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Thus, the formation of a foreign trade contract for the relevant operations is a very painstaking and time-consuming process that requires professional competence and attention. It is its provisions that protect the entity from additional costs and losses due to unforeseen circumstances and dishonesty of the partner. Due to the constant changes and additions to the current legislation, the covered topic does not lose its relevance and requires constant research.

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**Красняк О.П.**

*к. е. н., доцент, доцент кафедри аграрного менеджменту та маркетингу, Вінницький національний аграрний університет*

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### РИЗИК-МЕНЕДЖМЕНТ ЯК ЕЛЕМЕНТ УПРАВЛІННЯ АГРАРНИМ ПІДПРИЄМСТВОМ

**Krasnyak O.P.**

*Candidate of Economic Sciences, Associate Professor, Associate Professor of the Department Associate Professor of Agricultural Management and Marketing, Vinnitsia National Agrarian University*

### RISK MANAGEMENT AS AN ELEMENT OF AGRICULTURAL ENTERPRISE MANAGEMENT

#### **Анотація.**

*У статті зроблена спроба позначити сутність і зміст ризик-менеджменту. Розглянуто та проаналізовано операційні ризики, які супроводжують підприємницьку діяльність аграрних підприємств, і управління якими є одним з ключових елементів системи ризик-менеджменту.*

*Дана характеристика основних факторів, що впливають на ступінь операційного ризику. Описано комплексний підхід до оцінки інтегрального ризику за напрямками діяльності учасників аграрного ринку.*

*У центрі системи управління ризиками лежить процедура виявлення ризиків, яка повинна відповідати теоретичним рекомендаціям і бути внутрішньо і зовні збалансована, а так само орієнтована не тільки на запобігання шкоди, а й на підвищення ліквідності підприємства.*

#### **Abstract.**

*The article attempts to identify the essence and content of risk management. The operational risks that accompany the entrepreneurial activity of agricultural enterprises and the management of which is one of the key elements of the risk management system are considered and analyzed.*

*The characteristics of the main factors influencing the degree of operational risk are given. A comprehensive approach to the assessment of integrated risk in the areas of activity of agricultural market participants is described.*

*At the heart of the risk management system is the procedure for identifying risks, which must comply with theoretical recommendations and be internally and externally balanced, as well as focused not only on preventing damage, but also on increasing the liquidity of the enterprise.*

**Ключові слова:** підприємство, інноваційний менеджмент, ризик-менеджмент, фінансові ризики, інтегральний підхід до управління ризиками, ризик - фактори.

**Keywords:** enterprise, innovation management, risk management, financial risks, integrated approach to risk management, risk factors.



**Introduction.**

Modern market conditions are under the constant influence of external factors, which in turn affect the operational and strategic development of the enterprise. Fierce competition, the development of technology, the complexity of management systems - all this is associated with the emergence of new risks for organizations, which requires improving the quality of enterprise management.

Every day, each of us faces a large number of risks in everyday life: from risks at home, at work, in business and ending with political risks.

In the current Ukrainian reality, traditional management methods do not provide the expected effect, as they are focused, to a greater extent, on the relatively stable market environment of developed countries. Increasing the dynamics of the external environment, reducing the time spent on the adoption and implementation of management decisions, increasing the degree of exploitation of available resources and increased competition, place increased demands on the enterprise management system.

The various risks inherent in any economic activity, including in the agro-industrial complex, are especially exacerbated in the context of economic transformation. During the period of administrative and planned management of the national economy, the main risks that negatively affect the activities of the agricultural sector were reduced mainly to natural, climatic and industrial. With the development of market relations, the negative impact of business and financial risks increases.

To be successful and win in the competition, companies are forced to take on new types of risks, which, in turn, causes both the need for risk management and growing demands for quality management.

Thus, in today's market economy and growing competition, risk management is becoming one of the most important elements of the management system of industrial enterprises. In addition, companies face the need to manage not only certain types of risks, but also to build a comprehensive risk management system.

The greatest danger to the agro-industrial complex of the country is represented by all types of risk, ie the probability of adverse effects of environmental factors on doing business in the agricultural sector.

One of the main areas of enterprise management is risk management. In our opinion, the basis in risk management is the timely detection of this risk, determining the probability of risk, the possible time and calculation of possible damage in the event of this risk.

The problem of risk management is devoted to the scientific works of many scientists: R. Brayley, J. Bailey, D. Messen, S. Hughes, K. Redhead, V. Vitlinsky, G. Grabovoy, S. Petrov, M. Lapusta, L. Sharshukov, N. Petrakov, V. Rotary, G. Kleiner, R. Kachalov and others. Most of the work, both domestic and foreign professionals, are usually reduced to the tasks of managing financial, investment or insurance risks. In this article, the problem of business risk management is considered from a more general standpoint, with the inclusion in the range of analyzed aspects of the industrial enterprise of various risk factors.

**The aim of the study.**

The main purpose of this work is to generalize and develop theoretical and practical foundations, development and implementation of a modern system of effective risk management, as well as highlighting the functions, responsibilities and tasks of participants in the risk management process of business structures in the agricultural sector.

**Research methodology.**

Theoretical and methodological basis of the study were formal-logical, complex, systematic approaches, structural analysis and synthesis, graphic and other methods. The information base of the study was legal documents, reference documents, materials of sites on the Internet, author's research in the field of risk management in the activities of agricultural enterprises.

**Results of the research.**

The need to build a risk management process in modern conditions is beyond doubt. This situation is especially relevant for industrial and agricultural enterprises, as they do not have specific requirements for risk management, as established for enterprises in the financial sector of the economy (banks, insurance companies and others). This fact most likely indicates the insufficient development of risk management status in Ukraine.

The existing concept of "risk", of course, is inextricably linked with all human economic activity and begins its existence since the emergence of civilization. In today's world, the term "risk" is most often used in the economic sphere. Most of the representatives of this field of activity, namely: financiers, economists, financial managers, investors and entrepreneurs deal with risks most often, because their activities in one way or another affect this specific area.

However, to build a more complete picture of the risk management system, it is necessary to have a clear understanding of the term "risk". Risk is a multifaceted phenomenon and the association of risk only with the occurrence of adverse events is a one-sided approach to the consideration of this term. There is another positive side of "risk": risk contributes to economic development, progressive movement forward.

Risk is a combination of three factors: threats, vulnerabilities and consequences [1].

J.M. Keynes considered the risk inherent in the value of the product, identifying its main types: the risk of the entrepreneur (borrower); creditor risk (debtor's evasion of debt payment); the risk of depreciation of the currency (inflation risk) [2].

Risk is the probability of losses, losses, loss of planned income, profit. Risk is understood as the probability (or threat) of loss of part of its resources by the enterprise, loss of profits or the occurrence of additional losses as a result of certain production and financial activities [3].

Risk in the general case should be considered as an opportunity or threat of deviation of the results of specific decisions or actions from the expected ones. That is, the concept of "risk" is identified as the threat of loss of part of its resources, loss of income or the emergence of additional costs as a result of specific activities [4].

Today, the presence of risk in the activities of agricultural enterprises operating in market conditions is not a disadvantage in today's environment. Moreover, the absence of risk, ie the danger of unpredictable and undesirable for the enterprise consequences of its own actions, usually harms the economy, as it undermines its dynamism and efficiency.

The concept of risk is multifaceted, this is due to the presence of factors that characterize the type of activity, industry, enterprise and other conditions.

There is no single generally accepted classification of risks, it is carried out on the basis that is accepted today (Table 1).

Table 1

<b>Risk classification</b>		
Classification feature	Types of risks	Risk characteristics
1	2	3
By sphere of manifestation	economic	the set of uncertainties that arise in the development of the system as a whole and its elements
	political	manifested in the form of losses or reduction of profits due to public policy
	ecological	related to civil liability for causing damage to the environment
	social	characterized by internal conflicts and indicators of food accessibility for the population in the economic and physical sense
	technological	the risk of losses associated with the use of obsolete technologies
	natural	belong to the risks associated with the manifestation of natural forces of nature
By types of activity	resource	untimely delivery of raw materials or materials or their insufficient quantity or improper quality
	industrial	associated with the probability of default by the company under its contract or agreement with the customer
	financial	associated with the firm's failure to meet its financial obligations to the investor
	innovative	risk of losses during the implementation of inefficient innovation projects
	investment	risks associated with capital investment
	marketing	due to the uncertainty of demand for products
	transport	the probability of loss of property, equipment during transportation or transportation
By source	systematic	available to all market participants, arises as a result of market relations
	not systematic	does not depend on the market situation, but is manageable
By area of origin	internal	affects the business activity of enterprise management, the choice of optimal marketing strategy, policies and tactics and other factors
	external	not related to the activities of the enterprise
Continuation of table 1		
1	2	3
Depending on the possible result	clean	the possibility of obtaining a loss or zero result of activities
	speculative	the probability of obtaining both positive and negative results
Depending on the possibility prognostication	predicted	risks that can be predicted based on business practice and assessed with great accuracy
	partially predictable	risks for which it is impossible to predict the moment of their manifestation and can be estimated only approximately
	unpredictable	risks of which nothing is known, so it is impossible to estimate their impact and size
Depending on the probability occurrence	unlikely	risks that occur quite rarely
	probable	risks that arise from time to time due to repetitive processes
	guaranteed	risks that arise frequently in the course of operating activities of the enterprise
Depending on the level of financial losses	minimal	risks for which losses are small
	allowable	risks, the maximum losses of which are estimated as average
	critical	risks characterized by a high level of losses
	disastrous	are determined by the partial or complete loss of property of the enterprise
Depending on the possibility management	controlled	the possible level of which can be minimized at the enterprise level
	unmanageable	force majeure circumstances that cannot be predicted and taken into account

Source: adapted by the author

The theory of risk management identifies the following distinctive features of entrepreneurship, which must be taken into account when assessing the possible consequences of risk:

- the target orientation of the organization to make a profit from its activities;
- differentiation by type of business activity;
- liability for contractual obligations to the client;
- the need to make management decisions taking into account the consequences of risk [20].

To create an effective risk management system, it is necessary to know what methods of influencing risk can be adopted by a modern organization. The world and domestic economies, which are changing dynamically, dictate the need for active use of risk management tools to ensure the stability of business and business development, as well as to increase management efficiency, regardless of the size of the organization or the specifics of its activities. The study of the peculiarities of the functioning of modern Ukrainian business structures shows the relevance of building risk management systems for their effective economic activity.

The inevitability of business risk is caused by the objective laws of the market mechanism, freedom of enterprise and competition [8].

Any activity is exposed to a large number of risks. Risk exists in all areas of economic activity of enterprises. One of the special industries to risk is the agro-industrial complex.

Undoubtedly, the agro-industrial complex plays an extremely important role in the formation and prosperity of the economy of any country, as it provides food to society, is the basis of human life and reproduction of labor. In addition, the agro-industrial complex is a supplier of goods for industrial purposes and the production of non-productive consumer goods.

Therefore, the risk in agriculture can be defined as the probability of harm to agricultural production as a result of various natural and climatic factors, as well as the influence of factors that are due to economic activity of the agro-industrial complex.

According to its characteristics, agricultural risks can be fully attributed to the category of risks that pose a risk of damage to the agricultural enterprise due to disruption of the normal course of the production process [5].

The following groups of risks are distinguished, to which, in our opinion, the agro-industrial complex is most exposed:

- natural and climatic risks: the impact of weather conditions on crop yields, diseases of cultivated plants and animals, environmental risks, changes in weather (climate) which can reduce yields;
- environmental risks - environmental pollution;
- the risk of "wear" of the land, resulting in a decrease in soil quality and fertility;
- imperfect infrastructure of the agro-industrial complex, which in turn leads to significant losses of products during its transportation and storage;
- production risk: irrational use of raw materials, increased loss of time for production, rising production costs;

- price risk: prices for livestock and crop products can change significantly in a short period of time.

- market risks: fluctuations in exchange rates (in the case of exports), the emergence of cheaper import substitutes on the market;

- technical risks: breakage, moral or physical wear and tear of machinery and equipment used in the process of agricultural work;

- risks associated with the requirements for food safety and environmental standards;

- innovation risk: the probability of losses that occur when investing in the renewal of the technological process and the production of new products.

The problem of reducing the degree of risk in the agro-industrial complex should not fall on producers. The state should take an active part in its decision.

Therefore, to promote sustainable development provided with state support in determining the risks in agriculture, the Cabinet of Ministers of Ukraine adopted the Resolution of 15.08.2021 on № 841 "On approval of the Procedure for recognizing risks in agriculture as catastrophic and providing and using budget loans (state financial assistance) in case of their occurrence" [6]. The resolution defines the mechanism for recognizing catastrophic risks in agriculture, providing and using a budget loan (state financial assistance) at the expense of the reserve fund of the state budget in case of such risks.

Emergencies of man-caused and natural nature, caused by natural forces (drought, hail, frost, floods, etc.) and human activities in the process of creating material goods (accidents, fires, etc.), are the criteria for recognizing catastrophic risks. Also, the resolution stipulates that catastrophic risks are risk circumstances that cause damage or destruction of more than 30 percent of crop areas insured in accordance with the Law of Ukraine "On features of insurance of agricultural products with state support" [7].

Insurance risks of crops in agriculture, insurance against which can be carried out with state support in accordance with the periods of their cultivation.

Today, market risk is associated with losses that may occur due to factors that have a significant impact on the entire market. Of course, the agro-industrial complex is characterized by a fairly high potential as an attractive object of investment. In addition, the importance of the agro-industrial complex for Ukraine is also very high and this is due to the following factors:

- extraction of commercial benefits;
- creation of new jobs;
- production of products capable of competing for export;
- improving the nutrition structure of the country's population.

With regard to the agro-industrial complex, the most difficult in terms of risk management are:

- dynamics of prices for manufactured products;
- dynamics (change) of prices for raw materials and supplies;
- dynamics (change) of exchange rates.

These risks can be overcome by the state developing a new risk management program. However, in addition to the listed risks, there is a classification of the

main investment risks that are inherent in the agricultural sector. In modern market conditions, one of the main problems of the agricultural sector of Ukraine's economy is to attract investment resources needed to modernize the agricultural sector and ensure on this basis the production of competitive products. Therefore, the decision of potential investors depends on several main groups of factors (risks):

- a) investment and financial;
- b) epizootic;
- c) production;
- d) political.

Among the main components of these risks that affect the investment attractiveness of the enterprise, as well as the possible consequences of their implementation, we can highlight the following:

a) abolition or reduction of state support (in the form of subsidy programs) of the enterprise of the agro-industrial complex, increase of interest rates on loans or refusal to issue a loan, as well as the abolition of import quotas. These conditions can lead to aging (and, consequently, backwardness) of production assets, which in turn will reduce the profitability of sales due to rising costs.

b) the possibility of an outbreak of various dangerous diseases (bird flu). The need to get rid of the infected part of the livestock, which will reduce revenue and turnover. The possibility of banning the export of these products, additional costs for treatment and prevention, possible reputational costs of the enterprise.

c) violation of the production process (both external and internal factors), lack of qualified production and management staff, rising costs (feed, machinery and equipment, utility bills), equipment failure (funds). These conditions can lead to low product quality, higher costs, increased production cycle time due to lack of qualified personnel, which in turn can lead to reduced competitiveness of the enterprise, reduced profits and loss of trust from customers.

d) international sanctions, change of the current state strategy for the development of the agro-industrial complex. These risks can lead to a general decrease in the investment attractiveness of this sector of the economy, limiting markets, increasing production backwardness of the agricultural sector and a general slowdown in the industry.

Among the main factors that can potentially increase the investment attractiveness of the agro-industrial sector, it is necessary to highlight:

- creation of marketing potential of the agricultural sphere;
- positive dynamics of growth of profitability and volumes of production of this sector of economy;
- a small share of unprofitable enterprises;
- dynamic development of knowledge-intensive technologies;
- positive indicators (for several analyzed periods) of productivity and productivity;
- positive growth dynamics of average annual livestock and sown area.

The main ways to increase the investment attractiveness of the agricultural sector are:

- concentration of resources in the most promising areas;
- constant introduction of innovations into the production process;
- improving product marketing policy;
- social development, introduction of a system of motivation for employees.

It should be noted that innovation risks are realized with a lower level of frequency due to the low level of investment attractiveness of this sector of the economy. Innovation risk management in the agro-industrial complex is a system of economic and financial measures aimed at identifying, assessing, preventing and controlling the risks that arise in the implementation of innovative projects in the agricultural sector. One of the most important stages of innovation risk management is the development of a system for assessing and monitoring the market situation.

Conducting agricultural production in conditions of risk is a constant problem of agricultural production, which leads to its instability and requires the improvement of agricultural risk management systems. Therefore, an important activity of the agricultural sector is to assess the situation and choose a method of business risk management to reduce it.

The purpose of risk management is its assessment and classification, which will allow most agricultural enterprises to implement ways to minimize them. Risk management in agricultural production is a way to avoid the loss of funds, property, as well as a mechanism for making management decisions that allow to increase the financial performance of enterprises. Risk management is associated with analytical activities, which helps to determine the analysis of risk factors. Risk analysis is a procedure for identifying risk factors and assessing their significance for the agricultural enterprise, including their assessment and methods of minimizing adverse effects.

Risk analysis manifests itself in two types that complement each other: qualitative analysis and quantitative risk analysis. A manifestation of qualitative analysis is the identification (identification) of factors, areas and types of risks. Quantitative analysis is based on information obtained by qualitative analysis and determines the quantification of the size of individual risks as a whole.

According to AS / NZS Standard 4360: 1999, the risk management process can be defined as the systematic use of methods, techniques and techniques available to managers to address risk-related tasks: contextualization, analysis (detection and assessment), impact, monitoring and communication [9].

The process of risk management in accordance with the ISO 31000: 2009 standard begins with the definition of goals that the organization wants to achieve and internal and external factors that may affect the achievement of planned goals. This stage is called "establish the context", and it precedes the stage identification of risks.

Risk assessment according to ISO 31000: 2009 consists of three stages:

- Stage 1 - identification;
- Stage 2 - analysis;



Stage 3 - direct assessment [11].

Risk management solves the main tasks for enterprises - is the prevention of risks; minimization of damage caused by risks; maximizing the additional profit that the company receives as a result of risk management.

However, it should be noted that due to increased competition in all sectors of the economy, the emergence of international corporations and the complexity of risk management systems - also complicated the process of formation and integration of risk management system as a whole.

Farmers should use risk management tools. They can be divided into two main groups: strategies to reduce risks in the enterprise and strategies for the transfer and sharing of risks with other economic entities. The first group includes such risk management tools as diversification of industries and production methods, maintaining sufficient liquidity, creating reserves, choosing products and production methods with the least risk exposure and short production cycle, phased investment, search for additional sources of income.

The strategy for transfer and risk sharing includes contract-based production, vertical integration, hedging in futures and options markets, insurance. It should be noted that the tools of risk management in the enterprise can be used by farmers themselves, while the tools of transfer and risk sharing involve the appropriate institutional environment and market infrastructure.

Diversification of production allows you to find the optimal combination of different activities and thus minimize the set of internal risks and increase the sustainability of production. But this is in theory. In practice, it is often impossible, for example, to allocate agricultural land for the construction of a barn, etc. The land allocation procedure is complicated by the bureaucratic costs of local authorities.

Vertical integration has recently become widespread in the agro-industrial complex. Combining enterprises in different areas of agriculture, allows you to remove some of the problems associated with price risks in both agricultural and processing industries, as well as reduces the financial risks of enterprises. Currently, integration processes have affected almost all sectors of agriculture: dairy farming, vegetable growing, feed production, production of eggs and poultry meat, beef cattle and pig farming.

A study of the German-Ukrainian Agrarian Policy Dialogue emphasizes that the agricultural sector is likely to be less negatively affected than other sectors of the economy [12]. In this context, due to the coronavirus pandemic, there will be a significant increase in the importance of the agricultural sector in the structure of Ukraine's economy. The Government adopted a Resolution of 11.03.2020 "On prevention of the spread of acute respiratory disease COVID-19 caused by the coronavirus SARS-CoV-2" on special elements related to the agricultural sector and food industry. For example, the supply of means of production and machinery for agriculture was clearly excluded from the restrictions. Individual entrepreneurs, including many agricultural enterprises also file their tax returns three

months late. 289 retail markets, which account for a significant share of sales of vegetables, fruits and animal products, were closed. All products in supermarkets that were previously packaged by customers depending on their needs (for example, bread, vegetables and fruits by weight, sweets and cookies, etc.) are offered already packaged.

Own research by the German-Ukrainian Agropolitical Dialogue project, based on statistics published in Ukraine, indicates that the spread of the SARS-CoV-2 coronavirus is less intense in rural areas. According to the Law of the Cabinet of Ministers of 30.03.2020 № 540-IX [13] the state regulation of prices for so-called social products (including buckwheat, sugar, flour, milk, bread, eggs), eight medicines and two medical means of protection (masks) was renewed and gloves) [14].

Support for agriculture provided by the state budget for 2020 remained - despite the above. The state program to overcome the economic and social consequences associated with the coronavirus pandemic № 1201150 "Financial support for agricultural producers" from February 19, 2020 approved financial support of about 4 billion hryvnias (about 4 euros / ha of private agricultural area) [15]. In particular, support for farmers is provided under the programs:

- livestock development (UAH 1 billion);
- partial compensation for the cost of agricultural machinery and equipment of domestic production (1 billion);
- financial support of measures in the agro-industrial complex by reducing the cost of loans (1.2 billion UAH);
- development of horticulture, viticulture and hop growing (UAH 400 million);
- support for the development of farms (UAH 380 million)
- support for family households (UAH 20 million) [16; 17].

In our opinion, state support for the agricultural sector in the period associated with the coronavirus pandemic will reduce the risks for all agriculture, but state support will help cover unforeseen circumstances that will arise in business.

The basic purpose of risk management is to ensure an economic balance between the level of risk in the enterprise and the cost of protective measures [10].

The risk management includes all operations that can be performed on the risk:

- minimization - selection and implementation of countermeasures to close violations of the basic characteristics of resource security (the process of risk minimization occurs after its assessment);
- neutralization - risk mitigation by performing operations aimed at countering threats [18];
- in the field of agriculture, risks cannot be completely ruled out because some of them are out of reach of the enterprise, for example, natural disasters, so they are accepted - this is done, for example, with risks that are unlikely or significant and will lead to low costs ;
- residual risk or one that cannot be completely covered, usually the responsibility for it is transferred

to a third party, the transfer of risk or insurance is a system of measures to protect the interests of individuals and legal entities through funds formed by paying insurance premiums [19; 20].

Thus, the numerous changes taking place in all spheres of the economy, including in the agro-industrial complex, cause the need for risk management as a tool to minimize it.

The most common risk management methods for agricultural enterprises are:

- avoidance of risks or rejection of them;
- taking risks;
- damage prevention;
- reduction of losses;
- insurance;
- self-insurance;
- transfer of risks.

Good risk management increases the chances of success in the long run and reduces the risk of deterioration of its financial position. Because risks are inevitable in a market economy, the first rule of risk management emphasizes, "Don't avoid risk, but anticipate it by trying to keep it as low as possible."

Effective integrated risk management provides optimization of the "risk-return" profile and capital used to cover the economic risks of the enterprise, reducing its losses, expressed in: reducing the volume of some operations and reducing the speed of turnover of the enterprise; limiting the risk of investing in certain assets; diversion of funds from turnover above the objectively necessary level in the framework of provisions for losses from risks; diversion of funds from potentially more profitable operations due to overestimation of their risk.

### Conclusions.

Thus, summarizing the above, it can be argued that establishing the main types and classifications and signs of risks and causes that may directly affect the activities of the agro-industrial complex should take into account the heads of agricultural enterprises to identify them and find appropriate management methods.

Based on all of the above, we decided to offer our own definition of "risk".

Risk is an action carried out in conditions of uncertainty, which contain danger and can cause material damage, but avoidance of risky situations can deprive the company of additional profits. In addition, risky transactions can be quantified and, accordingly, can be measured.

As for the agricultural sector of the economy, the risks in it are due to the very specifics of the agricultural sector, in particular, the active use of various biological resources. The main means of production is land. Also, the features of this industry that cause risks include climatic conditions, the specifics of various physical processes, the technical condition of machinery and equipment used in the process of agricultural work, the requirements of food safety standards and the environment.

Risks in the agro-industrial complex are associated with the likelihood of harm to agricultural production due to the negative impact of various natural and

climatic factors, as well as factors that are due to the activities of the subject of agricultural activity.

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**Lohosha R.V.,**

*Doctor of Economics, Associate Professor,  
Associate Professor of Agrarian Management Department  
Vinnytsia National Agrarian University  
(Vinnytsia)*

ORCID iD <https://orcid.org/0000-0001-6462-5083>

**Pidlubnyi V.F.**

*Assistant of the Department of Computer  
Science and Economic Cybernetics  
Vinnytsia National Agrarian University  
(Vinnytsia)*

## METHODOLOGY OF RESEARCH, EVALUATION AND MODELING OF VEGETABLE MARKET DEVELOPMENT IN UKRAINE

### **Abstract.**

*Management of the economic system, as a rule, aims to achieve a certain desired state, which would be characterized by significantly better parameters. This requires modeling of both the system itself and the change management process as a whole. The object of research in the article was the market of vegetable products in Ukraine. Like any market and economic system, in addition to a static description of its state, it is necessary to determine the dynamics, to reflect the changes in this market over time. To define certain basic concepts in identifying such dynamics, the author of the article proposed a «matrix of market dynamics», which provides an interpretation of the main vectors of change in the state of these objects in terms of quantitative and qualitative transformations. Thus four basic variants of a condition can be defined: development, degradation, growth, decline. Defining such zones of market state is important, first of all, from the point of view of forecasting the movement of the real market to a better state, where, taking into account the dialectical law of interdependence between quantitative and qualitative changes, only two alternatives to the vector of change.*

*In turn, the author's methodology had a feature of direct interpretation of types and models of the market. Determining the ideal, desired state of the market (perfect / effectively functioning) requires a study of market structure, the allocation of different types (models) of the market depending on the market behavior of enterprises and groups of agents, features of market prices, sales, demand and supply of goods or of other quality, etc. Within these tasks, it is important to study, first of all, the factors of institutional nature that lead to the transformation of market processes, as well as methods of their identification by the criterion of the effectiveness of the economic system as a whole.*

*The developed model of vegetable market assessment in Ukraine outlines critical limitations based on the analysis of the existing model of this market, which in general are critical environmental dysfunctions, insufficient level of functionality of almost all market components and minimization of market value due to low industry potential.*

**Keywords:** *methodology, market, model, evaluation, market of vegetable products.*

Any economic theory can be evaluated by its applied value, the ability to provide specific proposals for improving or modifying the management system of the object under study. Based on this, a new management task is formed.

Management of the economic system, as a rule, aims to achieve a certain desired state, which would be characterized by significantly better parameters. This requires modeling of both the system itself and the change management process as a whole. The market of vegetable products, like any market and economic system, in addition to a static description of its state, needs

to determine the dynamics, ie to reflect the changes in this market over time. Comparing the current state of the object with the past and future – predicted – state allows us to answer the following questions: 1) how perfect this state is compared to the past and expected / possible; 2) what is the history of the dynamics of the object and how much its condition improves and deteriorates; 3) what determines the essence of deterioration or improvement in terms of the history of dynamics and how it can be taken into account by the control system [1, p. 6].

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