

THE MECHANISM OF INCREASING THE FINANCIAL AUTHORITY OF ECONOMIC SUBJECTS THROUGH REGIONAL AGGLOMERATION CLUSTER

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A B S T R A C T	K E Y W O R D S
A mechanism for increasing the financial potential of economic entities through regional agglomeration clusters has been developed. A methodology for improving the agglomeration of production development of economic entities in the region has been developed. The theoretical foundations of production clustering mechanisms in the region have been improved.	Digital technology, empirical model, econometric model, forecast results, information system, endogenous variables, exogenous variables.

Introduction

The formation of modern clusters based on increasing the financial potential of economic entities through regional agglomeration clusters gives the following results.

First of all, clusters increase the opportunities of economic subjects to use scientific, production and cultural information, the ability to choose the type of work, the comprehensive opportunities to use educational, medical and cultural institutions.

Secondly, savings for the economy of economic entities, modern trade formats, the production of promising consumer goods and, most importantly, the emergence of a complex chain in the service sector, both the entry of large businesses into the region and the rise of local companies to the level of market leaders creates an opportunity to rise.

Third, creating a wide and diverse labor market, people will have the opportunity to quickly find a job that matches their skills and personal life strategy.

Fourthly, the most important is the "infrastructure effect". The construction projects of new energy facilities, powerful transport complexes, airports, multimodal logistics centers and information centers will have an integrated relationship with each other.

Today, the problem of assessing the financial potential of regional economic entities is more urgent than ever. After all, its successful solution allows the city administration to make scientifically based management decisions and rationally distribute resources between metropolitan districts.

At this point, we considered it permissible to give a brief overview of the agglomeration process. Agglomeration (Latin aggloméra - connection, gathering) is considered in various fields in economics, geography, social sciences, urban management, ecology and urban planning. Regional agglomeration

is a cluster of densely located multi-component dynamic system, a set of settlements, located mainly in cities, with dense production, transport and cultural connections.

In the region, such clusters justify themselves and bring great economic benefits, especially for clusters of settlements. The same applies to education and especially innovation infrastructure.

II. Research Methods

In the general scientific sense, "compact territorial group clusters of settlements united by various and intensive relations (economic, labor, cultural, domestic, recreational, etc.) also develop agglomeration. This leads, firstly, to the urbanization of settlements, and secondly, to urban and rural infrastructure leads to development.

E.N. Pertsik gives a different definition, agglomeration is a system of geographically close and economically interconnected settlements united by stable labor, cultural, household and production relations, common social and technical infrastructure. A new form of settlement, it appears as the successor of the city in its compact (autonomous, point) form, as a special product of modern urbanization. And large urban agglomerations in the region are the most important areas where advanced industries, administrative and economic, scientific and construction organizations, unique cultural and art institutions and the most qualified personnel are gathered.

In this, in the historical evolution of residential forms, the place of urban and rural settlements, which are relatively autonomously developing traditional settlements, is replaced by more and more dense settlement forms formed when settlements are located close to each other and intensively connected. . As a result, an urban agglomeration appears in the region.

It is the urbanization process of increasing the role of lifestyle and urban culture in the development of cities. Urbanization in a narrower sense, in the demographic and statistical sense, is the growth of cities in the region, especially large cities, and the increase of the urban population in the country, region and the world [1].

Therefore, in many documents, the concept of urbanization is often associated with the factor of population change. The term urbanization of the territory is also widely used in scientific literature, which is understood as the process of transformation of natural landscapes into artificial (anthropogenic) ones, which develops under the influence of urban development [2].

Zhao, G. in his study [3] showed that the development of cities is closely related to the improvement of the transport system.

Thus, when conducting research in this direction, the following procedure can be performed for each linear object:

- identifying the object of study;
- the scheme of the object as a result of the stage;
- use of spatial analysis.

Useful features. For example, when analyzing transport systems, the following characteristics of transport systems are often taken into account:

- morphological characteristics;
- length;
- road density in the studied area;
- number of nodes;
- edge number;

- edge direction;

As we mentioned above, if we want to evaluate its spatial characteristics or observe its changes, first of all, it is necessary to decode the transport network of the urban agglomeration. Decoding the transport network is also an acute problem of cartography, in which a lot of time passes before an object appears (or disappears) on the ground and this fact is reflected on the map. Sometimes it can take several years. Often on the ground we have noticed a road or a parking lot that is not shown on any of the available maps. At the same time, accurate and up-to-date information on road networks is an important requirement for any country.

Area of consumption;

M1 – warehouse of materials where 3/4 tons of raw materials are used to get 1 ton of finished product;

M2 – warehouse of materials where 1/2 ton of raw materials is used to obtain 1 ton of finished product;

S - the area where "production-station" is located.

The scientific and technical revolution, which began in the middle of the last century, introduced a number of "corrections" to the "classical" theories of the development of production forces and improvement of territorial organization(6).

They include:

- a) rapid development of very new branches of industry, first of all, "scientifically demanding" areas closely related to scientific research and design-experimental works;
- b) the transfer of agricultural production to industrial sectors - the formation of an agro-industrial complex (agribusiness);
- c) a steady increase in the contribution of infrastructure sectors to the national income;
- g) the process of reducing the dependence of the production system on transport-geographical location and raw materials;
- d) increasing role of scientific research and design-experimental centers;
- j) increasing role of highly qualified labor contribution;
- z) socio-ecological factors - significant changes in the development and location of production forces can be cited. This, in turn, paved the way for the development of new trends in the theory of "location" such as D. J. Galbraith's "industrial society" and U. Izard's "market theory of location" [4]. However, the current situation did not allow to fully reveal the essence of the population and related laws and regulations in the "nature-society" system.

III. Results and Discussion

The entry of the regional economy into the post-industrial stage of development increases the requirements for efficient use of available resources. This predetermines the need not only to ensure the production of the maximum amount of products, but also to form the economic potential that will allow to achieve progressive structural changes in the industrial sector for a long time.

This is precisely the essence of sustainable development of the financial potential of economic entities at the stage of formation of a new technological order, characterized by the rapid development of techniques and technologies in the region.

In the scientific literature, there are many studies evaluating the level of urbanization of cities in the region, most of them are based on population statistics [5]. For example, [6] provides a ranking of the world's countries by the level of urbanization, characterized by the urbanization index, calculated by the Department of Economic and Social Affairs of the United Nations.

$U=SHA/MA (1)$

Here:

U -Urbanization level

SHA - city residents

Residents of the MA region.

It is characterized by intensive production, a combination of cultural, domestic and recreational relations, as well as high population and infrastructure density, low transport costs, increased investment and human potential, and high scientific, investment and cultural development. Clusters formed as a result of agglomeration production activities and production relations within a country or region are characterized by functional relationships.

To develop clustering, high concentration and diversification of production, quality of concentration, personnel, close connection of production with science and educational centers, production capacity and social infrastructure should be used most effectively.

There is no uniform terminology for cluster groups of settlements. In addition to the terms, words such as "city agglomeration", "local accounting systems", "regions of large cities", "group accounting systems", "group of cities" are used.

The evolution of residential forms under the influence of development cities and production concentration, the expansion of clustering leads to the formation of megacities. It is the basis for the emergence of cluster-level urbanized zones, including huge areas (city - agglomeration - urbanization zone, urbanized area - megapolis). The following three factors can be the basis for the development of clusters of urban settlements.

In the region, the cluster system of settlements is closely related to production relations. Although the ideas of the development of a cluster system of regional settlements, the development of an efficient production system with high profits based on the rational placement of production in economic entities have a long history, with the establishment of industrialized production, the "standard", that is, the doctrines of accommodation also arose.

In developing and implementing a policy aimed at achieving economic and financial growth rates in economic entities, as well as forming positive structural changes in the technological component of production, achieving economic independence of economic entities, economic entities can be implemented on the basis of effective use of economic independence of subjects. The general direction of the policy of the economic potential of economic entities in the region is the maximum technological renewal of the material and technical base, as well as the effective use of existing production capacities. The researches of local economists in the field of determining the nature and importance of economic potential made a great contribution to understanding its content. However, despite the many works devoted to the determination of methodological approaches to the potential structure, the formation of economic and mathematical models of its determination, many methodological and theoretical problems in this field of research have not been resolved to date. The financial potential of economic entities is a multidimensional category that includes at least three components. In contrast to the main potential economic potential, the targeted effect of the financial policy is an invariable part that ensures the improvement of its qualitative and quantitative characteristics and the achievement of currently required parameters. At the same time, the impact on the economic potential is carried out through the process of changing the legal, scientific-methodical, as well as investment and innovation base.

Recently, the processes of integration and globalization in the world economy, first of all, the innovative processes that predetermine qualitative and structural changes in economic entities of the economy have a decisive influence on the composition of economic potential.

Based on this position, it is necessary to form such a structure of economic and financial potential that will help the growth of the latest technologies, scientific achievements and new forms of production management in the conditions of the formation of a new technological order. Thus, the industrial policy faces a complex and multifaceted task of forming an improved structure of the economic potential of the industrial sector, which, from our point of view, should be based on the priority directions of the development of economic entities with the help of high technologies and new technologies.

Only on this basis, economic entities can ensure the necessary rates of economic growth, economic security, improvement of the environmental and social situation, that is, solving the most acute problems faced in recent years.

Table 1.Capacity scheme of business entities

The potential of economic subjects		
Basic resource capacity	Economic development potential	Potential for a transformational process
Economic and geographical location Natural and climatic conditions Demographic potential Historical and cultural potential	Production capacity Technological potential Labor potential	The potential for regulatory and legal documents to be ready for change Scientific and methodological preparation Investment preparation readiness for innovation

The main goal of forming and improving the economic potential is to continuously support the product quality at the level of competitiveness.

It follows that the management of structural changes should be aimed at creating economic relations that ensure the innovative neo-industrial development of the material and technical base. It is noted that "effective incentives for the development of productive forces in accordance with neo-industrialization based on effective technotronic technologies are necessary and they can only be internal. Because they are only provided and supported by internal reproduction.

In each block of the functional diagram of the methodology for determining the spatial characteristics of regional agglomerations (Fig. 1), we define the purpose and function of the various types used.

Automated digital analysis describes space imagery, survey objects, and remote sensing data used in research.

There is a wide selection of mapping software available, depending on which GIS creates maps based on aerial imagery material, as well as the thematic processing system of the original aerospace data (providing segmentation, classification of single images, or streaming terabytes of data). submission) depends.

It is one of the most important objects that are shown on maps with high accuracy. It is necessary in the planning and management of the metropolis, in the development of the economy, and especially in logistics. Transportation network maps are needed to navigate the space of domestic and industrial robots and drones. The importance of road networks is also reflected in geometric image correction procedures used for georeferencing of aerospace images [7].

IV Conclusion

To conclude, various regional agglomeration facilities, especially roads and buildings, are related to population demography. The proposed methodology should be efficient, accurate and fast, which allows to obtain reliable information about the road network from aerial images, especially in fast-growing urban areas where road maps need to be regularly updated.

This approach determines the need to transition to the formation of a modern material and technical base that helps to use production resources more efficiently per unit of time. It sets the task of attracting the accumulated scientific and technical potential, which is a reserve of economic development and capable of ensuring the necessary growth rates, to the production process.

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