УДК 338.28; 336.13.051

## THE INNOVATION ECONOMY AS ONE OF THE FACTORS OF THE COUNTRY'S CRISIS STATE OVERCOMING

STEPANENKO N. V.

**Dnepropetrovsk** 

he innovations and innovation activity are of primary importance in solving the tasks of the country's crisis state overcoming and dynamically stable economic growth providing. The innovation activity can provide continuous renewal of the production technological basis, mastering of the new competitive production and effective penetration into the global goods and services market. This requires reforming of all the spheres of social life and first of all economics.

The mankind has entered the new stage of its development resulting from the socio-economic revolution which has been taking place in the modern world. It's known that the basis of every socio-economic revolution is formed by its own specific technologies, industrial-engineering systems and production relations. For the post-industrial society this role is played first of all by the innovation technologies and computer-aided systems, high production technologies resulting from the new physico-technical and chemico-biological principles, and innovation technologies, innovation systems and innovation organization of different spheres of human activity based on them. The creation of the new form of economy organization - the innovation economy should become its end result.

The analysis of the recent researches and publications. A significant contribution to the research of innovations and innovation activity was made by the leading domestic scientists such as Amosha O., Amitan V., Antonyuk L., Vasilenko V., Gal'chinskiy A., Geyets V., Katsura S., Lapko O., Kondratiev M., Paton B., Prigozhin I., Poruchnik A., Savchuk V., Chervanyov D., Shmat'ko V., as well as by the foreign classic scientists such as Drucker, Kleichneht, Porter, Freeman, Henderson, Hiroshi, Schumpeter and others [1].

The results of the research on such problem made by the domestic and foreign scientists assure that the creation of the competitive innovation economy is the strategic line of our country's development. The creation of innovation economy to overcome crisis in Ukraine has to be studied more closely.

The aim of the article is to work out recommendations concerning anticrisis innovation economy implementation based on the modern state of the 'crisis' economy. The tactics, strategy and measures to solve problems connected with the effective innovation economy implementation are to be worked out as well.

he analysis of modern progress trends of the leading western countries carried out indicates that innovation economy is a society's economy based on the knowledge, innovations, benevolent attitude to new ideas, new machines, systems and technologies, readiness of their practical realization in the different spheres of human activity. It singles out a special role of knowledge and innovations, scientific knowledge in particular. The traditional spheres of material production in the innovation economy transform and drastically change their technological basis under the influence of scientific and technological knowledge as the production which isn't based on the new knowledge and innovations becomes nonviable in such economy.

The information technologies, computer-aided systems and high production technologies are the innovation economy's base systems. They drastically transform all the facilities of data accessing, processing, transfer and production. They drastically technolized the intellectual activity [1, 2].

The innovation, innovation activity and innovation infrastructure are the basic concepts of innovation economy. Let's become briefly familiar with these concepts because the tactics and strategy of the country's effective innovation economy forming depend greatly on their right understanding. The innovations, innovation activity and innovation processes are the concepts having actually the most various and broadest interpretation. The maturity and spread of such concepts on the processes which refer to all the new including new ideas and inventions, new scientific achievements, new knowledge and technologies, new results of fundamental and exploration scientific researches etc., are generated by the everyday notion and mixing of the innovative and new concepts. The broadest interpretation of innovation activity as something new includes everything understood by the scientific-technical progress, mixes scientific and innovation priorities, generates misconceptions about the similarity of requirements for infrastructures which provide scientific or innovation development [2]. The following understanding of the scientific-technical progress will be used to substantiate this thesis: the scientific-technical progress would be reasonably divided into two main interconnected and complementary components. The first one is the scientific-technical achievements; the second one is industrial engineering achievements.

In the first case the new knowledge, new scientific-technical ideas, discoveries and inventions, new technologies based on the new physical-chemical-biological principles form the results of the scientific-technical progress. In the second case the industrial engineering achievements such as innovations form the results of the scientific-technical progress as the creation of such presumes:

- professional purposeful development and bringing up the results of industrial engineering achievements to creation of new technologies, new systems, machines, equipment, new methods of production planning etc.;
- selling of the created results of industrial engineering achievements to the customer or through a market, or using the «order – fulfillment» mechanism;
- providing the effective use of the created innovation product;
- + research and receive of new industrial engineering achievements required for innovations creation wished by the market or by the customer [3].

By the innovation activity should be understood the activity of group of people directed at realization of the turn-key industrial engineering achievements such as innovations, the use of current breakthrough technologies, systems, machines and equipment on the basis of the implementation of domestic and foreign science and technology industrial engineering achievements. It should eliminate the gap between the current level of the received and checked industrial engineering achievements and their implementation at the developing enterprises. Hence it follows that the saturation of the innovation activity is the main condition for effective innovation economy formation.

The efficiency of innovation activity is largely defined by the innovation infrastructure. That's why the innovation infrastructure forms the basic part of the innovation economy and society's innovation potential.

The innovation infrastructure is the main instrument and mechanism of the innovation economy. It can boost the country's economy at a very high level. On the assumption of such definition the innovation infrastructure can be seen as a complex of interconnected and complementary production and technical systems, organizations, firms sufficient to carry out the innovation activity and innovations. The innovation infrastructure specifies the speed of a country's economic development and its people's welfare growth. The experience of the world developed countries confirms that at the global market competition conditions inevitably wins one that has a developed infrastructure of innovations creation and implementation, one that possesses the most efficient mechanism of innovation activity. That's why the innovation infrastructure should be functional to provide effective operation of the innovation economy. It should possess such features which fully promote the implementation of engineering technologies to

create and implement innovations on a regional and national scale. The development of innovation project should be followed by the continuous analysis of the end results. The availability of reliable information concerning end results allows working out constructive priorities directly during the development of innovation activity and providing the closed controlling system according to the scheme:

- innovations investments end results monitoring – investments etc.;
- ★ scientific-technical potential high level;
- staffing first of all managers of innovation projects and possibility of continuous renewal and improvement of innovation infrastructure staff;
- financial provision (availability of circulating capital);
- → high level of tools to speed up the end result;
- flexibility to provide adaptation of innovation infrastructure to market requirements and changes.

he experience of the world developed countries shows that the infrastructure of innovation engineering centers (firms and enterprises) is the main core of innovation infrastructure. These centers have to master the best domestic and foreign knowledge and technologies, and act for a customer as a systemic guarantor of successful innovation project realization and full innovation cycle ensuring beginning from market conditions analysis of the end innovation product, feasibility study and development of the innovation product till complex equipment delivery, its system integration and taking over with peopleware on a «turn-key» basis and further servicing [4, 5].

The investigation of market needs, the necessity of continuous and operational renewal of the innovation product requires flexible automation implementation. The complex flexible automation with wide use of information technologies and computer-aided systems forms the essence of innovation economy. That's why high automated technologies and computer-aided systems based on «engineering - production - control - implementation» model should lay down the foundations of all country's economy structural transformations and innovation infrastructure. This implies that the most important regional problem of innovation economy formation and development is deciding methodological and organizational-technological issues connected with engineering, construction and mastering of computer-aided integrated engineering-production systems. They combine research processes of technological production preparation and planning directed to create innovation product. More over there should be three main stages in such systems automated in a crisis chain typical for a new science intensive system creation:

- innovations engineering;
- manufacturing and packaging of the new science intensive system main model;
- new science intensive system commissioning and testing.

The advance creation of the innovation activity informational support efficient mechanism in the country forms an important problem which requires solving at innovation economy conditions. The complex innovation economy informational support will promote a successful solving of

the country's innovation economy main task – to provide competitiveness of the enterprises, branches, regions and country in whole [6].

The innovation economy establishment greatly depends on creation of efficient mechanism of complex innovation projects practical realization in the country. And it won't do without government assistance of innovation processes. The necessity of financial and legal support of science and innovations, innovation activity promotion, change to new forms of solving of country's economical, ecological and social problems typical for innovation economy continuously requires from the regional government to work out a liable politics to innovation activity control and development.

A complex of scientific and organizational-technical measures should be taken to provide successful innovation politics realization concerning innovation economy formation. The main of them are the following:

- 1. The innovation activity and innovation infrastructure development conceptualization with definition of the long-term strategic targets and methods of their achievement within innovation economy formation.
- 2. The creation of innovation development program which has to be an informational document indicating the resources, executor, terms and means directed to innovation development targets achievement.
- 3. The integration of the main innovation development program conditions into the socioeconomic development program.
- 4. The organization of practical activity of local and regional government concerning respective regional normative acts adoption and realization as well as their providing of organizational and informational support for this program [7].

An attitude to a human of high intellectual and high productive labor representing the main productive force of society must be absolutely changed At the conditions of innovation activity development (in society with innovation economy). It's necessary to integrate the innovation and investment functions under single control. Such integration will promote the executors' interest in successful realization of all single innovation-investment cycle stages which can be achieved if all the executors concentrate at the end result [8].

## CONCLUSIONS

The beginning of firm innovation economy creation should be realized stage-by-stage. At the initial stage the main efforts should be directed upon reforming of the legal, organizational and financial mechanisms which provide innovation system stability as well as small and middle business support and development, and creation of high efficient self-reliant innovation economy in the country in the long-term perspective.

The complex development of the domestic enterprises and territories to a level of their competitiveness in the world should become a strategic task of the innovation activity development in our country in the short-term perspective.

The education should be the main resource to achieve the assigned task. To provide the effective strategic task achievement Ukraine's infrastructure should be completed with the innovation-investment framework such as centers, complexes, companies, and institutes. The innovation activity and projects creation, implementation and development premise formation of the effective innovation economy in the country.

Therefore, the innovation economy in Ukraine should be national.  $\hfill \blacksquare$ 

## **LITERATURE**

- **1. Medvedkin T. S.** The forecasting methods of the innovation development // Herald of the Donetsk university. B series. Economics and Law. 2004.  $N^{\circ}$  1. P. 124 132.
- **2.** The innovation provision of the economics structural rearrangement. Collected scientific papers (NAS of Ukraine. Institute of economics. Ed. board: Beschasniy L.K. (ex.editor) and others.– Kyiv, 1999.– 152 P.

- **3.** The innovation component of the economic development: Monograph / NAS of Ukraine. Institute of economics. Ed. board: Beschasniy L. K.– Kyiv, 2000.– 262 p.
- **4.** The innovation factors of economic growth.– K.: The institute of economic forecasting of NAS of Ukraine, 1999.
- **5.** Nogovitsin O., Lugovs'kiy V., Voloshin N., Shkvorets' U., Onis'ko E. The institutional principles of public administration enhancement for innovation processes and intellectual property commercialization // Intellectual property.–  $2005.- N^{o} 10.- P. 4 10$ .
- **6. Malishko O. V.** The measuring of intellectual assets in the European companies // Intellectual property.– 2006.–  $\mathbb{N}^0$  1.– P. 26 39.
- **7. Triseev U. P.** The long-term forecasting of the economic processes (systemic conclusions).— K.: Naukova dumka, 1987.— 133 p.
- **8. Medvedkin T. S.** The formation and estimate of efficiency of the innovation-investment model of economic growth of Ukraine // The problems of foreign economic relations development and foreign investments attraction: regional aspect. Collected scientific papers.— Donetsk: DonNU.— 2005.— P. 513 520 (0,5 another pgh).