

Anatoliy Bogdanenko

Interregional Academy of Personnel Management, Department of Public Administration
office 506, 5 Skliarenko str., 04073 Kyiv, Ukraine

RESEARCH ON INVESTMENT AND INNOVATION ACTIVITY IN UKRAINE: TRENDS AND PROBLEMS

Abstract

In this article, the theoretical identification of concepts and categorical series of state regulation of investment-innovation processes are investigated; the directions of optimization of the state policy of innovation and investment development management in Ukraine are determined; the organizational and legal principles of the state regulation of development of intellectual potential of the population are substantiated; the areas of development and improvement of the national innovation system as an object of state policy are highlighted and assessed.

Key words

investment processes, innovation processes, state management, Ukraine

Statement of the problem

The article examines the theoretical aspects of investment activity in Ukraine and abroad, its essence and main problems. The forms of investment relations revealed made it possible to define their specific features. The influence of the level of investments in the development of the economy is estimated and the long-standing need for improvement of financial mechanisms for implementation of investment activity, in particular, based on processes of decentralization of the state authority powers is verified. It determines the current situation in the market of investment activity that shows the importance of searching for new methodological approaches to the formation of sources of financing the economy. One of the main factors slowing the economy in Ukraine down is the shortage of long-term investments. Instead, one of the important stages of development and successful operation of investment activity is the optimization of sources of financing.

Analysis of recent researches and publications.

The theoretical bases of investment activity were developed in the scientific works of V. Berens, L. Gitman, P. Samuelson, J. Honko, I. A. Blank, A. D. Dibrov, I. Y. Dorosh, M. I. Kysil, M. Y. Kodenska, I. V. Lipsits, O. V. Mertens, A. A. Peresada, G. M. Pidlisetskyi, A. M. Plotnikov, P. S. Rogozhyn, Y. O. Romanenko, P. T. Sabluk, V. P. Savchuk, O. Y. Starikov, T. S. Khachaturov, V. M. Khobta, I. V. Chaplay, V. Y. Shevchuk and others. The project development is a multistage, complex and painstaking process that includes technical, organizational, institutional, management, environmental, commercial, financial and social analysis that is recommended to be considered in the incremental and iterative manner.

Each aspect has its own characteristics that are specific to the economy. The main elements of the project analysis are based on local indicators reflecting the objectives of investment activity projects. At the stage of investment research, the conditions meeting the requirements of investors and end users are substantiated. The organizational analysis substantiates the selection of ways to establish the interaction between participants of the investment project. At the stage of investment research, the project concept reflects the cooperation of the participants' relations. When designing the project strategy, the objectives and tasks of the organizations' participation in the investment project are defined. The organizational analysis is based on the competitive system for the selection of the investment project participants. The selection of participants is determined by the project nature, complexity and scope, number of applicants, requirement for a prompt solution of issues and so on. The social analysis substantiates the consistency of the investment project objective with the public and population groups concerned. At the stage of investment research, the influence of the project on the public interests is determined, the social examination of the investment project is performed. During the social analysis, the impact of the investment project on the change of educational, medical, cultural and transport services of the population of the surrounding area is studied.

The institutional analysis reveals the basic rules of administration, management, and extent of the assistance of organizational and legal conditions for implementation of the investment project. At the stage of investment research, political, legal and administrative factors (regulations, laws, normative documents) are studied. At the stage of contractual relations, the operating procedure of actions of the investment project participants is established. The institutional analysis reveals the extent of economic freedoms of investors, customers and other participants in terms of selection and implementation of activity strategy and tactics. The institutional analysis serves as a restriction condition for acceptability of the investment project implementation. The management analysis is an audit of potential investment project participants for the creation of a strong project team and its interaction with other project participants. The environmental analysis determines the changes and potential environmental damage caused by the investment project and serves for substantiation of measures for human life support in the future. The commercial analysis assumes the substantiation of the most profitable methods for promotion of products to the end user. At the investment stage, the marketing research is conducted and the national strategy is developed, demand and supply are studied. At the stage of detail design and contractual relations, the interaction with the buyers of products is considered. During the creation and implementation of construction products, the changes in the market conditions are determined and prompt state measures for the organization of the marketing process are taken.

The purpose of the article

The purpose of this article is the study of theoretical and methodological bases of investment activities, made within the frame of the article, and gives the opportunity to formulate relevant conclusions that have theoretical and practical significance. The article considers the methodology of management of specific and integrated types of risks of investment activity, including planning, identification and risk evaluation.

The article determines the key features of development of the investment activity system directly influencing the formation of financial structure of investment projects in general, among them: simultaneous movement of production and financial investments due to the duality of the real estate economic nature; scale of attraction of investment resources, complexity and flexibility of financing system requiring the development of approaches to the formation of reasonable financial structure of the project at different stages of its formation; uneven cash flows and lack of investment return during all investment cycle, etc.

To achieve the objectives and tasks defined in the article, a complex of interrelated general scientific, interdisciplinary and special methods, in particular, systemic; historical; comparative; dialectical, logical and semantic methods; method of logical generalization; analysis and synthesis; induction, simulation, etc., are used. The use of classification method along with systematized method make it possible to generalize the scientific literature and legal documents.

Presentation of the basic material

The system of national economy management in any country is carried out by means of main forms, methods and levers for employing economic laws as well as the development of main productive forces, formation of human needs, creation of incentives and alignment of social and economic interests of main social groups. The main subsystems of the entire system of the economic mechanism are government regulation, corporate balanced development and market self-regulation. In modern conditions, government regulation of the economy is the dominant subsystem of the system of economic mechanism. The optimal combination of subsystems and appropriate forms, methods and levers provides a possibility of balanced and proportional development of the national economy.

At the same time, the experience of developed countries confirms that the key role in enabling the innovative development and formation of the national innovation system belongs to the state that establishes strategic objectives, provides resource support, and in particular, budget financing, tax incentives, crediting, etc. [1].

Countries have “assumed” the critical importance of innovations for society and with it an intensive type of economic development. During the “cold war”, under conditions of the confrontation between the USSR and USA - the accelerated research in the sphere of armament gave the opportunity to consider the innovations as the indicator of technical ideas, creative abilities and the ability of the country to develop intensively. Today world economic literature notes that the “technological” economy will be and is already being replaced by an

“informational” economy or knowledge-based economy. In this regard, states mainly concentrate on the creation of strategic plans for the development of territories. As the ratio between production and high-technology industries changes, the innovation activity of industrial enterprises becomes more intense. Therefore today, innovation-based type of economic development is the ground determining the economic power of a country and its place in the international differentiation of labor [2, p. 62]. This also applies to modern Ukraine that is, science and innovation activity are the main factors of stable economic development and social reliability. The scientific and technical potential of the country is created by efforts of national and technical organizations and due to the world’s scientific and technical achievements [3, p. 138].

At the present stage of development of world integration processes in the Ukrainian economy with its rapidly growing scientific and technical needs, the timely and full supply of financial resources for innovation activity is of particular importance [4]. Thus, the need of investments is one of the basic factors of stable functioning of the national economy.

Today, there is no country that would refuse government intervention in the economic processes. For this purpose, states use powerful instruments of influence on economic growth.

Investment and innovation activity is one of the key components of drawing real investments, which can also be represented only by innovation activity or investments of intensive development. Effective investment in the innovation process is the main factor determining economic growth. Such investments provide economic restructuring on a new scientific and technological base and promote the improvement of the country’s competitiveness. Innovation activity can be financed due to private investments as the variable nature of public funds are insufficient, while the innovative development of the country requires systematic capital investments.

The purpose of government regulation of investment and innovation processes is to completely ensure the implementation of programs of social development in the social, economic, scientific and technical spheres, as well as provide state protection and investment support.

State regulation of investment activity is aimed at managing not only state investments but also regulation of investment activity conditions and monitoring the actions of all investors and participants of the investment process.

The mechanism of state regulation of investment activity in Ukraine is carried out as follows:

- provision of financial assistance in the form of grants, subsidies, subventions, budget loans for the development of individual regions, industries, manufacturing;
- development of state norms and standards;
- implementation of measures for the development and protection of economic competition;
- denationalization and privatization of property;
- determination of the conditions of use of land, water and other natural resources;
- regulation of pricing policy;
- state expert examination of investment projects;
- other measures [5].

The Law of Ukraine “On Innovation Activity” defines the legal, economic and organizational foundations of state regulation of innovation activity in Ukraine, sets out the forms of stimulation of innovation processes of the state and is aimed at supporting the development of the Ukrainian economy in an innovative way. The main goal of the state innovation policy is to create social, economic, organizational and legal conditions for the effective reproduction, development and use of the country’s scientific and technical potential, ensuring the implementation of modern environmentally friendly, safe, energy and resource-saving technologies, production and the realization of new types of competitive products [6].

The Law of Ukraine “On Priority Directions of Innovative Activity in Ukraine” defines legal, economic and organizational principles for the formation and implementation of priority areas of innovative activity in Ukraine.

The purpose of the law is to provide an innovative model of economic development by concentrating the state resources on priority directions of scientific and technical renewal of production, on increasing of the competitiveness of domestic products in the domestic and foreign markets [7].

The mechanism of state regulation of innovation activity is carried out by:

- identification and support of priority directions of innovation activity;
- formation and implementation of state, sectoral, regional and local innovation programs;
- creation of a regulatory framework and economic mechanisms to support and stimulate innovation activity; protection of the rights and interests of entities of innovation activity;
- financial support for the implementation of innovation projects;
- stimulation of commercial banks and other financial and credit institutions that lend money for the implementation of innovative projects;
- establishment of preferential taxation of entities of innovation activity;
- support the operation and development of a modern innovation infrastructure [2].

The mechanisms of state regulation of investment and innovation processes should flexibly combine all levers, both economic and administrative. Under certain conditions, depending on the strategic changes, the instruments of state influence should also provide for certain tactical changes.

Today, the legislative and regulatory framework for the regulation of investments in Ukraine includes more than 100 different normative documents (laws, orders, decrees, instructions, etc.). Despite a large number of regulatory acts, today, imperfect legislation is one of the main reasons hindering the development of investment activity in Ukraine.

The economic basis of scientific, technical and innovation policy is the state's attitude towards these three spheres of the national economy, to the associations of people engaged in scientific, technical and innovation activities, as well as towards the results of such works. The state's attitude is reflected in the knowledge and understanding of the role and significance of science, products of scientific and technical activity in the state's economic system, as well as the ability to effectively direct all existing and potential opportunities of these spheres to achieve tactical and strategic goals of the state's social and economic policy.

As part of an integrated policy of economic growth, public investment and innovation policies are closely linked and interact with other social and economic policies (industrial, structural, financial etc.).

State investment and innovation policies are implemented largely through other policies of integral parts of social and economic orientation. Therefore, when developing the concepts and mechanisms for implementation of these policies, the consistency and coordination of activity of all social and economic policy subsystems and authorities, the activity of which is aimed at its development and implementation, take an important place. The clear delegation of tasks at all levels of the implementation of social and economic development strategy is required.

State investment and innovation policies have higher priority among other policies in the economic sector, but they are formed and implemented mainly by priorities: branch, technical and technological, scientific, innovation, etc. The investment and innovation priorities depend on the status and priorities of the production sector, and the others - on social priorities and the hierarchy of total human needs that change dynamically.

According to the objectively dependent trend of expanding the scope of authority of regions of Ukraine to the state level and as a result, the state innovation and investment system take on priority importance in the scientific, technical, and IT sectors. The activity of the state in the sectors of science, technology, as well as innovation and investment activity, depends on its interests and capabilities and provides impetus to solve the part of the tasks related to using and development of the scientific and technical, and IT potential of the region. This lessens the duties and responsibility of the regions for finding solutions to these problems [8, p. 118].

It is also necessary to emphasize the high level of influence of the institutional factors formed at the state level have on the investment and innovation policy. The state-level institutional standards can regulate the investment and innovation policy by reducing uncertainty and promoting the coordination and cooperation of participants of these processes.

Market demand is the essential foundation for innovations. Therefore, innovations should possess novelty both for the whole society and in relation to the particular organization, satisfy market demand, that is, to have market potential as an indicator of operating efficiency of the enterprise and realization of its innovative potential.

A common feature is that all EU countries promote the provision of incentives concerning investments into the development of innovative technologies and research and development (R&D). These incentives include granting credit on preferential terms and reimbursement of expenses for the creation of new technologies from the state budget. In general, these preferences include research and development support in three directions: fundamental research, production research and commercial development. The maximum share of their budget support amounts to 100, 50 and 20 percent, respectively [9]. EU countries apply special incentive innovations and preferential corporate taxes. In particular, Great Britain maintains a low level of taxation for corporations, considering it is a powerful incentive for technological initiatives involving risk.

The low rates of basic taxes in Germany, Spain and Italy are supplemented by special incentive systems for implementation of risk projects. In France, another combination is applied: high taxes for all and other special incentives in the innovative business. Special attention is paid to support of private innovative solutions and broad involvement of small companies in the mentioned process.

This activity also holds a central place to the Forum of Innovation Regions (FIR) and Innovation Relay Centers (IRC).

A special role is played in the regulation of the EU investment complex by special agencies who promote foreign investments. These institutions are responsible for providing information and planning the investment activity, carrying out marketing and advertising initiatives, organizing the negotiations and presenting the incentive packages for investors. The investment agencies grant the investors permission for their activities, settle any conflicts and facilitate the accelerated implementation of the investment projects. Their branches are in many countries worldwide.

Each EU country has a multiple system of investment institutions.

There are special rules for state assistance for certain competition-sensitive economic sectors (ferrous metallurgy, coal mining, textile industry, shipbuilding and automotive industry, manufacture of synthetic fibers) and quickly growing industries (telecommunications, computer technologies). It is assumed that this assistance may also include direct government subsidies. The purpose of the specified assistance is to promote the competitiveness of industries and acceleration of development and implementation of modern technologies.

As a result of joint government decisions of the EU member states, a number of institutions providing direct support to the innovation process were formed in Europe: European Investment Bank, European Investment Fund, Initial Capital and Eurotex Capital projects, as well as a special program for small business support [10, p. 156].

Financial assistance to the enterprises and the entire sectors from the EU centralized funds, combined with national support for each individual EU country is one of the main instruments of the EU investment policy. At the same time, the European Commission requires strict reporting on the use of assistance from the member countries and individual enterprises. Economic sanctions are applied to countries that misuse assistance for other than the intended purpose.

A key element of the EU investment and innovation system is the “Framework Programs for Scientific and Technological Development”, which is the main instrument for the implementation of the EU scientific and research policy. HORIZON 2020, the Eighth Framework Program (FP8) which is still operating today after its inception on December 31, 2020.

The European Union's economic policy directs special attention to the development of small and medium-sized enterprises (SME), which play a key role in the European economy.

One of the effective mechanisms to promote the development of innovative technologies in the EU is technological development centers - technological parks. The European model of the functioning of technological parks is characterized by significant state economic and organizational support, broad regional cooperation as well as elaborate programs and business plans, which enables qualitative and efficient management of development.

European technology parks tend to rely on large research centers and provide a kind of a bridge for technology transfer between the scientific and industrial sectors. In Europe, clients of technological parks are comprised of both state and privately owned enterprises.

The states providing the most part of financing for technology parks are; Great Britain - 62%, Germany - 78%, France - 50%, Netherlands - about 70%, and Belgium - almost 100%.

The European Union pays significant attention to cross-border cluster technological cooperation. One of the best known cross-border clusters is Biovalley, the biopharmaceutical cluster established in 1996 in the valley of Upper Rhine river (territory of France, Switzerland and Germany). About 10% of the total population of this region are involved in the biopharmaceutical industry which includes well-known scientific institutions (universities, research centers, headquarters of well-known global pharmaceutical companies such as Novartis, Roche, Siba, branches of large pharmaceutical companies such as Johnson & Johnson, Pfizer, Sanofi-Aventis). Other well-known cross-border clusters are: Medicon Valley (territory at the border of Denmark and Sweden around Øresund strait); Biotechnology cluster (Øresund region, Denmark - Sweden); German-Dutch cross-border cluster (Twente); German-Dutch network of regional clusters of suppliers, technical agencies and innovation institutions around transnational corporations Océ and Nedcar (Venlo), Dommel Valley (Belgium and Netherlands) is also equally well known [11, p. 64].

Global experience shows the ambiguity of PTT influence on the economic development of recipient countries that are associated with the possibility of negative effects as a result of the implementation of investment strategies by foreign investors that may be inconsistent with national interests of the country [12]. The destruction of the fundamental base for ensuring structural reforms in the economy on innovative principles is an extremely ominous trend. The domestic industry has a significant innovative potential capable to ensure the structural transformation of the national economy and provide a high level of scientific and technological development for the country as a whole. At the same time, the productive capacity reserves that were not used during the crisis period and favorable external economic conditions still remained the prevailing sources of growth in Ukrainian industry.

Considering leading world trends, the necessity of inclusion of Ukraine in the world economy based on sovereign partnership and mutual benefit is an objective prerequisite for further innovation development of the country. This is the reason for the questions of determining the place of Ukraine in the structure of the world economy today and in the future are placed on the agenda.

For example, in 2012, the German government approved an action plan called High-Tech Strategy 2020, aimed at securing Germany as a leading supplier of scientific and technical solutions in such spheres as climate and energetics, health and nutrition, mobility, safety and communications [13].

The development of systems for management of competitiveness of microeconomic systems is also impossible without considering the specified factors. In developed countries, understanding the role of innovations by business led to an increase in the volume of non-state financing of science and increase in innovation activity of enterprises and corporations (50-80% of the total). The sales of companies belonging to the top 10 world leaders in the sphere of innovation activity grow annually by 45-54%, and the profitability of sales is at a level of 70% [14].

Modern Ukraine has little competitive position in the world markets in the sphere of innovation. The deep decline in industrial production in general and in knowledge-based industries of investment, in particular, leads to the degradation and deindustrialization of the national economy. The industrial sector share in GDP structure is being reduced steadily. For many years, the role of the processing industry in creating the country's GDP has decreased, indicating signs of economic decline and technological backwardness. Raw materials extraction productions, as well as low-tech productions, prevail in the structure of the industry. The same holds

true in world markets for industrial goods - Ukraine is represented mainly by raw materials and low-tech products.

Against the background of declining total export revenues, the share of agricultural products is growing. It should be noted that the basis of agricultural export is still the export of raw materials, namely, plant products - wheat, corn, barley and soybeans [15].

Operationally, the competition in the world markets for goods and services has two dimensions:

1. Commodities and economics
2. Technological

The commodity and economic dimension of the external trade of Ukraine can be characterized as follows (Table 1):

Table 1. Key indicators of the external trade

	Export				Import			
	2015		2016		2015		2016	
	million U.S. dollars	%	million U.S. dollars	%	million U.S. dollars	%	million U.S. dollars	%
Total	35420	100	33571 (94,8 %)	100	38875	100	40364 (103.8 %)	100
CIS countries	7729	21,8	5961 (77,1 %)	17,8	11880	30,6	10010 (81.4 %)	24,8
including the Russian Federation	4200	11,9	3117 (74,2 %)	9,3	7420	19,1	5107 (68.8 %)	12,7
EU	10447	29,5	10700 (102,4 %)	31,9	13252	34,1	14877 (112.3 %)	36,9
Europe	10619	30,0	10951 (103,1 %)	32,6	14500	37,3	16068 (110.8 %)	39,8
Asia	12275	34,7	11734 (95,6 %)	35,0	6638	17,1	8178 (123.2 %)	20,3
America	762	2,2	719 (94,4 %)	2,1	2048	5,3	2322 (113.4 %)	5,8
Including USA	462	1,3	416 (90,2 %)	1,2	1396	3,6	1596 (114.3 %)	4,0
Africa	3755	10,6	3850 (102,5 %)	11,5	444	1,1	424 (95.5 %)	1,1
Australia	14	0,04	18 (130,3 %)	0,05	162	0,42	116 (71.3 %)	0,29

Source: UNCTAD, *Key indicators and trends in international trade, 2016*

Ukraine must overcome a considerable gap on the level of the innovation activity of enterprises as compared to the developed world countries, especially EU countries.

The sector of information and communication technologies (ICT) in Ukraine is a branch of the national economy that is developing dynamically. According to the State Statistics Committee, the share of information and communication technologies in the GDP was 1.42 % in 2014. The main indicators of development show a positive dynamics in the number of enterprises, the number of employees and the volume of sales of information and communication technologies subsectors [16].

Breakthrough technology as an integral unity of material resources, ideas and original management solutions played a structure-making role in the management systems of economic development of these countries. Its characteristics are defined by the objective and directness of action.

The organizational framework provides the ranking, evaluation and selection of the priority of scientific and technical programs along with complex coordination of organizational and socio-economic measures.

The formation of an organizational structure requires the creation of a single authority in Ukraine, which would be responsible for the coordination of works in the selection of strategic directions of innovation and technological breakthrough as well as the definition of promising enterprises and productions.

The functional framework ensures coordination and implementation of all stages of the innovation process — from planning (design) to market consumption of the innovative product. In total, three frameworks of the innovation module management system provide monitoring; identification of priority directions, technology of innovation breakthrough, implementation and control of the implementation of breakthrough strategy up to the world level of competitiveness.

Analysis and generalization of world experience of incorporating advanced technologies into the mechanisms of synthesis of national competitiveness control systems is evidence of their immediate effect and significant performance. The Second World War had a devastating impact on the economy of Japan, but in 1968, that is, 20 years after the war, the country took third place in the world after the USA and the USSR in terms of gross national product. The German government, which implemented breakthrough reforms of L. Erhard, needed only 12 years to triple the country's gross domestic product (GDP) from 1950-1962. [17, P. 35].

A modern example of the use of breakthrough technologies and the investment and innovation breakthrough module for achieving a world level of competitiveness by a particular region is the creation of a technology park in Kechnec village of Košice Region in Slovakia.

Slovakia and Ukraine have very similar pasts. Ukraine's independence was proclaimed in 1993, but Slovakia overcame most of the difficult process of transition from a centrally planned economy to a market economy and was able to shift to the western market in a very short time (2002-2005). It is currently an industrial and agricultural country, which occupies second place (after Poland) in economic growth among EU countries.

According to a study by the German Chamber of Commerce, about half of German investors see Slovakia as the best place for investments. Among the countries of Central Europe, Slovakia has gradually become a leader in attracting direct foreign investment in the automotive industry

According to the recommendations of the European Commission on the elimination of regional differences, Slovakia pays special attention to the construction of technology parks (an element of innovation infrastructure), especially in Eastern Slovakia, where the social and economic situation is much worse in comparison with one of the more highly developed EU regions. In developed countries, technology parks, universities-incubators, technopolises and diversified scientific zones are becoming more common. Each of them is a powerful scientific and technical complex that processes innovative ideas and projects that are rapidly introducing innovations.

One prime example is the technology park in Kechnec, which was prepared for the attraction of investors in Slovakia in regard to the fulfillment of all conditions that are necessary for entrepreneurs. Nineteen companies (15 foreign and 4 domestic) are located in the technology park in Kechnec [11]. Most of the investment resources attracted to the technology park are from the technological sectors of the manufacturing industry [18].

Today there are 71 industrial parks operating in Slovakia connected with the following industries: automobile manufacturing, electronics, engineering, chemical industry, pharmaceuticals, information technology.

Among the largest new enterprises in Slovakia are Samsung Electronics (electronics), Sony (electronics), Mondi Business Paper (paper), Hydro Aluminium (production of aluminium) and Whirlpool (household appliances).

Slovakia's example shows that the use of management technologies of an economic breakthrough in an attractive investment climate makes it possible to make a technological "leap" and increase the competitiveness of the national economy in conditions of extremely limited financial and time resources.

Intellectual potential represents individuals' set of abilities, creative talents, skills and motivations as well as their educational, ethical and cultural level that enable them to use intellectual means to learn and create new knowledge, which is suitable for application in a particular sphere of social reproduction, contributes to the growth of productivity and production efficiency and thereby influences the growth of income of an individual in the future [19, p. 292].

The development of intellectual potential is a priority for the state, as in the present conditions neither wealth of subsoil nor fertile lands or ideal climate, or tourism attractiveness can be compared with the power and social importance of the potential of the human mind.

Human capital is the basis for the formation of an innovative type of development in Ukraine, which is based on intellectual and information technologies of production.

At the same time, the innovative capital of the enterprise should take into account the financial, intellectual, organizational, management, information and methodical potential of the enterprise, which, in turn, will affect the motivation of labor, the culture of production, creating favorable conditions for changes in social relations both in the state and for the enterprises in particular.

The scientific and technical factors influence the level of novelty and the update rate of the product, as well as improvement of technical means and technologies. Due to the negative trends of the transition period, scientific production in Ukraine almost stopped – compared to the Soviet era scientific and technical works have reduced more than 10 times.

Primarily, the economic factors determine the level of development of the labor market. This is why society's intellectual potential is mainly recovered through the labor market.

Legal factors characterize the legislation of Ukraine concerning legal support of the intellectual economy. The scope of intellectual property is regulated by the following basic laws: "On Copyright and Related Rights", "On Protection of Rights to Marks for Goods and Services", "On Scientific and Technical Information". The most important problem of legal support and regulation of intellectual property is the ineffectiveness of legislative acts and the weak implementation of the proclamation of the orientation to the innovative development model in Ukraine.

The social and cultural factors in the context of the formation of a knowledge-based economy are revealed in the trends of development of education and science.

The organizational factors solve a fundamental problem: the existence of applied science outside of the production sector. Today, the first financial and industrial groups are being formed, which are based on mutually beneficial investment relations between science and business.

The environmental factors are characterized by an increase of the strength of their effect in modern conditions of social production. Most often they act as limitations on the use of raw materials [20, p. 60-62].

The main factors that negatively affect the formation and development of Ukraine's intellectual potential today are:

- poorly developed innovation infrastructure;
- lack of incentives for innovative projects;
- insufficient funding of science;
- underdeveloped intellectual property market;
- elderly age of most scientists.

The modernization of public administration with regard to human development requires consistent action to fulfill international obligations and meet national needs in this area. First of all, it requires the provision of legal status to Eighth framework (FP8), which was adopted by Ukraine, Horizon 2020, their development and implementation at the state and regional levels; overcoming differentiation of human development at the regional level; development of a system of state social guarantees and social standards, ensuring the achievement of social equality and equal starting opportunities for education, health service, employment;

creation of equal conditions of access to social services, social and housing services; ensuring the decentralization of social policy; justification and qualitative differentiation of social functions of the state and regions in respect of powers, duties and responsibilities for human and social development; increase of efficiency of activity of authorities of state and regional government concerning the formation and implementation of social policies; improving the assessment of activity of bodies of state and regional authorities in relation to human and social development; maintaining balance between development of market economy and ensuring social justice through fiscal, tax, pricing policy as well as credit and monetary regulation; conformation of social and labor legislation with the requirements of effective social control; ensuring a balance between reforming the economic mechanism and reforms in the social sphere, creation of institutional conditions for ensuring the transfer of knowledge from the university environment to the industry. For example, there is a need for conditions that will enable enterprises to use ideas and technologies, which are developed in universities, under license:

- ensure closer communication between the teaching and research staff of universities and employees of specific companies, so that researchers have a more realistic idea of the problems faced by the industry and practitioners have access to scientific knowledge. This can be achieved by using the Cape town approach, according to which the teaching staff of the University works closely with managers-practitioners;
- enterprises should not strive to be experts in everything, they can choose a fairly narrow industry, in which they will have possibilities for competitive development. And of course, these small companies should closely cooperate with universities and research departments of large enterprises, making a contribution to the common cause with their knowledge of the sphere where many are high-class specialists [21].

The mass communication system, as a component of influential factors, should also manifest itself with a significant effect in the development of the intellectual potential of the employed population. Creative work differs from non-creative work mainly in that it does not allow to churn out the production of standard items: the product of creative work exists in one copy and is marked by the individuality of the manufacturer and his worldview.

With the advent of the Internet, mobile communication itself has turned into a “production pipeline”: the structure of professional mass communication includes elements of the production process associated with virtualization, remote control, propaganda, manipulation of people's actions both in everyday life and in the process of their professional activities. Therefore, the consideration of communication as a production activity means that it should be dealt with as an element of the employment process, which proceeds with the use of certain technologies and it is reasonable to consider those employed as an intellectualized subject of communicative production [22, p. 195].

The state government must create a favorable political, legislative, social and economic environment in close interaction with business entities.

Ensuring the commercial implementation of the results of intellectual activity should be carried out through the formation of special complex structures that would become direct participants in the process of creating a legal object of intellectual property, carry out an expert assessment of its commercial attractiveness, including an indicative assessment of the value of intellectual property rights, study the market situation and provide effective marketing and financial support for innovative developments [23, p.54].

Therefore, in Ukraine, it is necessary to create a mechanism to support insurance companies that specialize in insurance of innovative risks: simplification of taxation of such companies, provision of loans on favorable terms, creation of state insurance companies that would specialize in insurance of innovative risks.

The main task of the innovation market is to solve the problems associated with the lack of finance, personnel and information regarding innovation systems, as well as the creation of a mechanism for insurance of innovative risks.

Currently, only the separate elements of the national innovation system in Ukraine are established and operate, the cycles of the innovation process are poorly coordinated with each other and not linked, so the returns from innovation activities remain low.

The effective integration of Ukraine into the global scientific and technological sphere is possible only on the basis of the development of the innovative economy in conjunction with following current trends of global innovation development. In this context, it is reasonable to mention the tendency of an increase of contradictions, imbalances and asymmetries in the global innovation sphere, of gradually changing its functional and structural design. These contradictions include:

- Contradictions between national and global interests. The interdependence of subjects of different national innovation systems is increasing leading to the formation of global innovation networks with appropriate mechanisms for self-organization and development. The global processes cause the de facto cancellation of certain state functions and the strengthening of others aimed at the formation of own stable and balanced economic development. The contradiction occurs between the objective processes of globalization of innovation processes with all its inherent features and the desire of national governments to preserve the national state economic system.
- Increased international competition. Competition often intensifies on world markets leading to unfair competition, the emergence of new organizations' forms of business organization (in order to obtain additional competitive advantages, firms create strategic alliances, resort to the processes of merger and acquisition, representatives of small and medium businesses join subcontracts, outsourcing, contract works), whereby a more complex system of non-market relations is formed.
- Current conditions and features of global competition require all market subjects to make advanced organizational and structural changes, however, the existing regulatory mechanisms do not correspond to these processes, the system of institutional support of global innovation development is lagging behind the scale and dynamics of global transformations.
- There are two contradictory trends in the development of the global technology market today. The first is the desire of technology owners to keep trade secrets and full rights to intellectual property. The second is in an attempt to commercialize the technology, including through entering the world market.

The existing asymmetries and contradictions of the global integration of the national innovation system, on the one hand, and the failure of the global market fundamentalism to neutralize these asymmetries, on the other, make it necessary to create an appropriate global regulatory system that would ensure the formation of effective mechanisms for the harmonization of national economic interests and policies, ensure the protection of technology owners, the introduction and compliance of countries with generally accepted norms and rules of technological exchange, as well as the adoption of sanctions against those, who violate these rules.

The integration of the national innovation system is an objective process, because the nature of information of the modern stage of civilizational evolution and the formation of the fifth and sixth technological modes make it impossible for any state to compete successfully in the high and medium technology sectors not only on external, but also internal markets without entering the spheres of information, science and technology.

Taking into account the likely global technological changes to come (the beginning of a new technological wave or its significant delay with the focus on large-scale replication of improving innovations) and possible options for the transformation of the national innovation system, three basic scenarios for the development of innovation processes in Ukraine can be considered: progressive, moderate and inertial. The progressive scenario provides for the intensive development of the national innovation system and its forced integration into the global economy with the implementation of the postindustrial development model. This scenario is the most difficult but also the most promising in terms of ensuring the long-term competitiveness of the state.

The main criteria for the implementation of such a strategy in the context of economic security are as follows: a share of the growth of GDP is distributed to higher education, science and science-driven sectors of the economy; increase in the growth of the intellectual services sector in the economy; growth in the volume of funding of research and development work, increase of the number of researchers and organizations engaged in research and development; growth in the volume of scientific and technical works performed and their share of the GDP; growth of the average education level of the economically active population of Ukraine, as well as the number of workers with higher education and mobility of workers of intellectual work; growth of the quality of education, the formation of a market of educational services and training; ensuring the growth rate of average incomes of workers in the sector of intellectual activity. It is necessary to work on the creation of such a strategy and its practical implementation today!

The necessity of Ukraine's integration into the European and world competitive environment determines the need to create an innovative development model, in which the main source of economic growth is the results of intellectual activity and their practical application. This is the generally recognized way which not only highly developed states but also states undergoing transformation use to develop an economy based on knowledge.

This approach should provide for: concentration of resources on the priority areas of creating conditions for the growth of intellectual potential and strengthening of its role in ensuring economic security; unity of educational and scientific processes and their focus on society's economic, social, intellectual and spiritual development; optimal combination of government regulation and management of intellectual activity in higher educational institutions, scientific institutions, enterprises and organizations [24, p. 26].

At the turn of the millennium, Ukraine was one of the leading countries of the world in terms of the number of researchers, had a relatively high human development index, and its index of the education level of the population even exceeded the average index of Eastern Europe and the CIS. However, an analysis of statistical sources shows that there is a steady trend of reduction in the number of scientists and organizations who perform research and development works.

The main reasons for the decrease in the number of researchers in Ukraine are: the processes of emigration of highly qualified specialists; lack of replenishment of scientific personnel staff with younger staff; lack of prospects for the implementation of own ideas due to material, economic and other reasons in the state; a large discrepancy between commercial and state salaries of creative workers [25, p 48].

Innovation activity is the purposeful activity of business entities regarding the design, creation, development and production of new types of equipment, subjects of labor, intellectual property (patents, licenses, etc.), technologies, as well as the introduction of more advanced forms of labor organization and production management. In the conditions of effective interaction of all elements of the innovation system, the main factors of innovation activity at the macro level are the growth rates of public spending on the development of science and education, rational innovation policy of the state, stimulating tax, credit and depreciation policy [26, C. 48].

In Ukraine, there is a decrease in the innovative activity of enterprises, which indicates primarily the limited domestic effective demand for innovation and the lack of effective incentives for innovation activity to take place.

One of the significant factors hindering innovation activity for enterprises is the long payback period for innovations, as a condition of instability this means additional risks. Therefore, enterprises refuse to introduce innovations in production due to the high economic risk which in turn hinders the innovative development of the entire country.

In accordance with the current legislation, namely, the Law of Ukraine "On Scientific and Scientific and Technical Activity", innovation development in Ukraine is provided at the expense of financing from various sources. In particular, Article 34 of this law establishes that budget financing is one of the main instruments for the implementation of state policy in the field of scientific and technical activities [27]. The state must provide budget financing of scientific and technical activities (other than defense expenditures) of at least 1.7% of Ukraine's GDP. However, the actual amount of financing of scientific and technical activities from the state budget decrease yearly.

In order to solve the problems of increasing the country's innovation potential, it is necessary to identify the main tasks and potential opportunities for innovation in Ukraine.

Taking into account the above mentioned factors, one of the main needed directions in the process of Ukraine's transition to innovation is an improvement of the investment climate in Ukraine and stimulation of investment in the development of innovative products and technologies [28, p. 23].

The search for external sources of financing not only for innovation but also for other spheres of the economy is the main feature of the current stage of Ukraine's development [29, p. 162]. By attracting investments to

production, the volume of production is increased, the funds are modernized, and within the country it means that the level of market competition, the balance of payments, and the investment infrastructure are developing.

Dynamics of direct foreign investments depends on the attractiveness for investment of the country as a whole, as well as its individual regions. As for state support for the development of the innovation sector, statistics show there is a low level of state financing of innovation activity.

In Ukraine today, in addition to external investors, there are also potential domestic investors. However, for wider involvement of domestic investment, mechanisms are needed to attract shadow capital. In addition, credit resources, property rights and intangible assets, loans, collateral and other types of financial resources should be included in the financial turnover, since the more innovative investments there will be, the more effective the innovation system will be. Solving these problems requires the development of state programs, the introduction of financial motivation and the development of an appropriate innovation infrastructure.

Domestic investment is an attractive potential source of income. To increase such investment, it is expedient to develop rational terms and conditions for taxation of small and medium businesses and grant benefits for conducting their activities, which in turn, will reduce the level of the so called "black economy".

The creation of "regional monopolies" is a negative consequence for small and medium-sized businesses, therefore it is important to increase the efficiency of the activity of Ukraine's antitrust authorities. The low investment attractiveness of Ukraine's regions in turn leads to a low level of investment in its economy.

Every effort should be made to create a favorable investment climate to attract both domestic and foreign investments. Unfortunately, the investment rating of the regions of Ukraine indicates the low professional level of state management of investment activity [30, p. 37].

The Ukrainian economy has been strongly influenced by the global financial crisis. First of all it caused a liquidity crisis in the banking sector, as foreign banks turned their programs down. In addition, the National Bank of Ukraine has increased requirements for reserving of resources, which led to an increase in the cost of loans. As a result, the growth rates of mortgage loans have fallen below the growth rates of the total loan portfolio. There was a significant fall in the stock market and also due to the financial crisis there was a withdrawal of foreign investors from Ukraine.

The separation of savings into organized and unorganized components (on deposit and directly from the population) may be insignificant in developed countries, where the black economy is relatively small. In countries with a transformational economy, the volume of unorganized savings is quite large. These funds, most often convertible into US dollars or euros, are essentially withdrawn from economic circulation. In Ukraine, the amount of free money in the hands of the population is estimated to be as much as 50 billion dollars. The availability of such a large cash array was made possible by the uncertainty of the economic situation, the lack of effective tools for attracting private investment, and in this case, a lack of experience [31, p. 132].

Stabilization of Ukraine's economy requires intensified attention to the regulation of investment processes in the regions. At the regional level, it is easier to improve the investment environment and ensure competitiveness as a factor of investment activity.

The lack of domestic funds to solve the tasks of stabilization of the economy requires the attraction of foreign capital, primarily direct foreign investment. World practice shows that the direct investment is a key element in countries' economic development, therefore contributing to the strengthening of the economic complex, as well as an increase in restructuring of scientific and technological potential.

The need to stimulate the inflow of foreign investment by providing them with preferential conditions is a serious problem. Concurrently, it is necessary to strive for the creation of a favorable investment environment not only for foreign investors but for domestic investors as well.

The effective use and ability to draw foreign investment requires improvement of government regulation. First of all, it is necessary to clearly define and delineate the powers of the objects of government regulation in this sphere in order to coordinate their activities and avoid duplication of efforts and oversight.

It is not attractive for foreign investors to see there is almost no domestic investment in production development. The attraction of foreign investments should be carried out taking into account the goals and objectives of the state programs of structural reorientation of production, target programs of inter-sectoral and sectoral development and conversion and development of export potential. It is also necessary to take into account the processes of internal and external cooperation of products for industrial purposes as well as the privatization of state enterprises with the involvement of foreign capital. The expediency of this approach is confirmed not only by foreign experts but also by the experience of countries such as Japan, where the purchase and use of foreign licenses to a large extent contributed to its social and economic development. The economic conditions should be created for the intensification of investment activities at the national level through the use of primarily financial and economic methods of investment control and stimulation which are typical for the market economy [32, p. 356].

These methods include:

- control of tax rates;
- refinancing;
- establishment of norms of mandatory reserves in National Bank of Ukraine;
- stabilization of the exchange rate;
- reduction/increase of customs duties and the like.

The methods of economic control also include subsidizing of interest on loans to finance investment. This will meet the priorities of regional investment policy and promote co-financing from public and private investment sources.

In addition, in the context of insufficient budgetary funding of the scientific and technical sphere, the need to implement extra-budgetary incentives for scientific and technological progress is becoming ever more necessary. Thus, an effective scheme for financing of innovation activities could be a network of specialized non-bank public financial and credit institutions in various sectors of the economy and separate regions for providing credit for innovation projects. The difference in the nature of the economic problems faced by certain regions also leads to the need for different approaches to their individual solutions.

Accordingly, the state innovation and investment policy should be formed taking into account regional investment programs. As the investments included in the state program will be implemented, objects will be built on certain territories of specific regions, the economic interests of which should be fully taken into account. Taking into account these interests may be ensured through joint equity financing from state and regional sources and the provision of preferential centralized investment loans under the guarantees of local banks [33].

Thus, innovation and investment potential influence a number of different factors that may contribute or hinder innovation and investment activities.

For the investment and innovation strategy, not only the goals but also means of their achievement (that is, the availability of required potential) are the important components. Investment resources include own and borrowed funds. The means, which are necessary for the implementation of innovation strategy are the availability of required productive potential, manpower, information and market potential.

Competitive (business) strategies are subject to corporate policy, they indicate the ways of achieving of the chosen direction by each strategic business unit and present a plan of winning of strong long-term competitive positions (advantages). These strategies are also called business strategies or competitiveness strategies.

A prerequisite for the development of an effective competitiveness strategy is the definition of the strategic nature and boundaries of the business by the strategist.

To determine the boundaries of business interests within the frame of the development of the competitive strategy of the enterprise, as a rule it is necessary to clearly identify and investigate the following factors:

- The needs of consumers.
- Segments of consumers, that is, to decide on the issue of “where and for whom” the goods are to be sold.
- Technological and functional execution, that is, the ways to satisfy the needs of a consumer.

Gaining an increased level of competitiveness strategy of an enterprise is the mission, that is, key instruction, which indicates the direction of focus of separate tasks, which direct intentions of managers towards certain strategic goals and actions needed to achieve them. This higher level must certainly be general and be developed for long-term.

The next level of competitiveness strategy of enterprise describes the strategic direction in more details. A more detailed description is provided by functional strategies (from research and development to production, distribution, sales, prices and etc.) as well as by programs of development of new products and projects of basic investment, such as the construction of new plants and modernization of existing ones. At this level, basic attention is paid to specific types of activities related to the expenditure of time, funds and energy, which significantly affects the strategic directions of the business. This may occur only when strategy elements strengthen and do not contradict each other. So in a wider sense, the competitiveness strategy should be focused on the unification of strategic efforts of different functional subdivisions of enterprise (purchase, production, research and development activities, finances, personnel divisions, sales, marketing, etc.) [34 p. 44].

There is high competition for investment worldwide, and an increase of Ukraine’s rating position and domestic business structures is the indicator of attractiveness international corporations look for. Doing Business is one of the key ratings, which is considered by investors when they plan to locate their production in this or any other country.

Modern states’ economies built on market principals, try to develop and implement state regulation to reduce negative consequences of inabilities of the market. According to the inability theory, states are divided into groups of states, which are symmetric to features of the market and group of states, which require the similar set of instruments for their reduction. That is, the occurrence of any crisis directly indicates the intensifying of certain inabilities of the market or the state. That is why identification and overcoming of inabilities is the prime task on the list within the frame of the reformation of economic system [35 p.11].

The position of the state in international ratings is the informative index of the efficiency of state policy in different spheres, particularly, economic, which is taken into account by the leading international creditors and companies in the implementation of credit and investment.

- Global competitiveness index. Within the frame of the global competitiveness ranking, the Competitiveness index determines the ability of an economy to grow in the long-term period. It consists of 114 indicators, 2/3 of which are the results of a survey of business leaders, 1/3 — statistical information.
- Ease of Doing Business index. The index is calculated on the basis of ten indicators (which constitute methodology of Doing Business Project): the creation of business, work with construction permits, connection to electricity, registration of property, obtainment of credit, protection of investors, payment of taxes, trade across borders, enforcement of contracts, closure of businesses.
- Global innovation index. The \ index covers 7 key elements of research: institutions; human capital and research; infrastructure; market experience; entrepreneurial experience; knowledge and technology (scientific and practical results) and results of creative activities.
- Economic freedom index. The experts of the American research center The Heritage Foundation define economic freedom as “the absence of government intervention or obstruction of the production, distribution and supply of goods and services, except for the necessary protection and support of freedom for citizens as such.” The degree of freedom of the economy is calculated on the basis of the arithmetic average of ten indicators: freedom of business, trade, financial sector, investment, labor, monetary and fiscal freedoms, guarantees of property rights, the volume of the bureaucracy and the degree of protection against corruption. Thus, the result of “absolutely free” economy should be 100 points, and where there is no freedom in general, respectively, zero.

- The Investment attractiveness index. The evaluation of investment attractiveness is performed by the European Business Association and is based on regular monitoring of the business climate by the first persons of companies, which are Association members.

The strategy of the decentralized regulation is characterized by more indirect state participation in the investment development of separate organizations and business entities. This means a lower centralization degree of management of investment processes by the state. The state implements its investment policy by creating innovations in the public sector. The state allocates appropriate resources in order to create an initial demand for innovations. The tax incentives and other preferences for investment activities are provided to implement this strategy.

The strategy of the decentralized regulation provides for the transfer of the initiative to business entities. The state uses tax and other incentives for investment development and creates favorable legal, investment, technical and economic conditions for this activity. This strategy is the most widespread in the US, UK and other countries.

Technological development of any state is impossible without effective functioning of mechanisms of technology transfer as an element of the national innovation system.

Technology transfer plays a decisive role in spreading objects of intellectual property rights. In a broad sense, the latter means interaction between two or more partners, in cases when at least one of them transfers their technology through know-how, patents and technical assistance to the other partner, who wishes to implement and use this technology for a specific purpose [36, p. 30]. This definition does not consider technology transfer as a commercial phenomenon, as it can serve to increase the amount of knowledge/know-how of one party without any financial transaction. However, the basic rule of technology transfer is that both parties should receive profit from it on a mutually beneficial basis. A technology recipient, for example, can acquire know-how and gain a technological advantage over competitors, and a technology owner can gain some financial benefit from cooperation and develop other technological solutions to improve competitiveness, reduce costs and increase profits.

Ukrainian Institute of science, technical and economic information (UkrINTEL) carries out activities in the field of technology transfer in Ukraine. UkrINTEL activities in the sphere of technology transfer are aimed at the implementation of the operational provision of necessary scientific and technical information and relevant technical solutions to developers, manufacturers, consumers of high technologies and potential investors, as well as at promotion of the development of partnership relations between Ukraine and the international community.

The concept and methodology of the National technology transfer network are developed in accordance with the methodology and the model of the European network of “relay centers” (Innovation Relay Centers — IRC network, since 2008 — EEN), the Russian technology transfer network RTTN and Ukrainian technology transfer network UTTN.

The overall management of the work is carried out by the National Aeronautics and Space Administration (NASA). The established network has the nature of a general federation and assists all other interested agencies in matters of technology transfer. All of this contributes to the activation of development and transfer of technology at all levels. The government does not provide direct financial support for the activities of technology transfer centers (CCS), however, it gives the universities, non-profit organizations and small business firms the right to transfer the license to commercial use of inventions made in the course of the research with the financial support of the government and industrial companies.

The function of technological intermediaries between laboratories and companies in Germany is performed by different scientific companies and joint research associations in the industry. Fraunhofer Society has the leading organizational role. After the unification of Germany, it united 45 research universities, including 9 from the former GDR. Their activities are financed through subsidies from the federal government and the incomes from the execution of contract research. The transfer of the technologies created with the use of the budget funds was carried out on the following strategic priorities of innovation activity:

1. Development of new technologies of energy transportation, introduction of energy-efficient, resource-saving technologies, development of alternative energy sources.
2. Development of new technologies of high-tech development of the transport system, rocket and space industry, aircraft and shipbuilding, weapons and military equipment.
3. Introduction of new technologies and equipment for qualitative medical care, treatment, pharmaceuticals.
4. Wide application of cleaner production and environmental protection technologies.

It should be taken into account that innovation activity is a venture business. This means that previously no one in our state was engaged in this activity and that the motivation to engage in innovation activities is to obtain high profits.

Conclusions

The study of theoretical and methodological bases of investment activities, which was made within the frame of the article, gave the opportunity to formulate relevant conclusions that have theoretical and practical significance. The theoretical foundations of investment activity in Ukraine were generalized and systematized. It is determined that the methodology of investment activity study, which is used to determine, compare and justify alternative management decisions, is accompanied by the implementation of project analysis, which is a multi-stage, complex and diligent process and includes: technical, organizational, institutional, management, environmental, commercial, financial and social analyzes, they are recommended to be considered in a progressive iterative order. It is proved that the main elements of the project analysis are formed according to local indicators, which reflect the main objectives of investment activities.

It is determined that, in general, the policy of foreign states concerning the investment sphere pursues the following main objectives: the direction of investment on the restructuring of the economy to improve its efficiency; the circulation of savings in the investment of the real sector of the economy; the formation of an effective and controlled capital market; reduction and insurance of investment risks; the improvement of the investment climate for domestic and foreign capital, etc.

It is proved that the public nature of the investment process itself requires structuring the investment resources and coherence of the state's influence on the investment process. The opinion that the mortgage financing system is an effective means for accumulation and redistribution of money, transformation of private savings into the investment resources, creation of instruments for stimulation of development of domestic financial market as well as increase in efficiency of the state economic policy, in general, was substantiated. At the same time, the complexity of market mechanisms of mortgage market functioning, constant transformation of financing processes and ineffective use of legally determined mechanisms of investment and financing determine the relevance for improvement of the mortgage market organizational level, improvement of forms, methods and instruments for its functioning. Thus, the development of the mortgage market in Ukraine is one of the most important problems at the present stage requiring the urgent solution.

Conflict of interest

There are no conflicts to declare.

Acknowledgments

This research has not been supported by any external funding.

References:

- [1] Postanova Verkhovnoi Rady Ukrainy Pro Rekomendatsii parlamentskykh slukhan na temu: "Stratehiia innovatsiinoho rozvytku Ukrainy na 2010-2020 roky v umovakh hlobalizatsiinykh vyklykiv" vid 21 zhovtnia 2010 r. № 2632-VI [Resolution of the Verkhovna Rada of Ukraine On the Recommendations of the Parliamentary Hearings on the theme: "The Strategy of Ukraine's Innovation Development for 2010-2020 in the context of Globalization Challenges": dated October 21 2010, № 2632-VI]. *zakon.rada.gov.ua*. Retrieved from <http://zakon0.rada.gov.ua/laws/show/2632-17> [in Ukrainian].
- [2] T. Ye. Kalashnyk, I. F. Lisna, Problemy innovatsiino-investytsiinoho rozvytku Ukrainy v suchasnykh umovakh [Problems of innovation and investment development of Ukraine in modern conditions]. *Biznes Inform - Business Inform*, 1 (2014) 60-64 [in Ukrainian].

- [3] N. V. Tkalenko, Struktura naukovo-tekhnichnoho potentsialu Ukrainy [The Structure of the Scientific-Technical Potential of Ukraine]. Visnyk ZhDTU. Serii: Ekonomichni nauky - Bulletin of the ZDTU. Series: Economic Sciences, 56 (2011) 137-140 [in Ukrainian].
- [4] O. I. Vynokurova, Stratehiia rozvytku derzhavnoi innovatsiinoi diialnosti v Ukraini [The Strategy of Development of State Innovation Activity in Ukraine]. Teoriia ta praktyka derzhavnoho upravlinnia - Theory and Practice of Public Administration, 2 (2010) 1-4 [in Ukrainian].
- [5] Zakon Ukrainy "Pro investytsiinu diialnist": vid 18 veresnia 1991 r. № 561-XII [Law of Ukraine "On Investment Activity" from September 18, 1991, № 1561-XII]. zakon.rada.gov.ua. Retrieved from <http://zakon2.rada.gov.ua/laws/show/1560-12> [in Ukrainian].
- [6] Zakon Ukrainy "Pro innovatsiinu diialnist" : vid 04 lypnia 2002, № 36 [The Law of Ukraine "On Innovation Activity" from July 04, 2002, № 36]. zakon.rada.gov.ua. Retrieved from <http://zakon5.rada.gov.ua/laws/show/40-15> [in Ukrainian].
- [7] Zakon Ukrainy "Pro priorytetni napriamy innovatsiinoi diialnosti v Ukraini": vid 08 veresnia 2011, № 3715-VI [Law of Ukraine "On Priority Areas of Innovation Activity in Ukraine" from September 08, 2011, № 3715-VI]. Vidomosti Verkhovnoi Rady Ukrainy - Bulletin of Verkhovna Rada of Ukraine, 19-20 (2012) <http://zakon3.rada.gov.ua/laws/show/43715-17> [in Ukrainian].
- [8] V. H. Prushkivskyi, T. H. Syvolap, Problemy investytsiinoi polityky ta innovatsii natsionalnoi ekonomiky (ekonomiko-ekolohichniy 154 aspekt) [Problems of the investment policy and innovations of the national economy (economic-ecological aspect 154)]. Ekonomichnyi prostir - Economic space, 47 (2011) 115-123 [in Ukrainian].
- [9] Sait InvestUkraine [Site of InvestUkraine]. www.investukraine.org. Retrieved from <http://www.investukraine.org> [in Ukrainian].
- [10] M. V. Haman, Derzhavne upravlinnia innovatsiiny: Ukrayina ta zarubizhnyi dosvid [State Innovation Management: Ukraine and foreign experience], Viktoriia, Kyiv, 2004 [in Ukrainian].
- [11] B. E. Holovash, Dosvid Yevropeiskoho Soiuzu u formu- vanni investytsiino-innovatsiinoi polityky [The Experience of the European Union in the Formation of Investment-Innovation Policy]. Formuvannia rynkovykh vidnosyn v Ukraini - Formation of Market Relations in Ukraine, 11 (2011) 62-66 [in Ukrainian].
- [12] V. H. Andriichuk, M. T. Fleichuk, A. T. Mokii, (Eds.). Investytsiina bezpeka perekhidnykh ekonomik v umovakh hlobalnoi intehtatsii: teoretyko-metodolohichni pidstavy ta prykladni aspekty [Investment security of transition economies in the conditions of global integration: theoretical and methodological grounds and applied aspects]. Donetsk, 2012 [in Ukrainian].
- [13] Industry 4.0 - na porozni nastupnoi promyslovoi revoliutsii [Industry 4.0 - on the eve of the next industrial revolt]. (May 06, 2014). appau.org.ua. Retrieved from <https://appau.org.ua/publications/industry-4-0-na-porozni-nastupnoyi-promyslovoyi-revolutsiyi-2/> [in Ukrainian].
- [14] The 2013 Global Innovation 1000 Study: navigating the digital future (2014). www.strategyand.pwc.com. Retrieved from https://www.strategyand.pwc.com/media/file/Strategyand_2013-Global-Innovation-1000-Study-Navigating-the-Digital-Future_Media-Report.pdf [in English].
- [15] Osnovni pokaznyky zovnishnoi torhivli Ukrainy [Main indicators of foreign trade of Ukraine]. (n.d.). ucab.ua. Retrieved from http://ucab.ua/ua/doing_agribusiness/zovnishni_rinki/osnovni_pokazniki_zovnishnoi_torgivli_ukraini [in Ukrainian].
- [16] V. M. Heits et al. (Eds.). Innovatsiina Ukraina - 2020: natsionalna dopovid [Innovative Ukraine 2020: National Report]. Kyiv, 2015 [in Ukrainian].

- [17] L. M. Meshkun, Nimetska ta shvedska modeli pobudovy sotsialno-orientovanoi rynkovoi ekonomiky [German and Swedish models for building a socially oriented market economy]. *Naukovyi visnyk ChDIEU. Seriya 1: Ekonomika - Scientific Bulletin of the CSTU. Series 1: Economics*, 3 (2014) 31-37 [in Ukrainian].
- [18] Archív Kechnecké Noviny (2008-2013). *www.kechnec.sk*. Retrieved from <http://www.kechnec.sk/clanok/archiv-kechnecne-noviny> [in Slovakian].
- [19] N. T. Rud, Yu. M. Havryliuk, Intelktualnyi potentsial: faktory formuvannia i realizatsii [Intelligent Potential: Formation and Implementation Factors]. *Ekonomichni nauky. Ser.: Ekonomika ta menedzhment - Economic sciences. Ser: Economics and Management*, 8 (2011) 283-297 [in Ukrainian].
- [20] I. R. Buzko, N. H. Ahafonova, Doslidzhennia chynnykiv, shcho vplyvaiut na formuvannia i rozvytok intelektualnogo potentsialu pidpriemstva [Investigation of the factors influencing the formation and development of the intellectual potential of the enterprise]. *Prometei - Prometheus*, 33 (2010) 59-63 [in Ukrainian].
- [21] S. Arkhiereiev, O. Popadynets, (n.d.). Pidvyshchennia roli rehioniv u vypusku vysokotekhnolohichnoi ta innovatsiinoi produktsii: mizhnarodnyi dosvid [Increasing the Role of Regions in the Issue of High-Cognition and Innovative Products: International Experience]. *old.niss.gov.ua*. Retrieved from <http://old.niss.gov.ua/Monitor/november08/5.htm> [in Ukrainian].
- [22] V. I. Hunko, Pokaznyky, indykatory ta kryterii rozvytku intelektualnogo potentsialu zainiatoho naselennia [Indicators, indicators and criteria for the development of the intellectual potential of the employed population]. *Visnyk Sumskoho natsionalnogo ahrarnoho universytetu. Finansy i kredyt - Bulletin of the Sumy National Agrarian University. Finance and Credit*, 1 (2013) 190-197 [in Ukrainian].
- [23] M. V. Paladii, Efektyvne vykorystannia intelektualnogo potentsialu natsii - neobkhidna umova innovatsiinoho rozvytku ekonomiky derzhavy [Effective use of the intellectual potential of the nation is a prerequisite for the innovative development of the state's economy]. *Nauka ta innovatsii - Science and Innovation*, 5, 3 (2009) 51-54 [in Ukrainian].
- [24] B. I. Pshyk, S. B. Kopytko, Rol intelektualnogo potentsialu u zmitsnenni ekonomichnoi bezpeky derzhavy [The Role of Intellectual Potential in Strengthening Economic Security of the State]. *Sotsialno-ekonomichni problemy suchasnoho periodu Ukrainy - Socio-economic problems of the modern period of Ukraine*, 2 (2016) 24-27 [in Ukrainian].
- [25] I. V. Fedulova, Teoretychne obgruntuvannia sutnosti innovatsiinoho potentsialu [Theoretical Explanation of the Essence of Innovation Potential]. *Halytskyi ekonomichnyi visnyk - Galician Economic Journal*, 15 (2007) 43-51 [in Ukrainian].
- [26] L. I. Fedulova, M. O. Kolosh, Innovatsiinyi potentsial pidpriemstva yak faktor zabezpechennia rezul'tatyvnosti restrukturyzatsii [Innovative potential of the enterprise as a factor for ensuring the effectiveness of restructuring]. *Naukovi pratsi MAUP -Scientific works of IAPM*, 3 (2007) 48-51 [in Ukrainian].
- [27] Zakon Ukrainy "Pro naukovu i naukovo-tekhnicnu diialnist" : vid 26 lystopada 2015 r., № 848-VIII [The Law of Ukraine "On Scientific, Scientific and Technical Activity" dated November 26 2015, № 848-VIII]. *zakon.rada.gov.ua*. Retrieved from <http://zakon5.rada.gov.ua/laws/show/848-19> [in Ukrainian].
- [28] E. M. Zabarna, Innovatsiino-investytsiinyi faktor ekonomichnoho rozvytku Ukrainy [Innovation-investment factor of the economic development of Ukraine]. In: *t problem rynku ta ekon.-ekol. doslidzhen NAN Ukrainy, Odessa, 2006*. [in Ukrainian].
- [29] I. V. Yukhnovskyi, Sutnist ta struktura innovatsiino- investytsiinoho potentsialu ekonomiky: osnovni pidkhody ta napriamy formuvannia [The essence and structure of the innovation and investment potential of the economy: the main approaches and directions of formation]. *Ukrainskyi sotsium - Ukrainian society*, 2 (2010) 159-171 [in Ukrainian].

- [30] N. Yu. Tymoshenko, N. V. Menshykh, Problemy rozvytku innovatsiinoi ta investytsiinoi diialnosti v Ukraini [Problems of development of innovation and investment activity in Ukraine]. Investytsii: praktyka ta dosvid - Investments: practice and experience, 12 (2015) 35-38 [in Ukrainian].
- [31] A. A. Danylenko, Aktualni pytannia priamykh inozemnykh investytsii do Ukrainy z YeS (u konteksti rozshyrennia Yevrosoiuзу na Skhid) [The urgent issues of direct foreign investment in Ukraine with the EU (in the context of the enlargement of the European Union to the East)]. Finansy Ukrainy - Finance of Ukraine, 1 (2008) 127-137 [in Ukrainian].
- [32] V. H. Bodrov, O. M. Safronova, N. I. Baldych, *Derzhavne rehuliuвання ekonomiky ta ekonomichna polityka* [State regulation of the economy and economic policy]. Akademvydav, Kyiv, 2010 [in Ukrainian].
- [33] I. M. Lytsur, Yu. V. Lymych, Chynnyky formuvannia innovatsiino-investytsiinoi polityky staloho rozvytku [Factors of formation of innovation-investment policy of sustainable development]. Efektyvna ekonomika - Effective economy, 9 (2013). Retrieved from <http://www.economy.nayka.com.ua/?op=1&z=2299> [in Ukrainian].
- [34] V. M. Zahorulko, M. V. Kolesnyk, *Dilova stratehiia pidpriemstva* [Business Strategy of the Enterprise: A Course in Lectures]. Vydavnytstvo Natsionalnoho aviaatsiinoho un-tu "NAU-druk", Kyiv, 2008 [in Ukrainian].
- [35] Ya. V. Bereznyi, D. V. Liapin, D. S. Pokryshka, Problemy ta shliakhy formuvannia spriatlyvoho instytutsiinoho seredovyscha dlia pidpriemnytskoi diialnosti v Ukraini [Problems and ways of formation of a favorable institutional environment for entrepreneurial activity in Ukraine]. in: Ya. A. Zhalila. (Eds.). NISD, Kyiv, 2014 [in Ukrainian].
- [36] Ukraina u svitovykh reitynhakh: Hlobalnyi innovatsiinyi indeks [Ukraine in World Rankings: Global Innovation Index]. (n.d.). *informal.com.ua*. Retrieved from <http://informal.com.ua/ratings/ukrajina-u-svitovyh-reitynhahhlobalnyj-innovatsijnyj-indeks> [in Ukrainian].