

**State Organization «Institute of Market and Economic&Ecological Researches
of the National Academy of Sciences of Ukraine»**

**Summary of scientific novelty for the research
«Development of the market of innovative goods based on the use of the
potential of technological entrepreneurship»**

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The scientific novelty of the research results is as follows:

Within scientific&methodological aspects:

The theoretical foundations of the development of the internal market of innovative goods are substantiated, based on the developed and verified hypothesis about the interdependence of this process with the formation of the system of technological entrepreneurship in the country, which is defined as a single complex social institution that ensures a close relationship of elements: education, science, technologies, innovations, technological entrepreneurship and coordination of interests of all stakeholders of innovative development.

The concept of forming a system of technological entrepreneurship (STE) for the development of markets for innovative goods has been *developed*, which is based on the principles of purposefulness, integrity, self-organization, completeness, competition, openness, and meets the criteria for the performance of STP (sustainability, stability, balance, reliability), taking into account the laws of the information economy (strengthening of globalization and integration processes and a significant reduction the cycle of mastering and spreading new technologies), as well as factors that hinder the innovative development of the domestic economy (organizational, financial, economic).

The methodological bases for researching the innovative potential of technological entrepreneurship in Ukraine have been developed, which include: substantiation of the necessary prerequisites for the formation and use of new knowledge as a resource for economic and social progress; definition of the category «innovative potential of technological entrepreneurship» in the context of the development of the internal market of innovative goods on a dialectical basis; a system of indicators for assessing the level of development of the innovative potential of technological entrepreneurship, which is formed on the basis of two subsystems (innovative personnel potential and economic and ecological potential of technological entrepreneurship); definition of hypotheses, methods of scientific knowledge and assumptions regarding verification of their accuracy; methodological principles; economic support for the formation, use and development of the innovative potential of technological entrepreneurship, taking into account the scientific and technical infrastructure.

A methodical approach to the construction of a structural model of the motivation of the technological entrepreneurship system for the development of the market of innovative goods has been *developed*, the essence of which is the

combination of identifier and classifier models, which, thanks to synergy, allow to obtain a general assessment of the potential suitability of the technological entrepreneurship system of the region for the development of the market of innovative goods and group motivational factors affecting the object of motivation.

The conceptual and categorical apparatus of the theory of the national economy has been improved in terms of providing definitions of concepts:

«technological entrepreneurship» – entrepreneurial activity related to the transformation of scientific knowledge into innovative ideas for the creation of new products and technologies adapted to modern chains of creation of added value;

«technological entrepreneurship system» – a single complex social institution «education, science, technologies, innovations, technological entrepreneurship»;

«innovative potential of technological entrepreneurship» – a set of professional-technical, scientific, research, infrastructure-production, investment-financial, informational, market and ecological potentials and the potential of their collective work, which is characterized by forms of combining individual potentials in technological entrepreneurship and is ensured by the appropriate level of education and scientific and technical infrastructure (financial, regulatory and legal, organizational, production-technological, informational, expert-consulting, etc.);

«All-Ukrainian classifier of innovative goods» – a systematized list of classification groupings, names and codes of types of innovative goods based on the most characteristic features of the innovative goods market;

«innovative product» – a new product or technology created by technological entrepreneurs based on new ideas in order to meet the requirements of consumers of these products;

«innovative goods market» – a system of organizational and economic relations between scientists - developers of new ideas, entrepreneurs of the real sector of the economy and technological entrepreneurs, who are the link that connects them and conduct organizational and functional activities.

Improved:

- *a methodical approach* to the selection of priority markets for innovative products, which is based on the proof of two hypotheses: 1) priority for development are markets that will ensure the needs of the population (that is, the priority is to stimulate demand for innovative products) and 2) new markets should be based on the network principle and selection criteria (the market should: be oriented to the needs of a person as a final consumer; be important for the development of the country's economy; the market can become significant on a global scale; to build a market in the country, there should be: developed educational and technical potential and social potential of entrepreneurship, as well as provided state support);

- *methodical provision* of assessment of the level of innovative potential of the technological entrepreneurship of the region based on integral indices, which are built according to the principle of structure-forming factors with the use of a system-praxeological approach, which includes a built-up database for determining the indicators of the level of a given indicator, a method of integral assessment of its level, the use of which, unlike the existing ones, provides an opportunity to determine the potential and real opportunities of the region in the context of the innovative potential of technological entrepreneurship;

- *a methodical approach* to the definition of the main groups of innovative goods by determining such classification features as: level of novelty, source of financing, scope of implementation, requirements of technological entrepreneurs, requirements of end consumers.

The theoretical foundations of the development of the market of innovative goods in Ukraine have been *developed*, which are based on the provision of the identified *necessary* (highly developed education system; increasing the social role of the scientist; a certain technological base that generates demand for innovative goods; developed research and development infrastructure) and *sufficient* (providing: protection of the intellectual property of scientists and a competitive business environment in the country) conditions that are ensured by the implementation of the state policy of the development of the internal market innovative products, which should be formed in accordance with the following methodological principles: individual orientation; management of priorities; stability; effective regulation and quality service; self-regulation and self-organization; active communication; transparency and openness; availability of resources and protection; feedback.

A theoretical approach to the formation of a mechanism for the implementation of the state policy for the development of the internal market of innovative goods has been *developed* on the basis of a systematic combination of information and process approaches as a complex mechanism, the components of which are management (as an instrument of influence of the center) and interaction (as a tool for coordinating the interests of all market participants) and which is a complete system that includes: an object, a center, an algorithm, desired results, factors, assumptions and elements that ensure hear active feedback from subjects and the center.

The scientific principles of organizational support for the development and effective use of the innovative potential of technological entrepreneurship have gained *further development* through the formation of priorities and the composition of the long-term public-private partnership Program for the development of new promising markets for innovative goods as a broad coalition, which provides for the formation of expert workers groups consisting of technological entrepreneurs, leading universities and research centers, large enterprises, development institutes, expert and professional communities.

A methodical approach to determining the impact of economic crises on the development of the innovative goods market of Ukraine has been *developed* based on the verification of the hypothesis of the relationship between structural deformations of the industrial complex, technological systems and the structure of exports of domestic products.

A methodical approach has been developed to determine the directions of innovative and technological modernization of the basic branches of industry based on the concept of «Industrialization 4.0», taking into account the specific features of the development of technological entrepreneurship in the industry of Ukraine.

Within scientific&practical aspects:

It was noted that in the structural dynamics of industrial production during 1991–2014 two cyclical waves with corresponding stages were outlined – decline, depression, revival and growth. The origins of the first wave, which lasted from

1991 to 2007, are associated with a sharp change in the economic paradigm and restructuring of the economic system, adaptation of its subjects to new economic and political realities. The second wave, which began in 2008, fundamentally differs from the first in its origin in that it is not connected with an internal «transformational breakdown», but with the crisis of the world economy, into which Ukraine was already closely integrated by that time. In 2012–2014 the third wave began to form, in which the stage of decline was already clearly outlined. The reasons for the latest wave are political, economic and military. The structure of production has changed to the opposite relationship between the output of primary and deep processing, low-tech and high-tech, raw material and final consumption products. In particular, the change in the ratio between the output of the mining and metallurgical complex, on the one hand, and machine building and light industry, on the other. As a result, the sectoral structure of industry was primitivized, and production became specialized for export raw materials.

It has been proven that the main factor supporting the sustainable innovative development of any country is the development of infrastructure, because the underdevelopment of infrastructure hinders economic growth, negatively affects the quality of services provided, and reduces the activity of innovative entrepreneurial activity. Solving this problem is all the more urgent for our country, where significant wear and tear of infrastructure facilities is observed.

It has been proven that the conditions under which infrastructure development can have a synergistic effect from the point of view of innovative economic development are as follows:

- formation of demand for innovations – without demand, there will be no supply of innovative goods and technologies;
- economic validity – large infrastructure projects must solve important socio-economic problems;
- coordination with regional development programs – solving important socio-economic problems at the regional level;
- built-in anti-corruption mechanisms – large infrastructure projects can naturally generate corruption risks due to the fact that it is difficult to control the process of cost growth;
- use of effective financial mechanisms based on coordination of state and private business interests.

Suggested:

Measures to solve the main problems to level the identified negative trends in the development of innovative entrepreneurship:

A) Improvement of the institutional base of innovative activity of entrepreneurial structures, which requires:

- formation of the state science and technology policy and its implementation strategy. The goal of this policy should be the formation of a new, high-tech management system that has a high degree of adaptability to the growing complexity of the global economy, which cannot be achieved within the framework of traditional vertically oriented and «bureaucratic» models, i.e. the key task of state institutions becomes the development of the regulatory system, which ensures the acquisition of knowledge, stimulates their transformation into technical and technological ideas, access to the national and global market of technologies and

science-intensive products, ensuring sustainability of business that uses acquired knowledge, results and technologies to form new products and services that change the structure of the economy;

- development of the state policy for the development of markets for innovative products (as part of the scientific and technological policy), one of the tasks of which should become introduction of tools aimed at overcoming insufficient entrepreneurial activity and, for this reason, weak participation of entrepreneurial structures in innovative activities;

- improving the quality of the regulatory environment of entrepreneurial activity, including solving issues one way or another related to the development of public-private partnerships in the innovative sphere: ownership, use and disposal of intellectual property obtained with the use of funds state budget; protection of the interests of private investors during the implementation of projects; creation of incentives for entrepreneurs to comply with their obligations and co-financing of research and development, and for research organizations - patenting and commercialization of the obtained results.

B) Solving the problem of extremely low state funding of scientific activity, because the main trend of global innovative development is the increase in funding of fundamental research. This is extremely relevant for Ukraine, which still has a fairly high scientific potential.

C) Solving the general economic problems of the country:

- insufficient development of the domestic market of Ukraine, low level of competitiveness of domestic production, deep structural disproportions – there are mainly industries that extract raw materials or produce products with a low degree of processing for export, the capacity utilization of which depends on the demand on the foreign market, a significant share of production is material-, energy-, and labor-intensive, and, accordingly, a low share of innovatively active industrial enterprises;

- the consumer market of Ukraine is increasingly filled with goods of foreign production;

- high-tech industries are on the verge of survival, a significant part of the scientific and technical potential has been lost;

- negative structural shifts were accompanied for a long time by the loss of jobs, the economic decline of many settlements, where city-forming enterprises ceased their activities, which led to mass labor migration of the economically active population to other countries.

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