

Economic security as a condition for sustainable development of countries, regions and enterprises

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Abstract. The basis of this research consists of conceptual developments of a methodological nature that allow one to diagnose and assess the limitations, threats and challenges of an economic, social, environmental, resource-technical, administrative and legal nature across the vertical of the economic levels of an integral national system. The purpose of the paper is to formulate an original methodological approach to the research of economic security, considering the causal connection between the elements of the totality of individual determinants and conditions characterizing threats and challenges. The peculiarity of the proposed approach lies in the fact that the authors consider the enterprise as the initial level of the economic system. The economic security of an enterprise largely determines the economic security of other levels of this system. They represent the business environment that can be a carrier of external threats that negatively affect the economic security of the enterprise. We believe that without ensuring economic security at all levels of the economic hierarchy, it is impossible to ensure the implementation of the concept of sustainable development. The use of the matrix principle justifiably allows the authors to solve the evaluation problem within a single methodological approach. It allows identifying the determinants that most affect economic security. It is assumed that the diagnostic results will allow developing specific measures to eliminate or reduce the role of negative factors and motivational and stimulating measures that ensure the resolution of contradictions arising from the presence of restrictions, including environmental and social, on entrepreneurial activity.

1 Introduction

The scientific community presents the category of economic security very broadly - from the analysis of various conditions that characterize it to protection from external and internal threats. It is postulated that this phenomenon belongs only to the national level. The authors have already spoken out on the definitions of economic security [1], drawing attention to the fact that this concept is still very controversial. It is important to note that the category of economic security is considered in scientific publications mainly at the national level in

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various aspects such as (1) countering threats to the country's defense capability; (2) ensuring the protection of people's lives [2]; (3) social security. In this aspect, economic security is considered in scientific papers [3-5].

The authors agree that security analysis is beyond the traditional focus on protection from interstate conflicts and military defense [6, 7]. It should be noted that today the world scientific community is trying to find new ways to develop the economy and ensure the vital needs of future generations to maintain a balance between the natural environment, economic growth, and social well-being.

As noted, economic security is characterized by various factors and aspects that determine the level or state of national security of the state. They can and should be considered. However, its most common definition of "the ability to withstand various threats and challenges" requires further specification, depending on the security of which of the levels of the holistic hierarchical economic system the talk is about: (1) enterprises within the industry; (2) industries as a set of enterprises; (3) regional economy; (4) the national economy as a set of regional economies.

A review of the scientific literature has shown that the concept of ensuring national economic security is sufficiently developed. The competitive environment itself dictates the need to assess economic security for enterprises, and the regional level does not have such tools. The authors agree with the opinion of scientists, who believes that the concept of economic security is applicable only to the national level. However, all levels of the national economic system are interconnected, and the concept of economic security is applicable to each level of the economic hierarchy (region, industry, enterprise).

All economic processes are carried out at enterprises that represent the initial level of the economic system. Therefore, on the one hand, their economic security largely determines the economic security of other levels of this system. On the other hand, the external environment of enterprises (the sectoral, regional, and country levels), represent the business environment that can be a carrier of external threats that negatively affect the economic security of the enterprise.

All of the above indicates that scientific thought has come close to interdisciplinary consideration of security and development issues. It is necessary to comprehensively assess the ability to confront various threats and challenges.

2 Materials and methods

All of the above determines the formulation of the purpose of the research. It consists in the development of a methodology for the research of economic security, taking into account the causal connection between the elements of the totality of individual determinants and conditions characterizing threats and challenges. To implement this approach, the main task is to determine the determinants characterizing the economic security of the enterprise. They are formed at each of the hierarchical levels of management, considering various factors (resource, technical, social, environmental, administrative, political) that influence the formation of a safe business environment at each level of management and their interrelationships.

The essence and originality of the proposed methodological approach lie in the fact that the authors consider an enterprise as an element of the national economy, whose economic security is ensured by the presence of resistance to the impact of various internal and external threats on it and which can respond to the challenges caused by these threats. At the same time, the dialectic is such that threats and challenges are not only a negative impact on economic security but also a serious incentive for economic growth and entering the trajectory of sustainable development [8].

However, the authors consider any threat, first of all, as a form of danger, which is a specific set of conditions and determinants that negatively impact the enterprise's financial and economic activities. One way or another, an enterprise should be able to resist this, and achieving such a state implies the absence of internal threats. It may also be caused by the general inadequate situation with the business environment in the industry, the region, and the country as a whole. The diagnostic method should be based on the principle of "factors-levels." It takes into account the fact that the enterprise operates in a social economic hierarchical system, and its safety is due to the situation developing on the "upper floors" of the hierarchical economic vertical. The principle of "factors-levels" logically represents a combination of four formed enlarged groups of factors (see the rationale in Section 3) in their manifestation at each of the four levels of the hierarchical economic system (i.e., the matrix) (Fig.1).

		GROUPS OF FACTORS			
		Economic	Socio-ecological	Resource and technical	Administrative and political
LEVELS	Country				
	Region				
	Branch				
	Company				

Fig.1. Matrix of distribution of factors by groups and corresponding hierarchical levels. *Source:* Compiled by the authors.

Thus, 16 combinations are presented for diagnosis. The task is to determine the content of these combinations. To do this, the following algorithm is proposed: (1) identification of possible factors and their dominant characteristics; (2) their differentiation according to the species group and hierarchical level; (3) ranking of the most significant determinants; (4) calculating risks in each of the 16 combinations under consideration and summing them up as a whole both by levels (horizontally) and by factors (vertically).

With regard to the implementation of the proposed methodology, the authors will focus on the principles of the formation of groups of factors.

3 Results

In the authors' view, based on the understanding that the production process is an interaction of material and personal factors, provided by certain production conditions (infrastructure) and specific organizational and legal relations, it is quite legitimate to present them with four main groups of factors: (1) economic; (2) socio-environmental; (3) resource-technical; (4) administrative-legal. The proposed approach should provide an opportunity to assess the security of the business environment, as a result of which all those who manage the processes of forming the business environment at their level could decide on measures. The implementation of them would contribute to the elimination of everything that negatively affects the protection of business. The authors considered the features of each of the enlarged groups of factors.

Economic factors are determined by the economic stability of the system and the prospects for its development and are related to the market and financial conditions of the business environment. Such characteristics of the business environment are (1) volume and specifics of the market; (2) degree of market monopolization and the level of competition;

(3) fiscal burden; (4) availability of credit resources; (5) the development of the financial system. At the same time, factors will manifest themselves differently at each economic level. An appropriate set of factors is selected for each level, taking into account the constant variability of economic conditions.

The group of socio-environmental factors should reflect the current state of the global market environment, where socio-environmental responsibility becomes the norm of entrepreneurial activity and one of the key factors in the process of making managerial decisions. A safe economic system should consider the requirements of social progress and environmental protection, and efficient use of natural resources.

Resource and technical factors are associated with the ability of the enterprise to develop and manufacture products that meet the established requirements. They characterize such aspects as the availability of a set of resources (material, financial, labor, technical, information) and the degree of efficiency of their use. Economic entities are characterized by resource potential on the one hand and possible risks on the other. Risks form threats to the economic security of the system. The authors note that resources take different forms at different levels of management.

A group of administrative and legal factors has a significant impact on the security of the economy. The insufficient level of institutional development in the country cannot fully ensure the implementation of market factors and generates administrative barriers and restrictions for business. Administrative factors are formed within a certain legal field. It seems appropriate to consider them as administrative and legal factors that have an institutional nature and characterize the quality of the business environment.

It should be noted that all the factors of the four groups presented are in some way interrelated. For example, such factors of the socio-ecological group as population migration, demographic dynamics, and the social conditions of employees of enterprises belong to the group of resource and technical factors, since they determine the possibilities of resource provision of enterprises.

For more information about factor groups, see [9]. Considering their importance, the authors consider it necessary to dwell on some specific determinants and factors. Such determinants of economic security are state tax administration and regulation of non-tax payments. At the same time, until now, there has not been an unambiguous opinion about whether they are capable of performing a stimulating function and under what conditions. On the contrary, they have a negative impact on the activities of enterprises, becoming one of the external threats. Some believe that tax incentives cannot be any significant factor stimulating investment activity [10] and perform mainly a fiscal function [11]. Also, the inadequate nature of tax administration is seen as a destabilizing factor. Others argue that they still play a stimulating role within specific phases of the economic cycle [12] or at a certain level of economic development of the country. At the same time, it is assumed that this statement is true for developed regions (territories). Along with the factor of tax administration that determines the activity of an entrepreneur, economists recommend considering factors that are formed not only at the country and regional but also at the sectoral levels. In particular, this applies to such activities as extractive industries, where rent relations play a leading role, which, as suggested in a number of works [13], require a different mechanism for regulating the distribution and withdrawal of rental income than the one that has developed to date, that is, through the administration of taxes. It is also necessary to emphasize the presence in administrative and legal factors, political, corruption, and other components that can have a significant negative impact on the security of the enterprise.

4 Discussion

The issue of identification and differentiation of factors that determine economic security is still insufficiently worked out. There is a significant spread of factors affecting economic security in the scientific literature, while there is no systematic and structured nature. Without specific grouping principles [14], a general set of factors is not very productive in the authors' understanding. Most often, the task of determining thresholds and measuring the level of economic security is solved [15], while the proposed methods are difficult to implement in practice. The authors believe that an entrepreneur, who assesses the risks that are formed by various factors and threats that negatively affect the economic security of an enterprise, will be able to resist external threats and, in accordance with his attitude to the level of risk, make a management decision.

The use of the methodological approach proposed by the authors provides an opportunity to identify and then implement measures to reduce or eliminate the manifestation of threats and challenges completely. Simultaneously with the reduction of risks, the level of economic security of the enterprise increases. The matrix approach allows doing this in the context of economic levels, which, as noted earlier, are closely interrelated. At the same time, the assessment is carried out not according to the total set of factors but according to enlarged groups, including key factors.

5 Conclusion

Methodological problems of the formation of economic security of the enterprise and a safe business environment are revealed. An attempt has been made to solve them. The authors, trying to overcome the controversial nature of a number of fundamental issues, took a new approach to the consideration of the problems of security and business development. They proposed for the research of economic security a matrix approach that takes into account the causal connection between the elements of a set of individual determinants and conditions characterizing threats and challenges.

To identify the nature of the impact of economic security on the results of financial and economic activities of enterprises, it is necessary to identify and then assess external and internal threats and challenges and their determinants through an adequate diagnostic method, which, in the authors' view, should be based on the principle of "factors-levels."

Within the framework of the stated problems, the authors consider the logical continuation of further research to be the solution of issues of identification of determinants that have the greatest impact on ensuring economic security. Assessment of external and internal threats and challenges. Substantiation of the possibility of practical use of a methodological approach that allows for the diagnosis of the state of economic security of the enterprise.

References

1. G. Alexandrov, I. Vyakina, G. Skvortsova. *Assessment of the Factors of Investment Attractiveness of the Business Environment in Terms of Sustainable Development of the Region*. E3S Web of Conferences **295** (2021)
DOI: [10.1051/e3sconf/202129501043](https://doi.org/10.1051/e3sconf/202129501043).
2. M. M. Kevin, R. H. Topel. *American Economic Review*, **103**(3) (2013)
3. S. Bazzi, C. Blattman. *American Economic Journal: Macroeconomics* **6**(4) (2014)
4. C. C. Coile, P. B. Levine. *American Economic Review* **101** (2011)

5. S. Imrohorglu, S. Kitao. *American Economic Journal: Macroeconomics* **4** (2012)
6. T. Mileski. *Journal of International Scientific Publications* **9** (2015)
7. S. E. Gaines. *William & Mary Environmental Law and Policy Review* **30**(2) (2006)
8. M. S. Castaño, M. T. Méndez, M. A. Galindo. *Journal of Business Research* **69**(11) (2016)
9. G. A. Alexandrov, et al.. *Economic security and investment attractiveness of economic entities: concept, diagnostics, evaluation*. Moscow, Russia: First economic publishing house. (2023) DOI: 10.18334/9785912924576
10. G. Alexandrov, A Yablonev *Rental and investment regulation of mining companies in subsoil developing industries*. *E3s Web of Conferences* **105** (2019)
11. D. Barbosa, V. M. Carvalho, P. J. Pereira. *Economic Modelling* **52** (2016)
12. E. Sims, J. Wolff. *European Economic Review* **107** (2018)
13. S. I. Nosov, B.Y. Bondarev, I. B. Gengut, et al. *Gorny Journal (Mining)* **2** (2016)
14. L. K. Egorova. *Transport Business in Russia* **4** (2009)
15. V. K. Senchagov. *Economy of the Region* **3** (2008)