



Formation of Methodical Approach to the Assessment of Coherence of Socio-economic Space of Agglomeration

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ABSTRACT

The research context lays around the issues of coherence of socio-economic space of agglomerations in aspects of the balanced development of the country. The vector of the study is interfaced with the increasing course of Russian regions towards formation of agglomerations and with insufficient study of coherence of the properties of socio-economic space in this regard. Formation of methodical approach to the assessment of coherence of social and economic space in agglomerations makes the scientific and practical novelty of research. The paper is based on a case study of Tomsk agglomeration. The study concludes that coherence of socio-economic space acts as the defining factor of formation and development of agglomerative processes.

Keywords: Agglomeration, Regional Development, Socio-economic Space, Coherence

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1. INTRODUCTION

At present, the state policy of the Russian Federation aims at providing the balanced socio-economic development of individual territories of the country (including agglomerations) providing orientation to creation of the conditions enabling territories to have necessary and sufficient resources for ensuring their complex development, increase of economic competitiveness, create comfortable living conditions. The concept of a territorial reorganization of Russia published in 2010 underlines the special importance of development of agglomerative processes in Russia. However, absence of necessary theoretical, methodical and practical base of research significantly complicates their studying. In this regard, relevance of the scientific problem of research expressed in absence of the updated methodical base that is necessary for studying of the Russian agglomerative processes in the context of coherence of the socio-economic space. The essence

of a scientific problem derives from need of revision and extension of theoretical, methodological bases and methodical provisions of researches on the issues of coherence of socio-economic space of agglomerations. Essential contradictions between the available methods of studying of the specified scientific problem and the new empirical knowledge accrue. What is more, many scholars note the insufficient study of coherence as properties of socio-economic space in aspect of agglomerative development demanding further research of regularity and a tendency of development of the Russian agglomerations.

One of necessary operating conditions of the socio-economic space is its coherence, which places impact on complex socio-economic development, as well as acts as one of characteristics of spatial unity of the territory. Practical aspects of coherence of the socio-economic space acquire special relevance nowadays and find reflection in regional development strategies. So, one of

the priorities declared in strategy of socio-economic development of the Tomsk region till 2030 is the “effective territorial policy” that assumes activities on ensuring the balanced development of municipalities, coherence of the territory in carrying out agglomerative policy.

Considering modern agglomerative processes in aspect of coherence of socio-economic space, the special attention should be paid to studying of availability, intensity, balance, complementarity of various communications inherent in an agglomerative form of resettlement, as of complex system. Coherence of socio-economic space of agglomeration demonstrates existence of the uniform social and economic field, as well as of the efficiency of realization of complex socio-economic policy in the territory of agglomeration.

2. AGGLOMERATIONS AND THE COHERENCE OF SOCIO-ECONOMIC SPACE

The analysis of modern researches has defining a circle of the foreign and domestic scientists who were engaged in studying of separate aspects of the specified scientific problem. So, theoretical and practical aspects of research of economic space are presented in works of the leading world researchers.

Launhardt (1882) has developed a method of finding the point of optimum placement of individual industrial enterprise with respect to the sources of raw materials and a sales market of production. The researcher based on a method of a locational triangle has offered an approach to find a point of an optimum depending on weight ratios of the transported freights and distances. As a decisive factor of placement of production, the researcher defined the transport expenses.

Weber (1909) in his publication entitled “Theory of the Location of Industries” has created a theoretical basis for determination of optimum location of the enterprise. In particular, the author considered three factors: Transport expenses, costs for workforce compensation (i.e., wages) and agglomerative advantages. A. Weber’s research has served as incentive for creation of more general theories of placement.

Cristaller (1933) has offered new approach to a question of the territorial organization of production and resettlement. As the most effective form of the organization of areas, the researcher considers the correct hexagon, but not a circle, as in enables to exclude the unattended zones and zones served twice.

Palander (1935) has developed the Location theory (i.e., Standort der Industrien) taking into account territorial features and regional distinction of the prices of resources, and also industry specifics of the enterprises according to which geographical factors define what industrial sector becomes dominating in the district.

Lyosh (1940) has made an attempt to identify the pattern of spatial placement of settlements, and also tried to apply it at design of settlements in newly developed territories. The researcher

considers placement not of one separate industry, but economy in general (the industries, agriculture, the cities, etc.). A. Lyosh coordinates a placement problem to economy of areas, foreign trade and a number of other factors.

Perroux (1950) has elaborated the concept of growth poles, at the heart of which lies the idea of the leading role of sectoral structure of economy, namely the leading industries that create new goods and services. According to the researcher, areas of economic space where the enterprises of the leading industries are placed become poles of attraction of factors of production as they provide their most effective use. It results in concentration of the enterprises and formation of poles of economic growth as which it is possible to consider not only set of the enterprises, but also concrete territories.

Isard (1960) has worked on the general laws and interdependence of development of the socio-economic phenomena from a geographical position while applying mathematical models. The researcher has developed models of forecasting the indicators that define socio-economic picture of the region (population, regional income, migration flows, inter-district trade balance, regional business cycle, etc.).

The theory of growth poles of Perroux has gained development in the work of Boudeville – “Problems of regional economic planning.” The researcher transformed the theory of growth poles to a spatial-regional form taking into account interregional communications (Boudeville, 1966).

Porter (1998) developing the theory of industrial clusters, has drawn a conclusion on existence of spatial industrial clusters. According to the researcher, the industrial cluster is formed only if in the region encompasses not less than two industries providing the steady regional growth as the competition acts as the internal force of development of the region economy (Porter, 1998).

Since the middle of the 20th century, studies on economic space find reflection in many works of the Russian researchers.

Kolosovsky (1969) has presented theoretical justification of economic division into districts. The researcher has marked out eight steadily repeating sets of the productions, which are a basis for allocation of the large economic region and economic sub districts.

The substantial contribution to development of regional science and to studying of various aspects of spatial economy was brought by Aganbegyan and Granberg (1968).

Nekrasov (1978) has shown the schemes of placement of a national economy and industries which main objective is scientific justification of the perspective territorial organization of each industrial sector of production taking into account their cumulative value in a national economy.

Researches of economic space based on the theory of placement, models of optimization and economic interactions continue the development up to date.

Works of many modern Russian researchers are devoted to studying of essence of socio-economic space. Davankov (1999. p. 12) notes, “the socio-economic space is a territory on which the person lives and acts, where all settlements are concentrated. In size it concedes to physiographic space. Socio-economic space is correlative concept, which characterizes localization and a spatial differentiation of human activity and its results.”

According to Hramov (2009. p. 64), it is possible to represent socio-economic space as “spatial set of the integrated and differentiated zones of socio-economic influence of the centers of socio-economic activity formed under the influence of surrounding settlement, industrial, communication and other centers of socio-economic activity.”

Belousova (2015. p. 138) describes socio-economic space as “the multidimensional, dynamic, living, self-regulating system which components are in a condition of an imbalance, constantly movable by contradictions and an antagonism of interests of the parties goals, etc.” The researcher notes that the socio-economic space needs to be considered in two aspects “...” as order, “a type of arrangement, a way of placement of objects and as the sphere or the environment of development in which establishment and judgments of its major components in process interaction and integrity of its representation is important.”

Studying of theoretical and practical aspects of coherence of socio-economic space in works of the Russian researchers gains special popularity.

Granberg (1990) describes coherence as intensity of economic relations between parts and elements of space, a condition of mobility of goods, services, the capital and people, determined by development of transport and communication networks.

Polyakova and Simarova (2014) consider coherence as property of economic space. Coherence of economic space is defined as “quantitatively measured intensity of economic, social and other interactions between various subjects.” Authors note that “need of increase the level of coherence of economic space of the territory is caused by the existence of a uniform and complete economic complex, the rupture of communications in which reduces efficiency of economic activity” (Polyakova and Simarova, 2014. p. 36).

According to Rudneva and Simarova (2014), the providing conditions of coherence of space are: Coherence of interests, complementarity, invariancy, economic feasibility.

According to the theory of complex systems, the property of system is the existence of stronger, continuous and stable relations between elements of system, than communication of these elements with elements of external environment. Considering that the most important quality of agglomeration are intensive internal interactions, it can be considered as a local socio-economic space (Prokhorova, 2010). Animitsa (2013), Neshchadin (2010), Pertsik (2009), Volchkova and Minaev (2014) allocate the following types of linkages inherent in agglomerations: Transport

communications; economic relations; social communications; labor communications; production communications; cultural and community communications; recreational communications; administrative political connections; organizational and economic communications; communications on social and technical infrastructure (uniform engineering systems of water supply, power supply, the sewerage, transport and so forth); resource interactions; military interactions; financial interactions.

Thus, considering modern agglomerative processes in aspect of coherence of socio-economic space, the special attention should be paid to studying of existence and intensity of various linkages inherent to agglomerative form of resettlement as a complex system.

However, despite an substantial contribution of the specified authors to the solution of topical issues of the studied perspective, many theoretical and methodical problems demand further research. Certain criteria, properties and indicators of coherence of space, as well as a uniform technique of their assessment are yet understudied. Unresolved are the issues of an assessment of coherence of space taking into account modern agglomerative processes. In this regard, relevance of further studying of coherence of socio-economic space does not raise doubts and demands consideration not only theoretical bases, but also methodical aspects of the specified scientific problem.

3. RESEARCH METHODOLOGY ON EVALUATING THE COHERENCE OF SOCIO-ECONOMIC SPACE

In recent years the increasing interest in development of methodical approaches to an assessment of coherence of socio-economic space is observed. However, according to Hramov (2009. p. 71) “in most cases the models trying to give the spatial description of socio-economic systems are focused on dynamics of processes, but not on dynamics of spaces.” The author notes that “for creation of the general model characterizing a condition of the territory it is necessary to create system of structural indicators in which socio-economic indexes are coordinated to spatial characteristics.”

Kirilova and Kantor (2010) for an assessment of coherence of economic space offered to use indicators of the economic sphere (departure of freights by railway transport of general purpose; transportation of goods by the motor transport of economy sectors; the foreign trade determined by values of export import), the social sphere (departure of passengers public by railway transport; transportations of passengers by public buses; coefficients of a migratory gain), the financial sphere (the volume of investment into fixed capital from regional budgets).

Zagitova (2013) notes that determining the coherence of economic space demands development of a certain system of indicators as which it is expedient to use the indicators of intensity and frequency of transactions between residents of subnational space reflecting the level of interregional and intra-regional integration. An example would be the coefficient of productivity of intra-

regional communications, coefficient of intensity of intra-regional communications, level of coherence of the institutes ordering transactions in the distributed spatial entities.

Polyakova and Simarova (2014. p. 40) offer a methodical approach to an assessment of coherence of economic space at the interregional and intra-regional levels. Researchers suggest to estimate interregional coherence using “the indicators systematized in three groups (the general, special and private),” and for an assessment of intra-regional coherence a gravitational model is formed “based on four types of forces of coherence (natural, dynamic, economic and social).” According to authors, the “use of this approach allows to reveal forms and the directions of intra-regional and interregional interaction” (Polyakova and Simarova, 2014. p. 40).

Delimitation techniques (i.e., identification of borders) of agglomerations are, generally, the methodological basis of agglomerative interactions and functional coherence of space. Goryachenko et al. (2011. p. 98) consider agglomeration from a position of social space. Authors have “focused on identification of real borders of an agglomerative area and internal structure of agglomeration, based on a basis of subjective indicators of perception of space of daily activity as prerequisites of development of agglomerative processes.”

Emeljanova (2013. p. 143) has developed “the technique of identification of borders of city agglomeration based on an assessment of transport availability, population density and nature of use of the territory, intensity of transport streams, placements of outdoor advertising.” In a number of similar techniques for functioning of agglomeration and development of agglomerative interactions the transport coherence of agglomeration as, according to many researchers, in most cases defines a level of development of other factors, thus, is of key importance.

Hence, in modern researches there is no uniform methodical approach to an assessment of coherence of socio-economic space of agglomeration.

4. AN ASSESSMENT OF SOCIO-ECONOMIC COHERENCE OF TOMSK AGGLOMERATION

The carried-out review of methodical approaches to an assessment of coherence of socio-economic space has shown that formation of a system of the indicators allowing to estimate force, intensity, level, etc. of coherence of space via certain parameters and indicators forming the basis for the majority of techniques. In our opinion, when forming methodical approach to an assessment of coherence of socio-economic space of agglomeration it is necessary to consider, at least, two main criteria.

4.1. The Balance of Development of Agglomeration

In functioning of agglomerations there are certain situations when the core, in the process of its intensive growth, starts to excessively “draw off” resources of the periphery on itself. In such conditions

it is not possible to speak about the balanced development and functioning of the agglomeration, as agglomeration does not promote improvement of qualitative characteristics of the periphery (Volchkova and Podoprigrora, 2015).

According to the “center periphery” concept, the distinction between the center and the periphery are generated by unevenness of economic growth that causes lack of coherence of territories on a number of signs.

In this regard, for studying of coherence of socio-economic space of agglomeration it is necessary to start with the analysis of a ratio of rates of development of a center of agglomeration and its periphery (the city and rural settlements located in its territory, the satellites). In our opinion, the similar analysis can act as primary tool of an assessment of coherence of socio-economic space of agglomeration as it enables to draw a conclusion on degree of balance of development of an agglomeration.

For a reasonable assessment of dynamics of indicators in time it is expedient to use average annual growth rate. Development of agglomeration can be considered unbalanced in case of the growth rates indicators of the core exceed growth rates of similar indicators of the periphery and above the national average level (provided that growth rates of indicators of the periphery do not exceed value of the national average indicators) (Volchkova and Podoprigrora, 2015).

The current study uses an example of Tomsk agglomeration for an assessment of balance of development. Tomsk agglomeration is one of the largest agglomerations of Siberia with the population of 766 thousand people in 2014, which makes 71.5% of the population of the Tomsk region, and 3.97% of the population of Siberian Federal District. According to the “Strategy of socio-economic development of the Tomsk region till 2030,” Tomsk agglomeration includes the Tomsk city district, closed city Seversk and the Tomsk district. Tomsk is the core of Tomsk agglomeration, which surpasses other settlements located in a zone of its influence by the territory, number of inhabitants, cultural and educational potential.

Specifics of Tomsk agglomeration is existence of the close satellite with the special administrative status – Seversk. Seversk is the large production and research center of a nuclear complex of the Russian Federation, the second largest city of the Tomsk region by population (approximate 10% of regional level), by number of workers of manufacturing industry (41%), by volume of the shipped production and the executed services in primary activities (9.5%), and by the volume of investments (4.2%). As a peripheral zone of Tomsk agglomeration we consider settlements of the Tomsk district. The territory of the Tomsk district is non-uniform, contrast. Thanks to existence of considerable natural resources Tomsk district has agrarian, industrial, service, and recreational specialization.

Average annual growth rates of indicators of socio-economic development of settlements of Tomsk agglomeration in 2009-2014 are presented in Table 1.

Table 1: Average annual growth rates of indicators of socio-economic development of settlements of Tomsk agglomeration (2009-2014) (%)

Indicators (%)	Tomsk	Severs	Tomsk area
Average annual growth rate of input of housing counting on one inhabitant	100.39	107.92	154.17
Average annual growth rate of a turnover of the organizations per capita	112.62	108.52	114.61
Average annual growth rate of retail trade turnover per capita	110.80	111.02	153.12
Average annual growth rate of volume of paid services per capita	105.02	105.61	88.45
Average annual growth rate security with places of the children who are in preschool educational institutions	95.90	106.92	100.00
Average annual growth rate of security of the population with doctors	101.03	97.80	106.63
Average annual growth rate of security of the population with sports constructions	101.84	100.83	100.46
Average annual growth rate of cost of fixed assets per capita	109.41	95.71	107.46
Average annual growth rate of investments into fixed capital per capita	115.93	98.57	105.79
Average annual growth rate of own income of the budget per capita	104.52	106.40	112.54

Thus, the carried-out selective analysis of average annual growth rates of settlements of Tomsk agglomeration allows to conclude that development of agglomeration can be considered as balanced, despite excess of growth rates of indicators of the core over growth rates of similar indicators of the periphery on three indicators, since they are lower than the average Russian level.

We shall note that besides tools of the comparative and analytical analysis, research on the balanced development of agglomeration requires application of the factorial and correlation analysis.

4.2. The Intensity of Agglomerative Interactions

According to Mosienko (2010. p. 165), “existence of intensive agglomerative processes is an important factor of development of the territory, which happens due to high-quality transformations (development of specialization of production and improvement of an economic mechanism, ensuring balance of economy).” Goryachenko et al. (2011. p. 108) suggest that “for assessment of intensity of interactions it is necessary to use a number of the objective indicators characterizing distance, transport availability, production and commercial communications, and also the additional indicators received on the basis of social-diagnostic testings (questioning of locals and/or experts of regional architecture and local administration).”

Empirical indicators of an intensification of agglomerative interactions, in our opinion, are: Frequency of trips of the population to an agglomeration core (daily pendular migration), specific weight of regular routes of the suburban routes in structure of transportations, growth rate of demand for real estate and the land near an agglomeration core, specific weight of commercial and an advertisement information in the markets of settlements satellites, the specific weight of joint research activity of settlements of agglomeration in the general structure, etc.

As instruments of studying the intensity of agglomerative interactions act the following empirical methods: Method of expert evaluations, comparative and analytical methods on the basis of statistical data. An approach is tested using Tomsk agglomeration. Separate indicators of an intensification of agglomerative processes of Tomsk agglomeration in 2009 and 2014 are presented in Table 2.

The carried-out expert analysis has shown that Tomsk agglomeration is characterized by existence of various intensive

Table 2: Indicators of an intensification of agglomerative processes of Tomsk agglomeration

Indicators	2009	2014	Growth rate (%)
Daily pendular migration to Tomsk (expert data), one thousand persons	17	20	117.64
Input of housing in Tomsk the area, 1 thousand m ²	12.7	115.6	910.23
Specific weight of regular routes of the suburban message in structure of transportations (%)	30.4	29.5	97.03

relations between settlements: Pendular migration, deliveries of raw materials and materials, trade and different rendering services, development of individual housing construction. Seversk acts as the supplier of workforce for Tomsk (daily pendular migration to the city of Tomsk makes more than 20 thousand people). Residents of Seversk also make a contribution to formation of solvent demand for production of the organizations and individual entrepreneurs of the city of Tomsk. However the closed mode of Seversk does not promote development of agglomerative communications.

One of aspects of strengthening agglomerative communications is emergence of new cottage sites in the territory of the Tomsk district. The Tomsk district remains the leader of area in commissioning of houses, in 6 years the indicator has grown more than by 6 times, from 12763 m² in 2009 to 115560 m² in 2014. On average the 80% growth of an indicator is caused by activation of individual housing construction. We will note that the uniform housing market in the territory of Tomsk agglomeration does not yet exist, which is related with the special status of Seversk. However the market of real estate and land of the Tomsk district is the most attractive today and has high potential. This fact is the prerequisite of development of an intensification of interactions of Tomsk agglomeration.

The network of city buses of the core of agglomeration covers not only its territory, but also suburban routes. As of 2014, there were 44 routes (31 city and 13 inter-municipal). Insignificant decrease in specific weight of regular routes of the suburban network in structure of transportations is caused by merge and reduction of several routes of the suburban network.

5. CONCLUSIONS REMARKS

Thus, one of necessary operating conditions of socio-economic space of agglomeration is its coherence, which exerts impact on complex socio-economic development of the territory, and acts as one of its characteristics of spatial unity.

The carried-out review of methodical approaches to an assessment of coherence of socio-economic space has shown that formation of system of the indicators allowing to estimate force, intensity, level, etc. of coherence of space via certain indicators (parameters, indicators) is the basis for the majority of techniques. In this regard, when forming methodical approach to an assessment of coherence of socio-economic space of agglomeration it is necessary to consider, at least, two main criteria – balance of development of agglomeration and intensity of agglomerative interactions. It is expedient to form a system of indicators (parameters and indicators) for an assessment of coherence of socio-economic space of agglomeration by the specified criteria on the basis of methods of the comparative and analytical analysis, methods of the factorial and correlation analysis, empirical methods, and also method of expert evaluations.

The carried-out analysis of balanced development of Tomsk agglomeration and intensity of agglomerative interactions enable to draw a conclusion that development of agglomeration can be considered as balanced, however it is necessary to develop agglomerative interactions between individual settlements of agglomeration.

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REFERENCES

- Aganbegyan, A.G., Granberg, A.G. (1968), Economic-mathematical analysis of inter-industry balance of the USSR. Moscow: Misl. p357.
- Animitsa, E.G. (2013), The largest cities of Russia in the context of global urban of processes. *Ars Administrandi*, 1, 82-96.
- Belousova, S.V. (2015), A control system of public sector in the light of theories of management of social and economic systems. *Questions of Management*, 6(18), 135-147.
- Boudeville, J.R. (1966), *Problems of Regional Economic Planning*. Edinburg: Edinburgh at the University Press. p192.
- Cristaller, W. (1933), *Die zentralen Orte in Sddeutschland. Eine konomisch-geographische Untersuchung ber die Gesetzmigkeit der Verbreitung und Entwicklung der Siedlungen mit Stadtischer Funktion*. Jena. p331.
- Davankov, A.J. (1999), Ecological-economic bases of a sustainable development of the region. Yekaterinburg. p339.
- Emeljanova, N.V. (2013), A geographical assessment of interaction of the cities within Irkutsk agglomeration. Irkutsk. p187.
- Goryachenko, E.E., Mosienko, N.L., Demchuk, N.V. (2011), City agglomerations of Siberia: Prerequisites of formation and barriers of development. *Region: Economy and Sociology*, 3, 94-112.
- Granberg, A.G. (1990), Problems of the interregional economic relations. *Economy and Mathematical Methods*, 26(1), 93-107.
- Hramov, J.V. (2009), Rangovoye’s temples Tsipf’s distribution and fractal dimension of social and economic spaces. *Questions of Modern Science and Practice*, 9(23), 63-78.
- Isard, W. (1960), *Methods of Regional Analysis*. Cambridge: MIT Press.
- Kirillova, S.A., Kantor, O.G. (2010), Regional development and quality of economic space. *Region: Economy and Sociology*, 3, 57-80.
- Kolosovsky, N.N. (1969), *Theory of Economic Division into Districts*. Moscow: Thought Publishing House. p335.
- Launhardt, W. (1882), *Die bestimmung des zweckmssigsten standortes einer gewerblichen anlage*. *Zeitschrift des Vereines Deutscher Ingenieure.*, 26, 105.
- Lyosh, A. (1940), *Die Rumliche Ordnung der Wirtschaft: Eine Untersuchung ber Standort, Wirtschaftsgebiete und Internationalem Handel*. Jena: Fischer.
- Mosienko, N.L. (2010), City agglomeration as object of sociological research. *Region: Economy and Sociology*, 1, 163-178.
- Nekrasov, N.N. (1978), *Regional Economy. Theory, Problems, Methods*. Moscow: Economy. p344.
- Neshchadin, A.A. (2009), City agglomerations as instrument of dynamic social and economic development of regions of Russia. *Society and Economy*, 12, 23-27.
- Palander, T. (1935), *Beitrage zur Standortstheorie*. Uppsala: Almqvist & Wiksell. p419.
- Perroux, F. (1950), Economic space: Theory and applications. *Quarterly Journal of Economics*, 64(1), 89-104.
- Pertsik, E.N. (2009), Problems of development of city agglomerations. *Academia. Architecture and Construction*, 2, 63-69.
- Polyakova, A.G., Simarova, I.S. (2014), Conceptual model of management of development of the region taking into account the level of spatial coherence. *Region Economy*, 2, 32-42.
- Porter, M. (1998), Location, clusters, and the new micro-economics of competition. *Business Economics*, 33(1), 7-14.
- Prokhorova, V.V. (2010), *Subregional Resources and Instruments of Intensive Development of Territorial Economic Systems of Modern Russia: Monograph*. Moscow: Publishing House of the Moscow University. p224.
- Rudneva, L.N., Simarova, I.S. (2014), Commodity Exchange as Factor of Interregional Coherence of Economic Space. Problem of Formation of Uniform Space of Economic and Social Development of the CIS Countries: Materials of Annual International Scientific and Practical Conference. p276-283.
- Volchkova, I.V., Minaev, N.N. (2014), *Theory and Practice of Management of Development of Agglomerations: Monograph*. Tomsk: Publishing House TSUAB. p234.
- Volchkova, I.V., Podoprigora, Y.V. (2015), Actual aspects of studying of agglomerations in Russia. *Municipality: Economy and Management*, 1(10), 17-21.
- Weber, A. (1909), *Theory of the Location of Industries*. New York: Reinhold.
- Zagitova, L.R. (2013), Transformation of regional economic space in modern Russia. *The Economy Horizons*, 4(9), 80-82.