UDC 339.13:631.1 DOI: 10.56407/2313-092X/2022-26(1)-3

Market Component of Economic Security of Agricultural Sectors

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Abstract. Market transformations modify the development of the agricultural sector and the possibility of uninterrupted operation in a market environment. At the same time, the subjects of the agricultural sector are subject to the potential destructive impact of risks that may threaten the profitability, solvency and have negative consequences for consumers of agricultural products. Under such conditions, strengthening the economic security of the agricultural sector is the basic principle of economic development. However, in the context of market transformations, there is a need to deepen research to assess the market component of economic security, as the latter is designed to protect against market errors, shortcomings in product and sales policy, as well as incorrect choice of pricing strategy. The research used methods: monographic, logical modeling, calculation-constructive, graphic, dynamic analysis, etc. The purpose of the article is to study the level of the market component of economic security of the agricultural sector and identify areas for ensuring its optimal level. An analysis of indicators and factors influencing the market component of the economic security of subjects of the agrarian sector was carried out. It was established that the level of the market component of economic security of subjects of the agrarian sector of the national economy and subjects of the agrarian sector of the Mykolaiv region during 2016-2020 was low. It is proven that increasing the level of the market component requires the subjects of the agrarian sector to develop and implement directions for improving the mechanism of managing the market component of economic security. An assessment of the level of the market component of the economic security of the subjects of the agricultural sector was carried out using the PESTEL-analysis based on expert assessments, and it was established that in the block of threats, the greatest number of points are economic (unstable exchange rate, difficulty of entering the market, "tinization" of the economy) and legal (insufficient legal justification of the market component of economic security) factors. Such threats are successfully leveled, as the change in the characteristics of doing business, the introduction of initiatives to stimulate access to markets, as well as the development of the legal framework for the market component of economic security will contribute to the transformation of threats into opportunities for growth

Keywords: market environment, market behavior, market opportunities, market threats, development, agriculture

INTRODUCTION

Agriculture, having a pronounced seasonal nature of production, together with the constant changes in the external market environment caused by globalization processes, must adapt to new economic and technological conditions. At the same time, market modernization significantly modifies the basic conditions of agricultural reproduction and the possibility of uninterrupted operation in a market environment. At the same time, the crisis and systemic challenges caused by the COVID-19 pandemic have had a negative impact on the inability to sell products without interruption, in particular due to the breakdown of supply chains; loss of access of producers to markets; falling demand for products; the presence of tariff and non-tariff restrictions, as well as the lack of knowledge of producers, including the organization of sales.

Protection against errors of market behavior, shortcomings in product and sales policy of the enterprise, incorrect choice of pricing strategy, designed to ensure an important component of economic security of enterprises – market, which characterizes the compliance of internal opportunities with external market environment, indicating the level of compliance of market, assessment of the coherence of production and sales, as well as the orientation of the enterprise to the needs of consumers.

Article's History:

Received: 20.12.2021 Revised: 19.01.2022 Accepted: 20.02.2022

Suggested Citation:

Sirenko, N., & Mikuliak, K. (2022). Market component of economic security of agricultural sectors. Ukrainian Black Sea Region Agrarian Science, 26(1), 30-39.

Therefore, in the context of market transformations, along with increasing globalization, the study of market opportunities of agricultural enterprises will strengthen their economic security (in the context of GDP growth, increase tax revenues, increase investment activity in the country), as well as protection from external and internal hazards arising in the market environment.

The calculation of the level of the market component of economic security is necessary to develop a set of measures to counter threats and expand opportunities to change the conditions of economic activity, education of market psychology and increase the prestige of the agricultural sector in the market environment.

Taking these factors into account is necessary in terms of developing the economic and regulatory framework for market security in order to ensure the competitive position of agricultural sector entities in the market environment.

LITERATURE REVIEW

The issues of economic security of agricultural sector entities are still well researched, which is confirmed by a significant number of publications [1-8] and methodology [9].

Methodical aspects and approaches to assessing the level of economic security of enterprises were studied by T. Oliynyk [1], T. Zubko [2], N. Pylypenko [3]. Evaluation methods and conceptual and strategic directions of economic security of agricultural enterprises were considered in the scientific works of Y. Yaremko, L. Shykova, L. Syvolap [4]. Diagnosing the level of economic security of an enterprise in conditions of limited information was carried out by T. Sak [5], the social orientation of the process of ensuring the economic security of entrepreneurship in the post-industrial paradigm is part of the scientific interests of R. Snishchenko [6]. Threats to national security were investigated by foreign scientists in their scientific works [7; 8].

In turn, market security issues are insufficiently studied and considered by scientists as a market component of economic security. The theoretical and practical aspects of evaluating the market component of an enterprise's economic security and its competitive potential as a criterion for choosing an effective competitive strategy are reflected in the scientific works of foreign scientists – J. Sheth [10], R. Sisodia [10], H. Assael [11], E. Dichtl [12], and others.

The market (domestic) component of economic security was studied by V. Tkachuk [13], M. Yarema [13], T. Melnyk [14], N. Vlasenko [14], O. Denisov [15].

The influence of the market component of economic security on the development of business entities was considered in the works of S. Ilyashenko [18], T. Voronkova, D. Melnyk and others. The work of H. Veretennikova [19] is devoted to the theoretical substantiation and improvement of methodical support for choosing a competitive strategy, taking into account the potential opportunities of enterprises and their market component of economic security. The work of L. Filipkovska [24] and G. Savchenko [24] is devoted to the study of the market aspect of economic security, as well as its influence on the formation of strategic tasks for the development of economic entities.

According to Guidelines No. 1277 [9], economic security of the state is a state of the national economy that allows to maintain resilience to internal and external threats, ensure high competitiveness in the global economic environment and characterizes the ability of the national economy to sustainable and balanced growth.

The composition of economic security includes: industrial, demographic, energy, foreign economic, investment and innovation, macroeconomic, food, social, financial security. Market safety is absent in the methodological recommendations, which makes it impossible to interpret the essence of the legislation and determine its level on the basis of legally defined indicators. Thus, the basis for determining the essence of the market component of economic security and methodological tools for assessing its level were the scientific works of domestic scientists and practitioners.

In particular, V. Tkachuk & M. Yarema [13] reckon that the market component of economic security characterizes the compliance of internal opportunities with external ones formed by the market environment and is a protection against errors in market behavior, shortcomings in product and sales policy and wrong choices. enterprise strategy.

According to T. Melnyk & N. Vlasenko [14], the market component of economic security characterizes protection against errors of behavior in the market, shortcomings in product and sales policy of the enterprise, low level of product competitiveness, incorrect choice of pricing strategy.

O. Denisov [15] notes that the market component shows the state and level of economic security of the industry market and determines changes in the economic condition of the industry relative to the level and volume of sales of enterprises and competition between them for a common market.

The authors of the study believe that the market component of economic security is a state of protection from market dangers that may arise during the operation of enterprises.

The weakening of the market component of economic security is evidenced by:

 reduction of the market share occupied by the enterprise;

 weakening of competitive positions and ability to counteract competitive pressure;

 reduction of adaptive capabilities of the enterprise to changes in the market situation, lagging behind market requirements [16].

The purpose of the article is to determine the level of the market component of economic security and to develop directions for improving the mechanism of its management.

MATERIALS AND METHODS

During the research on the theoretical and methodological foundations of economic security and its market component, general scientific and specific methods were applied; when assessing the level of economic security and its market component – calculation-constructive, graphic and dynamic analysis.

The assessment of the level of the market component of economic security of the agricultural sector was carried out using PESTEL-analysis based on expert assessments (the subjects were economic entities of the agricultural sector; number of respondents – 80 people), the results of which are shown in Table 8.

The normative and legal basis of the study was the Methodological recommendations for calculating the level of economic security of Ukraine No.1277 [9], the Law of Ukraine "On the National Security of Ukraine" [17]. The source base of the research was made up of the data of the State Statistics Service of Ukraine, the Main Department of Statistics in the Mykolaiv region, open sources and scientific publications of domestic and foreign authors.

The legislative basis for the definition and calculation of the market component of economic security is currently absent, so there is an objective need to deepen research on its assessment and ensure at the legislative level the definition of a list of indicators together with their normative values.

Indicators of assessment of the level of the market component of the financial and economic security of the agricultural sector were formed on the basis of information from open Internet sources.

According to the methodology of S. Ilyashenko [18], the analysis of the market component of economic security should be carried out on the basis of assessing the degree of compliance of internal development opportunities of the agricultural sector to external market environment [16]. Threats to the market component of economic security are shown in Figure 1.

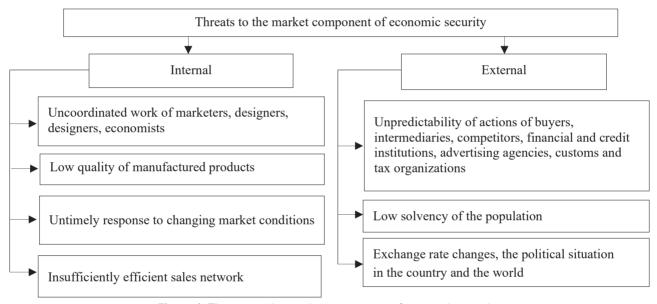


Figure 1. Threats to the market component of economic security *Source:* built by the authors according to [16]

Continuous monitoring of the state of the internal environment and analysis of changes in the external market space allows agricultural sector entities to quickly anticipate danger, make better use of internal opportunities and operate more efficiently. The list of indicators recommended to be used to determine the level of the market component of economic security was formed on the basis of the analysis of literary sources on the assessment of economic security (Table 1). Quantitative indicators for calculating the level of the market component of economic security of the agrarian sector of the national economy are given in the Table 2.

Indicator	Method of calculation	Significance
Market return on assets	$C_{\text{m.r.}} = \frac{P_n}{A}$, to growth, where, P_n – net profit of enterprises, UAH; A – assets of enterprises, UAH	0.12
Market share	$C_{\text{m.sh.}} = \frac{P_n}{SV_{sector}}$, to growth, where, P_n – net profit of enterprises, UAH; SV_{sector} – sales volume of the sector, UAH	0.19

Table 1. Methods for calculating indicators for assessing the level of market component

 of economic security of agricultural sector entities

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		Table 1, Continued
Indicator	Method of calculation	Significance
Innovation cost ratio	$C_{\text{in.c.}} = \frac{C_{in}}{C_{ent}}$, to growth, where, C_{in} – innovation costs of enterprises, UAH; C_{ent} – costs of enterprises, UAH	0.17
Rhythmic sales	$D=1-\frac{SV_{Pl}-SV_a}{SV_{Pl}}$, as close as possible 1, where, SV_{Pl} – planned sales volume, UAH; SV_a – actual sales volume, UAH	0.2

Source: summarized by the authors according to [16; 19]

Table 2. Quantitative indicators for calculating the assessment of the level of the market component
of economic security of the agricultural sector

-		3			
2016	2017	Years 2018	2019	2020	Abs. deviation (+, -)
2010	2017	2010			
90613.2	68858.5	71002.6	93255.4	81618.5	-8994.7
1537319.1	911614.1	983593.6	1030366.7	11303004.9	9765685.8
414799.9	467636.1	540509.3	572748.3	624070.1	209270.2
23229.5	9117.5	12180.1	14220.9	14406.9	-8822.6
326544.7	388918.7	481539.7	508633.7	512270.3	185725.6
474884.1	524120.7	616094.1	636661.5	679307.6	204423.5
	1537319.1 414799.9 23229.5 326544.7	90613.2 68858.5 1537319.1 911614.1 414799.9 467636.1 23229.5 9117.5 326544.7 388918.7	2016 2017 2018 90613.2 68858.5 71002.6 1537319.1 911614.1 983593.6 414799.9 467636.1 540509.3 23229.5 9117.5 12180.1 326544.7 388918.7 481539.7	201620172018201990613.268858.571002.693255.41537319.1911614.1983593.61030366.7414799.9467636.1540509.3572748.323229.59117.512180.114220.9326544.7388918.7481539.7508633.7	2016201720182019202090613.268858.571002.693255.481618.51537319.1911614.1983593.61030366.711303004.9414799.9467636.1540509.3572748.3624070.123229.59117.512180.114220.914406.9326544.7388918.7481539.7508633.7512270.3

Source: constructed by the authors using data [20]

It is advisable to determine the level of the market component of economic security using the formula (1), [19]:

$$Y = \sum_{i=1}^{n} (\alpha_i * x_i) \tag{1}$$

where α_i – is the significance of the partial indicator of the market component of the enterprise's economic security; x_i – is the value of the indicator of the market component of the enterprise's economic security.

To determine the qualitative level of market security of the enterprise, it is proposed use the following ratios proposed by G. Kozachenko, V. Ponomaryov and O. Lyashenko, which offer a range of values for a low-level indicator from 0 to 0.29; medium level – from 0.3 to 0.49; high level – from 0.5 to 1.0 [19].

In order to identify the impact of the market component on the economic security of subjects of the agricultural sector of the Mykolaiv region, we will calculate it, based on the methodology of the Table 1 and using the data in Table 3.

Table 3. Quantitative indicators for calculation of a level of a market component
of economic safety of subjects of agrarian sector of the Mykolaiv area

Indicators		Abs. deviation				
mulcators	2016	2017	2018	2019	2020	(+, -)
Net profit from operating activities, UAH million	4220.7	3352.2	3637.7	2903.2	2288.2	-1932.5
Assets of enterprises, UAH million	20574.5	25928.1	30197.5	30839.1	33276.7	12702.2
Sales volumes, UAH million	14603.4	16856.8	18134.1	19432.2	19757.5	5154.1
Production costs, UAH million	11066.2	14035.8	15568.3	17374.6	18221.1	7154.9
Planned sales, million UAH	17020.0	18915.1	20622.2	21755.2	22494.8	5474.8

Source: constructed by the authors using data [21]

Qualitative indicators of the assessment of the level of the market component of economic security of the agricultural sector of the Mykolaiv region are shown in the Table 4.

RESULTS AND DISCUSSION

When calculating the level of security of the industry market, it is important to identify and forecast possible

losses due to changes in the economic situation, the dynamics of changes within the industry and in relation to other industries and the economy as a whole [19].

Quantitative analysis of indicators for assessing the level of the market component of the economic security of subjects of the agrarian sector is based on the methodology given in the Table 1 and quantitative indicators for calculating Table 2. Thus, the net profit of agricultural enterprises has been growing since 2018, but in 2020 compared to 2016 we see its decline. In this case, the increase in profits is possible due to: increasing production and sales; competent building of contractual relations with suppliers, intermediaries and buyers; improving the marketing system (grouping products on the basis of profitability while focusing on those products that are highly profitable); systematic research of market analysis, consumer behavior and competitors.

The assets of enterprises in the agricultural sector are growing (+9765685.8 million UAH), which shows the change in the economic potential of enterprises, their financial weight in the national [22] market. Innovation expenditures of agricultural enterprises in 2020 show a negative absolute deviation (-8822.6 million UAH) compared to 2016, which indicates a decrease in innovation. Production costs are rising, which at current market prices affects profits [23]. However, an important aspect in the implementation of the production plan in a market environment is to take into account the range and quality of products, because in case of low quality of actual products from the planned there is a risk of customers abandoning products, leading to irregular sales.

The calculation of the level of the market component of the economic security of subjects of the agrarian sector of the national economy was carried out using the indicators of Figure 2, calculated using the method of table 1 based on the data of Table 2.

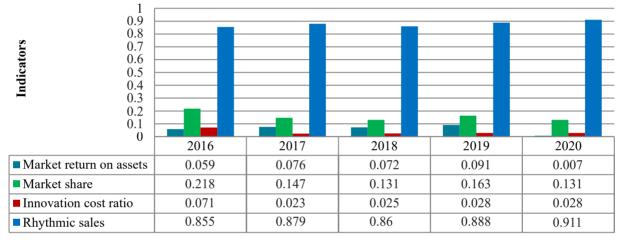


Figure 2. Qualitative indicators for assessing the level of market component of economic security of agricultural sector entities *Source:* constructed by the authors using data [20]

The market return on assets has been showing growth since 2017, but in 2020 the figure is lower than in 2020, posing a threat to businesses. The share of agricultural sector entities in the market since 2016 shows a negative trend until 2018, and in 2020 compared to 2016 decreases by 0.088.

During 2016-2020, the rhythm of sales is as close as possible to 1, but values exceeding this threshold pose a threat to enterprises.

The rhythm of sales directly depends on the rhythm of its production, violation of which affects sales, leading to a violation of the rhythm of sales and reduce the efficiency of operating activities of agricultural enterprises, and at the same time negatively affects the deterioration of economic security.

Qualitative indicators for assessing the level of the market component of economic security indicate that there are challenges to the development of market relations caused by the pandemic, in terms of limiting distribution channels and export markets. Quantitative analysis of indicators for assessing the level of the market component of economic security of the subjects of the agrarian sector of the Mykolaiv region, given in the table 3, makes it possible to determine trends in its state change.

The decrease in net profit from the operating activities of enterprises of the agricultural sector of the Mykolaiv region in 2020 is caused by a reduction in the volume of sales of the industry due to the introduction of quarantine measures (restriction of distribution channels and export markets, including tariff and non-tariff restrictions, drop in demand for products).

The assets of enterprises are growing, amounting to UAH 33,276.7 million in 2020, which exceeds the figure for 2016 by UAH 12.702.2 million, showing a change in the economic potential of enterprises. The growth of production costs at current market prices affects the increase in financial performance of enterprises [23].

The calculated indicators of the assessment of the level of the market component of the economic security of subjects of the agricultural sector of the Mykolaiv region were carried out on the basis of the quantitative data of the Table 3 and shown in Table 4.

of economic safety of agrarian sector of the Mykolaiv area						
In dianto ye						
Indicators	2016	2017	2018	2019	2020	Abs. deviation (+, -)
Market return on assets	0.205	0.129	0.120	0.094	0.069	-0.136
Market share	0.289	0.199	0.201	0.149	0.116	-0.173
Rhythmic sales	0.142	0.109	0.121	0.107	0.122	-0.020

Table 4. Qualitative indicators of an estimation of a level of a market component

 of economic safety of agrarian sector of the Mykolaiv area

Source: calculated by the authors according to [21]

Analyzing the qualitative indicators of assessing the level of market component of economic security of the agricultural sector of Mykolaiv region, we see a decline in the rate of return on assets, despite the fact that the latter should tend to increase, in 2020 there was a decrease of 0.136 compared to 2016. Market share has a fluctuating trend and in 2020 there is a decrease compared to 2016 by 0.173. The value of the rhythm of sales should be as close as possible to 1, but the calculated values are relatively low and range from 0.122 in 2016 to 0.122 in 2020.

The calculation of the level of the market component of economic security of subjects of the agrarian sector of the national economy and the Mykolaiv region, taking into account the methodology for determining the level of the market component of economic security and the significance of the indicators, is given in Table 5.

Subjects of 1 0.12 0.19	2016 the agricultural se 0.007	2017 ector of the nation	2018 al economy	2019	2020
0.12	5		al economy		
	0.007	0.000			
0.19		0.009	0.009	0.011	0,001
	0.041	0.028	0.025	0.031	0,025
0.17	0.012	0.004	0.004	0.005	0,005
0.2	0.171	0.176	0.172	0.178	0,182
The level o	of the market com	ponent of econom	nic security		
	0.231	0.217	0.21	0.225	0.213
Subjects	of the agricultura	l sector of Mykola	iv region		
0.12	0.025	0.015	0.014	0.011	0,008
0.19	0.055	0.038	0.038	0.028	0,022
0.2	0.028	0.022	0.024	0.021	0,024
The level o	of the market com	ponent of econom	nic security		
	0.108	0.075	0.076	0.06	0.054
	0.2 The level of Subjects 0.12 0.19 0.2	0.2 0.171 The level of the market com 0.231 Subjects of the agricultura 0.12 0.025 0.19 0.055 0.2 0.028 The level of the market com	0.2 0.171 0.176 The level of the market component of econom 0.231 0.217 Subjects of the agricultural sector of Mykola 0.12 0.025 0.015 0.19 0.055 0.038 0.022 0.022 The level of the market component of econom 0.022 0.024 0.024	0.2 0.171 0.176 0.172 The level of the market component of economic security 0.231 0.217 0.21 Subjects of the agricultural sector of Mykolaiv region 0.12 0.025 0.015 0.014 0.19 0.055 0.038 0.038 0.2 0.028 0.022 0.024 The level of the market component of economic security	0.2 0.171 0.176 0.172 0.178 The level of the market component of economic security 0.231 0.217 0.21 0.225 Subjects of the agricultural sector of Mykolaiv region 0.12 0.025 0.015 0.014 0.011 0.19 0.055 0.038 0.038 0.028 0.2 0.028 0.022 0.024 0.021

Table 5. Calculation of the level of the market component of economic security

Source: calculated by the authors based on the methodology [16; 19]

The range of values for the calculation of indicators of the level of the market component of economic security during 2016-2020 indicate its low level both for subjects of the agrarian sector of the national economy and for subjects of the agrarian sector of the Mykolaiv region. Increasing the level of the market component of economic security of the subjects of the agrarian sector requires the latest development and implementation of directions for improving the management mechanism of the market component of economic security (Table 6).

Table 6. Problems that need to be solved during the implementation of the market component

 of economic security of the agricultural sector

Problem	Measures to achieve a market component of economic security
Development of competitiveness	 monitoring and diagnosis of internal and external threats; improving methods of managing the economic activity of agricultural enterprises and sales processes; prevention of probable risks in the agricultural sector; strategic planning of the process of improving the quality of the internal environment of the agricultural sector; administration at enterprises, focused on preventing long-term negative consequences of the crisis
Improving advertising policy	 implementation of the appropriate legal and regulatory framework; socio-psychological study of consumers of the agricultural market; increasing the level of information support of the market; increasing the role of product promotion in the market

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		Table 1, Continued
Problem	Measures to achieve a market component of economic security	
Increasing the share of agricultural products in the market	 partial ban or difficulty of entering the market of imported products; regulation of export and customs policy of the state 	
Slow development of innovations	 regulation of patent, budget, credit, innovation policies; increasing the role of innovation marketing 	

Source: built using data [24]

Analysis of the level of market component of economic security is the basis for developing a set of measures (Table 6) to counter threats and increase the level of market component of economic security of enterprises and, accordingly, expand its adaptive capacity to change economic conditions, create conditions for stable operation and development.

Directions for improving the management mechanism of the market component of economic security of the agricultural sector are shown in Table 7.

Table 7. Directions for improving the mechanism for managing the market component
of economic security of enterprises

Methods	Directions for improving the components of the economic security system of enterprises
Institutional and legal	Establishment of a market security department. Elimination of any illegal actions by the company and careful study of the actions of counterparties in order to control their legitimacy. In certain cases, the involvement of experienced and qualified is allowed lawyers from outside, if necessary. But for large companies and organizations, the availability of such staff in their staff is a vital necessity, in addition, much attention should be paid to regular training of their lawyers
Informational	Restrict access to third parties to the organization, restrict access to any information that does not relate to a particular employee, ranking and fragmentation of information, the use of new technologies to hide and store information
Organizational and technological	Renewal of fixed assets, study of innovations in technology, purchase of necessary patents
Economic	Careful strategic and tactical planning and forecasting, strengthening accounting for financial flows and reporting. Facilitating access to markets and sales. Growing competitiveness of the enterprise. Providing conditions for the renewal of the enterprise
Administrative	Personnel certification, refresher courses, measures aimed at maintaining corporate spirit, improving incentive policies, strengthening measures against employees who for some reason harmed the organization, the presence of people in the staff engaged in corporate surveillance. Introduction of a bypass system for staff and outsiders
Socio-psychological	Increasing the level of staff motivation in the security system of the enterprise
Ecological	The company needs to constantly monitor innovations in legislation related to environmental regulations. If the company is large – to have environmental staff, and if medium or small – periodically use the services of environmental services
Market and interface	This area depends entirely on the work of the marketing department. The task of management is to control their activities, fully stimulate and provide the necessary information about the internal and external environment, special attention should be paid to competitors, suppliers and buyers, as well as market conditions

Source: systematized and supplemented on the basis of data [25]

The results of the assessment of the level of the market component of the economic security of the agricultural sector, carried out using the PESTEL-analysis, are given in Table 8. The assessment experts were 80 subjects of the agricultural sector.

Thus, economic and legal factors have the highest number of points (5.0) in the block of threats. Among the economic factors, the greatest threats to the state of the market component of economic security of the agricultural sector are: unstable exchange rate, the difficulty of entering the market and the "shadowing" of the economy. Improving the stability of the exchange rate, getting out of the "shadow" of business structures and improving the possibility of easy market entry will help to improve the situation. Such threats are successfully eliminated, as changes in the peculiarities of doing business (Digital Power: Action; Action. Business without barriers; bank account for online business; SmartID; ID-card with electronic signature), as well as the introduction of initiatives to stimulate market access uninterrupted sales of agricultural products by providing producers with access to markets through distribution channels, improving access to knowledge and information on production efficiency and sales organization, and assistance in entering export markets) of the agricultural sector will facilitate the transition of threats to growth.

Factors	Possibilities	Weighting factor	Score	Result	Threats	Weighting Factor	Score	Result
Political	 Improving the state of the financial system through reforms 	0.5	5	2.5	 Reduction or abolition of preferential taxation and lending 	0.5	4	2.0
	 Restriction of monopoly. ensuring competition 	0.5	4	2.0	 Deterioration of financial and economic condition 	0.5	5	2.5
	Σ	1		4.5	Σ	1		4.5
Economical	 Improving the efficiency of the use of equity and economic resources 	0.5	5	2.5	 Unstable exchange rate. the difficulty of entering the market 	0.5	5	2.5
	 Increasing the level of profitability 	0.5	5	2.5	 "Shadowing" of the economy 	0.5	5	2.5
	Σ	1		5.0	Σ	1		5.0
Social	 Increasing the motivation of staff in the system of financial and economic security 	0.5	5	2.5	 Reduction of income and employment 	0.6	4	2.4
	– Development of social infrastructure	0.5	4	2.0	 "Outflow" of qualified personnel. devaluation of human labor 	0.4	4	1.6
	Σ	1		4.5	Σ	1		4.0
Technological	– Updating processes and means of production	0.4	4	1.6	 Preventing the renewal of all fixed assets due to their large number 	0.3	4	1.2
	 Increase the efficiency of enterprise security management 	0.6	5	3.0	 Rapid change of innovations. which necessitates constant updating of equipment 	0.7	4	2.8
	Σ	1		4.6	Σ	1		4.0
Ecological	 Development of environmental programs to improve the external environment 	0.5	4	2.0	– High level of environmental pollution	0.7	5	3.5
	 Improving the system of environmental legislation 	0.5	4	2.0	 Reduction of soil fertility 	0.3	3	0.9
	Σ	1		4.0	Σ	1		4.4
Legal	 Introduction of the current legal framework on the market component of the ES 	0.6	5	3.0	 Insufficient legislative justification of the market component of ES 	0.7	5	3.5
	 Increasing state control over financial resources and directing them to their destination 	0.4	5	2.0	 Lack of strategy for the development of financial and economic security of enterprises of different levels 	0.3	5	1.5
	Σ	1		5.0	Σ	1		5.0

Table 8. Results of the PESTEL-analysis on the assessment of the level of the market component of economic security of the agricultural sector

Source: developed by the authors on the basis of expert assessments

The modern concept of open data is increasingly used by business representatives to increase the efficiency of their activities. Disclosure of data contributes to the creation of new markets in the field of business (monitoring and verification of counterparties, etc.).

Thus, a low level of the market component of economic security has been established, the increase of which requires the subjects of the agrarian sector

to develop and implement directions for improving the market component management mechanism, in particular, market and interface methods.

CONCLUSIONS

The analysis of the calculated indicators of the market component of economic security shows that there are challenges for the development of market relations caused by quarantine restrictions, in terms of suspension of activities of agricultural sector entities due to restrictions on distribution channels and export markets.

Calculations of the level of the market component of economic security during the research period indicate its low level both for the subjects of the agrarian sector of the national economy and for the subjects of the agrarian sector of the Mykolaiv region, increasing the level of which requires the development and implementation of directions for improving the mechanism for managing the market component of economic security.

The results of the PESTEL-analysis regarding the assessment of the level of financial and economic security of the agricultural sector indicate that the greatest threat to it is economic and legal factors, namely: an unstable exchange rate, the difficulty of entering the market and the "tinization" of the economy. The threats in the legal block are the insufficient legal justification of the market component of financial and economic security, which requires the development and implementation of a normative-legislative framework for the interpretation of the essence, definition of indicators and normative values of indicators. The improvement of the situation will be facilitated by restoring the stability of the exchange rate, getting out of the "shadow" of business structures and improving the possibility of easy entry into the market.

The strategic imperative of the market component of economic security of agricultural sector entities is to develop a legal framework to determine the essence of market security and methodological basis for assessing its level, as rapid globalization requires agricultural sector entities to quickly adapt to national and international market space.

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Ринкова складова економічної безпеки суб'єктів аграрного сектору

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Анотація. Ринкові трансформації модифікують розвиток аграрного сектору та можливість безперебійної роботи у ринковому середовищі. При цьому суб'єкти аграрного сектору підпадають під потенційний деструктивний вплив ризиків, які можуть загрожувати рентабельності діяльності, платоспроможності та мати негативні наслідки для споживачів аграрної продукції. За таких умов зміцнення економічної безпеки аграрного сектору є базовою засадою розвитку господарюючих суб'єктів. Проте, в умовах ринкових трансформацій, виникає потреба поглиблення досліджень щодо оцінки ринкової складової економічної безпеки, оскільки остання покликана захищати від помилок поведінки на ринку, недоліків у товарній та збутовій політиці, а також невірного вибору стратегії ціноутворення. У дослідженні використано методи: монографічний, логічного моделювання, розрахунковоконструктивний, графічний, динамічного аналізу та ін. Метою статті є вивчення рівня ринкової складової економічної безпеки суб'єктів аграрного сектору та визначення напрямів щодо забезпечення оптимального її рівня. Здійснено аналіз показників та чинників впливу на ринкову складову економічної безпеки суб'єктів аграрного сектору. Встановлено, що рівень ринкової складової економічної безпеки суб'єктів аграрного сектору національної економіки та суб'єктів аграрного сектору Миколаївської області протягом 2016-2020 рр. був низьким. Доведено, що підвищення рівня ринкової складової вимагає від суб'єктів аграрного сектору розробки та реалізації напрямів вдосконалення механізму управління ринковою складовою економічної безпеки. Проведено оцінку рівня ринкової складової економічної безпеки суб'єктів аграрного сектору із застосуванням PESTEL-аналізу на основі експертних оцінок, та встановлено, що у блоці загроз найбільшу кількість балів мають економічні (нестабільний валютний курс, складність виходу на ринок, «тінізація» економіки) та правові (недостатнє законодавче обґрунтування ринкової складової економічної безпеки) фактори. Такі загрози вдало нівелюються, оскільки зміна особливостей ведення бізнесу, запровадження ініціатив стимулювання доступу до ринків, а також розроблення законодавчої основи ринкової складової економічної безпеки сприятимуть переходу загроз у можливості до зростання

Ключові слова: ринкове середовище, ринкова поведінка, ринкові можливості, ринкові загрози, розвиток, сільське господарство