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ON THE IMPROVEMENT OF INSTITUTIONAL FRAMEWORK FOR THE GOVERNMENT REGULATION OF THE INDUSTRIAL PRODUCTION MODERNIZATION

The ways to improve the institutional framework for the government regulation of the industrial production modernization are identified in the context of structural transformations.
Key words: modernization, industrial production, government regulation, institutional framework.

Problem statement. A study of the improvement of the institutional framework for the government regulation of the industrial production modernization in terms of structural transformations becomes topical and timely. In their theses and thoughts the scientists aspire to solve this problem as follows:

- modernization of the industrial sector which makes the basis for economic growth is to be achieved with the aid of «the viable instrument of economic reforms and the mechanism that can assure post-crisis renovation on a solid basis» as it is stated in the Annual State of the Nation Address made by the President of Ukraine to the Verkhovna Rada of Ukraine «On Internal and External Affairs in Ukraine in 2013» [1, p. 41];

- however, «the possibilities of inertial growth in Ukraine have been basically exhausted which is confirmed by a decline of external demand and increase of the import of goods. Such situation is due to deep structural disproportions – a considerable share of production is technically and technologically backward and is characterized by a high degree of fixed assets depreciation, low level of capacity utilization, high consumption of energy and resources, and absence or low implementation of innovations. At that, a considerable part of research and technical potential is not used» as the State Program of Economy Development Acceleration for 2013-2014 approved by Resolution of the Cabinet of Ministers of Ukraine of 27.02.2013, No.187 [2];

- according to the expert estimates, «...the share of Ukraine in the high-tech product market equals about 0.1%. Research intensity of industrial production in Ukraine does not exceed now 1% which is in tens of times less that though by the end of the 1990s it amounted to about 3% » [3, p. 17];

- the total volume of funding allocated to scientific and research and technical activity in Ukraine as calculated per one researcher – states a well-known Ukrainian scientist and politician is «about 6 times less than in the USA and Germany, 5 times less than in Japan, and 1.3 times less than in Russia. Funding of science (% of GDP) during 2000-2011 was reduced from 1.16% to 0.73%. Insufficient funding of scientific and research and technical activity out of the state budget makes it impossible to accomplish the state special-purpose programs» [4];

- «absence of demand for innovation products causes a corresponding absence of demand for new knowledge, and it deters a growth of labour cost and the appropriate expansion of the domestic consumer demand and, additionally, reduces the incentives for production » [5, p. 9];

- «...now in Ukraine there is no viable mechanism that ensures implementation of the completed research developments and technologies, that are funded from the budget, in the industrial production» [3, p. 18].

So, the structural modernization and transformation of the industry, higher competitiveness of domestic products on the markets and provision of sustainable economic growth will necessitate considerably better relationship among the innovation process elements on the basis of the institutional framework of the government regulation of the real sector of the economy.

Analysis of latest studies and publications. The problems of innovative development of the industrial production were considered by such scientists as O. Amosha, I. Buleyev, I Vinchenko, V. Vyshnevskyi, A. Voronkova, V. Geiets, T. Grynko, V. Dementiev, V. Zaruba, A. Zemliankin, N. Illyashenko, A. Kabanov, Yu. Kindzerskyi, O. Lapko, L. Melnik, P. Pererva, L. Rassuzhday, I. Reshetnikova, L. Starychenko, D. Cherevatskyi, N. Chukhray, L. Fedulova, N. Shchepkina et al. Studies of prominent scientists make a scientific basis for developing proposals aimed at improvement of the institutional framework for the government regulation of the industry modernization process, which necessity is analysed in this paper.

Scientists of a number of scientific schools pay considerable attention to developing proposals aimed at improvement of the legal, organizational and economic, and social support of the innovative development of the industry. Measures were proposed to conduct technical and technological modernization, transformation, reformation and restructuring of the industrial complex; improvement of financial and staffing support of the innovative development of the industry; economic mechanisms to stimulate innovation activity; formation of the innovation infrastructure and industrial structures on the cluster approach basis, etc.

Highlighting parts of the general problem that have not been solved earlier. Consolidation of various scientific approaches and results of the conducted study revealed that at the present stage it is required to determine the institutional prerequisites for modernization of industrial production.

Objective of the paper. The main objective of this paper is to systematize the institutional support components of the innovative development of the industry and determine the directions for improvement of the institutional framework of industrial production modernization in terms of structural transformations.

Presentation of the basic material. A priority task of the modernization of the national innovation system is defined as «creation of favourable institutional and economic conditions for the accelerated development of innovations and modern science-intensive production enterprises ...» [1, p. 173].

The State Program of Economy Development Acceleration for 2013-2014 confirmed that « the necessity of modernization of production and structural reorganization of the economy requires to create conditions for accumulation of investments and strengthening of the investment potential of the economy» [2].

The tasks of the state economic policy include: accomplishment of investment and innovation projects; provision of a comprehensive state support to the developing priority high-tech industries; development and implementation of the advanced technologies aimed at the development of domestic production and innovation economy [2], while «...assurance of stable trends for the development of domestic external sector will necessitate attraction of innovation technologies to Ukraine» [6, c. 64], where «...If the institutional innovation was successful, the institution positively adapts itself to the institutional and cultural environment during a relatively short period...» [7, p. 13]. «Formation of the innovation economy implies creation of such institutional conditions where innovations become the main source of reaching the maximum individual income of an owner» [8, p. 19].

On the basis of the analysis and consolidation of the existing scientific schools approaches the institutional mechanism components of the state control of the innovative development of an industrial complex were systematized as follows:

- institutional and legal mechanism – in the normative and legal support of the innovative development;

- organizational and economic mechanism – the private-public partnership mechanism for technical and technological modernization, transformation, reformation and restructuring of the industrial complex; financial, staffing and marketing support of the innovative development of the industry; economic mechanism stimulating innovative activities; formation of the innovative infrastructure and industrial enterprises on the cluster approach basis.

The content of the institutional and legal mechanism of state control of the industrial sector innovative development in the country, which means the legal and normative and legal support of the industry modernization, has been analysed on the basis of consolidation of the ideas of scientists:

-improvement and development of the legislation that regulates innovative activity [9, p. 227];

- «intensification of the legislative work on legal support of innovative activities and protection of intellectual property» [10, p. 55];

- establishment of the National Council on Science and Technology as a single state expert and prognostic body in charge of assessing the prospects of scientific and technological development, definition of its priorities, formation of the appropriate innovative and technological policy and coordination of appropriate activity of the state administrative bodies [11, p. 37];

- formation of a single state bank of scientific and technical developments and ideas within the National Council on Science and Technology [11, p. 37];

- establishment of a structure for the system of public management of the innovation sphere according to the functional principle, and making its organizational structure legal [12];

- establishment a consultative body at the President of Ukraine which is to facilitate and accomplish a single state innovation policy [12].

The authors are of opinion that the normative and legal support of the coal-mining industry modernization is to be based on a determination of a set of norms and rules in the sphere of the innovative activity of enterprises

that are regulated by legal, normative and legal, departmental and industry documents.

As the authors state, the main obstacle for promotion of innovative processes and shifting of the domestic economy to the innovative development model and efficient accomplishment of the strategy in terms of modernization transformations is an insufficient activity of the organizational and economic mechanism that governs the scientific and technical and innovative development. It is proposed to use a functional and purpose-oriented business management model in order to develop the organizational and economic mechanism that can control technical and technological development of an enterprise. Such model, in its turn, includes:

a) a functional subsystem – planning, organization, motivation, control, regulation, analysis and records;

b) a support subsystem – competitive technologies (ability of an enterprise to implement technological innovations), advanced equipment, spare production areas and capacities and normative, information and financial support;

c) goals of an enterprise – manufacturing of high-quality and competitive products, efficient use of resources, profit maximization, promotion of the innovative activity at the enterprise and upgrading of the scientific and technical level of production;

d) organizational and economic levers – advanced organizational structure of management, stimulation (motivation) of employees, depreciation system and selection of the taxation system [13, p. 118].

Organizational and economic mechanism of the innovative activity is defined as «interrelated complex of economic relations, principles, methods and forms of the development, implementation in the industry and commercialization of novelties» [14, p. 91].

As it is mentioned in [15, p. 8], the organizational and economic mechanism of the innovative activity should perform the following functions: to ensure competitiveness and cooperation of functions when using the innovation potential for overcoming the economic crisis and achieving economic growth; assurance of balanced and in-plant proportionality between the structural branches of production on the innovative basis; adherence by entrepreneurs, managers, employees and collectives to firm stimuli when developing leading edge technologies, forms of industrial engineering, marketing services, fulfilment of creative potential of all participants of the process; creation of equal economic conditions to achieve social and economic potentials of each company and entity of various ownership and engaged in business who are eager to organize the efficient innovation process.

On the basis of the analysis of the innovative development study it is possible to assert that formation and efficient functioning of the organizational and economic mechanism used for managing innovative development of an industrial enterprise should be based on the following principles: consistency; involvement of all chains (interrelated subsystems) of the managerial cycle of the enterprise in innovation processes; integrity and adherence to a single managerial system; formation of long-term concepts of the innovative policy of the enterprise; standards and implementation of adequate economic sanc-

tions to those who violate them and do not fulfil the established requirements; strict responsibility of the enterprise services for achievement of the final result of innovative development and provision of a complex responsibility of all employees, divisions and services of the enterprise for the organization of the entire production process in accordance with the functions entrusted to them, enhancement of commitment to proactive and exact execution of their functions; adequate and prompt presentation of how the mechanism is functioning and consideration of the maximum impact factors that form quantitative values of intermediary and final economic figures illustrating the innovative development of the enterprise.

Use of venture financing of the innovative activity is one of the ways to modernize industrial production through setting up venture funds. The sources of investment to the coal mining industry and the instruments that accelerate the innovative development can be leasing because of its multifaceted forms which an enterprise can select trying to find the most favourable option to finance and implement technical or technological innovations.

The Action Plan aimed at accomplishment of the Concept of Reformation of the System of Funding and Management of Scientific and Scientific and Technical Activity Until 2017 provides for a qualitatively new approach to funding the national science. Accomplishment of the Plan is aimed at higher efficiency of use of the state funds allocated to the sphere of scientific and scientific and technical activity and to attraction of private business funds in the industry. The Action Plan envisages provision of competitive state grants to support applied research, scientific and technical developments, creation of high-tech products as well as establishment of the Technology Development Fund that is to distribute grants on a competitive basis. Besides, it is planned that the state-financed institutions (scientific and higher educational institutions) will participate in establishment of business enterprises. It is envisaged that investment partners will participate on a shared basis. The founders or co-founders of such business companies will have a possibility to obtain profits from disposing their shares in authorized capitals of business enterprises as well as the dividends. These funds can be directed to legal protection of the intellectual activity, payment of awards to authors and support of business activity of enterprises [20].

Stuffing support of the innovative development of the industry is to be accomplished along the following directions: renovation of the material and technical base of the sectoral science, training of high-qualification researchers in accordance with the changes in the national legal base concerning channelling a portion of taxed profits to renovation of the material and technical facilities of sectoral, increase of the state orders for postgraduate studentship and doctorate in technical sciences as well as permanent training of personnel in searching new ideas, performance of studies and rapid implementation of new technologies.

It is possible to include, in the list of economic mechanisms aimed at activation of investment processes, the industrial production restructuring of credit debts to budgets and off-budget funds by way of extending redemption periods, writing off penalties, reduction of interest on restructuring and

partial or complete compensation of the interest on bank loans from the state budget.

By a proposal of Mr. V. Semynozhenko, Academician, National Academy of Sciences of Ukraine, it is «...planned to exempt from payment of VAT the transactions connected with conducting research and performance of scientific and technical developments at the expense of grants provided by international organizations, including import in Ukraine of the scientific equipment provided by them. It is planned to settle a problem of exempting the scientific research and design and construction works made in accordance with business contracts with domestic customers from payment of VAT... To make these plans real, it is necessary to amend the Tax Code of Ukraine» [4].

Thus, the organizational and economic mechanism, that manages innovative development of the industrial production, should be viewed as a complex system which efficient functioning depends on interrelation and coordination of all subsystems and processes aimed at implementation of advanced equipment and technologies, and provides for funding, material support and stuffing in the field of production, job arrangement, marketing servicing and is aimed at reduction of production costs and positive acceleration as compared to its competitors.

Efficient system of incentives aimed to innovate the enterprises is an important element of the internal organizational and economic mechanism. This system includes the subsystems that motivate employees and collectives: system of wages, bonuses and social welfare.

Conclusions and proposals. Formation of the institutional mechanism based upon balanced and continuous system of use and reproduction of resources that provides for the coordinated movement in accordance with the strategic directions of the innovative development is the main principle of modernization of the domestic industrial production.

The system of innovative activity of an industrial complex in terms of modernization tasks should include such elements: normative and legal support of the innovative development of the industry, substantiation of priority directions, formation and accomplishment of innovative projects, prediction and strategic planning of research and technological development, establishment of industrial enterprises and modern innovation infrastructure. All these elements should improve economic and financial stimulation of the innovation activity of the industry, enhance priority measures to modernize industrial production and strengthen scientific and normative support of the national innovation sphere.

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ЩОДО ВДОСКОНАЛЕННЯ ІНСТИТУЦІЙНИХ ЗАСАД ДЕРЖАВНОГО РЕГУЛЮВАННЯ МОДЕРНІЗАЦІЇ ПРОМИСЛОВОГО ВИРОБНИЦТВА

Резюме
Визначено напрями вдосконалення інституційних засад державного регулювання модернізації промислового виробництва у контексті структурних трансформацій.
Ключові слова: модернізація, промислове виробництво, державне регулювання, інституційні засади.

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СОВЕРШЕНСТВОВАНИЕ ИНСТИТУЦИОНАЛЬНЫХ ОСНОВ ГОСУДАРСТВЕННОГО РЕГУЛИРОВАНИЯ МОДЕРНИЗАЦИИ ПРОМЫШЛЕННОГО ПРОИЗВОДСТВА

Резюме
Определены направления совершенствования институциональных основ государственного регулирования модернизации промышленного производства в контексте структурных преобразований.
Ключевые слова: модернизация, промышленное производство, государственное регулирование, институциональные основы.