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**THE INNOVATIVE ACTIVITY OF THE REGION: ESSENCE, MEASURING INSTRUMENTS, ASSESSMENT**

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*In this article the main indicators of an assessment of innovative activity of the region, their quantitative interpretation are considered. The factors causing possibilities of innovative development of the region are allocated and the directions of the state regional policy in the sphere of innovations are offered.*

*Keywords: region, innovative economy, regional policy, social and economic development, innovative strategy, scientific and technical potential.*

The formation of innovative economy is an extremely actual task both for industrially developed countries, and for the Russian Federation. In a new economic paradigm scientific and technical progress, knowledge as a whole represents itself as the main factors of growth of economy. They make a basis of new, innovative economy. Regular emergence of new products and services becomes its distinctive feature. It is proved by a modern science that improvement of competitiveness both the separate enterprises, and the countries as a whole, is impossible without increase the role of innovative components in economic development of regions.

According to the Concept of Strategy of social and economic development of regions of the Russian Federation [3], it is possible to consider the region as "locomotive" if it satisfies to the following conditions:

- in this region the steady tendency to growth of the passenger - and freight traffic is observed;
- existence in the region the scientific and educational center of world or federal level;
- in this region the strategic initiative important for all country is created;

- this region should have high scientific and technical, intellectual, personnel and social and economic potential,
- the region already carries out a powerful contribution to a gain of gross domestic product of the country;
- in this region exists or there can be a strategic partnership of the power, civil society and business;
- in the long term period about 10-12 years this region can become "a developer" for the next territories.

As alternatively innovative policy scientists offer division of the territory of Russia into 5 innovative zones:

1. «The world cities» - Moscow, as administrative, scientific and financial, and St. Petersburg, as the cultural and historical centers of Russia. Some other million-plus cities will try to enter into this zone (Nizhny Novgorod, Yekaterinburg), and also historical university and scientific centers – Kazan, Tomsk, Novosibirsk, Kaliningrad.

2. Historical industrial areas, Soviet research-and-production territorial complexes (Moscow, Leningrad areas, areas of the former Volga-Viatka territorial and production complex, Southern Siberia).

3. New industrial and raw areas (Vologda and Cherepovets agglomeration, Yamalo-Nenetsky autonomous region, Murmansk region, Komi Republic, Republic of Karelia, Tyumen, Surgut, Khanty-Mansiysk, Okh, Yuzhno-Sakhalinsk, Krasnoyarsk, Norilsk). The Magadan area, Kamchatka, a zone of the Northern Sea Way, which develop plans of advancing development, will aspire to enter into this innovative zone.

4. Areas with low or absent innovative potential (all Southern Federal District, CFD areas except for Moscow, the Pskov and Novgorod areas).

5. Areas with uncertain innovative potential (The Far East which has been completely provided in the resource and geographical relation, but possessing the low investment appeal and the sharp lack of human resources).

Proceeding from this distribution, the Belgorod region gets to the fourth category of innovative zones, and there is practically no prospect of its development.



We assume that this approach sharply narrows tools of regional policy. It is necessary to position our region rather highly and for the long-term period at development of a necessary technique, and also innovative strategy, which should become not the separate section of the general strategy of social and economic development of the region and to penetrate all its contents.

Good results can be reached only in the presence of the government regional innovative and industrial policy coordinated at all levels applying effective mechanisms of its realization in the following main directions:

1. Formation of organizational conditions for creation and improvement of regional innovative system (RIS) and development of scientific and technical capacity of the enterprises of the region.
2. Reforming and modernization of the enterprises making production with higher share of the added cost.
3. Identification of requirement for personnel, increase of their qualification.
4. Development of interbranch cooperation and subcontracting.
5. Development of the private and state partnership in the industrial and innovative sphere.
6. Creating an enabling environment for development of private business in the innovative sphere.
7. Development and implementation of priority investment and innovative regional projects.
8. Development of interregional and international cooperation in the innovative sphere, deepening of integration processes with boundary regions of "neighboring countries".
9. Development of organizational structure of management of innovative and industrial policy on principles of democratic partnership.

The innovative economy in the region is formed under the influence of two major factors:

- creations of conditions for transition to an innovative way of development;

- emergence of motivations of market subjects for activation of innovative processes.

Process of formation of the innovative sphere belongs to the first factor as independent branch of managing. The second – the enterprise factor, has possibilities for initiation of innovations from below. Both considered factors can be shown fully and require the formation of favorable conditions for development of the innovative sphere.

For a solution of the problem of innovative development it is necessary to formulate set of the regional purposes and priorities of development of scientific and technical and innovative activity, ways and means of their achievement on the basis of interaction of regional and federal governing bodies.

As a part of system of indicators of innovative activity of the region characteristics of resources and results of innovative activity are allocated:

1. Indicators of innovations.

- Indicators of sources of information on innovations.
- Number and structure of the personnel occupied with innovative activity.
- Indicators of volume and structure of the business assets used in innovative activity.

- Indicators of expenses for innovations.

- Indicators of volume and structure of expenses for innovations.

- Indicators of dynamics of expenses for innovations.

- Indicators of results of innovative activity.

- Indicators of innovative activity of the enterprises.

2. The indicators characterizing influence of innovations on economy and society.

- Indicators of technological structure of economy.

- Indicators of export and import of technologies.

- Assessment of influence of innovations on growth of labor productivity and employment.



- The integrated assessment of a contribution of scientific and technical progress in a gross domestic product gain.

- Indicators of influence of a science on society development.

These groups of indicators in the set provide a complex assessment of scales, structure and dynamics of innovative activity of regions.

As in a statistical science there are no specific methods for the analysis of innovative activity of the region, we apply:

- method of mass observation;

- method of statistical groups and tables;

- method of studying of change of the phenomenon (statistics of dynamic ranks);

- comparison method (comparison of the indicators);

- analysis method by means of generalizing indicators.

Applying formulas of indicators of the analysis of a number of dynamics, we will calculate a pure gain, growth rate, rate of a gain and absolute value of 1 % of a gain, the average level of a number of dynamics, average growth rate, average rate of a gain, an average pure gain of volumes of the innovative goods, works, services in the Belgorod region.

The volume of the innovative goods, works, services in 2009 made 10437,5 million roubles. In 2009 in comparison with 2008 the volume of the innovative goods, works, services decreased by 22541,4 million roubles, (68,35 %), and in comparison with 2005 the volume of the innovative goods, works, services increased by 8230,6 million roubles (372,95 %). The maximum pure gain was observed in 2008 (19601 million roubles), the minimum pure gain is fixed in 2009 (-22541,4 million roubles). On the average for all studied period the volume of the innovative goods, works, services increased by 2057,65 million roubles (47,5 %) every period. Rate of a gain shows that the row tendency increasing that testifies to acceleration of growth of volume of the innovative goods, works, services in the region.

At the moment it is clear that only under condition of formation of the purposeful and thought-over policy in the field of the innovative sphere, creation of accurately structured system of innovative activity, studying of successful experience

of other countries in this area, considerable investments, formation of economy of innovative type will be really carried out in Russia.

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**The Informational Methods in Econometrics**

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**Annotation:** *A new method of the econometrics computation, based on application of methods of information theory and new statistics « entropy of distribution » is offered.*

*It is shown, that the entropy is the universal statistics, allowing to solve all problems of simulation of complex economic processes, the analysis of stochastic processes, including identification of the law of allocation and solving the problem of discrimination.*

**Key words:** *econometrics, entropy, information theory, analysis, modelling*

During several decades in an economic science, as a whole, and in an econometrics, in particular, methods of research based on such concept as "entropy" are used.