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RESEARCH ON INNOVATIVE INVESTMENT TO ENSURE EFFECTIVE DEVELOPMENT OF ENTERPRISES

The article explores the key aspects of innovative investment as one of the most important mechanisms for ensuring the effective development of enterprises in the current environment. It is emphasized that in the context of rapid scientific and technological progress, growing global competition and dynamic changes in the world economy, innovations are becoming a decisive factor of success for enterprises. Innovative activity ensures adaptation to the challenges of the present, enhances competitiveness, and creates the preconditions for long-term business growth. Particular attention is paid to the role of investment in the creation, implementation and commercialization of new technologies, products and processes. The article analyses in detail the various sources of financing for innovative projects, including enterprises' own resources, government support, venture capital, bank loans, and international grant programs. These sources are compared by such criteria as accessibility, risk level, cost of attraction and efficiency of use. It is shown that the attraction of financial resources for the development of innovations contributes to increasing labor productivity, optimizing production processes, improving product quality, strengthening financial stability, and increasing the market value of enterprises. The authors emphasize the need for a strategic approach to planning investments in innovation development, which allows for efficient resource allocation and maximization of economic effect. The authors also consider the main obstacles that hinder the innovative development of enterprises. These include limited access to financial resources, poorly developed infrastructure to support innovation, insufficient number of qualified personnel, high risks associated with innovation, and imperfect legislative framework. To overcome these problems, the author proposes a number of measures, including the development of effective mechanisms to stimulate investment, intensification of public-private partnerships, creation of innovation clusters, simplification of access to finance, and introduction of modern digital technologies to optimize innovation management.

Key words: innovative investment, effective development, risk level, innovative capital, indicators, sustainability.

Formulation of the problem. The innovation sector is an organic part of the economy aimed at improving various aspects of economic life. Under the influence of innovative activity, productive forces and property relations change, economic relations and forms of management are modified. The innovation sector, as an integral part of the economy, is an object of scientific research in economics. At the same time, the innovation sector, as a subject of research, has certain specifics. The main thing is to identify, systematize and forecast the factors, conditions and trends that initiate and influence innovation activity. The complexity of the problem of establishing the relationship between the economy and technological progress lies in the fact that there are no formal methods for determining the impact of innovation on economic growth. Existing models of economic growth take into account the impact of technical progress as a residual factor, compared to others, and are hypothetically game-like with a number of assumptions, which does not allow them to be used in the strategic management of the region's innovative development. From the standpoint of economic stabilization, it is important to assess and predict the impact of all expected threats, as well as economic and non-economic influences on their course, and most importantly, to identify the possibility of a sharp decline and a critical threshold. Along with the forecasting and analytical task, the opposite task arises, which is to develop and implement a system of measures aimed

at preventing the onset of a crisis and overcoming a critical threshold.

Analysis of recent achievements and publications. The issues of theory and practice of using innovation capital and development of innovation processes are covered by such foreign authors as D. Gladstone, L. Gladstone, P. Gompers, S. Cortum, I. Cooper, K. Campbell, J. Lerner, T. Meyer, T. Perkins, G. Chesbro, etc. The study of various aspects of the functioning of innovation capital is devoted to the works of such researchers as L. Antoniuk, V. Anshin, A. Balaban, M. Bunchuk, P. Gulkin, L. Ivina, A. Karzhauv, A. Kashirin, A. Poruchyuk, A. Folomiev, N. Fonstein. Despite considerable theoretical interest in innovation capital, the content of the concepts of «innovation capital» and «innovation investment», creation and development of a national system of innovation investment are still controversial and require further research.

Therefore, the **purpose** of the article is to study the system of innovative investment and develop its model to ensure effective development of enterprises.

Presentation of the main material. As the analysis of foreign experience has shown, innovation capital, as a special type of financial capital, was brought to economic life not so much by the lack of budgetary funds for the development of science and high technologies (high-tech complex) as by the current stage of scientific and technological progress, which is characterized by the priority position of innovations,

especially systemic ones, among the set of development factors, as discussed above. Innovative capital has proved to be the most suitable for investment support of the reproduction of innovations, which is associated with a wide variety of risks. As the study has shown, innovation investment cannot compensate for the lack of funds from other sources for the development of the scientific and technological sphere. It is useful in its specific «niche» of developing the innovative activity of economic systems. No wonder that the share of innovation capital in the total amount of invested funds in many countries does not exceed a few per cent (except for the USA and the UK).

Let's briefly consider the main components of the concept of an innovative investment system. In the set of goals and objectives that the aforementioned system is designed to address, we should highlight those that are most consistent with the economic nature of innovation capital as a type of financial capital. The most significant effects of innovative investment on the economy can serve as a benchmark. On this basis, the goals and objectives of creating a national system of innovative investment can be identified as follows

- improvement of investment support for innovative activities, primarily for small businesses, by reorienting some financial resources [4];

- creation of optimal financial, personnel, organizational and regulatory conditions for innovative investment in breakthrough innovative, including technological, projects that increase the competitiveness of Ukrainian goods in world markets;

- development of small innovative entrepreneurship in the real sector of the economy in the scientific and technical sphere in the high-tech complex;

- promoting commercialization of the results of scientific, technical and innovative activities;

- promoting the modernization of the corporate sector of the economy through the formation of a critical mass of scientific and innovative concerns in the real sector of the economy, adequate to the post-industrial stage of scientific and technological progress;

- involvement of household savings in the economic innovation turnover and in the country's investment resource.

It is possible to ensure the achievement of the goals and strategic objectives of the formed system of innovative investment by creating the necessary initial prerequisites in the form of an integral set of factors of development of this system and subjective conditions. In this case, we proceed from two important methodological provisions:

- firstly, the factors are objective in nature and, in principle, social reproduction is impossible without them. Therefore, we share the position of the authors who include resource factors and process factors among such factors [6];

- secondly, the set of factors under the influence of which the system of innovative investment is formed and developed mainly consists of general economic factors, but they act in relation to the studied system in specific subjective conditions, and therefore take special forms.

Among such factors with special forms that determine the effectiveness of the formation and development of the system of integrated use of innovation capital, we include:

- potential demand for production innovations, including breakthrough innovations;

- market demand for long-term risky investments in innovation;

- qualified innovation management as a special management resource in the cycle of innovation investment;

- a developed comprehensive information resource that ensures the connection of all elements of the venture capital system and their uninterrupted information exchange;

- dynamic financial domestic capital and a developed national financial system with market distribution and exchange relations;

- a scientific and technological complex that reproduces innovations with high commercial potential and a high degree of novelty;

- innovative entrepreneurial resource of high qualification and culture;

- a stable regulatory framework that creates a number of advantages for the self-growth of innovative capital in the real sector of the economy compared to other types of investment.

There are other factors of formation of the system of innovative investment, but the above are, in our opinion, decisive, because, as the study of foreign experience has shown, they are sufficient, as they create, in accordance with the theory of systems, an objective need for the creation of an innovative system.

In order to form a viable system of innovative investment, we believe that a number of methodological rules should be followed.

Firstly, the system should create the most favorable conditions for the smooth flow of such processes as innovative investment, innovative entrepreneurship, investment design, etc.

Secondly, it must acquire a number of mandatory properties in the course of formation, which will allow us to judge whether the system has been created or not. These properties include self-organization, relative stability, proportionality, the ability to reproduce internal factors of self-development, integrity, the ability to function autonomously and the ability to build a mutually beneficial relationship with the economy as a whole, information content, and the ability to evolve in achieving the main target benchmarks (objectives).

Thirdly, the structuring of the system should begin with the identification of a set of elements that are closed on the basis of the specificity of the functions performed.

Fourthly, the system can be formed by combining functional elements by identifying and formalizing their dependence on each other.

Using the above methodological approaches, the formation of the author's structure will begin with the allocation of structural blocks that guarantee the possibility of applying the above factors and determine the emergence of the main properties of the system of innovative investment.

1. The main block in the structure of the system of innovative investment in Ukraine should be innovation and reproduction. It should include small innovative enterprises, innovative corporations, educational, research and innovation complexes of higher education and some universities. We include this block among the basic ones for the following reasons:

First, the structures of this block create real demand for long-term risky innovation investments, without which the emergence of innovation capital is impossible in principle.

Secondly, the structural elements of this block are used to the greatest extent as a factor in the development of innovative entrepreneurial resources.

Thirdly, these structures form a significant and most promising part of the national innovation market.

Only those small and medium-sized enterprises that reproduce or are capable of reproducing technical and technological innovations with high future market potential can be considered to be included in this system. One of the criteria for the existence of such potential in a particular

innovation may be the fundamental novelty, uncertainty and high risks of commercialization of the new product being created or created by scientific and technological activities.

2. Structures that provide a full supply of innovation capital can be considered equivalent to innovation and reproduction units in the system of innovation investment. This equivalence is explained by a number of theoretical and methodological circumstances. First of all, the dialectical unity of supply and demand in any market: in the market of innovative investments, supply and demand are the driving forces in the development of the system of innovative investment in any national economy. These categories serve as a barometer to show how well the innovation system is developing. It is the ratio of supply and demand for innovative capital that objectively determines the balance in the development of the first and second blocks of the structure of the high-risk investment system. In addition, the correlation of elements of these two blocks mainly determines the interconnection of all stages of the innovation investment process, contributing to its continuous renewal. Venture capital funds are special subsystems in the national system of innovative investment. Therefore, their creation can be considered one of the most important areas of formation of the national innovation system. This block also includes legislative regulation, a set of regulations. Working with innovative investments in the country is still very complicated, and there is an insufficient amount of legislation that could stimulate this type of activity, which is very important for the development of the economy of an industrial state. Not all countries have special legislation on innovative business, but in all countries other elements of civil and financial legislation allow innovative business to develop successfully. We don't have all these elements yet, and perhaps our country will have to adopt a law on this type of activity to accelerate its progress.

3. The organizational and institutional block should be considered an integral part of the innovation investment system. This thesis follows from the analysis of the most successful innovation capital markets in the USA, the UK, Canada, and Germany. Without being able to present in detail the results of the analysis of all forms of this block, we will list only the main ones:

- science and technology parks, business incubators, and their associations. The role of incubators, technology parks and technopolises in creating the optimal classical triad of innovative investment – capital – innovative projects – management – cannot be overestimated;

- various consulting firms for marketing of high-tech products; certification, measurement and standards; information support; training; project management; financial planning, protection and management of intellectual property, patenting, commercialization of technologies and other innovations, legal issues, etc. There are reasons to include in the innovation system only those consulting firms that are associated with the formation and efficient use of innovation capital and with the emergence and use of innovations through innovative investments;

- a set of centers, schools, courses, coaching centers, etc. for training, advanced training, retraining of personnel for the innovation industry;

- organizations that make up the market infrastructure of innovative capital. These are stock exchanges, brokerage firms, etc., i.e. the innovation investment system includes a

part of the innovation capital market and a part of the stock market infrastructure. These are the structures that ensure the movement of innovative capital. The above analysis allows us to develop a structural and functional diagram of the national system of innovative investment (Figure 1) [2];

- insurance organizations related to innovative business. Although the risks of innovative investment are not insured anywhere in the world, property risks of innovative enterprises – objects of innovative investment, risks related to the life and health of top managers of these enterprises, liability insurance, and insurance of other classical risks – are almost always insured. Such insurance is often a mandatory requirement of an innovative capitalist. A few comments should be made on individual structural elements.

Block 1 includes scientific and technical organizations (STOs) engaged in applied research and technology transfer. The latter is the key feature that makes a research organization a part of the innovation system. The main activities of these institutions are usually consulting and training, research and certification, information, technical support and technology transfer. NTOs are particularly common in Germany, France, Belgium, England, Italy, Greece and other countries.

Block 3 includes guarantee funds, which are often referred to in the literature as financial infrastructure. Guarantee funds do not provide funds for investment in firms. They only provide guarantees to financial institutions, reducing their risks when investing in innovative enterprises. The EU is actively creating such funds. Each block of the innovation system has 3-4 main tasks, which can also be considered as functions, as they are directly related to the main functions of innovation capital.

Conclusions. Thus, the main enlarged directions of formation of the national system of innovative investment, presented and substantiated in the study, are allocated on the principle of their greatest correspondence to the use of innovative capital for the development of innovative activity primarily in the production sector, in the scientific, technical and high-tech complexes of the State's economy. The structural and functional scheme of the national system of innovative investment developed by the author is distinguished by the presence of innovation and reproduction, financial and legal, organizational and institutional blocks and allows creating the most favorable conditions for the smooth flow of such processes as innovative investment, innovative entrepreneurship, investment design, etc. If we are talking about intensification of innovative investment in Ukraine in general, we can justifiably identify and specify a number of other areas of formation of the innovation system. These include, for example, the development of intermediation between science and capital, the development of holistic risk management, the development of an 'entrepreneurial culture', innovation management, self-organization of the population and its economic activity, stimulation of cooperation, etc. A long-term innovation strategy should be aimed at developing and maintaining a high level of innovation capabilities of the entire social system, and at creating a favorable innovation environment. In the process of establishing an innovative market model of economic development, it is recommended to pay primary attention to the development and intensification of innovation activities at the enterprise, development of production based on the implementation of research results.

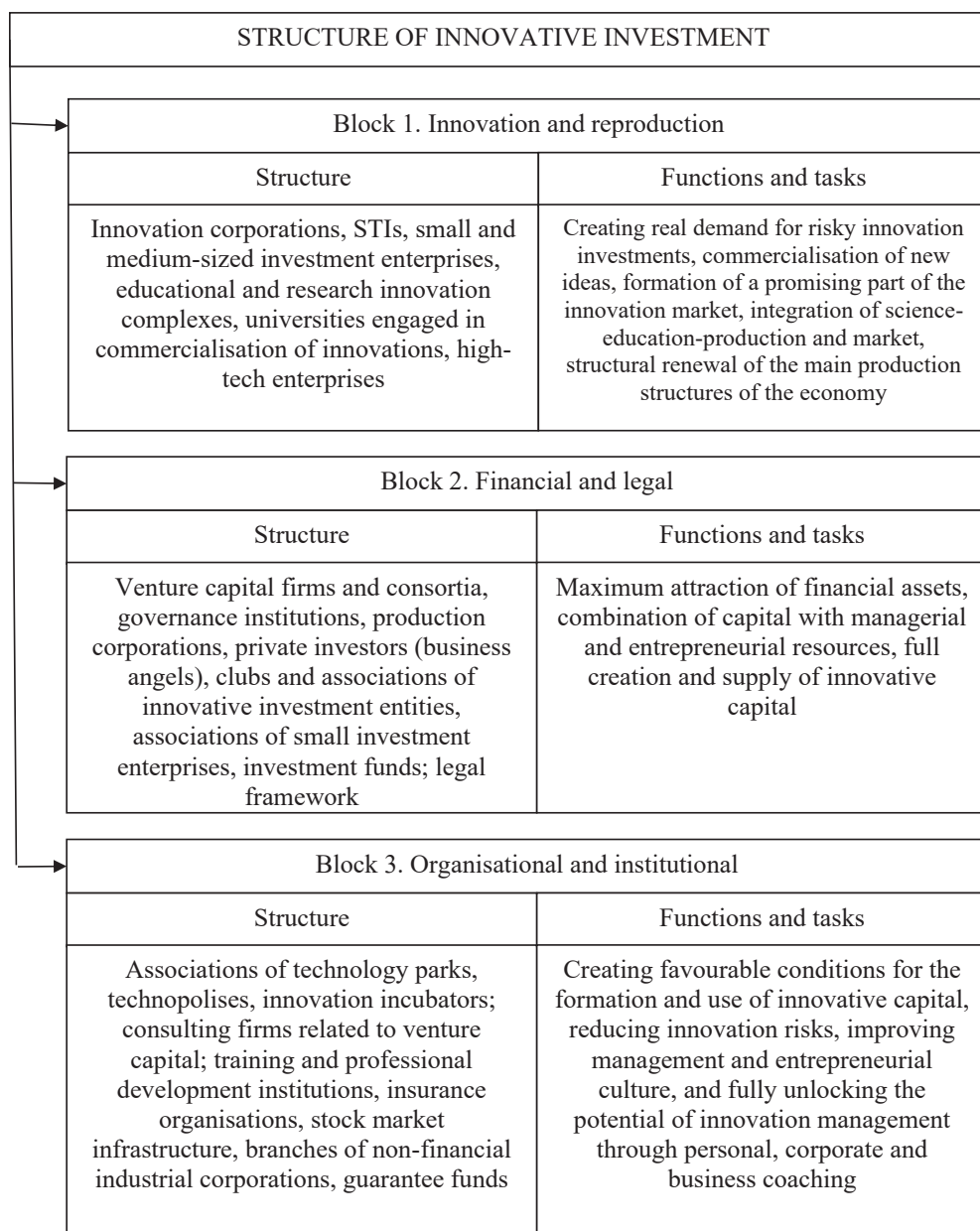


Figure 1. Model of the innovation investment system (compiled by the author)

References:

- Sosnovska O. O., Dedenko L. V. (2018), Napryami stiykogo funktsionuvannya pidpriemstva v umovah nevznachenosti [Trends of sustainable functioning of the enterprise in conditions of uniqueness]. *Zbirnik naukovih prats Universitetu Derzhavnoyi fiskalnoyi sluzhbi Ukrainy*, no. 2, pp. 369–383. (in Ukrainian)
- Lagunova I. A. (2018), Sutnist ta printsipi kontseptsiyi rizik-menedzhmentu. [Essence and principles of risk management concept]. *Aktualni problemi derzhavnogo upravlinnya*, no. 1 (53), pp. 44–52. (in Ukrainian)
- Dyadyuk M. A. (2017), Upravlinnya rizikami: konsp. lekts. [Risk Management: cons. lectures]. Harkiv: Fort. [Online], p. 165. Available at: <http://elib.hduht.edu.ua/jspui/handle/123456789/1893>
- Posohov I. M. (2017), Suchasni mizhnarodni standarti rizik-menedzhmentu [Modern international standards of risk management]. *Suchasni tendentsiyi rozvitku svitovoyi ekonomiki: zb. materialiv 9-yi Mizhnar. nauk.-prakt. konf., Harkiv : HNADU, Tom. 2*, pp. 77–78. (in Ukrainian)
- Gonchar G. P. (2014), Adaptatsiya svitovih standartiv rizik-menedzhmentu do diyalnosti vitchiznyanih kompaniy [Adaptation world standards of risk management to the activities of domestic companies]. *Efektivna ekonomika* no 3. (in Ukrainian)
- DudnEva Yu. E. (2019), Rizik-menedzhment: Integrovaniy pidhid do organizatsiyi [Risk management: an integrated approach to an organization]. *Ekonomika ta suspilstvo*, no. 20, pp. 229–236 ISO 31000:2018 (in Ukrainian)
- Moroz, I.O. (2017), Sutnist upravlinnya rizikami pidpriemstva ta navichki, neobhidni menedzheru dlya yogo provadzhennya [The essence of risk management of the enterprise and nurses, the necessary manager for its processing]. *Zbirnik materialiv*

Vseukrayinskoyi naukovo-praktichnoyi on-line konferentsiyi aspirantiv, molodih uchenih ta studentiv ZHDTU. [Online], Tom 2, available at: <https://conf.ztu.edu.ua/wp-content/uploads/2017/06/115-1.pdf> (accessed: 14.04.2024).

8. Volinets I. (2016), Organizatsiya rizik-menedzhmentu na pidpriemstvi [The Organization of Risk Management at the Enterprise]. *Ekonomichniy chasopis Shidnoevropeyskogo natsionalnogo universitetu imeni Lesi Ukrayinki*, no. 2, pp. 51–55. (in Ukrainian)

Список використаних джерел:

1. Сосновська О. О., Деденко Л. В. Напрями стійкого функціонування підприємства в умовах невизначеності. *Збірник наукових праць Університету Державної фіскальної служби України*. 2018. № 2. С. 369–383.
2. Лагунова І. А. Сутність та принципи концепції ризик-менеджменту. *Актуальні проблеми державного управління*. 2018. № 1 (53). С. 44–52.
3. Дядюк М. А. Управління ризиками: консп. лекц. Харків : Форт, 2017. С. 165 URL: <http://elib.hduht.edu.ua/jspui/handle/123456789/1893>
4. Посохов І. М. Сучасні міжнародні стандарти ризик-менеджменту // Сучасні тенденції розвитку світової економіки: зб. матеріалів 9-ї Міжнар. наук.-практ. конф., Харків : ХНАДУ, 2017. Т. 2. С. 77–78.
5. Гончар Г. П. Адаптація світових стандартів ризик-менеджменту до діяльності вітчизняних компаній. *Ефективна економіка*. 2014. № 3.
6. Дуднева Ю. Е. Ризик-менеджмент: інтегрований підхід до організації. *Економіка та суспільство*. 2019. № 20. С. 229–236 ISO 31000:2018.
7. Мороз І. О. Сутність управління ризиками підприємства та навички, необхідні менеджеру для його провадження. Збірник матеріалів Всеукраїнської науково-практичної on-line конференції аспірантів, молодих учених та студентів ЖДТУ. 2017. Т. 2. URL: <https://conf.ztu.edu.ua/wp-content/uploads/2017/06/115-1.pdf>
8. Волинець І. Організація ризик-менеджменту на підприємстві. *Економічний часопис Східноєвропейського національного університету імені Лесі Українки*. 2016. № 2. С. 51–55.

ДОСЛІДЖЕННЯ ІННОВАЦІЙНОГО ІНВЕСТУВАННЯ ДЛЯ ЗАБЕЗПЕЧЕННЯ ЕФЕКТИВНОГО РОЗВИТКУ ПІДПРИЄМСТВ

Анотація. У статті досліджуються ключові аспекти інноваційного інвестування як одного з найважливіших механізмів забезпечення ефективного розвитку підприємств у сучасних умовах. Підкреслюється, що в умовах стрімкого науково-технічного прогресу, зростання глобальної конкуренції та динамічних змін у світовій економіці інновації стають вирішальним чинником успіху для підприємств. Інноваційна діяльність забезпечує адаптацію до викликів сучасності, підвищення конкурентоспроможності, а також створює передумови для довгострокового зростання бізнесу. Особливу увагу приділено ролі інвестицій у створення, впровадження та комерціалізацію новітніх технологій, продуктів і процесів. У статті детально аналізуються різноманітні джерела фінансування інноваційних проєктів, серед яких виокремлено власні ресурси підприємств, державну підтримку, венчурний капітал, банківські кредити та міжнародні грантові програми. Проведено порівняння цих джерел за такими критеріями, як доступність, рівень ризиків, вартість залучення та ефективність використання. Показано, що залучення фінансових ресурсів у розвиток інновацій сприяє підвищенню продуктивності праці, оптимізації виробничих процесів, поліпшенню якості продукції, зміцненню фінансової стійкості, а також зростанню ринкової вартості підприємств. Акцентовано увагу на необхідності стратегічного підходу до планування інвестицій у розвиток інновацій, що дозволяє ефективно розподіляти ресурси та досягати максимального економічного ефекту. Автори також розглядають основні перешкоди, які гальмують інноваційний розвиток підприємств. Серед них відзначено обмежений доступ до фінансових ресурсів, слабо розвинену інфраструктуру підтримки інновацій, недостатню кількість кваліфікованих кадрів, високі ризики, пов'язані з інноваційною діяльністю, а також недосконалість законодавчої бази. Для подолання цих проблем запропоновано низку заходів, включаючи розробку ефективних механізмів стимулювання інвестицій, активізацію державно-приватного партнерства, створення інноваційних кластерів, спрощення доступу до фінансування, а також впровадження сучасних цифрових технологій для оптимізації управління інноваціями.

Ключові слова: інноваційне інвестування, ефективний розвиток, рівень ризику, інноваційний капітал, показники, стійкість.