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REGIONAL FACTORS OF MECHANISMS TRANSFORMATION FOR STRENGTHENING THE ECONOMIC SECURITY OF ENTREPRENEURIAL ACTIVITY IN THE INDUSTRIAL SECTOR OF UKRAINE

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Abstract. The third year of the full-scale war in Ukraine has given rise to a number of new challenges for the entrepreneurial activity of the industrial sector at the regional level. The issue of economic security has become paramount for business entities, its relevance being of the utmost importance. Therefore, the purpose of this study is to identify the factors and mechanisms that facilitate the transformation of entrepreneurial activity in the industrial sector of Ukraine at the regional level. The subject of the present study is the theoretical foundations, modern trends and transformation factors for the mechanisms of strengthening the economic security of entrepreneurial activity in the industrial sector of the Ukrainian regions. The research methodology is founded on the concept of Industry 5.0 development, which involves a shift of priorities from purely economic to social values and the welfare of society. The implementation of this concept should be a goal for each region separately and the country as a whole. In order to achieve the goal, the following methods were used: analysis of theoretical sources (to determine the essence of the concept of economic security and the mechanism of its formation at the regional level, taking into account the existing ones), comparison and generalisation (to analyse the latest publications of Ukrainian scientists), graphic and statistical analysis (to determine modern trends in the development of entrepreneurship in the industrial sector of Ukraine), analysis of strategic programme documents (to identify modern strategic favourable and unfavourable factors for strengthening the economic security of entrepreneurial activity in the industrial sector at the regional level). Results of the study: it is determined that the formation of economic security of entrepreneurial activity in the industrial sector of Ukraine at the regional level is carried out by increasing the volume of sales of products/services against the background of ensuring the resource, production, scientific, technical, human resources potential, provided that the welfare of employees and the absence of inflation; an instrumentarium for assessing the status of economic security of entrepreneurial activity in the industrial sector at the regional level has been defined, which provides for the analysis of individual coefficients with a threshold value, as well as the calculation of an integral indicator of the status of economic security of entrepreneurial activity in the industrial sector of the region; the article characterises modern factors of formation of economic security of entrepreneurial activity at the level of regions of Ukraine, in particular, the most promising branches of the industrial sector for a particular region of Ukraine and the standard of living of the economically active population with the status of internally displaced persons. Conclusion. It is evident that the most promising industrial sectors for enhancing the economic security of entrepreneurial activity at the regional level are energy, agri-food, extraction of critical minerals, processing industry, and IT sphere. It is important to note that these sectors are set to develop in parallel with the support for entrepreneurial initiatives and the implementation of the "green transition" in industry. However, it is crucial

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to ensure that the development of these industries is accompanied by balanced support for the most vulnerable categories of the population. This support should extend beyond professional reorientation, encompassing social and everyday support to ensure the proper quality of life for these individuals.

Keywords: regional factors, entrepreneurship, economic security, industrial sector, strengthening mechanism, labour force.

JEL Classification: L69, M29, R19

1. Introduction

The Ukrainian economy has been forced to operate under martial law for the third year, with negative consequences for all sectors of activity. Industrial enterprises are no exception: with the beginning of the full-scale invasion in 2022, the volume of domestic production decreased by 35%. The year 2023 showed a slight improvement in the situation – the index of industrial production was 102.4% (Popov, 2023), but against the background of the colossal decline of the previous year 2022, which was the largest for the entire period since 2015 (Figure 1), this positive dynamic is almost imperceptible.

Most experts point to a shortage of labour as one of the main problems in the recovery of industrial enterprises. This situation has arisen for several reasons:

1. Mobilisation. A significant proportion of the able-bodied male population was drafted into the Armed Forces, which led to a shortage of personnel, especially in those industries where most professions were considered male (e.g., metallurgy, mechanical engineering).

- 2. Emigration. Since the outbreak of the war, 4.7 million people have left the country, including 3 million people of working age (Zharikova, 2022), which is exactly the kind of workforce that Ukraine needs.
- 3. Structural disparities in the labour market. According to the Ministry of Economy of Ukraine, the shortage of specialists in the labour market is almost 30% (Welfare in the company..., 2024). Despite the shortage of personnel, it is not possible to fill vacancies in industrial enterprises because the professions or qualification levels of the unemployed do not meet the needs of employers.

Undoubtedly, the shortage of labour is not a single problem that exists in Ukraine. The level of economic security is influenced by a number of factors that must be taken into account in the conditions of modern transformation of the economic environment and in order to strengthen the economic security of entrepreneurial activities in the industrial sector at the regional level.

Accordingly, the **purpose of the study** is to identify the factors of transformation of mechanisms for strengthening the economic security of entrepreneurial activity in the industrial sector of Ukraine at the regional level. To achieve this goal, the following tasks were solved:

- 1) The genesis of problems of the economic security formation of entrepreneurial activity in the industrial sector at the regional level was investigated;
- 2) the toolkit for assessing the state of economic security of entrepreneurial activity in the industrial sector at the regional level was identified;
- 3) modern factors of formation of economic security of entrepreneurial activity at the level of Ukrainian regions were determined.

The research methodology is based on the concept of Industry 5.0 development, implementation of which should be pursued both by each region separately and by the country as a whole. Compared to the previous concept (Industry 4.0), this development concept involves a shift in priorities from purely economic to social values and the wellbeing of society. The focus is on the human being, both as a worker who returns to work processes, and as a customer whose personalised needs are the focus of production. Such an approach ensures the creation of new jobs; if previously the desire for mechanisation and automation of work dominated, then in Industry 5.0 there is a process of harmonising the work of man and machine, which ensures the stability and sustainability of economic development at the national and regional level, taking into account the needs of each region separately.

2. Literature Review

A large number of researchers deal with the problems of economic security (Klimova, 2017; Matiukh, & Asamoakh-Cheremekh, 2021; Patsula, 2021). According to experts, national economic security is a state of the economy in which country fully meets the needs of its own life activities based on sustainable innovative development (Sytnyk, Blakyta, Gulyaeva, et al., 2020).

Consequently, regional economic security can be defined as the state of the regional economy that is capable of meeting the needs of the population and developing in an innovative manner.

Even before the war broke out, experts identified the main threats to regional economic security. Among the main ones (Ovcharenko, Dubnytskyi, 2019): loss of scientific and technical potential, low competitiveness and low level of investment, imperfection of the economic policy formation mechanism, increasing

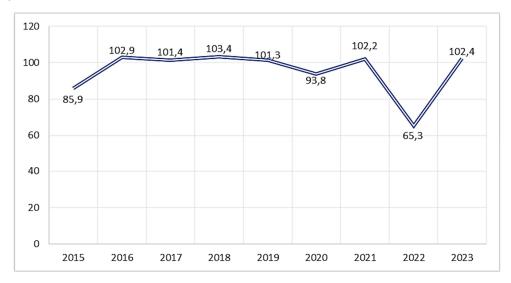


Figure 1. Industrial production indices in Ukraine 2015-2023

Source: on the basis of (Popov, 2023)

property differentiation of the population, increasing unemployment and decreasing motivation to work, deterioration of health, etc. The listed problems were present in 80% of Ukrainian regions of (Ovcharenko, Dubnytskyi, 2019).

Since the beginning of 2022, the situation in the country has deteriorated significantly. The national trend manifests itself differently at regional level, with the profile of the problem varying from east to west (Figure 2).

A colossal contraction of the labour market has been recorded in the eastern regions. Such a catastrophic situation is the consequence of a full-scale invasion: industrial facilities are physically destroyed, the population is evacuated due to the threat to their lives; therefore, it is impossible to speak of economic

security for these territories. On the other hand, according to statistics, by 2023 there will be 6.5 million internally displaced persons in the western regions (Ishchuk, 2023). Concurrently, the number of vacancies is increasing in western regions (Figure 2), yet the question remains as to whether there is a congruence between demand and labour supply. Regrettably, there is an absence of official statistics on the level of unemployment at the regional level. Concurrently, experts emphasise (Doschatov, Polishchuk, 2024) that the positive figures presented by the state employment service should be viewed with a degree of scepticism. This is due to the fact that, at the beginning of 2024, the unemployment rate in Ukraine according to the ILO methodology was 19%, which is twice the rate recorded in 2021.

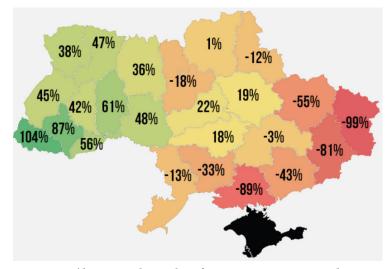


Figure 2. Increase/decrease in the number of vacancies in 2023 compared to 2021, %

Source: (Vynokurov, 2023)

3. Results and Discussion

The factors that characterise the strengthening of economic security, including entrepreneurial activity in the industrial sector, include the following (Klimova, 2017):

- 1) Economic growth, which includes indicators of production (sales), profit, volume and rate of industrial production, dynamics of capital investments, and so forth;
- 2) indicators characterising the state of resource, production, scientific and technical, human and intellectual potential, and the like;
- 3) indicators that reflect the dynamism and adaptability of the mechanism for strengthening economic security and its dependence on external and internal factors (inflation, receivables and payables, etc.);
- 4) level of employee welfare (average salary, level of income differentiation, provision of employees with material goods and services, population's ability to work, environmental conditions, etc.).

Within the framework of these indicators, threshold levels of strengthening the economic security of industrial entrepreneurship in the region can be considered. Therefore, from this perspective, certain minimum levels of strengthening can be considered, which characterise the revival of business activity of entrepreneurship, production resources of the region, and the positive development of a viable sphere of regional and entrepreneurial activity (Klimova, 2017):

- 1) The minimally acceptable level of strengthening the economic security of entrepreneurial activity is characterised by the minimum level of activation of production, investment and financing volumes. Within this level, stable independent economic development of the region is possible. This is based on a technically armed, modern, competitive regional base, state support for its defence, scientific and technical, innovative, investment potential.
- 2) The maximum acceptable level of improvement in the quality of life of the personnel and the regional population, beyond which there is already control of

social, labour and other conflicts, creates conditions to avoid threats of loss of the most productive part of human, social or intellectual capital.

3) The maximum permissible level of maintenance and reproduction of natural and ecological potential, within the limits of which there are no destructive threats to elements of natural sphere, loss of vital resource sources, significant territories of a population, location of production, recreation, damage to the health of present and future generations, etc.

Economic security can be enhanced by using the following research methods (Sytnyk, Blakyta, Gulyaeva et al., 2020):

- 1. Monitoring facilitates the analysis of socio-economic indicators, thus providing insights into the business activities of entrepreneurs and the public's stance on entrepreneurship development in the region.
- 2. The method of expert evaluation is a rigorous process that involves the clarification of the qualitative characteristics of an economic security level. It also encompasses the weighting coefficients of indicators and the formation of regions based on the level of business economic security.
- 3. Analysis and scenario development method.
- 4. Optimisation method.
- 5. Theoretical game method.
- 6. Multivariate statistical analysis.
- 7. A method of using the theory of artificial neural networks.

The utilisation of each of these methods is contingent upon the prevailing possibilities and conditions that permit the assessment of levels of economic security. However, in the majority of the author's studies, monitoring and the method of expert evaluations were utilised.

In order to establish the maximum permissible levels of strengthening the economic security of entrepreneurial activities of the industrial sector in the region, it is necessary to take into account both favourable and unfavourable factors of strengthening in the process of transformation (see Table 1).

Table 1 Conditions for strengthening the economic security of entrepreneurial activity in the industrial sector at the regional level

Favourable conditions	Unfavourable conditions
	Negative trends in the development of entrepreneurship in the region
Development of entrepreneurial activity of the region's population;	and their low investment activity;
support of entrepreneurship by public authorities at all levels;	ineffective state and legal support of the process of regulating
removal of administrative barriers to access to entrepreneurial	entrepreneurial activity;
activity;	financial and resource constraints of regional (local) authorities;
high level of infrastructure development to support and ensure	imperfect competitive environment for entrepreneurial activity,
economic security of entrepreneurial activity;	monopoly in the commodity and investment markets, corruption in
developed system of self-organisation of business entities in the	relations between business and government;
region.	imperfect legislation on business protection;
	general, systemic problems of entrepreneurship development.

Source: compiled on the basis of (Sytnyk, Blakyta, Gulyaeva et al., 2020)

The presence of stimulators or destimulators in the process of intensification of entrepreneurial activity in the industrial sector can be used to propose a set of indicators that would signal the state of economic security of entrepreneurship in the region (see Table 2).

In Table 2, the list of indicators includes only those that characterise foreign economic and innovative entrepreneurial activity in the region. Therefore, this list can be supplemented with any other set of indicators that are more appropriate for assessing the economic security of entrepreneurship and a regional environment: such as social, intellectual, informational, legal, etc. Moreover, when determining the minimum thresholds of strengthening, one should focus on the lower limit for stimulators and on the upper limit for destimulators in order to achieve the stabilising effect.

It should also be emphasized that the main problems preventing the strengthening of the economic security of business activity in Ukraine and its regions today include the inadequacy of the state economic policy in this area and some negative phenomena (factors) that still remain and influence the positive transformations of the industrial sphere taking place in the regions, as well as become an objective obstacle in the process of strengthening the economic security of business activity. These include the following (Sytnyk, Blakyta, Gulyaeva et al., 2020):

- Direct and indirect criminal attacks and raiding;
- discriminatory actions that put pressure on entrepreneurs both directly and through administrative authorities;
- imperfect legal and judicial systems;
- corruption in public authorities and lack of property rights protection institutions;

 low level of competitiveness of entrepreneurs and low performance indicators, in particular in the real industrial sector of the economy.

Today, in the existing strategy of sustainable development of Ukraine until 2030, there are 28 key indicators by which the progress of implementation can be assessed (Draft Law of Ukraine 07.08.2018 No. 9015) and the following main vectors of development are defined. In accordance with these vectors, the mechanism for strengthening the economic security of entrepreneurial activity should be directed, namely:

The development vector, which should ensure the sustainability of transformations and structural reforms in business, improve living standards and ensure the introduction of advanced innovations.

The security vector provides guarantees of safe business activity, protects investments and private property.

The responsibility vector should provide guarantees to every employee (citizen) and access to quality education, healthcare and other services in the public and private sectors.

The pride vector ensures mutual respect and tolerance in society (business environment), pride in the country, its history, culture, science and sports.

In fact, each of the identified vectors influences the potential for the development of entrepreneurial activity in the industrial sector. However, this influence has a synergistic effect and requires the justification of certain methods for assessing the level of strengthening of economic security due to the successful development of all stability vectors. At present, different methods are used to assess the level of economic security, depending on what should be emphasised. As a rule, in most cases

Table 2 Indicators of economic security of entrepreneurial activity and their thresholds

Indicator and unit of measurement	T., J:	Threshold values		
indicator and unit of measurement	Indicator type	lower limit	upper limit	
Import-export coverage ratio (ratio of exports to imports in the region), folds	Stimulator	1	3	
Ratio of export growth to import growth, %	Stimulator	100	150	
Duration of export operations, days	Destimulator	28	10	
Ratio of exports to regional GDP, %	Stimulator	10	60	
Ratio of imports to GDP in the region, %	Destimulator	60	10	
Investor protection index	Stimulator	1	4,5	
Depreciation of fixed assets, %	Destimulator	70	10	
Ratio of investments to the value of fixed assets, %	Stimulator	1	16	
Ratio of foreign direct investment growth to GDP, %	Stimulator	1	15	
Ratio of innovation development expenditures to GDP, %	Stimulator	1	50	
Share of entrepreneurs implementing innovations, %	Stimulator	30	100	
Inventive activity ratio (number of titles of protection per 1 million people)	Stimulator	200	800	
Growth rate of innovatively active entrepreneurs, %	Stimulator	100	150	
Number of cases of illegal use of property rights	Destimulator	5	0	

Source: compiled on the basis of (Sytnyk, Blakyta, Gulyaeva et al., 2020)

it is proposed to create an integral indicator by combining indices (Sytnyk, Blakyta, Gulyaeva et al., 2020), each of which characterises a separate block of determinants: availability of basic economic freedoms (index of economic freedom), favourable organisational conditions for doing business (business rating), provision of resources and development of infrastructure (global competitiveness index), state of the political and legal system, and so on. The use of indices calculated using the same methodology allows to obtain the same ranks of significance of indicators and to graphically compare the areas of n (four, five, six, etc. – depending on the number of selected indices) of angles on the axes, each of which corresponds to one of the selected indices. The resulting value of the area of the n-angle corresponds to the maximum possible area, where all vertices are at coordinate 1, and is expressed as a decimal (a fraction of one) using the formula:

$$I_{esea} = \frac{I_{1} \times I_{2} + I_{2} \times I_{3} + I_{3} \times I_{4} + ... I_{n} \times I_{1}}{n}, \quad (1)$$

where I_{esea} is an integral indicator of the state of economic security of entrepreneurial activity in the industrial sector of a region;

- I_1 index of basic economic freedoms;
- $\rm I_2$ favourability of organisational conditions for doing business in a region's industrial sector;
- I₃ index of resource provision and infrastructure development in a region;

 I_4 – index of the state of the political and legal system in a region;

 \dots I_n – other indices characterising various aspects of entrepreneurs' activities in the industrial sector of a region.

A notable benefit of this approach when assessing the economic security of business activity in the industrial sector of a region is the capacity for graphical representation of the findings in the form of a petal diagram.

The formation of such diagrams facilitates the development of measures for the positive transformation of mechanisms for strengthening the economic security of business activities in the industrial sector of any region in Ukraine (see Figure 3).

The formation of a system of measures, as illustrated in Figure 4, can be analysed according to the following components.

The evaluation of the level of economic security and the strengthening of entrepreneurial activity can be conducted through various methodologies, each of which is based on a distinct set of objectives, research tasks and analytical approaches. Consequently, if the security of business financing is regarded as the fundamental basis, then a simplified integrated assessment of the strengthening of economic security (Iesf) can be conducted by utilising such financing characteristics as (Sytnyk, Blakyta, Gulyaeva et al., 2020):

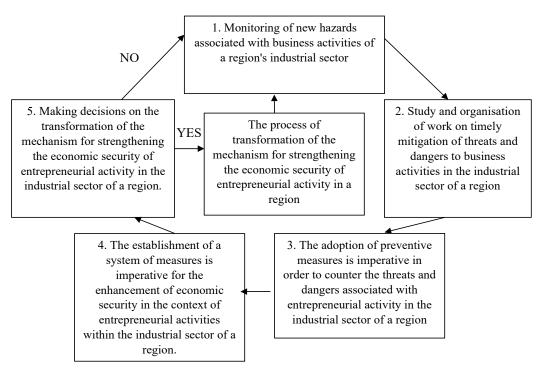


Figure 3. The process of transformation of the mechanism of activation of entrepreneurial activity of the industrial sector of a region

Source: developed by the authors taking into account (Sytnyk, Blakyta, Gulyaeva et al., 2020)

- 1) Independence from debt capital, which can be measured by the share of equity in total assets of the entity $-P_1$;
- 2) working capital adequacy (the degree of conservatism of the policy of financing current assets), which can be characterised by the ratio of working capital to current assets P_2 ;
- 3) quality of liabilities (borrowed capital), which combines the following components: the share of long-term liabilities in total liabilities (borrowed capital) and the share of loans from financial institutions (banks) and liabilities issued by market financial instruments in long-term and current liabilities P_3 .

The above indicators can be combined by calculating the geometric mean:

$$I_{esf} = \sqrt[3]{P_1 P_2 P_3} \,, \tag{2}$$

The proposed integral indicators (1) and (2) are not ideal, but they demonstrate the feasibility of

evaluating certain aspects of enhancing economic security during the process of transforming the mechanism of its strengthening and developing entrepreneurial activity.

Figure 4 shows only certain types of measures, but they can be complemented by the disclosure of other aspects of activity, such as production, information and communication, technological, environmental, economic and legal, and others, which are characterised by their set of resources that should be effectively used and strengthened in the process of functioning (see Table 3).

For each of the components of economic security listed in Table 3, it is possible to formulate tools and measures to strengthen entrepreneurial activity in the industrial sector and the effective use of resources (see Table 4). Each subject of business activity has its own specific tools and priority measures for strengthening economic security, but some universal preventive

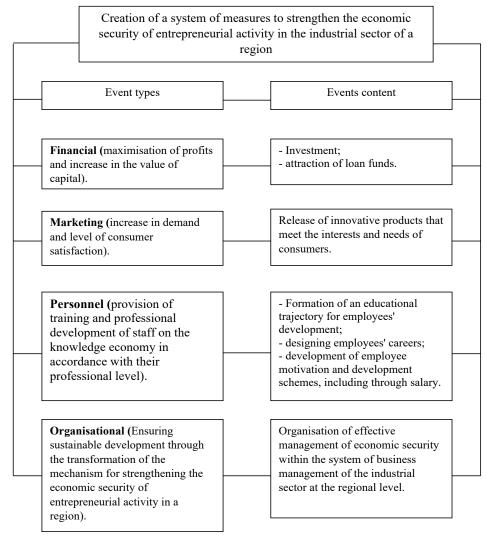


Figure 4. The system of measures to strengthen the economic security of entrepreneurial activity in the industrial sector and their essential content

Source: developed by the authors on the basis of (Sytnyk, Blakyta, Gulyaeva et al., 2020; Calinescu, Likhonosova & Zelenko 2023)

 $\label{thm:components} \begin{tabular}{l} Table 3 \\ A general list of components of economic security of entrepreneurial activity in the industrial sector of the region and their resource provision \\ \end{tabular}$

Eii	Resources required to ensure the efficient operation of business activities						
Economic security components	Finan-cial	Invest-ment	Informa-tive	Labor	Material	Intellec-tual	Techno-logical and energy
Production	+	+	+	+	+	+	+
Financial	+	+	+	+		+	
Marketing	+	+	+	+	+	+	+
Information and communication	+	+	+	+	+	+	+/-
Technological	+	+	+	+	+	+	+
Ecological	+	+	+	+	+	+	+
Organisational	+	+	+	+		+	
Personal	+		+	+	+	+	
Political and legal	+		+	+	+	+	
Other	+	+	+	+	+	+	

Source: developed by the authors on the basis of (Matiukh, Asamoakh, Cheremekh, 2021)

Table 4
Tools and preventive measures to strengthen economic security of entrepreneurial activity in the industrial sector at the regional level

Components of economic security of entrepreneurial activity	Tools	Measures to strengthen and efficiently use resources
Production	Improving the efficiency of the use of all production resources.	Monitoring new international product quality standards; tracking the validity of product quality certificates and obtaining new ones.
Financial	Creating conditions for financial and economic growth.	Timely assessment of the profitability of the company's assets and capital; search for alternative financing; development of programmes to reduce the share of borrowed funds in the capital structure.
Marketing	Improving the competitiveness of products.	Forecasting the market situation; implementing Internet technologies for product sales.
Information and communication	Create a mechanism for promptly responding to threats when negative information is disseminated.	Defining the boundaries of trade secrets; creating a modern, reliable system of protection against unauthorised access to information on business activities; implementing OSINT (Open Source Intelligence) technologies.
Technological	Continuous modernisation and technological upgrading of production.	Use of energy-intensive and resource-saving production technologies.
Ecological	Improvement of operating conditions and environmental protection.	Monitoring of the internal and external environment of the business entity; use of green technologies in the course of its activities.
Organisational	Improving the efficiency of economic security management.	Risk forecasting and development of measures to neutralise them; implementation based on OSINT Collection Management.
Personal	Creating conditions for the development of human resources.	Formation of a responsible motivational system for the safe functioning of a business entity.
Political and legal	Creating safe conditions for the operation of the business entity.	Establishment of secure legal relationships with business partners; selection of the best possible negotiation strategies.

Source: formed by the authors on the basis of (Patsula, 2021; Revak, 2021).

measures for effective use of available resources can be proposed.

It should be emphasised that OSINT technologies (see Table 4) can be used not only within the framework of strengthening the information component of economic security, but also for other components, because currently modern Internet networks contain

important sources of data for the development of advertising sites, trading. These include networks, blogs, forums, state projects, internet banking systems, and social networks. The successful application of this information in practical activities and the ability to make important decisions regarding the transformation of mechanisms for strengthening the

economic security of entrepreneurial activity in the industrial sector of Ukraine is therefore facilitated. The utilisation of OSINT technologies has been identified as a contributing factor to the development of intelligence collection management. The process of intelligence collection management encompasses the search and selection of the necessary data from available and accessible information for the purpose of analysis and assessment of factors that affect the level of economic security. The objective of this analysis is to develop the necessary measures to avoid threats and to facilitate the making of adequate operational and tactical decisions. The primary benefit of utilising OSINT technologies, which facilitates their extensive deployment, lies in their distinctiveness. The absence of standardised algorithms for conducting research and searches is a salient feature, as each case is unique and necessitates an individualised approach. OSINT is facilitated by numerous platforms that enable users to execute a series of actions through a sequence of stepby-step operations (Revak, 2021). These operations include, but are not limited to: searching and collecting data, analytics, tracking the dynamics of changes, and comparing results over time. Each search engine has its own query mechanism, which greatly simplifies the process of finding, analysing and selecting information sources. Even to search for information on the Internet, it is necessary to have appropriate resources, otherwise the effectiveness of such a search will be low. In general, OSINT is an indispensable tool for those organisations that want to be competitive, profitable and flexible, thereby strengthening their economic

All the above-mentioned theoretical aspects of taking into account regional factors of transformation of mechanisms for strengthening the economic security of business activity in the industrial sector should be implemented in the context of their current situation under martial law.

Before the start of the full-scale invasion, the main sectors of Ukrainian industry were metallurgy, mining and the agro-industrial complex. These sectors are still leading, but are gradually losing their positions. It is the metallurgical complex and the mining industry that are suffering most from the loss of a significant number of enterprises that remained in the occupied territory, as well as from the decline in global demand for metals. An exception is the gas extraction industry, which is actively expanding its own gas production against the background of the aggressor country's refusal to provide energy resources (Popov, 2023).

Aggravation of problems and low rates of recovery in old sectors require reorientation to other areas of activity and development of entrepreneurial initiatives in them. Thus, one of the most promising areas of business development in the direction of economic security is the IT industry, which in recent

years before the outbreak of the war grew by 20-30% annually. Despite the decrease in exports in 2023 (Popov, 2023) and 2024, experts in the IT industry expect an increase in this indicator in 2025 (Tartachnyi, 2024). The prospects for the development of the IT industry can be assessed in the context of its co-operation with the defence industrial complex. According to the Ministry of Strategic Industries, the defence sector has greater production potential than current contracts provide. In today's conditions, the defence-industrial complex acts as a driver and creates a multiplier effect for many related industries, including the IT sphere. It is one of the first to interact with the defence-industrial complex and to benefit from such a symbiosis. This is confirmed by the activity of the business sector, which is involved in particular in the implementation of the "Army of Drones" project, which is being carried out with the support of the government (Popov, 2023).

Despite significant losses in the eastern and southern regions, the agro-industrial complex continues to develop. Despite the fact that it is still not possible to restore the level of exports in 2021, this sector of the economy remains the most influential among the old industries. The final role is played by state support and support from EU partner countries, implemented through the Ukraine Facility programme (Ukraine Facility..., 2024).

The Ukraine Facility programme is predicated on the enhancement of transformational mechanisms to bolster the economic security of entrepreneurship in the industrial sector at the regional level. This is to be achieved through the deepening of decentralisation processes, investments in infrastructure and energy efficiency, support of regional innovation centres and the development of public-private partnerships. The programme's efforts will be directed towards the following industrial sectors: energy, agri-food, extraction of critical minerals, processing industry, and IT. These domains will be cultivated in conjunction with the endorsement of entrepreneurial endeavours and the execution of the "green transition" within industry (Ukraine Facility..., 2024).

The Skills Alliance for Ukraine represents a concerted international effort, involving 50 countries and organisations worldwide. This initiative, initiated in 2024, has set itself the ambitious goal of training and supporting more than 180,000 Ukrainians over the next three years. The primary objective of this initiative is to facilitate the reconstruction of Ukraine in the post-war era. The members of the Alliance will commit a total of more than 700 million EUR to achieve the Alliance's goals. The initiative focuses on the needs of youth, women and internally displaced persons. In this context, it is very important that the capabilities of one initiative overlap with the priorities of the other, the Ukraine Facility programme

mentioned above. It is important that the partners' efforts in the area of vocational training are implemented in sectors that are recognised as the most promising for Ukraine.

A number of planned and already adopted documents, which are expected to be implemented in the coming years, are also in the focus of attention of modern experts. In particular, attention is drawn to:

- The project of "The Strategy for the Development of Agriculture and Rural Territories of Ukraine for the period until 2030" (About the project of the Strategy..., 2024).
- "Strategy of Demographic Development of Ukraine until 2040" (The Decree of the Cabinet of Ministers of Ukarine "On Approval of the Strategy of Demographic Development of Ukraine until 2040", 2024).

For example, the draft of the first document is being hotly debated among experts (About the project of the Strategy..., 2024), and one of the main theses is the contradiction of the strategy, which focuses on the problems of the agricultural sector, but does not take into account the interests of the inhabitants of rural areas.

The Strategy of Demographic Development of Ukraine until 2040 also raises certain issues, the solution of which is a costly task. One of them is the development of mechanisms for providing citizens with housing in accordance with their needs and possibilities (the fourth task within the sixth strategic objective of this strategy). The provision of housing is one of the most acute problems for a large part of the population of Ukraine after 2022. Unfortunately, there is no official statistics, but for a certain number of internally displaced persons, the loss of housing occurred for the second time. This applies to residents of Luhansk and Donetsk oblasts and the Autonomous Republic of Crimea who moved to governmentcontrolled but close to the occupied territories in 2014. A significant proportion of these people, dreaming of a peaceful life, bought or mortgaged their own homes there for the second time. And after February 24, most of them lost their homes for the second time, either because of the temporary occupation of new territories or because of the physical destruction of their homes near the front line. Today, the problem of housing is perhaps the most important issue in the return of the economically active part of the population to the domestic labour market. As the distance from the front line increases, the feasibility of implementing this process diminishes. The compensation programme

for destroyed housing, which was initiated and implemented in Ukraine in 2022, has also encountered delays in its funding (Burdyga, 2024). Presently, it is not feasible to receive compensation for destroyed housing in the occupied territories. Initiatives to recognise housing in occupied territory as lost and compensable (regardless of its unverifiable condition) have not been supported at the government level.

4. Conclusions

The economic security of business activity is determined by a multitude of factors operating within and beyond the immediate environment of business entities in the industrial sector of a region. These factors encompass the external economic conditions, as well as the internal capabilities of business entities to assess their economic security and formulate strategies for its enhancement.

The study allowed us to achieve the goal and implement the planned tasks, namely:

It has been determined that the establishment of economic security for entrepreneurial activity in the industrial sector at the regional level is achieved through the augmentation of implementation, whilst ensuring the resources, production, scientific and technical, and personnel potential are utilised. This is contingent upon the well-being of the company's employees and the absence of inflation.

The toolkit for assessing the state of economic security of entrepreneurial activity of the industrial sector at the regional level has been identified. It involves the analysis of a number of coefficients with a threshold value, as well as the calculation of the integral indicator of an economic security state of entrepreneurial activity in the industrial sector of a region.

This paper sets out to explore the modern factors influencing the economic security of entrepreneurial activity in Ukraine. The most promising branches of the Ukrainian industrial sector are examined, as well as the unstable living standards of the economically active population who are internally displaced. It is argued that such circumstances force a significant part of this population to leave the country or become "ballast".

Subsequent studies will direct their attention to the quest for alternative means of ensuring economic security in the context of the establishment of minimum social guarantees for vulnerable categories of the economically active population of Ukrainian regions within the framework of martial law.

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