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MECHANISM OF STATE REGULATION OF INNOVATIVE DEVELOPMENT OF THE ECONOMY

The article considers some views on the role and mechanism of state regulation of the innovative economy as a whole and its individual spheres in the conditions of market relations. It is noted that the solution of problems of regulation of innovative development should be carried out on a balanced basis, taking into account the interaction of innovation policy with other components of state regulation of socio-economic processes.

An analysis of scientific developments in the field of state regulation of the economy has demonstrated the relevance of the issue of ensuring innovative development, which is the basis for the economic growth of the domestic economy. At the same time, it is necessary to take into account the nature of the influence of institutional mechanisms on the regulation of the economy and the connection of innovation policy with other components of state regulation of socio-economic processes. Therefore, the purpose of the article is to highlight the general economic prerequisites for state regulation of innovation processes and, on their basis, formulate the functions, institutional mechanisms, and technologies of state influence on innovative development.

The need for state regulation of innovation processes is primarily due to their growing importance for the economy and society as a whole. Today, economic growth is based on a combination of extensive and intensive factors. Under current conditions, the possibilities for increasing the output of products and services through greater employment of the working population and the involvement of new natural resources in the economic cycle are becoming increasingly limited. Intensive factors are becoming increasingly important for economic dynamics. In turn, the growth of personnel qualifications and labor productivity, the characteristics

of materials and equipment, their return is determined by the achievements of science and technology, empirical improvements and the degree of their use in the economy, that is, the spread of innovations. Thus, a significant factor in the national significance of innovations is their decisive influence on macroeconomic indicators.

Keywords: *innovative development, innovation policy, state regulation, regulatory functions of state bodies, economy.*

Problem setting. Innovative economic development is an extremely complex process. On the one hand, it is a result of a favorable market environment for commercial and creative activities. On the other hand, it is a powerful factor of progressive change, indispensable in modern globalization conditions. Innovative development is caused by the impact of scientific and technical achievements on the development of the economy and society; the renewal of fixed assets, the level of technical equipment of enterprises, and the level of competitiveness of domestic products and the economy largely depend on the results of scientific and technical and innovative activities. Ensuring innovative development of the economy requires clear regulatory influences. In this context, it is relevant to determine through what mechanism such influence can be exercised. The state should play a leading role in this, despite the increasing influence of market conditions. Therefore, the issue of the essence and structure of the mechanism of state regulation of innovative development of the economy is of high theoretical, methodological and practical importance.

Recent research and publication analysis. The research and results of this publication are based on materials by such authors as: V. S. Boychenko, N. I. Verkhoglyadova, B. V. Vyshnivska, S. V. Kotelban, T. V. Livoshko, Yu. M. Lopatynskyi, S. A. Morozova, V. M. Olesnyuk, A. A. Peresada, N. M. Syrotynska, V. P. Solovyov, A. T. Tofanchuk, etc. It is worth noting that the issues of state regulation of the economy and ensuring its economic development are a relevant subject of research by Ukrainian authors, which, at the same time, requires modernization, in particular, in the issues of the structure of the mechanism of state regulation of the innovative development of the economy.

The purpose of the article. The purpose of the article is to develop the theoretical foundations of the study of state regulation of the innovative development of the economy. The objectives in the context of achieving the formulated goal are set:

- to reveal the conceptual apparatus of the study of state regulation of the innovative development of the economy, in particular to determine the content of innovations and their types;
- to determine the structure of the mechanism of state regulation of the innovative development of the economy with the disclosure of its purpose, goals, objectives and instruments.

Article main body. Recently, the relevance and significance of research devoted to the study of mechanisms of state regulation of innovative activity has increased. This may be due to the increased science intensity of economic progress. Expanded reproduction has become unthinkable without the presence of the scientific factor, and economic development has acquired an innovative character. One of the central problems is the stimulation of innovative activity, rational financing of scientific, technical and innovative programs. Consequently, a financial and economic mechanism is needed as a set of conditions that promote the revival and stimulation of innovative activity in our country. The objective is to carry out a scientific assessment of the reasons for the suppression of innovative aspirations of economic entities in Ukraine and to develop the foundations of a comprehensive financial and economic mechanism for ensuring effective scientific and technological progress, a mechanism for innovative activity of enterprises. The goal is to develop proposals for the development of a strategy for the development and state support of innovative entrepreneurship.

The main contradictions in the innovation sphere:

there are no tangible prerequisites for the emergence of interest from enterprises in scientific and technical research, inventions, and innovations; there are no systems for the economically advantageous accumulation of resources for entrepreneurial projects of an innovative nature; interest in investing in the renewal of production has almost been lost;

underestimation of the decisive role of the state and regional authorities in the formation of an innovative market infrastructure;

shortage of highly qualified specialists.

Formation of an innovative type of economic development:

the emergence of a clearly expressed function of science for the continuous intensification of processes of social and individual production;

the transformation of new technologies into one of the decisive factors in the competitive

strategies of firms counting on long-term success in domestic and foreign markets;

high fundamentality of the most significant technological innovations based on economic research;

increased flexibility of organizational and economic forms that combine the efforts of researchers, developers, and marketers, capable of producing high commercial and socio-economic effects;

the presence of a resource and financial environment with high innovative readiness;

significant institutional influence (state, regional, etc.) on the sphere of science and technological development, on the mechanism of scientific and technological innovations [2].

The goal of innovation policy is to create economic, legal and organizational conditions that ensure the growth of competitiveness of domestic products, the effective use of scientific and technical research results, and the solution of other problems of social and economic development. Activation of the innovation process and increasing its efficiency, including the widespread adoption of high technology achievements and immediate renewal of the active part of fixed production assets, is the main way for the economy to emerge from the crisis. The formation and implementation of innovation policy is based on the creation of such a management, economic and financial system that will allow the intellectual, scientific, technical and industrial potential of the country to be used with high efficiency in the real sector on a new institutional and legal basis.

Mechanisms of state regulation of innovation activities are the following:

legislative regulation of innovation activities;

development of a long-term innovation strategy based on long-term and medium-term socio-technical, innovation and environmental forecasts, taking into account upcoming changes in the domestic and foreign market conditions;

selection of innovation priorities. The resources that the state and the private sector can allocate for the innovative transformation of the economy are limited. Therefore, it is important not to disperse them, but to concentrate them on a relatively narrow range of advanced technologies that give the greatest effect. This is solved by defining priority areas for the development of science, technology and critical technologies at the federal level [5].

Basic principles for priorities setting:

a) technological needs of the Ukrainian economy (saturation of the consumer market

with competitive goods and services; development of the socio-cultural sphere, health care and medicine; development of high-tech products, advanced development of mechanical engineering; resource provision and resource conservation, development of new generations of materials, energy-saving and environmentally friendly technologies; development of modern infrastructure, new generations of transport and communications; strengthening the country's defense capability);

b) competitiveness of products (technologies), level of novelty, patent protection;

c) efficiency – the rate of profit or other useful effect that can be obtained from the implementation of critical technologies; the expected payback period for investments in innovation;

d) reality – provision of scientific background, human resources, production capacities [6, c.117].

Formation of a system of innovative projects and programs is the main form of implementation of the selected priorities of state innovation policy. A set of interrelated projects forms a federal target innovation program.

State support for strategic directions of innovative development. It is necessary to create economic, informational, organizational, personnel conditions for the implementation of priorities. This is ensured by a combination of various methods and instruments of direct and indirect state support for the implementation of innovation policy.

a) direct budget financing of innovative programs and projects in the fields of science, education, healthcare, ecology, and defense; financing of the development and initial distribution of new generations of equipment and technology that are of key importance for raising the technical level and competitiveness of the economy. This is reflected in the lists of federal target programs and targeted investment projects of an innovative nature.;

b) indirect government support in the form of tax and customs benefits, tax and investment credits;

c) the state should provide special support to small innovative businesses that take on the risk of technological breakthroughs and provide employment for scientific, technical and engineering personnel;

d) the state takes responsibility for the protection of intellectual property used in the process of innovation or created in this process;

e) the state provides assistance in providing information support for innovation activities by creating, with budgetary support, information funds and databases on completed R&D, inventions and patents, innovations, technological needs of enterprises, innovation funds, venture funds;

f) the state must provide personnel support for innovation activities by training innovation managers, financing advanced training in this area, creating educational and consulting innovation centers, organizing foreign internships in this area of activity, organizing the publication of educational and reference literature on innovation activities;

i) state support is provided through the formation of innovative institutions – corporations, consortiums, holdings, financial and industrial groups, transnational companies that accumulate and invest in the development and dissemination of new generations of technology and equipment, coordinate the activities of participants in the innovation process, and conduct targeted marketing on foreign and domestic markets.

Economic and financial aspects of innovation policy.

The most important task of reforming the Ukrainian economy in general and the innovation system in particular is the development and use of a rational financial mechanism:

- creating conditions for increasing the innovative activity of all potential investors;
- development of adequate mechanisms to support payment demand for R&D and innovation;
- attracting financial capital to the innovation sphere and its targeted use;
- ensuring conditions of security, profitability and return on investment in R&D and technological development [3].

Ways to overcome the crisis of investment financial resources.

The basis of the investment and innovation crisis in Ukraine is the deficit of financial investment resources, the lack of investment capital and weak investment activity in the sphere of entrepreneurial activity. These problems of the innovation process can be eliminated through targeted government policy and government influence on economic activity by creating an appropriate economic environment [7].

A sharp decline in the volume of production of means of production and a reduction in the scope of applied research and development, as well as other forms of innovative activity, allows us to speak of a relative shortage of innovative material and intellectual resources.

This shortage is caused by a deep decline in demand, huge underutilization of production capacities and research organizations, that is, a decline in the degree of utilization of diverse production and scientific and technical potential. An expansion of the corresponding demand would make it possible to significantly increase the level of utilization of this potential in a relatively short period of time. This requires:

- financing the training of scientific and engineering personnel and improving their qualifications;
- support for special innovative programs in the field of production and business;
- the formation of a system of state orders for R&D, which ensures a stable demand for many innovations;
- tax, depreciation and other policies that stimulate innovation;
- funding of fundamental and applied science;
- creation of an infrastructure for innovation activities at the federal, regional and local levels, in the sectoral context and at the enterprise level;
- organizational activities to unite the efforts of science, production and business in innovative activities;
- protection of the strategic innovative interests of the nation in the sphere of foreign policy [4].

Stimulating venture entrepreneurship.

Venture companies are small-sized enterprises engaged in the development of scientific ideas and their transformation into new technologies and products. The main area of distribution of risky business is fast-growing science-intensive industries (electronics, information technology, creation of new materials, bioengineering, telecommunications). The importance of venture firms is determined by the fact that they stimulate competition, pushing enterprises to innovative activity. The problem is the lack of capital, ready to promote the development of venture entrepreneurship and the lack of managers, capable of effectively using these capitals, organizing the production of science-intensive products. Venture capital should be exempted from property taxes, deducted from the taxable amount of assets of enterprises, banks, investment funds, insurance and financial companies. The entire cycle of risk capital movement should be exempt from VAT. The profit of venture firms should be taxed at a preferential rate [8, c.67].

Recommendations for strengthening the innovation focus and stimulating role of tax policy.

When improving the tax mechanism, it is necessary to take into account the low sensitivity of enterprises to minor tax benefits (for example, a reduction of 10-15%). Strong economic incentives are needed.

The current tax and customs policies do not stimulate the export of high-tech products from domestic manufacturers and discourage foreign investors who wish to invest in the technological upgrading of Ukrainian and joint ventures.

There are no clear priorities in tax policy: the system of tax incentives applies equally to all sectors of the national economy and does not give priority to promising science-intensive areas.

The rights of regional government bodies to conduct independent tax policies aimed at stimulating enterprises to update production, manufactured products and provided services are insufficient.

Ukrainian enterprises need a special approach to building tax mechanisms and tax policy. Low tax rates have a great stimulating effect on investment activity in the private sector and a much smaller one in the public sector. Under the current mechanism, enterprises feel insufficient interest in using profits for capital investment purposes [1, c.128].

Offers:

The greatest stimulating effect can be achieved by a comprehensive approach to the formation of tax policy in relation to innovative enterprises, including complete exemption from all types of taxes and payments during their formation period. At the same time, depending on the enterprise's area of activity, strong benefits for individual taxes can be decisive in the formation of innovative motivations.

On value added taxes:

completely exempt specialized enterprises and organizations operating in the field of R&D, production, development, implementation and servicing of new goods and services, as well as institutions and organizations of innovation infrastructure from paying taxes. This benefit may be applied provided that the volume of the specified products, works, services is, for example, not less than 75% of the total volume;

establish differentiated VAT rates from 0 to 18% depending on the predicted result of

development in production and consumption of new goods and services. For this purpose, a special list of these goods, works and services could be used with an indication of specific tax rates;

introduce standards for repaying expenses for the acquisition of new equipment, materials, components for organizing the production of new goods through tax payments within 1-2 years.

On income tax:

it is advisable to completely abandon the collection of income tax on enterprises modernizing production, purchasing new domestic and imported equipment, raw materials, materials, and components;

exempt from paying income tax enterprises in the defense industry that are being converted to the production of civilian high-tech products;

for enterprises that direct part of their profits to the development of innovative infrastructure, to the implementation of innovative programs, or to regional innovative funds, it is advisable to exempt the corresponding part of the profits from taxation.

It is desirable to grant regional government bodies the right to independently establish additional tax benefits for enterprises for all types of taxes within the limits of the amounts allocated to the relevant budgets.

As for taxes on personal income, it is necessary to determine the list of incomes that are not subject to taxation: amounts of remuneration for the development and implementation of inventions, discoveries, utility models, and rationalization proposals.

Establish preferential customs tariffs, and in some cases exemption from customs duties on goods, the lists of which must be adjusted annually by the Government. It would be advisable to include in this list new equipment, goods, raw materials, materials, components necessary for upgrading production, producing new goods and services.

Completely exempt joint ventures in the innovation sphere from all types of taxes during the first 5 years of operation.

In the context of the difficult situation of science and research activities, it is important to provide sufficient tax benefits to the relevant individuals, in particular, for wages and other income from scientific, research, and scientific management activities.

State regulation instruments of international scientific and technical cooperation:

- selection and rationalization of priority areas of cooperation;
- financing of personnel exchanges;
- connection to global scientific and technical information systems;
- inclusion in the global technological space by introducing international standards and norms in the country;
- provision of legal, intermediary, consulting and other services to cooperation participants;
- support for international contacts of small and medium-sized innovative businesses;
- government stimulation of foreign investment in the innovation sphere;
- foreign patenting at government expense;
- purchase of foreign scientific and technical literature;
- involvement of foreign experts in the evaluation of large-scale programs and projects.

References:

1. Boichenko, V.S. (2011), "The essence of regional innovation development", *Visnyk Sumskoho derzhavnoho universytetu. Ser.: Ekonomika*, no. 4, pp. 127-132.
2. Verkhohliadova, N.I. and Radamovska, I.V. (2016), "Ensuring the competitiveness of socio-economic systems on the basis of the information-knowledge paradigm of innovation development", *Skhidna Yevropa: ekonomika, biznes ta upravlinnia: elektronne naukove fakhove vydannia*, Issue 3, available at: http://easterneurope-bm.in.ua/journal/3_2016/10.pdf (access date August 08, 2018).
3. Vyshnivska, B.V. (2016), "Innovative development of Ukraine", *Naukovyi visnyk NUBiP Ukrainy. Serii: Ekonomika, ahraryni menedzhment, biznes*, Iss. 244, pp. 183-191.
4. Avihdor, H., Arkhanhelskyi, V., Boito, E. et al. (2015), *Innovatsiina polityka: yevropeyskyi dosvid ta rekomendatsii dlia Ukrainy [Innovation policy: European experience and recommendations for Ukraine]*, Feniks, Kyiv, Ukraine, 76 p.
5. Karliuk, D.O. (2006), "Improved management of innovative development of enterprises in the flax processing industry", *Thesis abstract of Cand. Sc. (Econ.)*, 08.06.01, Kyiv, Ukraine, 23 p.
6. Livoshko, T.V. and Dvornichenko, D.S. (2014), "Innovation and innovation policy of the enterprise: principles of formation and mechanisms of realization", *Ekonomichnyi*

visnyk Zaporizkoi derzhavnoi inzhenernoi akademii, no. 6, pp. 116-124.

7. Olesniuk, V.M. "Innovative development as a component of economic security of the state", available at: irbis-nbuv.gov.ua/cgi-bin/irbis_nbuv/cgiirbis_64.exe?...2.. (access date August 09, 2018).
8. Tofanchuk, A.T. and Kolesnyk, M.V. (2010), "Socio-economic features of the innovation process", Problemy pidvyshchennia efektyvnosti infrastruktury: zb. nauk. prats (ekonomichni nauky), NAU, Kyiv, Ukraine, Iss. 26, pp. 61-68.