her consciousness.

The authors of the concept of networked spatial development combine the above-mentioned theories into the concept of “information society”, emphasizing the fundamental changes in the arrangement of the economic space in the conditions of globalization of the economy.

The latest trends in spatial organization, based on social capital, modify the traditional notion of economy, turning it into a “knowledge economy”, a “knowledge-based economy”, which marks the paradigm of development and important content for the generalized theory of “new regionalism”:

1. The form of organization of production is changed; traditional schemes of production concentrations are replaced by the spatial development what implies decentralization of production and, consequently, settlement policy;

2. The change of conditions of production automatically leads to denationalization of management with the delegation of significant powers to its lower levels, in particular, local self-government bodies;

3. The system of values of economic practice changes, which means the primary satisfaction of the social needs of the population of the territory;

4. Foundation of the centers of local territories and on their basis local economy within the local economic districts allows characterizing the latter as the basic units of organization of economic space and spatial development of the regional economy, which in complex form a network of regional economic communities.

Conclusions. Thus, the study of the content of the role of economic space, ways of optimization of socio-economic processes in it should be carried out within the framework of the new methodology of spatial development, which is still in the state of conceptual formation, but the necessity for which is becoming more obvious, based on modern conceptual ideas of development of regional economic systems.

References

1. Habrel M.M. Prostorova orhanizatsiia mistobudivelnykh system. Instytut rehionalnykh doslidzhen NAN Ukrainy. K.: “Vyd. dim. A.,S.,S.”. – 2004. –215 p.
2. Boiko O.I., Voitsekhovskiy V.V., Horyn M.P. Investuvannia strukturnykh reformuvan promyslovosti rehionu. Lviv: In-t reh-ykh doslidzhen. – 2000. – 160 p.
3. Zastavnyi F.D. Heohrafiia Ukrainy: u 2-kh tomakh. L.: Svit. – 1994. – Pp. 357-359.
4. Blyzhnee y dalnee zarubezhe v heopolytycheskoi stratehyy Rossyy / Otv. red. Yu.V. Shyshkov. M., – 1997. – 317 p.
5. Danylyshyn B.M., Cherniuk L.H., Fashchevskiy M.I. Prostorova orhanizatsiia produktyvnykh syl Ukrainy: mezo- ta mikrorehionalnyi riven. Vinnytsia: Knyha-Veha. – 2007. – 572 p.
6. Mirzodaieva T. Teoretychno-metodolohichni pidkhody do doslidzhennia prostorooho rozvytku rehionu. Rehionalna ekonomika. – 2004. – №2. – Pp.15-22.
7. Barr R. Polytycheskaia ekonomyia. V 2-kh T.: Per. s fr. M.: Mezhdunarodnyie otnosheniya, 1995. – T.1. – 608 p.

8. Perru F. Ekonomika XXI veka y 25 kliuchevykh knig po ekonomike. Per. s fr. Ural: UTO. – 1999. – 448 p.
9. Efremov V.S. Orhanyzatsiya biznes-sistemy y strategicheskoe planirovaniye // Menedzhment v Rossii i za rubezhom. – M.: 2001. – №5. – Pp.3-36.
10. Holikov A.P. Shliakhy udoskonalennia ekonomichnoi rehionalnoi polityky: postup u XXI stolittia. Rehionalni perspektyvy. – 2001. – №5-6. – Pp. 25-34.
11. Viliamson O.E. Ekonomichni instytutsii kapitalizmu: firmy, marketynh, ukladannia dohovoriv. Per. z anhl. K.: “Art EK”. – 2001. – 280 p.
12. Izard I. Metody rehyonalnoho analiza: vvedenye v nauku o rehyonakh / Per. s anhl. M.: “Prohress”. – 1966. – 520 p.
13. Kovalov O.P. Rehionalnyi rozvytok: pohliad ta sto rokov vpered. Rehionalni perspektyvy. – 2003. – №7-8. – Pp.52-61.
14. Viliam Barnz, Larri Ledebur. Novi rehionalni ekonomiky. Per. z anhl. Andriia Pekhtyna. Lviv: “Litopys”. – 2003. – 196 p.
15. Kruhlyi stil zhurnala “Rehion”: problemy i perspektyvy. Rehion. – 1997. – №1. – Pp. 5-15.

АНОТАЦІЯ ПРОСТОРОВА ОРГАНІЗАЦІЯ РЕГІОНАЛЬНОГО ЕКОНОМІЧНОГО РОЗВИТКУ

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Розглядаються науково-теоретичні засади просторової організації регіональної економіки в рамках нових концепцій регіоналізму та наукових теорій зарубіжних та вітчизняних вчених. Аналізується понятійний зміст категорій “економічний розвиток” та “просторовий розвиток”, їх відмінності та змістовні характеристики. У статті детально викладено форми просторової організації господарства і розселення та наукові підходи щодо розміщення в просторі елементів економічних систем.

Окремо аналізуються наукові концепції становлення економічних систем з визначенням базових їх елементів, таких, як місцевий економічний район, заснований на принципах концентрації виробництва в окремих місцях та містах, що в них знаходяться. Якість економічного простору в публікації визначається за сукупністю визначених характеристик (цілісність, розміщення тощо), а просторовий розвиток характеризується рядом специфічних ознак системоутворення (синергетизм, незворотність, флуктуативність тощо). Новітні тенденції просторової організації регіональної економіки продукують нове бачення і зміст розвитку регіональних економічних систем в руслі вимог узагальненої теорії “нового регіоналізму”.

Ключові слова: простір, організація, регіональна економіка, концепції, теорії, форми, якість, ознаки, тенденції, регіоналізм, розвиток.

Рис. 2. Літ. 15.

**АННОТАЦИЯ
ПРОСТРАНСТВЕННАЯ ОРГАНИЗАЦИЯ РЕГИОНАЛЬНОГО
ЭКОНОМИЧЕСКОГО РАЗВИТИЯ**

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Рассматриваются научно-теоретические основы пространственной организации региональной экономики в рамках новых концепций регионализма, а также научных теорий зарубежных и отечественных учёных. Анализируется понятийное содержание категорий “экономическое развитие”, и “пространственное развитие”, их различие и содержательные характеристики. В публикации изложены формы пространственной организации хозяйства и расселения, а также научные подходы к размещению в пространстве элементов экономических систем.

Отдельно анализируются научные концепции становления экономических систем с обозначением базовых их элементов, таких, как местный экономический район, организованный на принципах концентрации производства в отдельных местах и городах, которые в них находятся. Качество экономического пространства в публикации обозначается по совокупности характеристик (плотность, размещение и т.д.), а пространственное развитие характеризуется целым рядом специфических категорий (синергетизм, необратимость, флуктуация и т.д.). Новейшие тенденции пространственной организации региональной экономики продуцируют новое видение и содержание развития региональных экономических систем с учётом требований теории “нового регионализма”.

Ключевые слова: пространство, организация, региональная экономика, концепции, теории, формы, качество, тенденции, регионализм, система.

Рис. 2. Лит. 15.

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