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ENTERPRISE INNOVATION AND INVESTMENT ACTIVITIES RISKS SYSTEMATISATION IN THE CONTEXT OF POST-CONFLICT TRANSFORMATIONS

Ivchenko Yu.A.

СИСТЕМАТИЗАЦІЯ РИЗИКІВ ІННОВАЦІЙНО-ІНВЕСТИЦІЙНОЇ ДІЯЛЬНОСТІ ПІДПРИЄМСТВА В КОНТЕКСТІ ПОСТКОНФЛІКТНИХ ТРАНСФОРМАЦІЙ

Івченко Ю.А.

The article analyses types of risks that are typical for domestic business entities. It improves classification of innovation and investment risks of an enterprise by means of expansion of classification features. Domestic enterprises are constantly solving the problem of identifying, assessing and managing business risks, which is even more important in the context of post-conflict transformations. Therefore, the problem of identifying and systematising the risks of innovation and investment activities of enterprises in the context of post-conflict transformations is relevant and requires scientific substantiation. The risks of innovation and investment activities should be considered not in the historical dimension, but in the context of their minimisation in the future. When implementing innovation and investment activities, which are unpredictable in themselves, it is simply not possible to consider risk "as a result", because innovations have no analogues and it is impossible to extrapolate the experience of other projects. iIf risk is the possibility of deviation from a certain value, then such a possibility can be assessed using relative scores, the deviation can be determined by direction (positive, negative, zero), and the risk itself can be characterised by type.

Based on the results of a qualitative risk analysis, an enterprise should assess the risks and determine a set of organisational decisions to manage them (types of management decisions to minimise their possible impact). The allocation of the proposed feature "Risks of postconflict transformations" allows to take into account new types of risks that arise in the socio-political and economic environment in the new economic conditions and relate to: the crisis state of the economy, demographic changes in the job market, social attitudes, the state and quality of the information space, infrastructure support, the level of innovation and investment, en-

ergy, transport, consulting, engineering and other types of activities, etc. Possible methods for assessing various types of risks of innovation and investment activities of enterprises are outlined. In general, the author's proposals can be used to formalise approaches to assessment of innovation and investment risks.

Keywords: risk, innovation and investment activity, enterprise, systematisation, post-conflict transformations, assessment methods.

Formulation of the Problem. Innovative and investment activities are the most risky, so the vast majority of entrepreneurs do not want to deal with them (according to psychologists, most managers are risk averse). And even those enterprises that implement innovation and investment activities face significant problems, in addition to minimising external risks, such as overcoming internal resistance (employees do not want changes), the need to divert significant resources from core activities with unpredictable results, the need for fundamental technical, technological and/or organisational upgrades, etc.

Domestic enterprises are constantly solving the problem of identifying, assessing and managing business risks, which is even more important in the context of post-conflict transformations. Therefore, the problem of identifying and systematising the risks of innovation and investment activities of enterprises in the context of post-conflict transformations is relevant and requires scientific substantiation. Recent Research and Publications Review. The following scholars have devoted their works to the study of the nature of various types of risks: Bozhkova V.V. [6], Vitlynskyi V.V. [1], Verchenko P.I. [3], Vos D. and Wiley J. [9], Hurochkina V.V. [4], Illyashenko S.M. [5], Nakonechnyi S.I. [2], Sigal A.V. [3], Sirik I.P. [7], Shoaf I.K. [10], Yastremskyi O.I. [8] and many others. However, the nature of business risks is such that their number is constantly growing and they are constantly updated in accordance with the changes that occur in the environment.

The purpose and objectives of the article. The aim of the article is to improve the systematisation of risks of innovation and investment activities of enterprises in the context of post-conflict transformations.

To achieve this goal, the set of tasks is formulated:

- to analyse the existing types of risks that are typical for domestic business entities;
- to propose a classification feature that characterises the risks of enterprises in the context of post-conflict transformations,
- to substantiate the feasibility of using an expanded classification of risks;
- to allocate possible methods for assessing the risks of innovation and investment activity of enterprise.

The subject: tools for systematising the risks of innovation and investment activities of business entities.

The object of research: innovation and investment processes that occur at enterprises in the context of post-conflict transformations.

Results. In modern riskology, established scientists have two alternative approaches to risk definition (which exist equally), on which all further procedures for its assessment and minimisation depend:

- first: risk is considered as a result;
- second: risk is considered as a possibility of deviation from the planned result.

In our opinion, the risks of innovation and investment activities should be considered not in the historical dimension, but in the context of their minimisation in the future. When implementing innovation and investment activities, which are unpredictable in themselves, it is simply not possible to consider risk "as a result", because innovations have no analogues and it is impossible to extrapolate the experience of other projects. So, we follow the second approach.

If risk is the possibility of deviation from a certain value, then such a possibility can be as-

sessed using relative scores, the deviation can be determined by direction (positive, negative, zero), and the risk itself can be characterised by type.

Generally speaking, all types of risks can be (and are) characterised by the following features

- duration (short-, medium- and long-term);
- scale (micro-, mega-, macro-level);
- systematicity (systematic and unsystematic) of the relationship to the subject (internal, external), etc.

Let us consider specific risks. Scholars identify different types of risks inherent in innovation and investment activities. Thus, V. V. Hurochkina identifies the following types of risks of innovation activity of an enterprise [4]

- operational (commercial, production)
- technological
- resource
- financial (investment, credit, currency);
- intellectual and personnel;
- documentary.

Therefore, in ensuring innovation and investment potential, enterprises need to identify first of all innovation and investment risks, then all business risks that accompany any activity, and then new types of risks that may arise in the context of post-conflict transformation.

Thus, we consider investment risks to include

- credit (risk of lack of credit funds; risk of inability to repay credit debts on time; risk of high credit rates)
- currency risks (risk of rapid currency fluctuations),
- financial (risk of insufficient attraction of own funds of enterprises, high cost of innovations),
- other (risk of difficulty in attracting investment (grant, credit, budget, etc.) funds).

Innovation risks include

- technological (the risk of rejection of an innovative technology - the impossibility of its implementation due to the inconsistency of all other elements of the system; underdevelopment of the market for new technologies)
- technical (the risk that the company's existing technical support does not meet the requirements of the innovation),
- uncertainty of the payback period of an innovation and investment project;
- market rejection of the finished innovative product.

The risks related to entrepreneurial activity include

- low level of innovation and investment potential of the enterprise,

- lack of resources (finance, qualified management and technical staff, etc.)
 - internal resistance of the system, etc.

The risks related to the period of post-conflict transformation and arising in the external environment include

- dangers and threats caused by the state of the economy in the changed conditions of post-conflict transformations;
- deficiencies in the regulatory framework, which does not have time to respond to socio-economic and political changes;
- political (changes in the attitude of certain states towards Ukraine);
- social (changes in social attitudes in society, demographic crisis, job market);
- market (low effective demand for domestic innovative products);

- infrastructure (insufficiency of innovation and investment infrastructure: consulting, engineering, etc;)
- destroyed/damaged industrial infrastructure (damaged critical energy and transport infrastructure)
- communication (absence or imperfection of conditions for establishing co-operative links between new entities in the innovation and investment process);
- information (lack of Internet platforms, insufficient systematic information on investments and innovations, on the state of the market conditions for innovative products); etc.

Thus, the risks under consideration can be summarised by the following criteria and schematically presented in Scheme1.

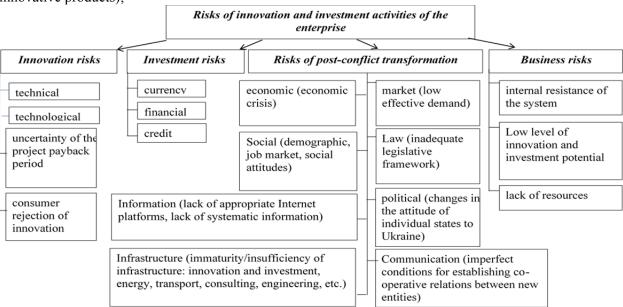


Fig. Systematisation of risks of innovation and investment activity of an enterprise in the context of post-conflict transformations

Chart

Methods for assessing the risks of innovation and investment activity of an enterprise

Groups of risk types	Methods of of risk assessment
Innovation risks	- decision tree method
	- scenario analysis method
	- simulation modelling method
Investment risks	- statistical method
	- method of analogues
	- balance method
	- calculation and analytical method
	- method of critical values,
	- method of sensitivity analysis
Business risks	- method of expert assessments
	- scenario analysis method
Risks of post-conflict	- a method based on game theory
transformation	- decision tree method
	- scenario analysis method
	- simulation modelling method
	- Delphi method

Scientists distinguish between qualitative and quantitative risk analyses. Based on the results of a qualitative risk analysis, an enterprise should assess the risks and determine a set of organisational decisions to manage them (types of management decisions to minimise their possible impact).

Let us outline the possibilities of applying different methods to assess the risks of innovation and investment activity of an enterprise (Chart).

Such a division, in our opinion, can be used in future to formalise approaches to assessing innovation and investment risks.

Conclusion. Thus, based on the results of the study, the following scientific results were obtained:

- the classification of innovation and investment risks of an enterprise has been improved by expanding the classification features (allocation of the feature "Risks of post-conflict transformations"), which, unlike the existing ones, allows taking into account new types of risks arising in the socio-political and economic environment in the new economic conditions;
- possible methods for assessing the risks of innovation and investment activities of an enterprise are outlined.

The results of this study can be implemented in the activities of domestic enterprises and form the basis for further scientific research.

References

- 1. Vitlinskyi V. V. (2003) Modeliuvannia ekonomiky: Navch. Posibnyk [Economic modelling]. K.:KNEU, URL: $http://elcat.pnpu.edu.ua/\bar{d}ocs/\%D0\%92\%D1\%96\%D$ 1%82%D0%BB%D1%96%D0%BD%D1%81%D1 %8C%D0%BA%D0%B8%D0%B9.pdf
- 2. Vitlinskyi V.V., Nakonechnyi S.I. (1996) Ryzyk u menedzhmenti [Risk in management]. K.: Borysfen-
- 3. Vitlinskyi V.V. (2006) Ekonomichnyi ryzyk: ihrovi modeli [Economic risk: game models]./ V.V. Vitlinskyi, P.I. Verchenko, A.V. Sihal, Ya.S. Nakonechnyi K.: KNEU, 446 p.
- 4. Hurochkina V.V. (2015) Innovatsiinyi potentsial pidpryiemstva: sutnist ta systema zakhystu. Ekonomika: realii chasu [Innovative potential of an essence and protection system. Economics: the realities of the times]., N_2 5 (21). https://economics.net.ua/files/archive/2015/No5/51.p
- 5. Illiashenko S.M. (2004) Ekonomichnyi ryzyk [Economic risk]. K.: Tsentr navchalnoi literatury, 220 p.
- 6. Illiashenko S.M., Bozhkova V.V. Upravlinnia ekolohichnymy ryzykamy innovatsii

- [Managing the environmental risks of innovation] Sumy.: VTD «Universytetska knyha», 214 p.
- 7. Sirik I.P. (2011) Upravlinnia ryzykamy v protsesi pryiniattia upravlinskykh rishen [Risk management in the management decision-making process]. AhroSvit: Naukovo-prak tychnyi zhurnal. № 13/14. P. 72-76.
- 8. Iastremskyi O.I. (1997)Modeliuvannia ekonomichnoho ryzyku [Modelling economic risk]. K.: ArtEk, 248 p.
- 9. Vose D. Risk analysis: a quantitative guide / D. Vose, John Wiley & Sons. 3rd ed. Chichester, 2008. 729 p.
- 10. Shoaf I.K. Hazard Risk Assessment Instrument / I.K. Shoaf et al. UCLA Center for Public Health and Disas- ters. 2006. 89 p.

Івченко Ю.А. Систематизація ризиків інноваційно-інвестиційної діяльності підприємства в контексті постконфліктних трансформацій

У статті проаналізовано види ризиків, характерні для вітчизняних суб'єктів господарювання. Вітчизняні підприємства постійно вирішують проблему ідентифікації, оцінки та управління бізнесризиками, що особливо важливо в умовах постконфліктних трансформацій. Тому проблема виявлення систематизації ризиків інноваційноінвестиційної діяльності підприємств в умовах постконфліктних трансформацій ϵ актуальною та потребує наукового обтрунтування. Удосконалено класифікацію інноваційних та інвестиційних ризиків підприємства шляхом розширення класифікаційних ознак. Ризики інноваційно-інвестиційної діяльності слід розглядати не в історичному вимірі, а в контексті їх мінімізації в майбутньому. При здійсненні інноваційно-інвестиційної діяльності, яка сама по собі непередбачувана, розглядати ризик «як результат» просто неможливо, оскільки інновації не мають аналогів і неможливо екстраполювати досвід інших проектів. Якщо ризик — це можливість відхилення від певної величини, то таку можливість можна оцінити за допомогою відносних балів, визначити відхилення за напрямком (позитивне, негативне, нульове), а сам ризик можна охарактеризувати за типом. За результатами якісного аналізу ризиків підприємство має оцінити ризики та визначити набір організаційних рішень щодо управління ними (види управлінських рішень для мінімізації їх можливого впливу). Виділення запропонованої ознаки «Ризики постконфліктних трансформацій» дозволяє врахувати нові види ризиків, які виникають у соціально-політичному та економічному середовищі в нових економічних умовах і стосуються: кризового стану економіки, демографічних. зміни на ринку праці, соціальних настроїв, стану та якості інформаційного простору, інфраструктурного забезпечення, рівня інновацій та інвестицій, енергетики, транспорту, консалтингу, інжинірингу та інших видів діяльності тощо. Можливі методи оцінки різних видів діяльності. окреслено ризики інноваційноінвестиційної діяльності підприємств. Загалом авторські пропозиції можуть бути використані для формалізації підходів до оцінки інноваційно-інвестиційних ризиків.

Ключові слова: ризик, інноваційноінвестиційна діяльність, підприємство, систематизація, постконфліктні трансформації, методи оцінки. **Івченко Юлія Анатоліївна** — старший викладач кафедри публічного управління менеджменту та маркетингу Східноукраїнського національного університету ім. В. Даля, м. Київ

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