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Russia's New Industrialisation in the Context of the Regional Economic Development Theories¹

The paper aims to justify the genesis of the theory of new industrialisation as a new research programme within the theories of regional economic development and regional economic growth. The author proves that the research of new industrialisation in economic space of a macroregion is a promising direction and it is scientifically accurate to hold it in the context of the theories of regional economic development and regional economic growth. Methodologically the paper relies on the fundamental propositions of the theories of regional development and regional economic growth and examines their content by the methods of evolutionary analysis. As a result, the research refines the theory and methodology of regional economics by extending the scientific theory of regional economic development and regional economic growth. The evolution of the theories of regional economic development and regional economic growth vividly demonstrates that innovative, integrated factors capturing potentials of several regions, macroregions (for instance, agglomeration processes, appearance of growth points, shrinkage of economic space and acceleration of economic time, interregional projects, etc.) are strengthening. This particular regularity is the key argument in the choice of an interregional object of the study – a macroregion, which encompasses several subjects of the Russian Federation.

JEL classification: O14

Keywords: new industrialisation; macroregion; economic space of a macroregion; theories of economic development; scientific paradigm of the new industrialisation.

Introduction

Presently, Russian and foreign economic science is actively searching for a new model of economic development and economic growth, which is capable of addressing the challenges of the fourth industrial revolution, accelerated formation of the fifth and sixth technological waves. In the Russian economy, we can clearly see the negative outcomes of implementing a liberal market model, which led to a catastrophic fall in the national industrial production. The economic model of new industrialisation is now being brought to the forefront of scientific discussions. Its main idea is the priority development of industrial production, primarily, of manufacturing industry, on the basis of advanced modern technologies.

The need to develop and implement a new industrialisation policy, to launch its processes raises no serious doubts among most domestic scholars. However, because the scientific paradigm of new industrialisation is only being formed, the problem of developing its conceptual propositions in the national economy and in the economic space of its macroregions proves to be quite acute.

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The undertaken research allows stating that the theoretical basis of the scientific paradigm of new industrialisation is being built on the propositions of the four core theories: the economic theory of industrialisation, the theory of industrial society, the modernisation theory and the theories of regional economic development complemented by the conceptual principles of the dichotomy between space and time.

The economic theory of industrialisation determines the content, key characteristics of the industrialisation process, suggests approaches, means and methods of its implementation.

The theory of industrial society proves the long-term continuous nature of the industrialisation covering all spheres of modern society and reveals key technologies of the future (the third, fourth industrial revolutions, the fifth and sixth technological waves).

The modernisation paradigm allows identifying criteria and phases, stages and types, rates and factors of the development of high-tech industrial production in the country and its regions. Of particular interest are the propositions of the theory of industrial modernisation, the consequence of which include structural, spatial, institutional modernisation. The development of industry is a key factor in modernising the economy of Russia and its industrial regions (macroregions).

Theories of regional economic development, which are a system of scientific views, approaches, concrete actions and interactions, justify the need to strengthen (or create) a new socioeconomic identity (image) in the space of regions that are part of the country's space.

The spacetime paradigm predetermines the need to explore the spatial aspect of the new industrialisation at the macro, meso- levels, and the temporal aspect in the form of evolution (phases of development) of the new industrialisation, what substantially complements the conceptual notion of industrialisation.

The purpose of the paper is to show the emergence of a new research programme within the theories of regional economic development, namely the theory of new industrialisation; and in addition, to justify the prospects of the research of new industrialisation in economic space of a macroregion and prove that it is scientifically accurate to hold it in the context of the theories of regional economic development and regional economic growth.

Theories of regional economic development as an important element of the scientific paradigm of new industrialisation

The analysis of domestic and foreign scholarly literature allows stating that the theoretical foundation of the scientific paradigm of new industrialisation is being set within several theoretical viewpoints (see the Figure):

- economic theory of industrialisation (the late 19th – early 20th centuries);
- theory of industrial society (the mid-20th – early 21st centuries);
- theory of economy modernisation (the mid-20th – early 21st centuries);
- theories of regional economic development (the 19th – early 21st centuries).

Theories of regional economic development provide a solid scientific basis for studying the processes of the new industrialisation, which directly aims at determining the directions of the long-term regional dynamics. Theories of regional economic development are meant to provide the understanding of the scientific basis of economic growth and development. The scientists, who in various years invested their efforts into this block of theories, are united by the common idea of searching for possible ways, methods, mechanisms, key factors and conditions of the regional progress.

The analysis of the theories and models of regional economic development and growth demonstrates there is a broad variety of them (see the Table). Each research programme significantly contributes to the development of a theoretical platform for researching the new industrialisation processes.

Within the present paper, we will not detail the content of the theories and models of regional economic growth, because their comprehensive analysis can be found in the scholarly

literature. We will focus on our contribution made on the basis of these theories. We believe that the scientific paradigm of new industrialisation should be identified as a new research programme within the theories of regional economic development and regional economic growth. The principal objective of this paradigm is to formulate a modern model of economic development for Russia and its regions mainly on the basis of the third and fourth technological revolutions.

This conclusion follows from the analysis of the evolution of the theories of regional economic development, which demonstrated that over time, the emphasis in these theories shifted from simpler factors of regional dynamics to more complex ones, from extensive to intensive ones. If the classical (neoclassical) theories were based on the factors of regional specialisation, territories' sufficiency with production factors, then modern theories (new theories of regional growth) point to the innovative component as the driving force of growth on the basis of which shrinkage of economic space and acceleration of economic time are possible.

The evolution of the theories of regional development clearly demonstrates that innovative factors, factors capturing the potentials of several regions, macroregions (for instance, agglomeration processes, shrinkage of economic space, formation of growth poles) are strengthening. This particular regularity influenced the choice of an interregional object of the study – a macroregion, which encompasses several constituting entities of the Russian Federation. Let us further present the arguments for choosing the economic space of a macroregion as an object of research for studying the processes of new industrialisation and searching for prospective directions of regional economic development.

Scientific basis of the theories of regional economic development in the context of the new industrialisation research

Research programmes and scientific concepts	Principal theories and models	Authors who have most contributed to the development of a research programme (concept)	Key factors of regional economic development and economic growth
Classical economics	Theories and models of regional growth	A. Smith, D. Ricardo, J.-B. Say, F. Quesnay, E. Heckscher, B. Olin, and others	1. Regional specialisation. 2. Main factors of production (land, labour, natural resources, capital). 3. More intensive use of a factor of production, which is the most widespread in the given region
Neoclassical economics		A. Marshall, J. B. Clark, J. Schumpeter, J. Borts, H. Siebert, R. Solow, T. Swan, G. Mankiw, and others	1. Traditional production factors (capital, labour, land, technical knowledge, transport costs), as well as social, political and geographical factors. 2. Sufficiency with the factors of production, taking into account the interregional movement of factors. 3. Acceleration of technological progress, increase in production efficiency
Keynesian (Neo-Keynesian, post-Keynesian) economics		J. M. Keynes, J. Hicks, E. D. Domar, J. Robinson, J. Stiglitz, and others	1. Active state stabilisation policy with the predominant use of monetary instruments and budgetary regulation. 2. Factors of state influence: the creation of effective demand; the basic tool is state investment and programmes, progressive scale of taxation, interest rates
Theories of cumulative regional growth		G. Mural, A. Hirschman, F. Perroux, H. Richardson, J. Friedman, T. Hegerstrand, J.-R. Boudville, P. Potier, H. Giersch, and others	1. Innovations and channels for distributing them are the main factor in the economic growth of territories. 2. Cohesion of interregional levels of economic development through diffusion of innovations and industrialisation. 3. Specialisation (territorial division of labour). 4. Agglomeration of production. 5. Reduction of transportation costs. 6. Increased mobility of factors of production. 7. Individual features of regions
	"Diffusion of innovations" model	T. Hegerstrand, P. Haggett, J. Schumpeter, and others	Constant qualitative transformation of the core through the generation, introduction and diffusion (spreading) of innovations, including technical improvements, new sources of raw materials and energy, scientific and technological progress in general
	The "volcano" model	H. Giersch	Major innovation center is the urban agglomeration. The "lava eruption" of innovations in such a "growth pole" is accompanied by their gradual spreading to the periphery, as a result of which the level of welfare of the backward territories steadily increases
	Theory of territorial-production complexes	N.N. Kolosovsky, E. B. Alaev, E. A. Probst, Yu.G. Saushkin, M.D. Sharygin, M. K. Badman, and others	Economic effect is achieved as a result of the optimal planned selection of enterprises in accordance with the natural and economic conditions of a region, and its transport and economic-geographical location. Reduction of production costs, rational use of natural resources are due to territorial concentration and agglomeration of production from the standpoint of state planned economy

Table (concluded)

Research programmes and scientific concepts	Principal theories and models	Authors who have most contributed to the development of a research programme (concept)	Key factors of regional economic development and economic growth
New theories of regional growth	Theories of urban development and urban agglomerations	A. Weber, E. Hoover, H. Richardson, G. M. Lappo, V. Ya. Lyubovny, Ye. N. Pertsik, Ye. G. Animitsa, N. Yu. Vlasova, and others	1. Territorial concentration of productive forces, "saving in urban concentrations", i.e. reducing production costs due to the location of various industries, as well as enterprises of one industry, in one place. 2. Internal returns from scales of production, localised economies, and economies of agglomeration
	Cluster theory	M. Porter, M. Enright, D. Jacobs, S. Rosenfeld, A. I. Tatarin, Yu. G. Lavrikova, and others	1. Territorial concentration of interrelated companies, specialised suppliers, servicing organisations. 2. Competition of enterprises in the cluster. 3. Agglomeration effects. 4. Use of external economies of scale by companies
		P. Krugman, M. Fujita, T. Mori, E. Venables, D. Pugo, J. Harris, and others	1. Spatial factors as internal (endogenous) sources of regional growth in conditions of imperfect competition. 2. The effect of the market size, degree of access to market. 3. Industrialisation of the periphery, expanding market size, improving access to market. 4. Cyclic movement of factors of production. 5. Different types of effects form the scales of production 6. Reduction of transportation costs. 7. Mobility of factors of production. 8. Agglomeration. 9. Spatial or multiple effects of mutual influence of economic factors
Theory of new industrialisation	Theory of shrinkage of socioeconomic space	Yu. L. Pivovarov, T. G. Nefedova, A. I. Treyvish, A. M. Lola, N. S. Mirnenko, D. Harvey, S. Sassen, D. Friedman, P. Hall, E. Giddens, P. Dicken, and others	Acceleration of human life, shrinkage of space. These processes take place as a result of the intensification of socioeconomic and other processes in the territory. Key factors of intensification: expanding transport communications, growing transport accessibility, increasing speed of movement, increasing frequency of movement, diversifying and multiplying contacts of the population and operating subjects (economic, cultural, ethnic, trade, financial, etc.), formation of information and communication systems
	Theory of new industrialisation in economic space of a macroregion	S. S. Gubanov, V. T. Ryazanov, E. B. Lenchuk, S. D. Bodrunov, D. Ye. Sorokin, S. A. Tolkachev, V. M. Kulkov, A. I. Tatarin, O. A. Romanova, Ye. G. Animitsa, Ya. P. Silin, Ye. B. Dvoryadkina, and others	1. Innovative renovation of traditional basic industries (process of reindustrialisation, modernisation). 2. Creation of new high-tech industries of the fifth and sixth technological waves (the process of new industrialisation)

Note. Based on: [15, P. 14–40; 3, P. 38–53; 8, P. 45–62; 2, P. 63–84; 5, P. 44–118].

Research of the new industrialisation in economic space of a macroregion

Scholars studying regional economics support the conclusion that the foundation of the national economic development rests on the large economic regions (or macroregions) that have the greatest potential for maximising the efficiency of using natural, economic, social, demographic and other resources.

Professors Ya. P. Silin and Ye. G. Animitsa advance the following arguments for performing regional research at the level of macroregions: "It is within the macroregions that the most significant national economic problems are solved that cannot be resolved within the boundaries of one subject of the Russian Federation. Under current global competition, not individual regions of the Russian Federation but strong macroregions that are able to concentrate large-scale, high-tech industries, economic knowledge, nanotechnology, as well as modern transport, energy, information, and recreational infrastructure can respond to external challenges" [29. P. 12].

The content of the concept "macroregion" is specified in federal regulations. In particular, Federal Law of June 28, 2014 no. 172-FZ "On strategic planning in the Russian Federation" defines *macroregion* as part of the territory of the Russian Federation, which includes the territories of two or more subjects of the Russian Federation and where socioeconomic conditions require identification of separate directions, priorities, objectives and tasks of socioeconomic development while designing strategic planning documents¹. This federal law makes a macroregion the main object of strategic planning of the country's spatial development.

Item 2 of the Decree of the President of the Russian Federation of January 16, 2017 no. 13 "On approval of the Fundamental principles of the state regional development policy in the Russian Federation until 2025" completely reproduces the definition of macroregion given in the Federal Law no. 172-FZ². In addition, Item 2 of the Decree completely identifies the concept "region" with the concept "subject of the Russian Federation": "*region* is part of the territory of the Russian Federation within the borders of a subject of the Russian Federation".

In line with this, in the scientific research and practical developments, macroregion is used in relation to an economic region or a federal district, but not in relation to a subject of the Russian Federation.

In accordance with the All-Russian Classifier of Economic Regions, *economic region* is part of the territory of the country consisting of several republics*, krais*, oblasts*, autonomous oblast*, autonomous okrugs*, cities of federal significance*, characterized by territorial and economic unity, relative similarity of natural and economic conditions and specifics. One subject of the Russian Federation can be included into only one economic region³.

This document is a systematised list of regional economic groupings of administrative and territorial divisions of Russia. In line with it, in the territory of the country there are 12 historically formed economic regions with scientifically justified boundaries [13; 9; 33. P. 297–305]. They were approved as far back as in the USSR by the State Planning Committee (Gosplan) and include Northern, Northwestern, Central, Volga-Vyatka, Central Black Earth, Volga, North Caucasus, Ural, West Siberian, East Siberian, Far Eastern and Kaliningrad economic regions.

The All-Russian Classifier of Economic Regions also provides the definition to the concept of *federal district*, which is a large territorial entity (consisting of several republics, krais, oblasts, autonomous okrugs, cities of federal significance), characterized by territorial unity.

¹ On strategic planning in the Russian Federation: Federal Law of June 28, 2014 no. 172-FZ.

² On approval of the Fundamental principles of the state regional development policy in the Russian Federation until 2025: Decree of the President of the Russian Federation of January 16, 2017 no. 13.

³ All-Russian Classifier of Economic Regions OK 024-95: Approved by the Decree of the State Standard of the Russian Federation on December 27, 1995, no. 640 (revised on July 19, 2017).

* Types of subjects of the Russian Federation.

The main difference between the concepts is that economic region is formed by territories characterized by economic and territorial unity, relative similarity of natural and economic conditions and specifics, whereas the territories constituting a federal district are similar in the only one characteristic – territorial unity.

Evidently, integration within economic region is more complex, it covers historically emerged territorial and economic unity, as well as more or less comparable natural conditions and specifics. Therefore, in terms of conducting studies in the field of regional economics, economic regions and macroregions are of greater interest than federal districts.

We will adhere to the definition formulated by professors Ya. P. Silin and Ye. G. Animitsa, who treated a macroregion as a complex multilevel spatial structure consisting of the territories of two and more subjects of the Russian Federation, which is characterized by certain physical–geographical and economic unity of the territory conditioned first and foremost by sustainable and intensive intraregional production and other ties [30. P. 22].

Currently, macroregions are increasingly acquiring the traits of subjects of global economic power, competing for factors of production and seeking globalisation advantages. In this context professor V.N. Leksin and academician B.N. Porfiryev consider the Arctic macroregion [17. P. 985–1004], academicians P.A. Minakir [19. P. 7–28], P.Ya. Baklanov [6. P. 8–19] and professor A.V. Moshkov [7. P. 46–63] look at the Far Eastern macroregion (Pacific Russia), and professor S.V. Kuznetsov and his colleagues examine the Northwestern macroregion [14. P. 25–38].

The Ural macroregion in the context of Russia's economic development and the emergence of the new industrialisation has been intently studied in a series of academic works by professors Ye. G. Animitsa, Ya. P. Silin and their supporters [1; 4. P. 71–81; 31. P. 2–11].

The review of the literature suggests that in the context of the forming scientific paradigm most scholars study the processes of the new industrialisation at macroeconomic (national) level, whereas the problems of researching new industrialisation in the space of regions and macroregions are poorly addressed. However, we can specify some works on this subject written by professor V.T. Ryazanov [24. P. 3–33; 25], and Ural economists, namely academician A.I. Tatarkin [32. P. 21–38; 34. P. 13–21; 20], professors O.A. Romanova [21. P. 276–289; 22. P. 43–56], Ye. G. Animitsa [28. P. 684–696], Ya. P. Silin, I.V. Makarova [18. P. 2–13], V.V. Akberdina [23. P. 143–152], Ye. B. Dvoryadkina [12. P. 41–46].

Professor V.T. Ryazanov highlights the prominent role of macroregions in the processes of the new industrialisation: “Powers that are economically interested in the revival of industrial sector are presently concentrated in medium and small industrial towns, many of which were founded and developed as a result of the construction of large enterprises in their territory. With such turn in view, Eastern regions of the country assume particular importance (the Urals, Siberia and the Far Eastern Russia). Thus, special attention should be paid to justification of the Eastern direction in formation of the centres responsible for the implementation of Russia's new industrialisation strategy” [26. P. 68–80]. In the opinion of V.T. Ryazanov, we have every reason to believe that the Urals and Siberia may well be such centers [24. P. 3–33; 25].

Academician P.A. Minakir proves the necessity to develop the concept of the new industrialisation for the Far Eastern macroregion. He formulates the key idea of the new concept of the macroregion's long-term development as “synchronising economic structure and qualitative parameters of reproduction in the region with the parameters of subglobal economic and social main road in Northeast Asia and building a competitive economic and social complex in the region on this basis” [19. P. 24]. He concludes that this goal can be reached if the region conceptualises its long-term development in the context of the new industrialisation.

In their studies, A.I. Tatarkin and O.A. Romanova note that for innovative development of industrial regions (macroregions), it is of great importance to pay attention not only to creation of new economic sectors and enterprises, but also to modernisation of traditional industries, which are the basis of their economy.

Advanced technologies are turning into a vital factor and undeniably dominate modern production, ensuring economic development on the basis of the new industrialisation. Radical changes in technologies imply not only fast growth of new sectors, but also a far longer period of rejuvenation of traditional industries, to be exact, those of them, which found ways to adopt modern technologies and introduced necessary changes into organisation and management [22. P. 43–56].

Based on these conclusions A. I. Tatarkin and O. A. Romanova define the *new industrialisation of regional economy* both as a process of creating new sectors in it, efficient renovation of traditional production, and as agreed qualitative changes in the system of social relations in accordance with the imperatives of the time [32. P. 30]. They emphasise that the Middle Urals is a region with established industrial structure of economy and traditions, able to enter a new stage in the development – the new industrialisation stage. The authors outline prospects for the new industrialisation in the Middle Urals connected with the development of production of the fifth and sixth technological waves.

We believe that the research of the new industrialisation at a macroregional level is of fundamental theoretical, methodological and practical importance.

1. Regional economic science has become mature enough to grasp the specifics of the present and future social relations in the space-time continuum. For enormous Russia, which has always been characterized by considerable variety of the constituting territories, the regional dimension of economic, social and other transformations is crucial.

Academician A. G. Granberg stressed that considerable differences in natural, social, demographic, economic, political and other conditions in numerous Russian regions doom to failure the unified approaches to reforms oriented to some average conditions [10. P. 16]. Whilst, the numerous strategies for the socioeconomic development of the country and its regions suffer from fundamental incompleteness. They do not include the spatial dimension of the productive forces organisation in the foreseeable future. The need to take into account spatial specifics also arises in the conditions of the forming model of new industrialisation, which is based on a powerful high-tech manufacturing sector, the achievements of the third and fourth industrial revolutions, as well as the results of the fifth and sixth technological waves.

The industrialisation processes can be astonishingly unique depending not only on time, but also on place, where they occur. The space with its specific conditions and factors accelerates and slows down the pace of the new industrialisation. It colours the new industrialisation and highlights these or those facets. Region's individuality determines the initial conditions of the new industrialisation in the spatial aspect [28. P. 684–696].

2. The enlarged object of research (a macroregion) is formed by separate independent subjects of the Russian Federation yet having homogenous historically developed structure of the economy, common development factors, close economic ties, which have forged over years.

The regularities, trends and factors of the new industrialisation (deindustrialisation) distinguished at macroregional level prove to be more justified and sustainable, because they were validated not in one subject, but within a set of economically homogenous subjects constituting a macroregion.

At macroregional level the consequences of reforms, structural (tectonic) shifts and changes are seen more plainly, especially during long periods. This is the result of inertia in development as a specific property of a macroregion (we will consider this property in more detail further). At the level of federal districts such changes are smoothed out. Comparative analysis of the dynamics of industrialisation processes in the subjects of the Russian Federation forming a macroregion is also of particular interest.

In addition, the study of the processes of new industrialisation at macroregional level allows excluding random fluctuations, deviations caused by temporary (insignificant) factors.

The results of implementation of government policy, including the one on the new industrialisation, are more obvious in the scales of a macroregion compared to a federal district

primarily because the latter is formed according a territorial criterion. This thesis is confirmed by the comparison of the indicators of industrial development, including the ones of manufacturing industries in the Ural macroregion and Ural federal district.

As Yu. G. Lavrikova puts it, in the structure of the Ural federal district there all types of regions: industrial (Chelyabinsk oblast), energy and raw materials-centred (Tyumen oblast and autonomous okrugs, included in its territory), agricultural-industrial (Kurgan oblast), and trade-industrial (Sverdlovsk oblast). As a result, the indicators of industrial development, high-tech industries, budget sufficiency look quite dynamic, which is largely due to the contribution of energy and raw materials-centred regions (Tyumen oblast and Khanty-Mansi autonomous okrug and Yamalo-Nenets autonomous okrug) [16. P. 47–74].

The economic picture is completely different when considering the Ural macroregion, which encompasses seven territories, out of which five have a clear industrial nature (Sverdlovsk, Chelyabinsk oblasts, Perm kray, the Republic of Bashkortostan, the Udmurtia Republic) and two territories are agricultural-industrial (Kurgan and Orenburg oblasts). We can detect the deindustrialisation trends, expressed in deceleration of industrial production (first and foremost of manufacturing industries), lagging behind national dynamics, and massive impact of crisis processes on macroregional situation [31. P. 2–11].

In our opinion, the practical significance of the study of macroregions is that in difficult, critical years the government of the country has to count on the potential of large macroregions, since the challenges cannot be overcome within the boundaries of individual administrative-territorial entities. Russian history has a number of good examples of this idea. During the socialist industrialisation, the country's leadership implemented an interregional project on the construction of the Ural-Kuznetsk Combine, and during the Second World War it used the defence potential of both the Urals and Siberia, not individual territories.

Presently, to fulfil the strategic task of the national breakthrough development, the Russian government assigns high priority to spatial development, investment in infrastructure, new technologies and science¹. The construction of the Crimean bridge, which will lend the impetus to the development of the Crimea and all Russian part of the Black Sea, is a modern large-scale project undertaken at macroregional territory.

The Northern Sea Route, which is being transformed into a global, competitive transport artery, is to become a key factor in the development of the Arctic and Far Eastern macroregions. For the development of the Arctic macroregion the government initiated a number of large-scale industrial projects, which meet the strictest environmental standards. These projects are aimed at strengthening academic, transport, navigation, defence infrastructure, what serves Russia's strategic interests.

Active policy is carried out to attract investments and form centres of social and economic growth in the Russian Far East.

Business climate, production development, investment attractiveness and, therefore, standard of living in the Ural macroregion largely depend on the construction of high-speed rail lines and roads. In the first place, they would connect five subjects of the Ural economic region – Sverdlovsk, Chelyabinsk oblasts, Perm kray, the Republic of Bashkortostan and the Udmurt Republic), and thus trigger the shrinkage of economic space and acceleration of economic time.

3. The research of the new industrialisation at macroregional level is conditioned by its specifics. The new industrialisation policy is based on the development of the high-tech sector of economy. Cutting-edge technologies, which are in the core of the fifth and sixth technological waves, have global nature, often their spread cannot be limited by national borders, needless to say by regions' (or municipalities') borders.

¹ In more detail: Address of the President of the Russian Federation to the Federal Assembly of March 1, 2018. Available at: <http://kremlin.ru/events/president/news/56957> (In Russ.)

Practical implementation of breakthrough technologies involves the potential of several territories, not one. To introduce advanced technologies it is necessary to create new and modernise existing regional infrastructure (for instance, high-speed rails, high-speed Internet connection, energy infrastructure, etc.), which can be done exclusively by means of interregional projects.

4. Among multiple specific properties of a macroregion scholars draw extra attention to inertia and self-development as the most important ones.

Inertia is regarded as a macroregion's ability to keep unchanged or subtly changed main parameters of spatial production structure of a region for long periods of time (years and decades) [27. P. 684–696]. Inertia is an indicator of holistic nature, functional and structural sustainability of a spatial system, its ability to continue functioning, reproducing and developing despite the change of external conditions [11].

It was theoretically proved and confirmed by many years of practice that a macroregion is a type of self-developing spatial socioeconomic systems [27]. Each of these systems has the formed potential for self-development, simple or expanded reproduction of its systemic essence. Such systems are able to adapt quickly to external conditions and threats, preserve and modify their structure and system of interaction.

The properties of inertia and self-development of a macroregion are important factors in the formation of new industrialisation in the territory. The property of inertia helps decide on industrial priorities of the new industrialisation, since new technologies root better in existing spatial and production structure of a region, whereas the creation of high-tech industries and implementation of advanced technologies should take into account territory's potential for self-development.

Conclusion

The study findings demonstrate that within the theories of regional economic development a new research programme is being formed – the theory of new industrialisation.

According to this research programme, strengthening of innovative, integrated factors, capturing the potential of several regions, macroregions (for instance, agglomeration processes, shrinkage of economic space, formation of growth poles, interregional projects, etc.) is the main driver of regional progress.

The aforementioned arguments prove the necessity to study economic space of a macroregion in the context of a scientific paradigm of new industrialisation, in particular, within the theories of regional economic development.

Our view of new industrialisation in the space of an old industrial region is twofold. On the one hand, it is innovative renewal of traditional basic industries (the process of reindustrialisation, modernisation) and, on the other hand, the process of creating new high-tech industries of the fifth and sixth technological waves (the process of new industrialisation), which aims to increase production efficiency and improve the standard of living.

From a methodological perspective, innovative renewal of traditional basic industries (the process of reindustrialisation, modernisation) is an endogenous process, because it is effected on the basis of the internal logic of a regional economic system. Creation of new high-tech industries of the fifth and sixth technological waves is an exogenous process, because high-tech industries are preconditioned by regularities of social development and are the consequences of the third and fourth technological revolutions.

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Новая индустриализация России в контексте теорий регионального экономического развития¹

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Статья посвящена обоснованию зарождения теории новой индустриализации как нового научного направления в рамках исследования теорий регионального экономического развития и регионального экономического роста. Доказывается научная корректность и перспективность исследования новой индустриализации в экономическом пространстве макрорегиона в контексте фундаментальных положений теорий регионального экономического развития и регионального экономического роста. Метод исследования – эволюционный анализ содержания теорий регионального экономического развития и регионального экономического роста. Результат проведенного исследования – уточнение теории и методологии региональной экономики на основе расширения научной теории регионального экономического развития и регионального экономического роста – область применения результатов исследования – научная теория и методология региональной экономики. Показано, что эволюция теорий регионального экономического развития и регионального экономического роста отражает усиление инновационных, интегральных факторов, охватывающих потенциал нескольких регионов, макрорегионов (например, процессы

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агломерирования, формирование полюсов роста, сжатие экономического пространства и ускорение экономического времени, межрегиональные проекты и др.). Эта закономерность является одним из ключевых аргументов выбора межрегионального объекта проведения исследования – макрорегиона, в состав которого входят несколько субъектов РФ.

Ключевые слова: новая индустриализация; макрорегион; экономическое пространство макрорегиона; теории регионального экономического развития; научная парадигма новой индустриализации.

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