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# PRINCIPAL MOMENTS OF FUNCTIONING OF INNOVATION AND INVESTMENT ECONOMY



інноваційно-інвестиційної економіки.

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Захарченко В.І. Ключові моменти функціонування

В статті показано формування нової сфери економічних відносин, яка базується на розвитку інтелектуальних ресурсів, інформації, знаннях та комп'ютерних технологіях, яку прийнято визначати як інноваційно-інвестиційну економіку. Одночасно з перевагами формування такої системи виділено окремі труднощі її становлення в сучасних умовах.

Ключові слова: економічні відносини, інтелектуальні ресурси, інновації, інвестиції, інформація

Захарченко В.И. Ключевые моменты функционирования инновационно-инвестиционной экономики.

В статье показано формирование новой сферы экономических отношений, основаной на развитии интеллектуальных ресурсов, информации, знаниях и компьютерных технологиях, которую принято определять как инновационно-инвестиционную экономику. Одновременно с преимуществами формирования такой системы выделены отдельные трудности ее становления в современных условиях.

Ключевые слова: экономические отношения, интеллектуальные ресурсы, инновации, инвестиции, информация

Zakharchenko V.I. Principal moments of functioning of innovation and investment economy.

The article shows the formation of a new sphere of economic relations, based on the development of intellectual resources, information, knowledge and computer technology, which is usually defined as the innovation and investment economy. Along with the advantages of the formation of such a system is separated into difficulties of its formation in modern conditions.

*Keywords:* economic relations, intellectual resources, innovations, investments, information

he trajectory of modern society development focuses on the creation of interaction and purposeful development of all social life processes system. Today fundamental basis for the so-called "innovation and investment economy" creates; there are new mechanisms that require theoretical and methodological substantiation.

Current state of the economy is characterized by the following: development of fundamental and applied science, modernization of production base, the introduction and expansion of communication systems, the expansion of the patent system and economic growth due to the increase of the share of knowledge in the economy.

The transition to market relations implies a qualitative change of the mechanism of formation and implementation of state innovation and investment policy. It should contain elements associated with the creation of external and internal environment for the development of enterprises in scientific and technical. innovation; promote competition and restriction of monopolistic activity of large enterprises and companies, what is of particular relevance in the conditions of formation of market relations. The orientation of the control system for the solution of future problems of acceleration of social development requires a single scientific concept, which is based on the improvement of socio-economic efficiency of social production. The implementation is unity of the socio-economic, scientific-technical and innovative investment policy. Analyzing innovation and investment policy from this point of view, we can say that the results to assess the degree of achievement of socio-economic development goals of the society.

But this is only one aspect of innovation and investment, scientific-technical and socio-economic policy. Another aspect of this unity is that of innovation, science and technology have their own laws of development, defined by the inner logic of the knowledge of natural and social phenomena that affect socio-economic development goals of the society. The third aspect relates to the fact that the effective development of science it is necessary to create legal and economic conditions that will foster innovation and investment activity and the smooth introduction of achievements of science and technology in production. Innovative investment policy specifies the objectives and tasks of social and

economic policy, determines its helping the scientific and technical achievements, effective ways and organizational forms of its using.

In the modern economy new knowledge creates and free access to them offers. This feature is a major factor in the competitiveness of all economic agents. The economy is characterized by: an increase in the rate of innovation, shortening life cycles of products, the actualization of the role of learning throughout life, i.e. orientation continuous learning person, and consequently, enterprises and the whole economy are widely used investment in intangible assets. In connection with this new approach in economic theory arose that currently the economy includes not only industrial complex, but the whole mechanism for the establishment and functioning of a system of knowledge. Describing this situation, scholars have resorted to the following concepts: "investment and economy", "economy innovation knowledge", "knowledge economy", "information economy," "intellectual economy", "new economy", "innovative economy", "network economy", "digital economy", "the Internet economy", "knowledgeintensive economy", "weightless economy" and many others. After reviewing all these concepts, we will adhere to the opinion that this phenomenon fully characterizes one of the widest, which can be regarded as a distinct term – innovative-investment economy.

## Analysis of recent researches and publications

In the preparation of this material, the author relied on the works of the following scholars: Goncharov Yu. [2], Bubenko P. [1], Kotelnikov V. [5], Materov I. [6], Sidorova A. [8], Fedulova N. [9], Hvesik N. [10], Chemodurov A. [11] etc. Sidorova A. and Anisimova A. claim that "... for the implementation of the strategy of innovative development is necessary, first of all, the redistribution of capital investments in favour of the innovation sphere improving the efficiency of use of these resources, a concerted effort by civil society to build an effective high-tech complex for the resumption of the process of integration of knowledge" [8].

Materov I. characterizes an economy thus: "the new economy" may be regarded as a special phenomenon in economic life which reinforced some signs of the modern economy that were previously shown not so bright. You can talk about big changes "new economy" as in the real sector and in the "financial economy" [6].

Fedulova L. emphasizes: "... in today's economy there are new opportunities to overcome existing constraints in the form of innovation development scenario ..." [9].

In the early 2000s by professionals such as Galchinskiy A., Geets V., Kvasuk B., Chuhno A. and others have analyzed the transition to the innovation investment model of development of the national economy. There were prepared by the appropriate state program. Chemodurov A. concludes: "the main reason for the lack of significant progress in the

implementation of approved programs of modernization of national economy is to shift the financial problems of the provision of investment and innovative activity of the enterprise" [11].

The aim of this article is to identify the main reasons for the support and formation of innovative-investment economy in order to justify the preconditions of the transition to the innovation-investment model of development of the national economy.

### The main part

Innovation and investment, the economy is characterized by the fact that the successful development of the economy is achieved by accumulating a certain level of knowledge and on the basis of them is new ideas that can provide the country and individual enterprises a competitive advantage. From a methodological point of view we note that this trend is reflected in the emergence of new fields and disciplines in the economy, such as marketing ideas, innovation management in the enterprise, staff motivation on creative thinking, school leadership growth, etc. The basis of existence and development of the "new economy" are rightly called knowledge, which is expressed in innovation and basic research. The production is being driven by the acquisition of new knowledge.

One important consideration in addressing the issue of development and formation of innovative-investment economy is improving technology. What is the structure of the economy embedded computer technology and informatization of the society is not talking about the establishment of new economic relations.

Introduction to the economy of computer technology does not increase the performance of the entire system, this innovative investment the economy is reflected on the computerization of the population, and about other changes, therefore, not correct to say that only technology have led to changes in the system of economic relations.

The inclusion of computer and information technology in the economic structure gives the following results, which can be traced in the innovation-investment economy:

- is the rapid growth of electronic Commerce and the rapid spread of economic activity in the network;
- constant technological improvement, the high demand for products, quick change stages in the life cycle of goods lead to rapid aging of the product;
- the lack of strict measures to stop violations of the law in the area of patent and copyright;
- comprehensive global firms, the lack of territorial the boundaries of the "new economy";
- the high cost of innovation and fundamental research;
- the need for constant hardware upgrades;
- the speed of printing the information;
- the low marginal costs of production.

Hvesik M. and Sunduk A. emphasize: "the important role of management in the development of the national economy plays a monitoring system, the results and conclusions which form the basis for managerial decision-making" [10].

Innovation and investment the economy is developing in quite specific terms. Trends of globalization in the economy are very widespread, leading to free trade with the free movement of capital and the reduction of income tax. The possibility appears smooth movement of industries between countries to reduce the cost of labour and natural resources. Apply new forms of labour relations; work is carried out through a system of remote offices. The general information society orients to redistribute qualified and mental work. The rapid development of technologies leads to the emergence of technology with more features. Multinational companies in such circumstances, take an active part in global economic processes.

At the national level, it is proposed "to define innovation oriented priority sectors of the economy, to create conditions for enhancing its development. This will give the opportunity to shape the demand for research and development of the real economy and to overcome the mismatch between science and industry" [2].

Describing a new economy, Kotelnikov V. identified three driving forces of innovation and investment in the economy:

- 1) knowledge intellectual capital has become a strategic factor; a set of concepts that people use for decision making, critical for the company;
- 2) change continuous, rapid and comprehensive; create uncertainty and reduce predictability;
- 3) globalization of the scientific and technical development, technology, production, trade, Finance, communications and information led to the discovery of economies, global hyper competition and the business relationships [5].

Based on the above discussions, we believe we can make a prediction of economy development. The development of all economic sectors, including industry, is only possible through the orientation of the production of knowledge, as high-tech production allows you to save different types of resources. At the same time, computerization and the need for new knowledge to ensure the development of services. These circumstances are pushing society to rapid scientific and technological progress, which, in turn, becomes the basis for the development of all economic processes.

Let's highlight three main reasons in the maintenance and formation of innovative-investment economy:

- 1) reorientation of the economy from raw materials on innovation, research, information;
- 2) achieving full employment through the formation of a system of remote work;
  - 3) to achieve higher rates of economic growth.

Results development of innovative-investment economy can be: the development of all sectors of the

economy, the distribution of the flow of information, the development of science, social change.

Bubenko P. and Gusev V. claim that "... the main problem on the way to creating an innovative economy ... is the low entrepreneurial activity of national business" [1]. They provide the direction for its solution: conceptual, legal, financial and administrative support; infrastructure; special incentives for innovative businesses; knowledge [1].

For individual enterprises the conditions of functioning in the innovation-investment economy change. The following condition determines the activity of enterprises: globalization, shorter life cycles of products, instability, complexity of production systems and technologies, high competition rapid changes.

On the micro level Goncharov Yu. and Kasich A. offer: ensure effective interaction of science and industry, primarily in the area of information integration, actively engage in cooperation with other countries, subject to the provision of technology transfer [2].

As for Ukraine, it has the potential for the development of post-industrial information society and meets the needs of the population in knowledge. In this case, the economy becomes the main driving force for socio – economic development. In such circumstances, are actively innovative processes aimed at the production, acquisition, dissemination and practical application of knowledge.

So the country had developed economy, we need to meet the following conditions:

- 1) constant growth of knowledge, science and knowledge infrastructure;
  - open and free access to knowledge;
- 3) development of the competitiveness of the economy through increased knowledge and access to them;
- 4) reduction of the product life cycle due to the rapid development of technology;
- 5) increase the rate of development of innovative activity and innovation in production;
- 6) the significant role of education in economic and social life, continuing education;
- 7) globalization in all spheres of the economy and the society;
- 8) the income of a large part of investments in intangible assets of enterprises.

But at the same time, it should be said about the problems of innovation and investment in the economy, which are reflected in the insufficient development of the infrastructure of the knowledge economy.

Any basic research require significant financial investment and is currently funding research activities is not available. As for the study of aspects of knowledge in the economy, there is a theoretical and methodological substantiation of the processes of knowledge economy, in particular the exchange of knowledge in which knowledge does not disappear, as the goods under normal economic exchange, and double). It is also necessary to focus on creating

demand for knowledge that can be created and maintained by the state.

Now it is obvious that the ongoing reforms in the country most destroyed areas of innovation, investment, science and science-intensive industries. At the beginning of the reforms, it was assumed that the route to market relations will become a powerful factor of interest of enterprises and organizations to innovate. However, this did not happen, because all the incentives of innovation were destroyed, and businesses focused solely on the income derived from the turnover. Therefore innovation and investment policy of the state as such has not been formulated. Regression of the scientific and technical potential of the industry and other sectors of the economy started.

Analysis of scientific-technological and innovative activity in industrial enterprises directions of showed that the largest share of design and technological work, less – scientific-research work (SRW), and even less – scientific and technological services.

Thus, the technological and production structure of the economy of Ukraine is becoming less effective and more significantly behind developed countries. Required important changes in the whole system of relations between the reproductive interests, that is the first step to eliminate those processes that lead to the suppression of domestic expanded reproduction based on innovation.

According our opinion, the main areas of innovation and investment policy in industry must be:

- 1) increase in investments (decrease of investment activity is characteristic of all sources of financing of capital investments);
- 2) to ensure the reproduction of scientific developments and technologies for the stable presence of industry in the global market;
- 3) forming an effective mechanism of objective selection of the most effective projects based on the strategic benefits of excessive creativity, i.e. the manifestation of a clearly defined state line to support invention and innovation. The necessary investment in such infrastructure as technology parks and science parks, and various businesses and organizations innovative and entrepreneurial services, incubators for small and medium business, etc., it is Important to go on the optimal layout of public spending on science and investments, applying, where it is rational principles refund or parity in the cotton-and state share;
- 4) forming a flexible system of structural and financial forms of organization of scientific-technical and innovation policy. Regarding an important the search for new organizational and financial forms, which are able to be agents of scientific-technical and innovation policy at various levels of government;
- 5) the objective conditions for the development of the world community, internal and external factors require from each country, including Ukraine, a clear definition of its place and role on the world stage. For this condition it is necessary that the most important part of the state policy was the research and technology strategy, which provides a major structural

change in the economy. This is due to a number of factors, which include the following:

- modern world economy is highly competitive economy; our country has the potential to be an innovative leader in certain scientific and technical directions and gets the most from them;
- there is transition from inter-firm competition to powerful supranational companies, competition groups of leaders with other countries of the world. Thus, for integration into the world community needs relevant laws of global competition and specific action. In addition, the necessary material conditions, including strong industrial, scientific, financial, institutional, human, informational and infrastructural capacity;
- we should develop and implement large-scale national public scientific and technical strategy and structural policy, which is based on the introduction of the latest achievements, original ways and methods of solving future problems of global importance;
- we should increase the state's role in the selection of priority areas for research programs, the implementation of its long-term strategic planning;
- it is necessary to develop and implement a longterm intergovernmental programme on essential programs.

The most important models, the basic principles of formation and implementation of innovative investment strategies and structural policy (IIS and SP), in our opinion, can be grouped around the following fundamental approaches [12].

- 1) A new, intense focus IIS and SP. A new model of innovation and investment and structural transformation is redirecting to the intensive development of the economy on the basis of the most advanced ideas, scientific and technical achievements at the world level, the development of competitive knowledge and technologic types of products and industries that meet the requirements of the future. As international experience shows, the guarantee of socio-economic prosperity, country's the competitiveness and efficiency of the industry in the long term can be active investment policy with the development of science-intensive industries and the development of flawless quality products, high technology, etc.
- 2) National IIS and SP are rod prosperity of the country. Development and private equity, empowerment, entrepreneurship, increase the weight of the state policy in this aspect. The diversity of forms of ownership and organizational-legal forms of management in the conditions of development of market relations create a favourable basis for the innovative activity of the various links that improve the efficiency and competitiveness of different types. Objectively, it becomes necessary skilled coordination initiative by the state that provides the necessary priorities in addressing socio-economic and other tasks.
- 3) Radical structural transformation of industry on the basis of the latest scientific and technical

achievements. The art of structural policy should be to multilevel promotion of effective structural change in its broadest aspect, aimed at ensuring high competitiveness of the economy.

Our view is the primary global structural changes should be implemented in the following areas:

- strengthening the material-technical base based on the life cycle of major sectors: industry (engineering), computer science;
- expansion of production of critical machinery, equipment, energy, advanced materials and raw materials;
- increased production of non-food consumer goods;
- increase the scientific information and innovative potential and investment;
- increase of export and import capabilities;
- expansion of infrastructure and IIS and SP innovation market;
- the creation of human and educational potential.

A prerequisite for the competitiveness of the country is the dynamism, flexibility and adaptability IIS and SP. This can be facilitated by the introduction of the principle of innovation strategic projects at all stages, covering the stages of research, forecasting, designing and managing the implementation of tasks. In the initial stages of strategy formation multivariance will allow for a more representative competitive selection of the best projects, and the implementation stage more fully appreciate the benefits of the options and make possible changes in strategic direction, to clarify goals and outcomes, a timely response to the situation that is emerging.

- 4) The task of problem-subject principle of construction IIS and SP using a slim system strategic long-term target programs. The central object in the target programs of scientific and technical progress and structural changes must be not the industry or the region in general, and the specific problem and are achieving as a result of this higher level of efficiency and competitiveness.
- 5) Using scorecards at the time of study and assessment IIC and SP. They should objectively and comprehensively characterize the source (base) and the final level of scientific-technological and socioeconomic development of the country, compared to the same criteria, designtime both within the country and abroad or alternative design options for a prospective period. Science-based system of criteria and indicators should be adopted.

The most common indicators that are recommended for studies of projects, evaluation of performance of public IIS and SP:

- in the world after the implementation of this program:
- volume of production or the development of new products, technologies and share in world total;
- sales innovations in the external market and the share of its sales;
- net profit from the sale of innovations in the external market;

- the competitiveness of innovations in the external market (matching sales price, quality, reliability, durability, ease of consumption, maintenance, etc.) in comparison with the best foreign analogues;
- the indicators characterizing the efficiency of the implementation the state target program:
- total volume of investments for implementation of the program;
- average annual volume of introduction of innovations (number, proportion, etc.);
- the average annual savings from reduced production costs for the implementation of the program;
- average annual savings at the consumer during use innovations;
- the volume of capital investments from the consumer;
- return on capital investment, spending on the implementation of the program;
- return on capital investment from the consumer;
- saving the most important material resources;
- increase productivity of staff and solutions commitments to social problems during the implementation of innovations (saving of labour, the creation of new jobs, improvement of working conditions, etc.);
- amount of actual revenues to the state budget (annual average) from the implementation of this program;
- amount of budget funds spent on the implementation of this program;
- profitability of budgetary allocations on the implementation of the program;
- parameters that determine the program's impact on the environmental situation (regarding the pollution of air and water);
- indicators characterizing the economic and political independence of the country.

Additional parameters characterize, for example, changing scientific and technological level of products and production, compliance with international requirements of standardization and certification, etc.

- 6) Organic combination of indirect methods of market and state regulation of innovative activity. A new model for the formation and implementation of IIS and SP is advisable to base on the formula of regulation and control, covers in the organic unity:
- establishing government priority national objectives using both broad democratic examinations of decisions;
- state prediction of the global parameters of the industry of the country;
- flexible mechanisms of indirect regulation system using market-based instruments and incentives.

Governance and regulation is not only the establishment of certain tasks (state, etc.) or the use of certain (strict or liberal) restrictions. Government regulation is, first and foremost, the choice of objectives, priorities and General policy directions and goals of effective scientific-technological and socio-economic development. This is the realization

of complex of measures on organizational and regulatory and government financial and resource support of innovative activity of economic entities.

7) The creation of a new generation of scientific production and management systems that provide seamless, flexible and adaptive to act in the mode of the innovation pipeline. His work should include a synchronous relationship, changeability and effective self repairing elements of organizational structure vertically and horizontally.

Along with the creation of new systems should be implemented by modification of existing organizational and operational structures and management methods IIS by lifting the intermediate links, the decentralization of management, diversification of operations, the empowerment of staff, the introduction of advanced information technologies.

8) Democratization of the formation and reorganization of the IIS and SP at all stages and levels. This refers to the creation of favourable conditions for democratic, the widest participation in innovation activities the variety of economic systems, legal forms of business, irrespective of forms of ownership and subordination, activity profile, spatial location. It is important to achieve the transfer of the centre of gravity from a purely administrative rigorous method for coordination and indicative of the style of management of scientific-technical and structural progress, the transformation of the state in effective partner entities.

Public authorities should promote self the most effective scientific and technological solutions to shape the legal and regulatory frameworks to stimulate the development and introduction of the latest achievements at all levels of management, to increase the innovative activity, contribute to the growth of scientific production and personnel potential.

9) Development of international cooperation and exchange of experience in the field of innovation. Perspective could be the creation of effective

organizational and economic forms of international cooperation in the sphere of innovation, including through the development of joint niches, research centres, information systems and other organizations carrying out joint projects, research and development. A large value may be implementing, in cooperation with foreign partners, activities for the unification and harmonization of standards systems, legal documents, customs regulations, in order to eliminate discriminatory restrictions in the field of IIS and SP and innovation cooperation.

The country's economy, especially industry, is a complex socio-economic and scientific-technological system, consisting of many links, represented by different structures and levels of economic activity and management. The transition to a developed market economy makes intensify attention on the problem of creating a multi-level model of formation and implementation of IIS and SP of the country for the foreseeable future. This model should be based on the equality of different forms of ownership, creative participation in the implementation of innovative activities of all legal forms and management structures. With this in mind, a multi-level model should cover a broad set of diverse but interrelated hierarchical innovative strategies.

#### **Conclusions**

Difficulties in the development of innovative-investment economy that is the key moments, which at this stage do not contribute to the development of this type of economy: dependence on natural resources, the growing socio-economic gap between social strata and regions, social passivity, low level of readiness of people to develop and decision making.

Innovative-investment component creates the conditions in which it becomes possible to carry on an economic activity at a speed of technological processes, without limitation through electronic and nominal monetary turnover, without institutional barriers.

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