

METHODS OF COMPETITIVENESS ASSESSMENT OF AGRICULTURAL ENTERPRISE IN EASTERN EUROPE

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Abstract

The purpose of the article is to substantiate theoretical and methodological principles and to develop practical recommendations for the formation of competitive advantages of agro-industrial enterprises based on the methods of factor analysis. The article highlights the theoretical principles of formation of competitive advantages in agro-industrial enterprises. The article forms the methodological approaches to managing the competitiveness of agro-industrial enterprises. The organizational and economic measures on increase of competitive advantages of the enterprises of the agro-industrial complex are substantiated. The results of the study allow making more substantiated conclusions about the competitiveness state of economic entities as well as facilitating the adoption of managerial decisions on improving certain areas of activity of the agro-industrial enterprise.

Keywords: competitiveness, methodological approaches, agro-industrial enterprise, benefits, organic products, integrated systems

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1. Introduction

The production of high quality organic products and the efficiency of agricultural enterprises are particularly relevant in terms of distribution of integration processes. In recent years, agricultural enterprises in developing countries operate in a volatile competitive environment that requires the implementation of scientifically based approaches to competitiveness management in order to ensure stable competitive position of economic entities in the strategic perspective. Considering the current market relations, characterized by increasing competition, limited financial support of manufacturers, uncertainty and variability of the political, economic and social factors, the main task for the agricultural enterprises is the adoption of effective management decisions.

A competitive agro-industrial enterprise should not only outperform its competitors from the point of view of more effective use of internal potential, but also have a flexible, adaptive response to external opportunities and threats. The unsystematic and dispersed nature of revenues into modernization of production activities of enterprises, low investment activity, the lack of integrated application of innovative technologies, imperfection of the economic management mechanism of the production process and inter-branch relations, economic relations with processing enterprises and trade enterprises, and insufficient state support hamper the provision of competitive development of enterprises.

The question of the selection and practice methodology of implementing the directions of the enterprises competitiveness increase is researched in the works of scientists-economists: Vasylieva N. K (Vasylieva N. K. 2017), Hadley (Hadley 2006), Barnes (Barnes 2008). These scholars have considered the general issues of competition from the point of view of national economies.

Issues of competitiveness at the national level were raised by A. Sin and C. Nowak (Sin and Nowak 2014), which concluded that the main thing in the competitiveness is the promotion of state-owned enterprise development.

Sweden's experience was systematized in the work of A. Wästfelt, Q. Zhang (Wästfelt and Zhang 2016), that proved that the gain of competitive advantages was achieved through saving labor costs in direct relationships with consumers in suburban areas.

An unfortunate UK experience was raised by C. Thirtle, L. Lin Lin, J. Holding (Thirtle et al. 2004), that revealed that lowering of wages in comparison with other spheres leads to a decline in competition throughout the whole industry.

Within the framework of the modern theory of agro-economics, attention is being paid to innovation as a competition increase factor. Some scientists focused on cloud technologies to increase the competition (Ojha, Misra, and Raghuvanshi 2015), some scientists focused on database use (Barrett et al. 2017). Among many articles devoted to the analysis of weather forecasting for the optimization of agricultural work, one can distinguish the manuscript by Caroline Mwongera, Kelvin M. Shikuku, Jennifer Twyman, Peter Läderach (Mwongera et al. 2017) who systematized the latest achievements in this field.

M. Hartvigsen (Hartvigsen 2014) considered the problems of raw specialization, which creates dependence on the conjuncture and imbalance of the payments.

The influence of exchange factors on the level of competition among agroholdings was investigated by M. Sunderman (Sunderman et al. 2000).

The study of the theory and development of measures for provision of competitiveness of dairy enterprises was conducted in the works of some authors such as Andrieu (Andrieu et al. 2017) and J. Preece (Preece 2006).

However, the following issues still remain inadequately investigated: issue of a systematic approach to the understanding of competitiveness as a complex economic category, the relation between competitiveness and the competitive advantages of enterprises, and organizational and economic realization measures of the competitive potential of the agro-industrial market subjects. In this aspect, especially relevant is the study of the formation and development of agro-industrial enterprises' competitiveness and the development of recommendations on improving the quality of management.

The purpose of the article is to substantiate theoretical and methodological principles and to develop practical recommendations for the formation of competitive advantages of agro-industrial enterprises.

To achieve this goal, the author proposes the following tasks:

- to clarify the conceptual apparatus of the research problem, in particular the interpretation of the essence of the "competitiveness" category of the enterprise;
- to improve methodological approaches to managing the competitiveness of agro-industrial enterprises;
- to substantiate organizational and economic measures for the implementation of the competitive development strategy of the agro-industrial enterprises;
- to develop organizational and economic measures in order to increase the competitive advantages of agricultural enterprises.

2. Methods

In the world economic science, the significant advances in research are devoted to the study of the methodological foundations for the analysis and evaluation of the competitiveness of enterprises (Biorusov O. S. 2008; Bolobolov A. 2003). Currently, a broad arsenal of approaches and methods is used for assessing both competitiveness and competitive advantage (Karlan et al. 2014). Subjective methods are used in determining the competitive advantages of a methodical toolkit, which is based on the study of causal relations, statistics, intuition and experience. These include methods of sociological research and expert methods. The estimation of competitive advantages with the help of objective methods means independent determination of factors and causal structure of the investigated phenomenon. They are verified experimentally and subjected to objective observation and measurement.

Methods for evaluating competitiveness and individual benefits differ in their ability to assess the overall and partial benefits levels. Each of the methods has the characteristic advantages and disadvantages that affect the possibility of their practical application in assessing the competitiveness and individual benefits.

Consequently, in spite of the considerable amount of scientific research on the competitiveness assessment of enterprises, it should be noted that there are no universal methods for this. Each of the modern methods has certain drawbacks that reduce the practical value of research results. The imperfection of individual assessment methods affects the diversity of approaches to the process of studying competitive advantages and the limited possibilities of their application. This fact is due to the concentration of attention of researchers in certain aspects of the subject of research, as well as features of the choice of object and scale of research, the choice of tools.

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Therefore, the process of the competitive advantages studying of agro-industrial enterprises should be based not only on the properties and characteristics of the competitiveness category, but also on full compliance with the specifics of the industry (Velandia et al. 2009). In this case, the producers as the subjects of management need to solve the following tasks: assessment of the actual level of competitiveness as well as its potential level; reflection of the factor component of competitiveness in the analysis results; research of competitive advantages at the level of the subject and products; selection of methods and tools for evaluation according to the specificity of the study.

The presented analytical review of methods for competitiveness assessment and individual competitive advantages, along with the limited specific methods, showed the practical value of each of them. Thus, it can be assumed that competitiveness research should be based on the use of several complementary groups of methods that could reflect all the necessary aspects of its formation and, in the long run, could form an integral assessment of competitiveness and individual competitive advantages.

This study is based on factor analysis, and the problems listed above are solved on its basis.

The object of the research is the management process and the competitive advantages of the agro-industrial enterprises.

The subject of the research is a set of theoretical, methodological and practical aspects of ensuring the competitiveness of agro-industrial enterprises.

3. Results and discussion

The objective necessity of organizing the management of an enterprise competitiveness in the agro-industrial sector is substantiated by the following provisions:

- processing organizations are open systems, fully dependent on the state of the environment;
- in the conditions of active competition between manufacturers of organic products, the strategic perspective orientation of the company allows it to react to factors of uncertainty and environment risks;
- the complexity of forecasting the future market structure calls for the use of managerial technologies;
- effective reaction of an enterprise to the environmental influence is impossible without the adaptive abilities.

In view of the inadequacy of the study of this problem, the authors consider it relevant to highlight the peculiarities of the formation of competitive advantages that are characteristic of the agro-industrial enterprises.

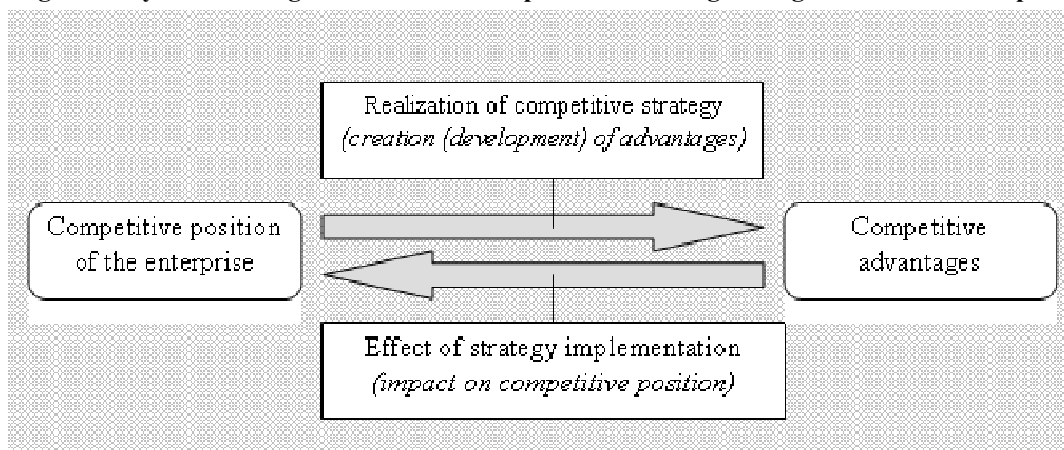
The ability of economic entities to compete with other manufacturers within a certain market space determines the basis of the competitiveness category. Competitiveness of the manufacturer shows its suitability in the strategic perspective to external changes. Some authors understand the competitiveness as a complex of interrelated economic characteristics (factors), which could help in achieving market advantage (Tsiganiuk O.O. 2009). Other researchers determine the competitiveness of the subject as the ability to use the available potential with maximum efficiency in order to provide a favorable market position (Nagirna L. V. 2010; Zarutskii I. D. 2008; Beregovyi V. 2006).

The presence of many interpretations of competitiveness and the lack of a unified methodological approach to its evaluation indicates the importance of the problem and the need for further research. The authors will understand the competitiveness as the multifactor indicator, which reflects the ability of the subject to compete within a certain market space by ensuring the competitive advantages of internal components of economic activity and manufactured products (goods, services) in accordance with the requirements of this market and consumer needs at a specific time.

Competitive status of the manufacturer affects the development and selection of strategic management decisions in the field of forming the competitive advantages. Different types of manufacturers are differentiated by size and market share (Giannakis and Bruggeman 2015). They also differ in their internal capacities, which influence the process of forming the competitive advantages and lead to the creation of their characteristic types together with the nature and force of external action.

The presence of several intra-industry segments in the structure of modern markets leads to the fact that the manufacturer either focuses on a small number of markets, or is trying to reach the majority of them. In this case, the overall competitive position of the company serves as a set of positions in various intra-industry segments. The actual competitive position of an enterprise, which is achieved through the use of existing advantages, acts as a "starting point" in choosing a future competitive strategy that involves the formation of new types of advantages or the development of existing ones (Figure 1).

Figure 1. Cycle of strategic formation of competitive advantages in agro-industrial enterprise



According to the provided information, the company undergoes a cycle of competitive development during the change of market positions. During this process, the agro-industrial enterprise realizes the strategy of forming the competitive advantages.

The actual competitive status of the subject provides several alternatives for further development, which are determined by the strength and nature of the environmental impact. In this case, each of the options is characterized by individual types of benefits, which are due to the combination of external and internal factors.

Changing the manufacturer's competitive status as a result of the influence of external economic conditions also involves changing the types of benefits created (Smaliychuk et al. 2016). Determination of the place and role of the subject in a competitive environment is a prerequisite for the further development of a competitive strategy that best suits the goals and objectives of the manufacturer.

Since the ultimate goal of the subject's competitive development is the creation and development of types of competitive advantages, the relationship between them and the type of implemented strategy is obvious (Table 1).

Table 1 Transformation of types of competitive advantages depending on the type of subject's competitive position and the nature of the environment attractiveness change

Type of competitive position	Types of competitive advantages	General development direction of the subject of competition		
		negative	neutral	positive
Specialized leader	Concentrated differentiation	Differentiation, combination of types	Concentrated differentiation	Concentrated differentiation
Universal leader	Low costs	Low costs, concentrated differentiation, combination of types	Low costs	Low costs
Specialized follower	Concentrated differentiation, focused combination of types	Concentrated differentiation	Concentrated differentiation, combination of types	Low costs, combination of types, concentrated differentiation
Universal follower	Low costs, combination of types	Concentrated differentiation, focused combination of types, low costs	Low costs, differentiation, combination of types	Low costs
Specialized	Concentrated	No benefits	Concentrated	Concentrated

outsider	differentiation, no benefits		differentiation	differentiation, low costs, combination of types
Universal outsider	Low costs, no benefits	Concentrated differentiation, combination of types	Low costs, differentiation, combination of types	Low costs, differentiation, combination of types

Being a self-organized system, the organic products market consists of many interconnected structural elements and is divided into subsystems depending on the type of product, its destination, as well as the territorial boundaries of the market. The market for organic products is characterized by high technological diversification of production, which allows the production of various types of products. However, the commodity substitution between the main types of products is rather limited, which allows us to talk about consumer demand, supply and prices within a single market.

As a result of the analysis of the structural elements of the finished organic products market, the main groups of factors were generalized determining the general direction of the development of the external market environment. The following specific features of the internal potential of agro-industrial enterprises have a direct influence on the process of competitive advantages formation: use of natural and biological factors in the process of production; possible inexpediency of the production of certain foods; land is not only the object of labor, but also its subject, as well as the main means of production; within the regional boundaries, the enterprise is not isolated, however it is based on an optimal combination with other enterprises, thus forming a cluster; variety of ownership forms, forms of management and size of enterprises; location of production in a certain territory and its attachment to separate raw material zones; seasonality of production due to the divergence of the working period with the production period; meeting the needs of the population in food; specialization in the production of certain types of products (Novichenko A 2008; Martusenko I. V. 2010). The above features directly affect the main factors of the internal industry environment (Table 2).

Table 2 Features of the main factor characteristics of the internal environment of agro-industrial enterprises

Internal factor	Characteristic features of agro-industrial enterprises
Production	- biological nature of the used resources and the resulting products; - high requirements for ecological cleanliness of raw materials and manufactured products; - insufficient quality of raw milk;
Marketing	- non-rhythmic production due to the seasonal supply of raw materials - the need for a forecast of agricultural production in the future; - increased consumer demands for environmental and product quality; - "long way" of products from manufacturer to consumer; - variety of types of marketing structures at the enterprise.
Financial position	- uneven income of financial resources during the year; - high relative share of working capital in the balance structure; - the need for constant attraction of borrowed funds;
Human resources	- low provision of highly qualified specialists; - low level of special education for middle managers
Management	- dynamic, unstable nature of external conditions of activity; - relative underdevelopment of strategic management methods at the enterprise.

These features of the external and internal environment form certain types of competitive advantages, which are transformed into new modified types under the influence of industry specifics. Identification of the types of competitive advantages (present and potential) by the

manufacturer is associated with certain difficulties, among which there is a lack of scientifically grounded approaches to the study of the system of internal and external influence factors on the economic entity. As a result, the lack of effective management, organizational, and economic mechanisms for responding to the environment changes and the imperfection of the methodological apparatus for assessing competitive advantages lead to low competitiveness of processing enterprises.

The nature of the company's competitive advantages is determined by the dynamics of environmental factors (Moschini and Hennessy 2001). The management of the competitiveness of the economic relations' subject involves a comprehensive influence study of the system of internal and external factors, as well as the application of modern, scientifically based methods of evaluation.

The first stage of the proposed methodology is to determine the potential level of the company competitiveness as a derivative from the attractiveness level of the external environment and the internal competitive potential of the entity.

Functioning of the agro-industrial enterprise as an open system to the influence of external conditions involves the study of its attractiveness for the subjects of competition. While studying the external environment, the attention should be paid to the determination of sectoral and geographical conditions of the formation of factor influence on the enterprise activities (Grinchuk V. Yu. 2010). Firstly, the factor influence may be limited both by industry and by individual intra-industry segments. Another restriction type assumes the existence of a local space, separated by territorial barriers. The manifestation of these types of restrictions is interrelated, which contributes to the formation of market structures with different qualitative and quantitative factor composition.

The next step is to evaluate each of the factors using a set of criteria, and to calculate general state indicators of the external and internal environment. The evaluation criteria are indicators that reveal the nature and potential of the individual factor. The actual level of interaction between the manufacturer and the external environment is characterized by the ratio of the real and potentially possible production volume or the ratio between the consumed and the available resources (goods) of the participants in the industry exchange.

Another approach is proposed in the study of competition between manufacturers of organic products (Nikiforova E. N. 2009). In this case, the manufacturer and competitors are elements of a single subsystem, and are interconnected by a competitive relationship. Estimation criteria in this case characterize the quality of internal development of this subsystem. The study of the environment of agro-industrial enterprises allowed us to determine the set of the following groups of factors: suppliers of raw materials, end users of organic products, intermediaries (intermediate consumers), and market competition (activity of competitors). These estimation criteria reflect the degree and direction of influence of these environment factors, taking into account the existing features of the industry.

The next (second) stage is the study of the ability of the agro-industrial enterprise to compete with other actors for the limited resources and opportunities of the environment, taking into account qualitative characteristics of the internal environment factors: production; management; marketing; human resources; financial position. While determining the criteria for evaluating these groups of factors, the authors used the principle of generalization in the final evaluation of the various aspects of the object's operation. However in practice, the factors and indicators that describe the activities of the enterprise are highly interdependent. This is due to the presence of interconnections between the functional zones of the enterprise.

The developed factor indicators of attractiveness are subject to further expert evaluation by conducting a written questionnaire in order to determine the minimum and maximum values of the criteria, as well as the nature of their impact. The calculation of criteria for evaluating each factor is carried out according to the following formula:

$$k_{ij} = \frac{k_{oij} - k_{ij\min}}{k_{ij\max} - k_{ij\min}}, \quad (1)$$

where k_{ij} – evaluation indicator of i -criterion and j -factor; k_{oij} – actual value of i -criterion and j -factor; $k_{ij\max}$ – maximum value of i -criterion and j -factor; $k_{ij\min}$ – minimum value of i -criterion and j -factor.

If the indicator exceeds the smallest and the largest values, its value equals to the minimum or maximum value, respectively. The obtained values of the estimated indicators are summed up by factor. This helps to calculate a weighted average of the influence degree of each factor (p_j):

$$p_j = \frac{\sum_{i=1}^n k_{ij}}{n}, \quad (2)$$

where p_j – weighted average of j -factor influence degree; k_{ij} – evaluation indicator of i -criterion and j -factor; n – number of factors.

The final step is to determine the general indices of the attractiveness of the external environment (I_{PR}) and the level of competitive potential (I_{KP}), which represent the sum of estimates of the corresponding constituent factors, adjusted to their significance. An expert assessment of the importance of factor groups and the determination of weighting factors allows us to reflect the role of factors in shaping the benefits of the enterprise. The form of the significance study is a survey of a group of experts, which is conducted in the form of questionnaires. During the study, an expert group of 8-12 people was invited to distribute 100 points between the factors of the external and internal environment. The obtained weighting factors allow finding the generalized indices of attractiveness of the environment:

$$I_{PR} = \sum_{j=1}^m W_{PRj} \cdot p_{PRj}, \quad (3)$$

where I_{PR} – general indicator of the attractiveness estimation of the environment; p_{PRj} – j -factor estimation indicator; W_{PRj} – j -factor influence coefficient; m – number of factors.

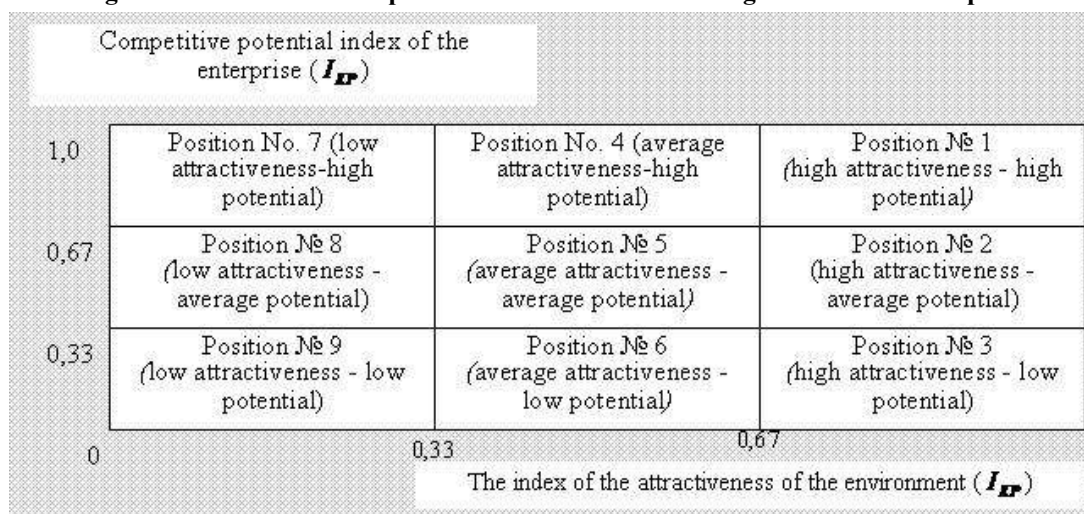
And the condition of internal potential:

$$I_{KR} = \sum_{j=1}^m W_{KRj} \cdot p_{KRj}, \quad (4)$$

where I_{KR} – general indicator of the competitive potential estimation of the enterprise; p_{KRj} – j -factor estimation indicator; W_{KRj} – j -factor influence coefficient; m – number of factors.

The last action of this stage of evaluation is the positioning of the processing enterprise in the matrix "Competitive potential-attractiveness of the external environment", which allows setting the level of general competitiveness of the subject (Figure 3).

Figure 2 Matrix of the competitiveness assessment of the agro-industrial enterprise



The horizontal dimension of the matrix is defined by an indicator of the market attractiveness, and the vertical - by the competitive status of the subject. Usually, the subject cannot control parameters, by which the state of the processing organization is assessed by the I^{PR} axis. Positioning along the I^{KR} axis is under the control of the subject and can be

changed. Each axis of coordinates is the axis of a multifactor measurement, which makes the model more analytical in comparison to other matrices and more realistic in terms of determining the competitiveness of production and its positioning in the system of competitive relations. The expanded dimension of the matrix allows for a more detailed analysis of the possibilities and prospects of strategic choice.

The next (third) stage of the implementation of the proposed methodology is to clarify the competitive position of the company in the market and to determine the nature of the competitive advantage origin. This stage is the basis for further strategic and tactical steps of the manufacturer in the organization of the competitive advantages managing process.

The obtained estimates of competitive forces and product benefits are a prerequisite for the development of a competitive strategy, and they determine the means to achieve strategic goals. Company's competitive position in the market has a major impact on the type of competitive advantages created. The assessment of the competitive status of the subject allows: identifying the features of the competitive development of the market; establishing the degree of enterprise dominance; identifying the closest competitors, and establishing the relative position of the subject among other market participants.

The next step is to group entities into competitive positions in the intra-industry markets. In this case, grouping is an intermediate process of data sorting for further analysis. In order to identify competitive positions, the authors choose the criteria for analysis and calculate indicators that characterize them. To find the boundaries of the market, we used the size of the market share of the manufacturer (D) and the rate of its growth over a specific period of time (T):

$$D_{c\bar{d}} = \frac{1}{n}, \quad (5)$$

where $D_{\bar{d}}$ – average arithmetic mean of market shares;

n – number of enterprises.

Subsequently, the division of the studied amount into two sectors is carried out: "strong" enterprises with a market share that exceeds the average level, and "weak" enterprises with a market share below the average level. In order to differentiate competitors in the resulting sectors, their average market shares are calculated:

$$D_{c\bar{d}1} = \frac{1}{n_1} \cdot \sum_{i=1}^{n_1} D_i, \quad D_{c\bar{d}2} = \frac{1}{n_2} \cdot \sum_{j=1}^{n_2} D_j, \quad (6)$$

where $D_{\bar{d}1}$, $D_{\bar{d}2}$ – the arithmetic mean of the market share of "weak" and "strong" enterprises, respectively;

n_1, n_2 – number of enterprises with a market share below and above the average level;

D_i, D_j – market shares of enterprises below and above the average level, respectively.

For each group, we calculate the mean-square deviation:

$$\sigma_{D1} = \sqrt{\frac{\sum_{i=1}^{n_1} (D_i - D_{\bar{d}1})^2}{n_1}}, \quad \sigma_{D2} = \sqrt{\frac{\sum_{j=1}^{n_2} (D_j - D_{\bar{d}2})^2}{n_2}}, \quad (7)$$

The calculated indicators (along with the maximum and minimum market shares - D_{\min} and D_{\max}) are the main ones for determining the share of dairy enterprise market. Depending on its size, we propose to allocate four classes of the enterprise: the market leader; an enterprise with a strong competitive position; enterprise with a weak competitive position; outsider. The calculation of boundaries for homogeneous and heterogeneous aggregates varies and can be carried out according to the following system (Table 3).

Table 3 Criteria for assigning enterprises to groups depending on the held market share

Competitive position of the enterprise depending on the size of the market share	Using "Three sigma rules" (homogeneous set)	Using the law of averages variation (heterogenous set)
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Market leader	$D_{\bar{n}\delta 2} + 3 \cdot \sigma_{D2}; D_{\max}$	$D_{\bar{n}\delta} + 3 \cdot \sigma_{D2} / \sqrt{n_2}; D_{\max}$
Enterprise with a strong position	$D_{\bar{n}\delta}; D_{\bar{n}\delta 2} + 3 \cdot \sigma_{D2}$	$D_{\bar{n}\delta}; D_{\bar{n}\delta} + 3 \cdot \sigma_{D2} / \sqrt{n_2}$
Enterprise with a weak position	$D_{\bar{n}\delta 1} - 3 \cdot \sigma_{D1}; D_{\bar{n}\delta}$	$D_{\bar{n}\delta} - 3 \cdot \sigma_{D1} / \sqrt{n_1}; D_{\bar{n}\delta}$
outsider	$D_{\min}; D_{\bar{n}\delta 1} - 3 \cdot \sigma_{D1}$	$D_{\min}; D_{\bar{n}\delta} - 3 \cdot \sigma_{D1} / \sqrt{n_1}$

The procedure for distinguishing groups of commodity producers by the degree of change in market share is almost identical in its content and begins with the calculation of the indicator that characterizes the growth rate of the market share of each producer with the following definition of its minimum and maximum values:

$$T = \frac{1}{m} \cdot \frac{D^t - D^{t_0}}{D^{t_0}} \cdot 100\%, \quad (8)$$

where T – The growth rate of the market share of the enterprise, %

$D^t (D^{t_0})$ – The market share of the enterprise in the period of time, %

m – Number of years in the analyzed period.

In case of impossibility of calculating the indicator of a separate enterprise, an exception is made from the existing procedure of determining the limits: the manufacturer does not participate in further research and is assigned the highest competitive position.

When calculating the average arithmetic value of the growth rate, the following formula is used:

$$T_{\bar{n}\delta} = \frac{1}{n}, \quad (9)$$

where $T_{\bar{n}\delta}$ – The arithmetic average of the growth rates of market shares;

n – Number of analysed enterprises.

The average growth rates in the sectors are calculated according to the formulas :

$$T_{cd1} = \frac{1}{n_1} \cdot \sum_{i=1}^{n_1} T_i, \quad T_{cd2} = \frac{1}{n_2} \cdot \sum_{j=1}^{n_2} T_j, \quad (10)$$

where $T_{\bar{n}\delta 1}, T_{\bar{n}\delta 2}$ – The arithmetic mean of the growth rates of enterprises located in the 1st and 2nd sectors respectively;

n_1, n_2 – The number of enterprises with the growth rate of the market share below and above the average level, respectively;

T_i, T_j – Market shares of enterprises in the first and second sectors.

Selection from a total of two sectors characterizing enterprises with the highest and lowest growth rates of a market share requires calculation in each group of the mean square deviation:

$$\sigma_{T1} = \sqrt{\frac{\sum_{i=1}^{n_1} (T_i - T_{\bar{n}\delta 1})^2}{n_1}}, \quad \sigma_{T2} = \sqrt{\frac{\sum_{j=1}^{n_2} (T_j - T_{\bar{n}\delta 2})^2}{n_2}}, \quad (11)$$

where σ_{T1}, σ_{T2} – The average deviation of the growth rate of the market share of enterprises in the first and second sectors.

The assessment of the competitive advantages of the company's products by the developed method complements the results of the research of the competitor's status of the manufacturer and creates a coherent picture of the actual level of competitive advantages.

The final stage of the method is the synthesis of the results of all previous studies and the final conclusion about the competitiveness of the manufacturer. At this stage, a situational analysis is conducted describing the situation of the enterprise and revealing the potential directions of development of competitive advantages. The next step is to look for sources of sustainable competitive advantages and to form a set of measures aimed at their achievement.

4. Conclusions.

Taking into account the current state of agricultural production, its own direction of effective integration is the most important way of its development, which would best suit national interests, available resources, geographical position, and potential of the country.

The main task of the integrated corporate structure is to achieve competitive economic benefits at the expense of the synergy effect, the growth of labor productivity, diversification and rational specialization of production, reducing overhead expenses, and raise in the level of management

The development of integration processes in agro-industrial production consists of the gradual organizational integration of isolated, diversified specialized production plants for the production of raw materials, its storage, processing, and sale of finished products that operate in the conditions of the social division of labor, into a single integrated industrial and legal structure and help to develop a competition level.

The integrated system of formation of the production and processing sphere of organic products should be based on certain general scientific methodological principles. Among them, it is necessary to highlight: systemacity, priority, complexity, scientific substantiation, formation of optimal organizational and economic management mechanism, balance and proportionality, adequacy, combination of regional and sectoral planning etc.

In accordance with the current problems of the processing and production development of organic products, we propose to supplement the existing principles with the following: the unity of the development process of the agro-industrial complex and modernization of the country economy; consistency of interests and efficiency; planning and balance; modernization and development; regulation of foreign economic relations; activation of innovative processes.

The use of the proposed methodology determines both the research value of the evaluation results and the effectiveness of further decisions on the organization of the entire management process. The results of the study allow making more substantiated conclusions about the state of competitiveness of economic entities and facilitating the adoption of managerial decisions on improving certain areas of activity of the agro-industrial enterprise.

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