

UDC 658.152

DOI <https://doi.org/10.32782/CMI/2024-11-11>**Klius Yuliia**

Doctor of Economic Sciences, Professor,
Head of Department of Accounting and Taxation,
Volodymyr Dahl East Ukrainian National University
ORCID: <https://orcid.org/0000-0002-1841-2578>

Mykhalchuk Dmytrii

Postgraduate,
Volodymyr Dahl East Ukrainian National University
ORCID: <https://orcid.org/0009-0001-2980-450X>

THE IMPACT OF STRUCTURAL CHANGES ON THE ECONOMIC SECURITY OF ENTERPRISES

The article is devoted to a comprehensive analysis of the impact of structural transformations on the economic security of enterprises in the current conditions of dynamic changes in the global and regional economy. Structural transformations, which include changes in the organisational, production, technological and market spheres, have a significant impact on the ability of enterprises to ensure sustainability, financial stability, competitiveness and sustainable development. The article examines the impact of external and internal factors on the economic security of enterprises in the context of structural changes. Particular attention is paid to the key aspects of economic security, including: innovation activity, strategic planning, risk management, improving the efficiency of production processes and adaptation to new market conditions. The article analyses the main risks arising in the course of structural transformations, including increased competitive pressure, dependence on foreign markets, the need to integrate modern technologies and financial challenges. The article presents the author's approach to assessing the impact of structural changes on the economic security of enterprises. It is proposed to take into account a wide range of criteria, such as financial indicators, level of innovation, efficiency of management decisions and the ability of an enterprise to adapt to the crisis. Emphasis is placed on developing practical recommendations to improve the level of economic security of enterprises in the process of structural changes. Among the recommended measures are: introduction of an internal control system, diversification of production and market activities, investments in technology modernisation and personnel development, formation of adaptive organisational structures. The results of the study have both theoretical and practical value. They can be used by managers involved in strategic management to develop mechanisms for protecting the economic security of an enterprise. Researchers can use the findings as a basis for further research in this area. The presented material contributes to the formation of more effective approaches to the management of enterprises in the context of structural changes.

Keywords: structural transformation, economic security, enterprise, region, impact, consequences.

Клюс Ю.І., Михальчук Д.І.

Східноукраїнський національний університет імені Володимира Даля

ВПЛИВ СТРУКТУРНИХ ПЕРЕТВОРЕНЬ НА ЕКОНОМІЧНУ БЕЗПЕКУ ПІДПРИЄМСТВ

Стаття присвячена всебічному аналізу впливу структурних перетворень на економічну безпеку підприємств у сучасних умовах динамічних змін глобальної та регіональної економіки. Структурні трансформації, що охоплюють зміни в організаційній, виробничій, технологічній і ринковій сферах, істотно впливають на здатність підприємств забезпечувати стійкість, фінансову стабільність, конкурентоспроможність і сталий розвиток. У статті розглянуто вплив зовнішніх і внутрішніх факторів на економічну безпеку підприємств у контексті структурних змін. Особливу увагу приділено ключовим аспектам забезпечення економічної безпеки, серед яких: інноваційна активність, стратегічне планування, управління ризиками, підвищення ефективності виробничих процесів та адаптація до нових умов ринку. Аналізуються основні ризики, що виникають під час структурних трансформацій, включаючи зростання конкурентного тиску, залежність від зовнішніх ринків, необхідність інтеграції сучасних технологій і фінансові виклики. У статті представлено авторський підхід до оцінки впливу структурних змін на економічну безпеку підприємств. Запропоновано враховувати широкий спектр критеріїв, таких як фінансові показники, рівень інноваційності, ефективність управлінських рішень та здатність підприємства до антикризової адаптації. Зроблено акцент на розробці практичних рекомендацій для підвищення рівня економічної безпеки підприємств у процесі структурних змін. Серед рекомендованих заходів: впровадження системи внутрішнього контролю, диверсифікація виробничої та ринкової діяльності, інвестиції в модернізацію технологій і розвиток персоналу, формування адаптивних організаційних структур. Результати дослідження мають як теоретичну, так і практичну цінність. Вони можуть бути використані менеджерами, які займаються стратегічним управлінням, для розробки механізмів захисту економічної безпеки підприємства. Науковці можуть використовувати отримані висновки як базу для подальших досліджень у цій сфері. Представлений матеріал сприяє формуванню більш ефективних підходів до управління підприємствами в умовах структурних змін.

Ключові слова: структурні перетворення, економічна безпека, підприємство, регіон, вплив, наслідки.

Formulation of the problem. The current economic environment is characterised by rapid structural changes driven by globalisation, technological innovation and increased competition. In this environment, businesses face the need to adapt to new challenges and transformations in the sectoral and regional economic structures. Structural transformations affect all aspects of business operations, including their economic security, which is determined by the ability of an enterprise to maintain stability, competitiveness and ensure sustainable growth. However, the impact of structural changes on the economic security of enterprises remains insufficiently studied. The issues of integration of economic security measures into the processes of strategic planning and management of structural changes of enterprises require additional analysis. Insufficient consideration of these aspects can lead to increased risks, loss of competitive advantages and financial stability.

Thus, the relevance of studying the impact of structural transformations on the economic security of enterprises is due to the need to find ways to effectively adapt to changing market conditions, minimise risks and ensure long-term development.

Analysis of recent achievements and publications. The study of the system of economic security of an enterprise has received much attention in the scientific works of H. Kozachenko, Yu. Pogorelov, Z. Zhyvko, L. Shemaieva, I. Otenko, V. Babayev, T. Momot, Ye. Ovcharenko, Ye. Rudnichenko, O. Lyashenko, L. Korchevska. A large number of domestic and foreign scientists have been and continue to be engaged in researching the problems of innovative development of regional enterprises under the influence of various transformations at different levels. However, in our opinion, insufficient attention is paid to the impact of structural changes on these processes.

Based on the above, we can formulate the **purpose** of the study, which is to determine the impact of structural changes in industrial enterprises in the region as a result of post-conflict transformation on their economic security.

Presentation of the main material. An analysis of existing approaches to managing innovative structural changes at industrial enterprises in the region has shown that most innovative structural changes are not accompanied by an increase in innovative sustainability. The reason for this is the low level of structural viability and security of the implementation of innovative activities of economic systems due to the unbalanced nature of structural changes [4]. In this regard, for the effective innovative development of the complex based on the growth of innovative characteristics of its leading enterprises, a new model of structural transformation management is needed, formed on the principles of balanced development of the structure of the economic system, which leads to the achievement of structural viability in the conditions of post-conflict transformation. With this help and by achieving a new quality of the system structure, the economic security of the innovative development of the complex of enterprises in the region will be ensured [4].

Structural shifts arising in the process of innovation activity acquire the following specific features: irreversibility, evolutionary nature, and outstripping development. This leads to the need to search for new forms of management implementation in order to increase

their efficiency by enhancing the viability and security of innovation activity of economic systems.

The peculiarities of innovative structural shifts (irreversibility, evolutionary nature, advanced nature of development, incomplete predictability of consequences under the influence of the time factor) determine the specifics of their management at the enterprises of the region: uniqueness, advanced and targeted nature, and growing complexity. Along with these characteristics, the system of management of innovative structural shifts acquires such features as complexity, continuity, innovation, timeliness, which, in turn, determines the strategic nature of such management [5].

While in conditions of certainty, standard decision-making methods and techniques are mainly used, justified in practice, in post-conflict transformation, experience, intuition, and creative abilities of managers are most often involved [3]. Therefore, managers who make decisions on managing the economic security of regional enterprises use several strategic directions:

- The strategy of avoiding uncertainty, which means ignoring the sources of uncertainty and relying on the best variant of innovation;
- the strategy of reducing uncertainty to certainty based on the assumption that the future will be the same as the past and making decisions as in the past;
- a strategy to reduce environmental uncertainty by negotiating with sources of uncertainty, consistently clarifying unknown circumstances, and collecting and processing information.

Managing the impact of structural changes on the economic security of regional enterprises in the long term should be aimed at creating tools for adapting economic systems of different levels to changing environmental conditions, improving the efficiency of managing innovative industrial risks of economic systems and increasing their resilience, which corresponds to the specifics of the region's enterprises in the context of post-conflict transformation.

The continuous change of the external environment means that it is characterised by a certain unpredictability of the results of innovative development. And the development of a strategy for managing innovative structural shifts is carried out under conditions of uncertainty, which in the context of innovation activity is generated by both processes within the complex and outside it. In this regard, the system of structural change management should take into account the impact of the external environment and take into account the level of survivability in the process of structural transformation. The external environment is characterised by the instability of the factors that cause the structure of the economic system to change. The uncertainty of changes in internal factors is due to the mutual influence and impact of components and subsystems of the complex as a complex system. However, it is practically impossible to model the behaviour of complex systems accurately and in detail, but it is possible only to identify and predict trends in their self-development [6].

Currently, the existing management tools do not fully adapt the transformation of the complex structure to the constantly changing innovative realities. In this regard, the preparation and analysis of strategic decisions to manage the impact of structural changes on the economic security of regional enterprises is not given due attention. This leads

to the fact that the resulting risks are not taken into account in the formation of the economic security system, which leads to a decrease in the effectiveness of the implemented management measures due to a decrease in structural viability, and then, the pace of innovation development.

The uncertainty of external conditions of development affects the entire management system of the economic system as a whole and affects the economic security of its innovation activities. This leads to an increase in the likelihood of innovative structural risks, including the risk of the new structure not being suitable for the peculiarities of the internal production environment and the external environment. In addition, there is a risk of errors in forecasting, planning, developing and implementing a system for managing structural changes in the innovation economy. There is also the risk of failure to achieve the expected result, rapid obsolescence of the transformed structure, and irrationality of its application (if its costs are not commensurate with the results). All this complex of risks requires management, which should be taken into account when formulating a strategy for managing innovative structural changes, since otherwise a decrease in their effectiveness will be due to a decrease in the economic security of the region's enterprises. Therefore, long-term goals should be set in such a way that their adaptation to the impact of the external environment takes into account measures for continuous risk accounting in the system of managing innovative structural changes.

This means that the long-term management of the structure transformation in the process of innovation activity should include a system of measures for mobile adjustment of the developed long-term directions, taking into account changes in the consequences of the impact of external and related internal factors of innovation development, which are determined on the basis of monitoring.

For this purpose, it is proposed to develop alternative measures (options for alternative strategies for managing structural changes), taking into account the expected options for changing the conditions for effective and safe innovation activities of industrial enterprises. Such measures do not imply a change in the management strategy, but only provide for the need for adjustment, allowing the management system to adapt to changes in the external environment, increasing the efficiency of managing the system's innovative industrial risks and its structural viability. In strategic planning, it is important to put forward and consider as many alternatives as possible at the early stages of the process. The more alternatives there are, the more effort and time is required to evaluate them.

However, in order to achieve the highest possible level of adaptability of the system of innovative industrial risk management (structural resilience), it is also necessary to develop options for less likely cases, drawing up a multidimensional multivariate sequence of managing innovative structural shifts and assessing their impact on the economic security of industrial enterprises in the region, which would take into account different directions of strategy development in an uncertain environment, which would allow achieving economic security through the new structure. Considering the management strategy as a set of interrelated strategic decisions sufficient to describe the key areas of activity of industrial enterprises, it

should be noted that the development of strategic decisions requires the existence of conditions for their consistency and completeness. This creates requirements in an effective management system for a comprehensive and comprehensive impact on the processes of transforming the structure of not only the entire complex, but also its individual elements – the leading enterprises, and increasing their resilience in the process of changing the structure. The latter creates the conditions for the proactive nature of the innovative development of the structure, which is necessary in the face of continuous changes in the external environment. This means that the long-term management of innovative structural changes should focus on anticipating innovation processes, comprehensively and comprehensively influencing the foundations of industrial enterprises, taking into account the impact of environmental factors. Preventive measures used in the management of structural shifts to make them innovative will free up resources, divert industrial enterprises to prepare for the harmonisation of their development directions with changes in the external environment in the conditions of the innovative economy and will allow timely increase of their viability and economic security.

Strategic management decisions are characterised by two features: long-term nature and irreversibility of consequences. They are implemented over a long period of time and the consequences of their implementation are irreversible. Therefore, it is important that long-term management decisions are made taking into account the effectiveness of innovative development of all components of the production potential of industrial enterprises. A strategic set of management measures should harmonise the effects of heterogeneous innovative development of industrial enterprises, while simultaneously providing targeted impact on the transformation of their structure and their integration into a single structure to increase structural resilience by reducing the risk of bottlenecks in their development.

In this case, the management model should provide for a balance of measures to manage innovative structural shifts in individual micro-level systems that make up industrial enterprises. And to avoid asymmetry in the development of the structure of innovation activity, which currently exists in many domestic industry complexes.

Thus, in the current domestic conditions, management of structural shifts in innovation activity and determination of their impact on the economic security of regional enterprises requires the formation of a management strategy that would be distinguished by a comprehensive, comprehensive impact on the transformation processes, would be targeted, capable of harmonising the consequences of heterogeneity of innovative development of the components of industrial enterprises and could be adjusted as a result of changes in the external environment. In an innovative economy, the strategy requires the formation of a unique sequence of management of innovative structural changes, which would be proactive and meet the conditions of balanced development of individual subsystems of the complex and adaptation measures to changes in the external environment, which will allow it to achieve a new level of efficiency of the complex's innovation activity by increasing its structural viability (improving the quality of management of innovative industrial risks).

The proposed sequence of management of innovative structural shifts should be interrelated with the management of innovative development of the industry complex and the regional system. However, changes in the former should not be conditioned only by changes in the latter. It is necessary to integrate the strategy of managing structural changes into the overall management strategy of the complex, so that the improvement of the management of innovative structural changes leads to the adjustment of the management of innovative development of higher systems. Their interconnectedness and complementarity will allow us to talk about the integrated management of the effectiveness of innovation activities in the industry complex.

When developing a strategy for managing structural transformation within the framework of management, it is necessary to identify its key stages and form a sequence of actions for its creation and implementation. The proposed new sequence of management of innovative structural changes provides for a certain set of strategies that allow taking into account various factors influencing the emergence and manifestation of innovative changes, adapting to changes in the external environment, and allowing its integration into the management of innovative development of the regional system. All this allows us to characterise it as a complex adaptive sequence of harmonising management of innovative structural changes and determining their impact on the economic security of regional enterprises.

The first stage is a strategic analysis of the nature and direction of innovation activity, the balance of innovative development of subsystems of the industrial complex and identification of the sequence of management of innovative structural changes. The purpose of the analysis is to identify the harmony of the components of innovative development, determine the priorities of managing structural changes in the conditions of an innovative economy, the dynamics and directions of innovative development of this management. It is also to determine the initial level of structural viability of the complex itself and its leading enterprises.

In this regard, it is necessary to determine the homogeneity of the complex development.

This is revealed on the basis of a qualitative analysis of the impact of the state of structural viability of the subsystems of the complex on the nature of changes in it. If the development of all components is homogeneous, we can speak of the harmonious management of innovative structural changes. If the influence of only one component is strongly marked, the management sequence is unidirectional, and if several components are strongly marked, the sequence is multidirectional.

Also, within the framework of this stage of the approach, it is necessary to determine the prevailing sources of innovative resources of the economic system, which will be used to strategically manage innovative structural changes. There are several possible sources of these resources: the results of own innovation activities, attracted results of innovation activities of third-party organisations (e.g. technology parks).

An important point is to determine the innovativeness of the structural changes described above, which is also determined at this stage in order to choose the direction of the structure's development.

The second stage involves analysing strengths and weaknesses, assessing opportunities and threats to the functioning and development of the complex in terms of structural transformation, and identifying the main causes and directions of influence on structural innovation industrial risks in the course of post-conflict transformation. As a result of the cross-analysis of the situational analysis matrix, four possible strategies have been identified:

- strong internal aspects of industrial enterprises' development to minimise structural risks against strategic opportunities of the environment, i.e., relying on the strengths of the complex and taking advantage of external opportunities to maximise the innovative development of the structure to achieve a more sustainable innovative development of the production system;

- weak internal aspects of the complex's development to strengthen its internal structure against the strategic opportunities of the environment: using external opportunities, create a system of management of innovative structural changes to get rid of weaknesses and internal structural risks;

- strong internal sides of the complex development to minimise structural risks and strengthen the development efficiency against strategic threats of the environment, i.e., relying on the strengths of the production system, managing emerging risks, to compensate for the impact of external threats caused by the growing uncertainty of innovation development;

- weak internal aspects of the production system development against strategic threats of the environment, i.e., in essence, it is a defensive strategy designed to simultaneously minimise strategic threats and internal weaknesses, aimed at managing emerging risks, as well as adapting the new structure to the uncertainty of the external environment in the context of the innovation economy. This is the most important and relevant field for industrial enterprises, as all factors are highly significant and characterise the underlying strategic problems of its subsystems.

At this stage, the issue of choosing the most effective actions for a set of innovative projects within the framework of forming a strategy for managing innovative structural changes and determining their impact on the economic security of enterprises becomes relevant.

The third stage involves strategy planning, which includes the selection of alternative strategies based on the results of the assessment of the effectiveness of structural transformation management systems in the process of innovative development and situational analysis (based on achieving the maximum level of efficiency of innovation activities in the existing conditions). Then, the strategy that best meets the efficiency of the complex's innovation activity is selected from them. The traditional process of strategy development is the selection of one of the acceptable scenarios (based on the value of structural resilience), compiled as a result of the analysis of the weaknesses and strengths of the production system, as well as threats and opportunities in the environment.

The fourth stage is the consistent and comprehensive implementation of the strategy, which implies adaptation to the strategy that primarily forms a set of subsystems, harmonisation of the development of their structures, i.e. implementation of measures to increase structural resilience through the complexity of development in the process of strategic management. Adaptation of the

enterprise to the developed strategy involves adjusting the innovative development of the complex structure and its policy in the field of innovation development priorities. Strategy implementation includes organisational measures to implement the chosen strategy, project and plan development, restructuring, control, monitoring of the analytical process and implementation of decisions. Evaluation and control of the implementation of the strategy for managing innovative structural changes is the final and very important process of strategic management, as it ensures a stable connection between the goals of achieving the efficiency of the complex's innovative development (the level of innovative sustainability) and the process of achieving them (measures to increase structural resilience).

This process is controlled by strategic controlling methods. It establishes the object of control, controlled indicators (coefficients of innovation of structural changes), assessment of the state of the controlled object (assessment of the effectiveness of the management system), the causes of deviations revealed in the process of control, and the need for adjustment, if possible [3].

Adjustments based on the results of strategic control may affect not only the structural transformation management strategy. In some cases, it is possible to adjust the directions of the innovation activity of the selected complex itself, to change the nature of innovation in further structural development depending on the level of viability. Control over the implementation of the management strategy should be carried out on the basis of a strictly developed schedule of tasks and an action plan. Monitoring of the implementation of the stages of the management strategy for innovative structural changes should be carried out in a timely manner and in full.

Adjustment of the developed measures of the strategies for managing the transformation of the complex structure in the process of innovation activity should be carried out

based on the results of individual stages based on monitoring data. This stage of strategic management of innovation development is very important, as it pays attention to the efficient use of allocated funds, to reducing the likelihood of structural innovation industrial risks, and to meeting the deadlines for the implementation of the planned measures. It is also necessary to take into account that the strategy for managing innovative structural changes is ultimately an integral part of the strategy for innovative development of the complex, so the adjustment should be reflected in the innovation development strategy first.

Conclusions. The strategy for managing innovative structural changes and determining their impact on the economic security of enterprises, developed according to the proposed general methodology, will allow them to adjust the existing model of innovative development by including a comprehensive adaptation model of harmonising management of innovative structural changes. When implementing the strategy, it is necessary to take into account that within the complex, its subsystems have some resistance to change, including innovations in the field of structure transformation, accompanied by an increase in the complex of risks. In this regard, the model for managing innovative structural changes should provide for additional mechanisms to improve the economic security of the region's enterprises in order to increase the efficiency of its innovation activities. Thus, in the current domestic conditions, the management of innovative structural changes requires the formation of a management strategy that would be distinguished by a comprehensive, comprehensive impact on the structural transformation in the process of innovation, would be targeted, capable of harmonising the consequences of heterogeneity of innovative development of subsystems of the production system and could be adjusted as a result of changes in the external environment.

REFERENCES

1. Ivchenko Ye., Pogorelov Yu. (2017), Economic security of enterprises in the Luhansk region in conditions of post-conflict transformation. *Baltic Journal of Economic Studies*, vol. 3, pp. 358–367.
2. Ivchenko Ye., Galgash R., D'yachenko Yu. (2017), Teoretichni zasady formuvannya intelektualnogo kapitalu dlya stalogo rozvitu regionu v umovah postkonfliktnoyi transformaciyi [Theoretical foundations of intellectual capital formation for sustainable development of the region in the conditions of post-conflict transformation], *Visnik Shidnoukrayinskogo nacionalnogo universitetu im. V. Dalya*. vol. 2(232), pp. 28–33.
3. Ovcharenko Ye. (2015), Sistema ekonomichnoyi bezpeki pidpriyemstva: formuvannya ta cilepokladannya [Enterprise economic security system: formation and goal setting]. Lisichansk: PromEnergo. (in Ukrainian)
4. Klius Y. (2015), Korporativna sistema upravlinnya innovaciyami: formuvannya ta rozvitok [Corporate management system innovations: the formulation of this development]. Lisichansk: Kit-L. (in Ukrainian)
5. Bezus P. I., Bezus A. M. (2014), Faktori vplivu na formuvannya ta realizaciyu innovacijnoyi strategiyi pidpriyemstva [Factors influencing the formation and implementation of the enterprise's innovative strategy], *Naukovyy visnyk. Seriya «Ekonomika»*, vol. 1, pp. 61–69.
6. Mikitiuk P. P., Senov, B. G. (2009), Innovatsiyna diyalnist: navch. posib. [Innovative activity: teaching manual], Kyiv, Tsentr navch. lit. (in Ukrainian)

СПИСОК ЛІТЕРАТУРИ

1. Ivchenko Ye., Pogorelov Yu. Economic security of enterprises in the Luhansk region in conditions of post-conflict transformation. *Baltic Journal of Economic Studies*. 2017. V. 3. P. 358–367.
2. Івченко Є. А., Галгаш Р. А., Д'яченко Ю. Ю. Теоретичні засади формування інтелектуального капіталу для сталого розвитку регіону в умовах постконфліктної трансформації. *Вісник Східноукраїнського національного університету ім. В. Даля*. 2017. № 2(232). С. 28–33.
3. Овчаренко Є. І. Система економічної безпеки підприємства: формування та цілепокладання. Лисичанськ, 2015.
4. Ключ Ю. І. Корпоративна система управління інноваціями: формування та розвиток. Лисичанськ, 2015. 356 с.
5. Безус П. І., Безус А. М. Фактори впливу на формування та реалізацію інноваційної стратегії підприємства. *Науковий вісник. Сер. «Економіка»*. 2014. Вип. 1. С. 61–69.
6. Микитюк П. П., Сенів Б. Г. Інноваційна діяльність: навчальний посібник Київ : Центр навч. літ. 2009. 320 с.