Role of innovations in provision of competitiveness and innovational development of economy and overcoming of "underdevelopment whirlpools" in Russia and countries of Eastern Europe

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Abstract

Purpose – The purpose of this paper is to determine the role of innovations in provision of competitiveness and innovational development of economy and overcoming of "underdevelopment whirlpools" in Russia and countries of Eastern Europe with the help of a special proprietary methodology.

Design/methodology/approach – The authors substantiate the concept and methodology of calculation of "underdevelopment whirlpools", perform the analysis of development of "underdevelopment whirlpools" in Russia and countries of Eastern Europe and evaluate the influence of "underdevelopment whirlpools" on competitiveness of these countries' economy.

Findings – The authors determine the perspectives of overcoming the "underdevelopment whirlpools" in Russia and countries of Eastern Europe and increasing their competitiveness with the help of innovation and develops practical recommendations for creation of innovational economy for the purpose of provision of high competitiveness and overcoming of "underdevelopment whirlpools" in Russia and countries of Eastern Europe and overcoming of strong and growing differentiation of the level of socio-economic development of their sub-systems.

Practical implications – Creation of innovational economy in Russia and countries of Eastern Europe is hindered by multiple obstacles (socio-economic and institutional), the success of overcoming of which determines the realization of a certain scenario of development of events.

Originality/value – The main conclusion is that creation of innovational economy can and should become a new vector of economic growth in Russia and countries of Eastern Europe and overcoming of strong and growing differentiation of the level of socio-economic development of their sub-systems.

Keywords Competitiveness, Countries of Eastern Europe, Innovational economy, Underdevelopment whirlpools

Paper type Research paper

1. Introduction

Russia and countries of Eastern Europe are characterized by similar economic problems. Despite the fact that the Russian economic system is built by the principle of federative structure, and the European is built by the principle of integration of independent states, Role of innovations

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Journal of Entrepreneurship in Emerging Economies Vol. 10 No. 3, 2018 pp. 511-523 © Emerald Publishing Limited 2053-4604 DOI 10.1108/JEEE-12-2017-0100 both of them are multi-dimensional and poly-structural dynamic systems. Analyzing them from the point of view of the theory of synergism, it is possible to see strong variation in the level of socio-economic development of their elements (sub-systems), which in the context of the Russian economy are regions, and in the context of the European economy, countries.

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This leads to a serious scientific and practical problem, related to reduction of the level and rate of development of the general socio-economic system because of the presence and gradual deepening of its structural disproportions. Despite the active attempts of scientists and practitioners, effective solution of this problem has not yet been found.

This article offers a hypothesis that a perspective means of solving this problem is innovations. Creation of innovational economy can and should become a new vector of economic growth in Russia and countries of Eastern Europe and overcoming of strong and deepening differentiation of the level of socio-economic development of their sub-systems. A logical substantiation of the offered hypothesis is generally acknowledged provisions of the theory of economic growth, theory of economic cycles and theory of innovations – these theories acknowledge the key role of innovations in acceleration of the level of socio-economic development of the level of socio-economic development of regions in the common economic system is actually brought down to crises of certain regions and intensive growth of others, innovations can have anti-crisis role, leveling and balancing the level and rate of development of all regions.

This predetermines the goal of the research, which consists in determining the role of innovations in provision of competitiveness and innovational development of economy and overcoming of "underdevelopment whirlpools" in Russia and countries of Eastern Europe. The work is to solve the following tasks:

- substantiating the concept and methodology of calculation of "underdevelopment whirlpools";
- applying this methodology for determining the presence and analyzing dynamics of development of "underdevelopment whirlpools" in Russia and countries of Eastern Europe;
- evaluating influence of "underdevelopment whirlpools" on competitiveness of economy of Russia and countries of Eastern Europe;
- determining perspectives of overcoming "underdevelopment whirlpools" in Russia and countries of Eastern Europe and increasing their competitiveness with the help of innovations; and
- developing practical recommendations for creation of innovational economy for the purpose of provision of high competitiveness and overcoming of "underdevelopment whirlpools" in Russia and countries of Eastern Europe.

2. Conceptual framework and literature overview

The information and analytical basis of the research consists of statistical and information and analytical accounting of the International Monetary Fund, the World Economic Forum and the Federal State Statistics Service. The author views the fundamental studies on the issues of provision of region's competitiveness and the applied studies in the sphere of creation of innovational economy with emphasis on developing countries.

The performed literature overview showed that there are a lot of theories and concepts of regional development, which are devoted to studying and solving the problems of regional differences.

Thus, Anukoonwattaka (2016) substantiates the importance of considering the region's position in the global chain of added value for determining its competitiveness and comparing it with other regions. Barney *et al.* (2017) and Bilbao-Osorio and Rodríguez-Pose (2004) substantiate the importance of organizational and managerial factors during evaluation of competitiveness and innovational activity of economy by the example of countries with transitional economy and countries of Europe.

The key influence of the level of competition on innovational activity of regional entrepreneurial structures is substantiated in many studies (Crowley and Jordan, 2017; Freeman, 2002; Gagarin and Chainikova, 2016; Gries *et al.*, 2017; and Guliak, 2017). In their turn, scholars such as Malyshkov and Ragulina (2014); Otoiu *et al.*(2017); Saltykov *et al.* (2015); Segerstrom (1991) and Skiter *et al.*(2015) offer their models of economic growth on the basis of innovational activity of regional economic systems.

Thus, despite the diversity of existing scientific theories and concepts of regional economic development and regional disproportions, a serious gap in the system of modern scientific knowledge in this sphere is absence of precise methodology of studying the differentiation of the level of socio-economic development of regions in dynamics, as the existing studies and publications allow studying only the statistical picture of this differentiation. This gap can be filled with the methodology of "underdevelopment whirlpools".

The issue that is studied in this work is formulated, actualized and studied in a lot of modern fundamental and applied works. In particular, reduction of the level and rate of development of modern socio-economic systems because of presence and gradual deepening of their structural disproportions is noted in the following publications of well-known scholars:

- differences in the level of investment attractiveness and investment provision, which leads to reduction of the level and rate of socio-economic development of regions of modern India, starting from 1991 (that is, in the age of liberalization of market economy) and increase of structural disproportions in the Indian economy are studied in the work (Bhandari *et al.*, 2015);
- technological asymmetries (differences in the level of technological development), which lead to regional economic imbalance in modern Spain and increase its internal disproportions, are studied in (Gómez, 2013); and
- Socio-economic and ecological differences in development of industry of the Urals and Siberian Federal Districts of the Russian Federation, which lead to disproportions in their development, are discussed in (Eydenzon *et al.*, 2013).

Based on the above scientific studies, innovations are here defined as completely new (unprecedented, not previously existing) technologies of organization of business processes, marketing and production, as well as products (goods and services). That is, in the offered definition, the copying of innovations from other companies (innovations are new for the given company but are applied by its rivals) and countries (innovations are new for the given economy but are known and popular in the whole world) are not taken into account, as they ensure modernization (overtaking development), not innovational development of economic systems which leads to growth of their competitiveness. In our opinion, the most important and inseparable characteristics of innovations are novelty and uniqueness.

Methodological basis of the research is comprised of the proprietary methodology of E.G. Popkova for calculation of "underdevelopment whirlpools". Studying the process of change of qualitative and quantitative characteristics of these sub-systems in dynamics allows Role of innovations

determining sustainable regularity related to increase of underrun of certain systems from the others. The actively developing systems preserve the status and the role of leaders that possess corresponding privileges and related additional capabilities. Slowly developing subsystems preserve the underdeveloped status and the role of periphery that possesses lesser capabilities for further growth and development.

In the existing scientific economic literature, large attention is paid to the issues of regional economic development, innovational eco-systems and regional differences. Thus, the mechanism of trans-regional competition and imbalance of territorial economic development are studied by Cao *et al.* (2018). Spatial analysis of inhomogeneity of regional economic development and factors of its formation and deepening by the example of modern China is performed in Cao and Xu's (2018) study. The issues of formation of innovational eco-systems and systemic management of innovational potential of modern economic systems are studied in the publication of Kostyshak *et al.*, (2018).

Foundations of sustainable economic growth and innovational development of modern economic systems with emphasis on the educational factor are studied in the work of Tvaronavičienė *et al.* (2018). Regional differences in 22 countries of the world as to the level of their socio-economic and demographic development are noted in the work of Lynn *et al.* (2018). The topic of provision of socio-economic security in the aspect of presence and overcoming of regional differences and disproportions in development of the modern regional economy is studied in Ohotina *et al.* (2018).

Based on the concept of regional economic development, innovational eco-system and regional inequality, which are studied in detail in multiple works of the modern authors (Wong *et al.*, 2005; Youtie and Shapira, 2008; Freeman, 2002; Segerstrom, 1991; Bilbao-Osorio and Rodríguez-Pose, 2004), for explaining the theoretical essence of this phenomenon and its practical study, the work offers to use the concept and methodology of calculation of "underdevelopment whirlpools". Such whirlpools describe the process of socio-economic sub-systems losing the sources and perspectives of growth and development and larger aggravation of their position in the general system as compared to other sub-systems. Calculation of "underdevelopment whirlpools" is performed in the following way.

In connection to certain period (in statics), the depth of "underdevelopment whirlpool" is calculated according to the following formula:

$$Duw_t = Y_t - Ye \tag{1}$$

Where:

 $Duw_t = depth of "underdevelopment whirlpool" in year t, years;$

 $Y_t = year t;$

Ye = year in which the model country had the same level of GDP per capita (or GRP per capita).

Then, comparing the depth of the "whirlpool" in the current and previous year (in dynamics), the speed of economy's sucking into "underdevelopment whirlpool" is determined according to the following formula:

$$Suw_t = Duw_t - Duw_{t-1}$$
⁽²⁾

Where $Suw_t - speed$ of economy's sucking into "underdevelopment whirlpool" in year t, years for 1 year.

The methodology of calculation of "underdevelopment whirlpools" is described in detail with examples of its practical application in the publications of Popkova *et al.* (2013, 2014).

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3. Methodology and empirical strategy of research

In Russia, the object of the research is Volgograd Oblast, with Moscow Oblast being a model. In countries of Eastern Europe, the object of the research is the Republic of Belarus, with the Czech Republic being a model.

In Russia, analysis is performed within the country (Volgograd region is compared to Moscow region), and in Eastern Europe inter-country, analysis is performed because of two main reasons: first, absence of statistical data within the country, and second, necessity for providing representativeness of data, as countries of Eastern Europe could be compared to Russia according to geography and the level of socio-economic development only in the scale of a regional integration association. That is why the Republic of Belarus is compared to a more dynamically developing representative of the region of Eastern Europe – the Czech Republic.

Volgograd Oblast was selected as an example of modern Russia's region because of the fact that it can be presented as a standard, average Russian region – the Oblast is neither a donor nor recipient. The Republic of Belarus was selected as an example of countries of Eastern Europe because of its close connection to modern Russia and similar indicators of socio-economic development.

We selected these research objects as, first, position and role of Volgograd Oblast in the Russian Federation in terms of geography is comparable to the role and position of the Republic of Belarus in Eastern Europe, and second, as a result of preliminary research, it is seen that they face common (similar) problems and are peculiar for presence of "underdevelopment whirlpools".

The empirical strategy of this research consists in following this algorithm:

- determining the parameters of "underdevelopment whirlpools" in selected objects for the research – Volgograd Oblast (as compared to Moscow Oblast) and Republic of Belarus (as compared to countries of Eastern Europe) – with application of the proprietary methodology of calculation of "underdevelopment whirlpools";
- determining the connection and influence of innovative activity in Russia and countries of Eastern Europe (by the example of selected objects for the research) as to the depth of their "underdevelopment whirlpools" and as to their global competitiveness with application of regression and correlation analysis; and
- developing practical recommendations for overcoming "underdevelopment whirlpools" and increasing competitiveness of Russia and countries of Eastern Europe with the help of innovations.

4. Results

Let us study economic development of Russia and countries of Eastern Europe with the help of methodology of "underdevelopment whirlpools". Timeframe covers years from 2000 to 2017 (Table I).

To explain the calculations provided in Table I, let us study them by an example. Thus, according to the official statistics provided by the Federal State Statistics Service, GRP per capita in 2016 in Volgograd Oblast constituted RUB 294,682.2. In Moscow Oblast, the similar level of GRP was observed in 2011. Therefore, the depth of "underdevelopment whirlpools" in Volgograd Oblast in 2016 is calculated in the following way: Duw2016 = 2016-2011 = 5 years.

In 2017, the level of GRP per capita in Volgograd Oblast constituted RUB 318,946.5, which equaled the level of 2012 in Moscow Oblast. Therefore, the depth of

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JEEE	Volgograd Oblast Republic of Belarus							18	
10,3	Year	GRP per capita, RUB	Year	Duw	Suw	GDP per capita, USD	Year	Duw	Suw
	2000	35,689.4	1990	10	_	1,329.8	1980	20	_
	2001	39,862	1991	10	0	1,292.6	1982	19	$^{-1}$
	2002	45,891	1992	10	0	1,533.9	1984	18	$^{-1}$
E1C	2003	53,674	1993	10	0	1,886.1	1986	17	$^{-1}$
516	2004	69,325	1994	10	0	2,456.8	1988	16	$^{-1}$
	2005	76,740.6	1995	10	0	3,229.6	1990	15	$^{-1}$
	2006	89,534	1997	9	-1	3,979	1991	15	0
	2007	107,461	1999	8	-1	4,900	1993	14	$^{-1}$
	2008	125,922	2003	5	-3	6,598.9	1994	14	0
	2009	147,357	2005	4	-1	5,359.9	1995	14	0
	2010	166,029	2007	3	-1	6,023.1	1996	14	0
	2011	508,433	2007	4	1	6,472.7	1996	15	1
	2012	571,516	2008	4	0	6,938.1	1996	16	1
	2013	607,472	2008	5	1	7,977.1	1995	18	2
Table I.	2014	715,050	2009	5	0	8316	1995	19	1
Calculation of	2015	278,961	2010	5	0	5,941.2	1995	20	1
•••••	2016	294,682	2011	5	0	5,142.9	1994	22	2
"underdevelopment whirlpools" in Russia	2017	318,947	2012	5	0	5,786.9	1995	22	0
and countries of Eastern Europe		e: Compiled by the authory Fund (2017)	ors on th	e basis o	f Federa	l State Statistics Service	(2016) ar	nd Intern	ational

"underdevelopment whirlpool" in Volgograd Oblast in 2017 is calculated in the following way: Duw2017 = 2017-2012 = 5 years. The speed of Volgograd's Oblast sucking into the "underdevelopment whirlpool" in 2017 is calculated in the following way: Suw2017 = $5 \cdot 5 = 0$ years for 1 year, that is the speed is zero.

As is seen from Table I, the depth of "underdevelopment whirlpool" in the Republic of Belarus (22 years) is larger than "whirlpools" of Volgograd Oblast (5 years). Despite the high speed of sucking of these economies into the "whirlpool" in 2015, up to this time (2017), they brought it down to zero. For evaluation of the influence of "underdevelopment whirlpools" on competitiveness of economy of Russia and countries of Eastern Europe, we performed regression and correlation analysis of the depth of "underdevelopment whirlpools" and the values of indices of their competitiveness.

To determine the role of innovations in provision of competitiveness and innovational development of economy and overcoming of "underdevelopment whirlpools" in Russia and countries of Eastern Europe by the examples of the selected objects, let us conduct regression analysis. Competitiveness of Volgograd Oblast is determined on the basis of the corresponding index of competitiveness of Russia's regions according to AV Group and innovational activity – on the basis of the ranking of the subjects of the Russian Federation (RF) according to the Russian regional innovational index by the National Research Institute "Higher School of Economics of the RF".

Competitiveness of the Republic of Belarus is determined on the basis of analytical materials of the research organization Ekonomika.by similarly to the Global competitiveness index (the World Economic Forum) and innovational activity – on the basis of the Global innovations index according to the INSEAD, WIPO, Cornell University. The data for 2000-2017 are given in Table II.

For provision of transparency of the given data and simplicity of reproduction of authors' calculations, let us view the process of their execution. In 2017, GDP per capita in

	Depth of	V olgograd Ublast		Depth of	Republic of Belarus	
Year	"underdevelopment whirlpool", years	Innovational activity, points from 0.01 to 1.00	Competitiveness, points from 0.01 to 5.00	"underdevelopment whirlpool", years	Innovational activity, points from 1.00 to 100.00	Competitiveness, points from 0.01 to 10.00
2000	10	0.17	1.06	20	31.14	4.77
2001	10	0.17	1.06	19	32.78	5.03
2002	10	0.17	1.06	18	34.60	5.30
2003	10	0.17	1.06	17	36.64	5.62
2004	10	0.17	1.06	16	38.93	5.97
2005	10	0.17	1.06	15	41.52	6.37
2006	6	0.18	1.17	15	41.52	6.37
2007	8	0.21	1.32	14	44.49	6.82
2008	5	0.33	2.11	14	44.49	6.82
2009	4	0.41	2.64	14	44.49	6.82
2010	က	0.55	3.52	14	44.49	6.82
2011	4	0.41	2.64	15	41.52	6.37
2012	4	0.41	2.64	16	38.93	5.97
2013	5	0.33	2.11	18	34.60	5.30
2014	5	0.33	2.26	19	37.10	5.03
2015	2	0.33	2.23	20	38.20	4.77
2016	5	0.33	2.23	22	30.40	4.34
2017	2	0.33	2.23	22	30.00	4.34
Source Institut	Source: Compiled by the auth Institute "Higher School of Ecor	authors on the basis of AV G Economics of the RF" (2018)	roup (2018), INSEAD, WI	IPO, Cornell University	authors on the basis of AV Group (2018), INSEAD, WIPO, Cornell University (2018), Ekonomika.by (2018) and National Research Economics of the RF ^w (2018)	() and National Research

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Table II.Dynamics of the
depth of"underdevelopment
whirlpools",innovational activity
and competitiveness
of Volgograd oblast
of the RF and the
Republic of Belarus

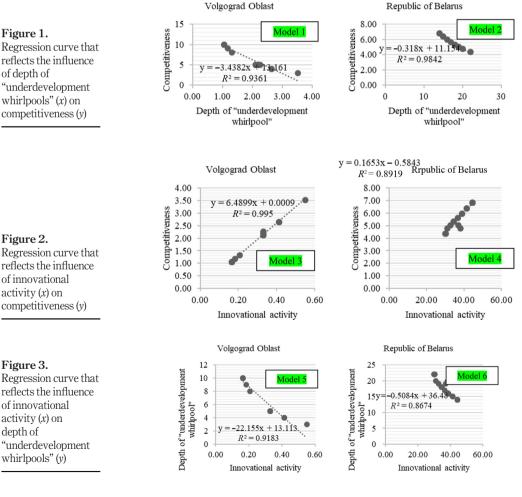
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Volgograd Oblast of the Russian Federation constituted RUB 318,947. The similar level of GDP per capita in Moscow Oblast of the RF was observed in 2012 (i.e. Ye = 2012). Therefore, depth of "underdevelopment whirlpool" of Volgograd Oblast from Moscow Oblast in 2017 is calculated in the following way: Duw = 2017-2012 = 5 years.

Let us check the materials of AV Group (2018), where we find the value of the index of competitiveness of Volgograd Oblast in 2017. After that, from the materials of the National Research Institute "Higher School of Economics of the RF" (2018) we take the value of the index of innovational activity of Volgograd Oblast in 2017. Let us put the data in Table II.

Based on the data from Table II, regression analysis was performed, which reflects the influence of "underdevelopment whirlpools" on competitiveness (Figure 1), innovational activity on competitiveness (Figure 2) and innovational activity on the depth of "underdevelopment whirlpools" (Figure 3).



"underdevelopment whirlpools" (x) on competitiveness (v)

Figure 1.

of depth of

Figure 2.

Figure 3.

of innovational

activity (x) on

whirlpools" (y)

depth of

Regression curve that reflects the influence of innovational activity (x) on competitiveness (y)

4.1 Competitiveness competitiveness

The determined regression and correlation dependencies are described in detail in Table III. As is seen from Figures 1-3, all three regression dependencies are rather strong and are seen in the RF and the Republic of Belarus. Thus, increase of the depth of "underdevelopment whirlpool" by 1 year leads to reduction of competitiveness in Volgograd Oblast by 3.43 points (correlation 93.61 per cent), and in Republic of Belarus, by 0.17 points (correlation 98.42 per cent). Increase of innovational activity by 1 point leads to growth of competitiveness of Volgograd Oblast by 6.48 points (correlation 99.50 per cent), and Republic of Belarus, by 0.16 points (correlation 89.19 per cent). Increase of innovational activity by 1 point leads to reduction of the depth of "underdevelopment whirlpool" in Volgograd Oblast by 22.15 years (22 years) (correlation 91.83 per cent), and in Republic of Belarus by 0.50 years (correlation 86.74 per cent).

The perspectives of overcoming the "underdevelopment whirlpools" in Russia and countries of Eastern Europe and increase of their competitiveness with the help of innovations are seen in the context of three basic scenarios. The realistic (most probable) scenario supposes increase of the level of innovational activity that allows supporting high global competitiveness, but it is insufficient for creation of innovational economy. A precondition for its realization is the global tendency for development of innovations and the program of modernization of socio-economic systems conducted in Russia and countries of Eastern Europe.

Despite the vivid efficiency of measures for state stimulation of innovative activity of economic subjects, this scenario does not allow forming innovational economy because of institutional problems – such as instability of normative and legal provision of innovational activity and low investment attractiveness of economy. However, certain leveling of structural disproportions of socio-economic development of economic systems is ensured.

The pessimistic scenario is related to preserving the current level of innovative activity. The government measures for development of innovational economy are ineffective within this scenario because of strong opposition to innovations from society and entrepreneurship, and weak effectiveness of the market mechanism hinders creation of natural market stimuli for innovational activity of business. As a result, the level of differentiation of the regions of Russia and countries of Eastern Europe stays at the same level at best, but probably will worsen.

The optimistic scenario is based on successful development of innovational economy. Because of high interest of entrepreneurship, social support and high effectiveness of the measures of state regulation of innovative activity of business, intensive development of high-tech spheres and growth of employment in these spheres are achieved, as well as mass production of innovational products and their export. As a result, the global competitiveness of economy of Russia and countries of Eastern Europe grows, sustainability and balance of

Models	se _n	se _{n-1}	r^2	sev	F	d_{f}	SSreg	SSresid	
1	0.1791 0.01003	0.13024 0.17372	0.93505 0.98437	0.20031 0.11339	230.344 1007.52	16 16	9.2422 12.9546	0.64198 0.20573	Table III. Detailed information
2 3 4	0.12087	0.03726 0.55296	0.99467 0.89191	0.05736 0.29818	2,988.59 132.02	16 16	9.83154 11.7378	0.05264 1.42255	on the received regression and
5 6	1.73933 0.04967	0.53611 1.90783	0.91289 0.86747	0.82533 1.02878	167.669 104.728	16 16	114.212 110.843	10.8988 16.9343	correlation dependencies

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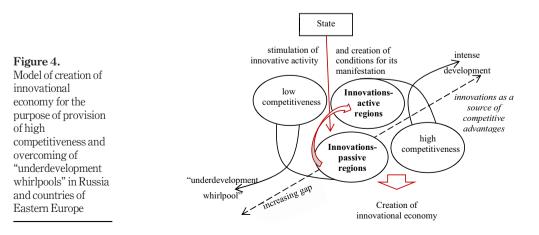
JEEE their development are achieved and structural disproportions of their economic systems are overcome.

For realization of the optimistic scenario, we developed the following practical recommendations for creation of innovational economy for the purpose of provision of high competitiveness and overcoming of "underdevelopment whirlpools" in Russia and countries of Eastern Europe:

- Provision of favorable institutional conditions for creation of innovational economy. This requires creation of stable and transparent normative and legal provision in the sphere of innovations and simplification of the registration procedure, as well as increase of protection of rights for intellectual property objects.
- Conduct of social and cultural policy, aimed at leveling (if possible, overcoming) the
 opposition to innovations from society and business. This requires propaganda of
 innovations and increase of loyalty to them from business and society with the help
 of the specialized marketing tools social advertising and PR.
- Strengthening natural market stimuli for increase of innovative activity of entrepreneurship. It is necessary to support balance between high level of competition and its certain limitation with the help of anti-monopoly policy for provision of economic subjects' capability to manifest innovational activity.

The offered recommendations became the basis for the created model of development of innovational economy for the purpose of provision of high competitiveness and overcoming of "underdevelopment whirlpools" in Russia and countries of Eastern Europe (Figure 4).

As is seen from Figure 4, innovational passivity is a cause for growing underrun of certain regions (or countries) from others, which leads to formation and deepening of "underdevelopment whirlpools". Realization of the offered recommendations aimed at stimulation of innovational activity, and creation of conditions for its manifestation allows these regions to go into the group of innovations-active economic subjects, thus overcoming "underdevelopment whirlpools" and providing the growth of its competitiveness in the long-term. Innovations are a source of competitive advantages of economic systems, allowing them to increase and support their global competitiveness at the high level, thus overcoming the "underdevelopment whirlpools". As a result, innovational economy in Russia and countries of Eastern Europe is created.



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5. Conclusions

The results of the performed research confirmed the offered hypothesis and provided proofs that innovations are a perspective means for eliminating structural disproportions in economy of Russia and countries of Eastern Europe, i.e. overcoming of "underdevelopment whirlpools". That is, innovations have a key role in provision of competitiveness and innovational development of economy and overcoming of "underdevelopment whirlpools" in Russia and countries of Eastern Europe. However, creation of innovational economy in these counties is hindered by multiple obstacles (socio-economic and institutional), the success of overcoming of which determines the realization of a certain scenario of development of events.

It is necessary to emphasize that innovative activity is a complex process from the point of view of management. This is caused by specificity of innovations. They could be divided into two categories – true innovations, with high level of novelty, which are in high demand in the market and lead to growth of competitiveness of economic subject and economy, and false innovations, which lead to insignificant improvements (or copied from other countries) and are in low demand and do not provide growth of competitiveness.

Therefore, in the process of development and realization of innovational policy, the emphasis should be made on stimulation of creation and implementation of true innovations, while false innovations, which require a lot of resources but do not lead to positive results, should be rejected. That is why such policy should be flexible and accompanied by continuous quantitative and qualitative monitoring and evaluation of innovative activity of economic subjects. Development of theoretical and methodological and practical recommendations for its conduct is a perspective direction for further scientific research in this sphere.

The performed research contributes into development of the modern theory of regional economy and disproportions in development of regions in economic systems. In view of the dynamics aspect of development of these disproportions with the help of the authors' methodology of calculating "underdevelopment whirlpools" and the performed regression and correlation analysis, this research allows substantiating the influence of innovational activity on region's competitiveness and overcoming its "underdevelopment whirlpool" in the future.

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