UDC 338.48.640.4

DOI https://doi.org/10.32782/2521-6643-2024-2-68.20

**Yudina O. I.,** Doctor of Economics, Professor, Department of International Tourism and Hotel and Restaurant Business University of Customs and Finance ORCID: 0000-0003-3699-5321

**Nebaba N. O.,** Doctor of Economics, Associate Professor, Department of Economic Modeling, Accounting and Statistics Oles Honchar Dnipro National University ORCID: 0000-0003-1264-106X

**Sabirov O. V.,** PhD, Associate Professor, Department of International Tourism and Hotel and Restaurant Business University of Customs and Finance ORCID: 0000-0001-9436-0477

**Saihak Ye. L.,** PhD, Department of International Tourism and Hotel and Restaurant Business University of Customs and Finance ORCID: 0000-0002-6406-9272

**Altunin K. O.,** Higher Education Student, University of Customs and Finance ORCID: 0009-0009-3718-6930

# ANALYSIS OF COMPETITIVENESS OF ENTERPRISES IN THE RESTAURANT SERVICES MARKET

The article conducts a comparative analysis and evaluation of the market positions of restaurant enterprises to identify key areas for their development and ways to increase their competitiveness in the food service market. The main goal of this article is to analyze the competitiveness and assess the development potential of restaurant enterprises in the Dnipropetrovsk region, justifying ways to improve their market positions.

The study analyzes the current restaurant services market and identifies key development directions, including the growth of demand for healthy food, technological progress, the development of gastronomic tourism, social media, and information technologies. A comparative graph-analytical method for determining competitiveness and ranking restaurant enterprises is formulated, consisting of operations such as forming criteria parameters and establishing their weights, selecting competitors, determining ranking characteristics, calculating competitiveness indicators and overall enterprise ranking, identifying leaders and outsiders, building a competitiveness matrix and zone, and determining the radius of the leaders' circle.

Based on the results of the graph-analytical analysis, the indicators for evaluating the potential of the studied enterprises in the restaurant services market of the Dnipropetrovsk region were calculated according to defined criteria parameters, as well as their level of competitiveness. Using the obtained indicators, a matrix and a graph of the competitive positions of the establishments were built. By determining the placement range of each food enterprise in the competitive field zone, their positions were characterized as follows: the "Silver" restaurant is in the zone of untapped potential; the "Magnum" restaurant is closest to the leader in the attack waiting zone; the "Oasis" restaurant is in the leaders' zone, and the "Kvitan" restaurant is in the outsiders' zone.

Based on the evaluation results of the "Kvitan" enterprise, proposals for improving its activities and strengthening its competitive positions were formulated, including: improving the atmosphere, increasing comfort and service quality, enhancing staff qualifications, and greening the restaurant's territory.

Key words: restaurant services market, food enterprises, competitiveness, analysis, graph-analytical method, evaluation indicators, criteria parameters.

### © O. I. Yudina, N. O. Nebaba, O. V. Sabirov, Ye. L. Saihak, K. O. Altunin, 2024

## Юдіна О. І., Небаба Н. О., Сабіров О. В., Сайгак $\epsilon$ . Л., Алтунін К. О. Аналіз конкурентоспроможності підприємств на ринку ресторанних послуг

У статті проведено порівняльний аналіз та здійснено оцінку ринкових позицій закладів ресторанного господарства, виявлено ключові напрями їх розвитку та шляхи підвищення конкурентоспроможності на ринку ресторанних послуг. Основною метою статті є проведення аналізу конкурентоспроможності та оцінювання потенціалу розвитку підприємств ресторанного господарства, обґрунтування напрямів покращення їх ринкових позицій.

Проведено аналіз стану сучасного ринку ресторанних послуг, виявлено ключові напрями його розвитку. Розглянуто процедуру порівняльного графоаналітичного методу визначення конкурентоспроможності та рейтингу підприємств ресторанної сфери, що складається із таких елементів: формування критеріальних параметрів та встановлення їх питомої ваги; вибір підприємств-конкурентів аналогічного типу; визначення рангу оцінювальних характеристик; розрахунок індикаторів конкурентоспроможності та загального рангу підприємства; встановлення підприємства-лідера і підприємства-аутсайдера; побудова матриці, графіку та зони конкурентоспроможності й визначення радіусу кола лідерів підприємств.

У ході графоаналітичного аналізу розраховано індикатори оцінювання потенціалу досліджуваних підприємств на ринку ресторанних послуг за визначеними критеріальними параметрами, а також рівень їх конкурентоспроможності. На основі отриманих показників побудовано матрицю та графік конкурентних позицій досліджуваних закладів ресторанного господарства, а також встановлено діапазон їх розташування у зоні конкурентного поля. Це дозволило встановити ринкове становище ресторанних підприємств, яке характеризується такими особливостями: ресторан «Silver» розміщується у зоні невикористаного потенціалу; ресторан «Магнум» знаходиться найближче до лідера, у зоні очікування нападу; ресторан «Оазис» займає зону лідерів, а ресторан «Квітан» — зону аутсайдерів. За результатами оцінювання положення ресторанного підприємства «Квітан» сформульовано пропозиції щодо удосконалення його діяльності та зміцнення конкурентних позицій, які включають: покращення атмосфери, підвищення рівня комфорту, якості обслуговування, кваліфікації персоналу та озеленення території ресторану.

Ключові слова: ринок ресторанних послуг, підприємства харчування, конкурентоспроможність, аналіз, графоаналітичний метод, оцінювальні показники, критеріальні параметри.

Introduction. The restaurant services market is a dynamic and competitive environment with a diverse range of food enterprises. The global food service market is constantly increasing due to the growing demand for various types of restaurant products and the income level of the population, as well as its structure being reshaped by changing social processes and consumer taste preferences. Therefore, the restaurant services market represents a combination of food enterprises and consumers forming aggregated demand and supply, as well as relationships between sellers and consumers of restaurant products. Currently, it is characterized by instability and a highly competitive environment where competitive processes occur among food enterprises for offering diverse services and culinary masterpieces to satisfy consumers' evolving and varied needs. Thus, important components in ensuring sustainable leading positions in each market segment include: analyzing external environment factors and competitors' activities, identifying key development directions for the restaurant services market, and justifying ways to increase competitiveness and the development level of the enterprise based on the obtained data.

Analysis of Recent Research and Publications. Many scientific works by foreign and domestic scientists are dedicated to the problem of analyzing and evaluating enterprise competitiveness. Theoretical problems and methodological approaches to determining competitive advantages are highlighted in the scientific works of F. Kotler, J.-J. Lamben, D. Evans, I. Ansoff, A. Marshall, O'Shaughnessy, V. Geets, A. Mazaraki, T. Ostashko, and others. The theory of competitive advantage by M. Porter is based on reducing costs and efficient resource use [1], A. Marshall's equilibrium theory focuses on maximizing sales and profits [2], A. Mazaraki emphasizes the importance of financial, economic, technical, and material competitive advantages [3], T. Ostashko examines approaches to evaluating product price competitiveness [4]. However, issues related to evaluating and justifying enterprise competitiveness based on ranking criteria remain not fully disclosed.

**Purpose.** The purpose of this article is to analyze the competitiveness and assess the development potential of restaurant enterprises in the Dnipropetrovsk region, justifying ways to improve their market positions.

**Results.** Competitiveness is an important characteristic of an economic entity and is determined by its advantage over similar enterprises in this sector, both domestically and internationally. Competitiveness is not an inherent quality of an establishment; it can only be assessed within a group of enterprises in the same industry or producing similar products and services. Therefore, the level of competitiveness can only be established by comparing enterprises within a specific market segment.

Thus, the level of competitiveness of an enterprise can be determined based on distinctive characteristics of its development, operational efficiency, and the satisfaction of people's needs with its products and services compared to competitors. Competitiveness indicators indicate the ability and dynamics of an economic entity to adapt to market competitive environment conditions. The key task for an enterprise in forming competitive advantages is achieving and maintaining a dominant position based on the ability to produce products and services at a higher and better level than competitors in this market.

The main essence of the modern restaurant services market is the combination of gastronomic experiences, high-quality service, and creating a special atmosphere that together form a unique experience for consumers.

Currently, restaurant services are characterized by a wide range of cuisines and cultures satisfying various tastes and preferences. Restaurants can specialize in one cuisine or represent international culinary traditions. An important aspect of progressive restaurants' activities is attention to product quality, using only fresh, high-quality, and one hundred percent natural ingredients. This contributes to the creation of exquisite food and meeting guests' needs.

Modern restaurants strive to personalize each consumer's experience by using an individual approach to service, considering guests' preferences and needs. Applying innovations and technological advancements is now widespread in the restaurant industry, where new technologies are implemented in management and service processes, such as online table reservations, mobile apps for food ordering, electronic menus allowing direct order transmission from the guest to the kitchen, loyalty programs, and more. The development of online platforms is a characteristic of modern restaurants that actively use the Internet and social media to promote and realize their services. Having websites and being present in social media improves consumer engagement and interaction. Restaurants are increasingly focusing on social responsibility and creating conditions for sustainable development by implementing environmentally friendly practices, using local products, minimizing waste, and supporting social initiatives.

Successful restaurants meticulously work on creating a unique atmosphere and design that attract consumers. They skillfully use decor, lighting, music, and other elements to create a pleasant and comfortable environment for their guests. The development of gastronomic tourism is one of the key directions in the modern restaurant services market, aiming to enjoy local cuisine and gain unforgettable gastronomic experiences. Restaurants become important tourist attractions, offering culinary tours, tastings, and various national gastronomy delicacies. The main key directions of the restaurant services market development in recent years are shown in Fig. 1.

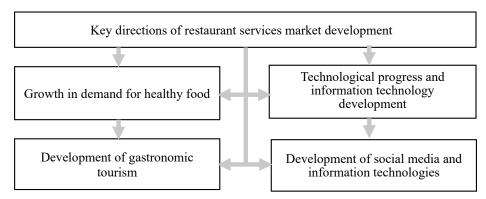


Figure 1. Key directions of restaurant services market development

Source: compiled by the authors

These modern development directions indicate that the restaurant services market has become more diverse, innovative, and focused on satisfying consumer needs in recent years. To ensure their competitive positions, restaurants actively adapt to changes, implementing unique gastronomic offerings and new approaches to improving visitor service quality.

One of the important tools for determining the competitiveness level of food enterprises and justifying ways to improve it is the comparative graph-analytical method. This analysis method allows identifying the strengths and weaknesses of a restaurant enterprise compared to competitors and justifying effective strategies and tactics aimed at increasing the rating and strengthening the competitive positions of the economic entity based on the obtained evaluation data. The graph-analytical method involves determining the enterprise's position in the market and measures for its improvement, performed according to a specific procedure (Fig. 2).

Thus, the procedure of the comparative graph-analytical method for determining the competitiveness and rating of an establishment in the restaurant services market includes the following sequential operations: forming a list of criteria parameters (standard characteristics) that are evaluation characteristics of competitiveness; establishing the weight of the criteria parameter based on expert assessment; selecting enterprises of a similar type that are the closest competitors; determining the ranking of the enterprise's evaluation characteristics based on the absolute values of the selected evaluation parameters (according to the best result); calculating the overall ranking of each enterprise considering the weight (significance) of each evaluation parameter indicator; identifying the leader and outsider enterprise and the distance range between them; building a competitiveness matrix and graph for enterprises in the restaurant services market; determining the radius of the leaders' circle (outsiders); determining the level of competitiveness (competitive positions) of the enterprise in the restaurant services market.

Determining the competitiveness of four similar restaurant enterprises in the Dnipropetrovsk region («Kvitan», «Silver», «Magnum», «Oasis») operating in the same segment of the food services market using the specified

method is based on criteria that are most important to visitors according to survey results, namely: food taste, service quality, price-quality ratio, establishment atmosphere, and rating. The results of the analysis with the defined evaluation scores and ranks established by their ranking are presented in Table 1.

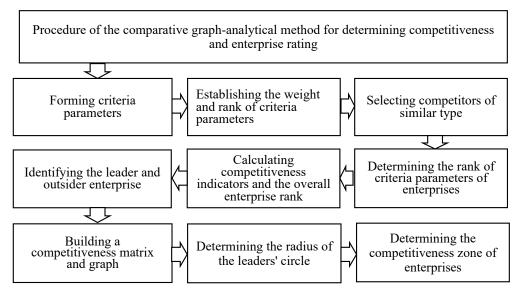


Figure 2. Procedure of the comparative graph-analytical method for determining competitiveness and enterprise rating

Source: compiled by the authors

Evaluation of competitiveness potential of enterprises in the restaurant services market of the Dnipropetrovsk region

Table 1

	Enterprise Name	Evaluation (Criteria) Parameters									
№		Food Taste (FT)		Service Quality (SQ)		Price-Quality Ratio (PQR)		Atmosphere (A)		Rating (R)	
		ball $(B_{FT})$	rank	ball (B <sub>so</sub> )	rank	Ball (B <sub>POR</sub> )	rank	Ball (B <sub>A</sub> )	rank	ball (B <sub>R</sub> )	rank
1	Silver	4,52	3	4,37	2	4,6	3	4,11	3	4,88	3
2	Magnum	4,1	4	4,67	1	4,85	2	4,38	1	4,89	2
3	Oasis	4,8	2	4,18	4	4,91	1	4,29	2	4,9	1
4	Kvitan	4,81	1	4,25	3	4,41	4	4,1	4	4,7	4
Weig	ght of the	0,22		0,19		0,37		0,09		0,13	
Evaluation Parameter (Vi)		$\sum V_i = 1$									

Source: developed by the authors

Based on the data presented in Table 1, the calculation of the weighted (by significance) indicator "food taste" for each enterprise, characterizing its competitiveness level according to the specified criteria parameter, is performed according to the formula:

$$I_{FT} = B_{FT} * V_{FT} \tag{1}$$

where  $I_{\rm FT}-$  competitiveness indicator by the criterion "food taste" of the i-th enterprise;

 $B_{\scriptscriptstyle FT}-$  rank of the i-th enterprise in the evaluation environment;

 $V_{FT}$  - weight of the criteria parameter "food taste" (0.22).

According to the calculations, the weighted indicator "food taste" ( $I_{FT}$ ) for the «Silver», «Magnum», «Oasis», and «Kvitan» restaurants was 0.994, 0.902, 1.056, and 1.058, respectively.

The competitiveness indicator by the criterion "service quality" considering its weight is determined as follows:

$$I_{SO} = B_{SO} * V_{SO}, (2)$$

where  $I_{SO}$  – competitiveness indicator by the criterion "service quality" of the i-th enterprise;

 $B_{SO}$  – rank of the i-th enterprise in the evaluation environment;

 $V_{SO}$  – weight of the criteria parameter "service quality" (0.19).

The obtained values of the indicator  $(I_{SO})$  for the aforementioned food enterprises are 0.830, 0.887, 0.794, and 0.807, respectively.

The evaluation of the competitiveness of the studied restaurant establishments based on the indicator "price-quality ratio" is performed according to the following mathematical expression:

$$I_{POR} = B_{POR} * V_{POR}, \tag{3}$$

where  $I_{\tiny POR}$  – competitiveness indicator by the criterion "price-quality ratio" of the i-th enterprise;

 $B_{\it POR}$  – rank of the i-th enterprise in the evaluation environment;

 $V_{\it PQR}$  – weight of the criteria parameter "price-quality ratio" (0.37).

The weight of the indicator "price-quality ratio"  $(I_{POR})$  for the «Silver», «Magnum», «Oasis», and «Kvitan» restaurants is 1.702, 1.794, 1.816, and 1.631, respectively.

The significance of the indicators "establishment atmosphere" and "rating" is calculated similarly using formulas 4 and 5:

$$I_{A} = B_{A} * V_{A}, \tag{4}$$

where  $I_4$  – competitiveness indicator by the criterion "establishment atmosphere" of the i-th enterprise;

 $B_A$  – rank of the i-th enterprise in the evaluation environment;  $V_A$  – weight of the evaluation parameter "establishment atmosphere" (0.09);

$$I_{R} = B_{R} * V_{R'} \tag{5}$$

where  $I_{p}$  – competitiveness indicator by the criterion "rating" of the i-th enterprise;

 $B_R$  rank of the i-th enterprise in the evaluation environment;  $V_R$  - weight of the criteria parameter "rating" (0.13). The obtained values of the indicative indicators of the analyzed enterprises «Silver», «Magnum», «Oasis», and «Kvitan» by the criterion "establishment atmosphere" were 0.369, 0.394, 0.386, 0.369, and by the criterion "rating" -0.634, 0.635, 0.637, 0.611, respectively.

The next step in determining the competitiveness level of food enterprises in the restaurant services market is calculating the overall weighted rank of their indicative indicators:

$$R_{Jiovrl} = \sum B_{ji} * V_{ji} \tag{6}$$

where  $R_{Jiovrl}$  overall weighted rank of the evaluation parameters;

 $\sum B_{ji} * V_{ji}^{Jiovrl}$  sum of competitiveness indicators (indicative) of the j-th criteria parameter of the i-th enterprise. Thus, the calculated values of the overall weighted rank of the evaluation parameters of the «Silver», «Magnum», «Oasis», and «Kvitan» restaurants and the results of their ranking are presented in Table 2.

Ranking of the overall rank of the evaluation parameters of enterprises

№	Enterprise Name	Overall Rank, R <sub>Jiovrl</sub>	Ranking
1	Silver	4,529	III
2	Magnum	4,612	II
3	Oasis	4,689	I
4	Kvitan	4,476	IV

Source: compiled by the authors

Based on the ranking of the overall rank of the competitiveness indicators of the aforementioned establishments, it was established that the «Oasis» restaurant is the leader (L) and the «Kvitan» restaurant (A) is the outsider in the studied segment of the restaurant services market of the Dnipropetrovsk region.

Using the obtained data and formula 7, the range of lagging of the outsider enterprise from the leader is established:

$$D_{Bl-A} = R_{lovel} - R_{Aovel} \tag{7}$$

where  $D_{\rm BL-A}$  – range of lagging of the leader from the outsider;

 $R_{Lovel}$  – overall weighted rank of the leader enterprise;

 $R_{Aovrl}$  – overall weighted rank of the outsider enterprise.

Thus, the range of lagging of the «Kvitan» restaurant ( $D_{RK}$ ) from the "Oasis" restaurant is 0.213 (i.e., 4.689 – 4.476).

Table 2

The lagging of each enterprise from the leader enterprise is determined as the difference between their overall weighted ranks:

$$D_{Bi} = R_{Lovrl} - R_{Ri} \tag{8}$$

where  $D_{Bi}$  – range of lagging of the i-th enterprise;

 $R_{Lovel}$  – overall weighted rank of the leader enterprise;  $R_{Ri}$  – overall weighted rank of the i-th enterprise.

According to the calculations, the lagging ranges of the «Silver»  $(D_{RS})$  and «Magnum»  $(D_{RM})$  restaurants from the leading establishment in the food services market were 0.16 (4.689 - 4.529) and 0.077 (4.689 - 4.612), respectively.

The level of competitiveness of each food enterprise in the restaurant services market is determined by dividing the lagging range of the i-th enterprise by the maximum lagging range (between the leader and outsider):

$$CM_{Ei} = \frac{R_{Lovrl} - R_{Riovrl}}{D_{VL-A}} \tag{9}$$

where  $CM_{Ei}$  – level of competitiveness of the i-th enterprise;

 $R_{Lovrl}$  – rank of the leader enterprise;

 $R_{Riovrl}$  – rank of the i-th enterprise;

 $D_{VL-A}$  – lagging range of the leader from the outsider.

The obtained evaluation parameters serve as the basis for creating a competitiveness matrix (Table 3) and building a graph of the competitive positions of enterprises (Fig. 1).

## **Competitiveness matrix of enterprises**

Table 3

	Enterprise Name	Evaluation Parameters								
№		Rank $I_{FT}$	Rank $I_{SQ}$	Rank I <sub>por</sub>	Rank I <sub>A</sub>	Rank $I_R$	overall rank ∑ <i>Ri</i>	range $D_{Bi}$	$CM_{Ei}$	
1	Silver	0,994	0,830	1,702	0,369	0,634	4,529	0,16	0,751	
2	Magnum	0,902	0,887	1,794	0,394	0,635	4,612	0,077	0,361	
3	Oasis	1,056	0,794	1,816	0,386	0,637	4,689	0	0	
4	Kvitan	1,058	0,807	1,631	0,369	0,611	4,476	0,213	1	

Source: developed by the authors

Thus, to build a graph of the competitive positions of food enterprises, the overall rank indicators and lagging range values, serving as coordinate points for the X and Y axes, are chosen and correlated as follows: (4.529; 0.16) – for the «Silver» restaurant; (4.612; 0.077) – for the «Magnum» restaurant; (4.689; 0) – for the «Oasis» restaurant; (4.476; 0.213) – for the «Kvitan» restaurant (Fig. 3).

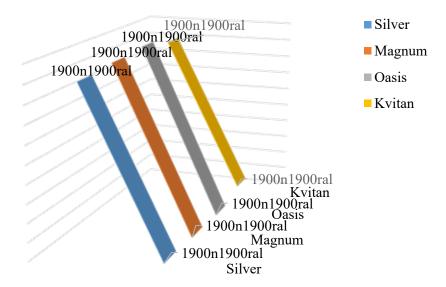


Figure 3. Competitive positions of the studied restaurant establishments

Source: developed by the authors

The competitiveness zone of enterprises in the studied segment of the restaurant services market of the Dnipropetrovsk region is established by calculating the lagging range radius (10) and constructing the corresponding graphical circle radii based on the obtained data (Fig. 4):

$$R_i = \frac{D_{Bi}}{4} \,, \tag{10}$$

where  $R_i$  – lagging range radius;  $D_{Bi}$  – range of the i-th enterprise.

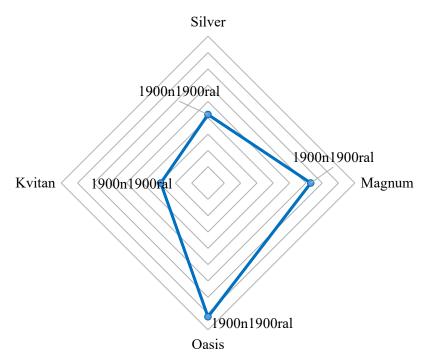


Figure 4. Radius of Lagging Range of Studied Enterprises from the Leader Enterprise

Source: compiled by the authors

Using the radius value, the position of each enterprise is determined by establishing the range limits according to the following mathematical inequality:

$$R_{Jiovrl} < R_i \le D_{Bi} + Rd_L, \tag{11}$$

where  $Rd_L$  – leader's range radius;

Performing the corresponding mathematical operations allows characterizing the placement features of each restaurant establishment in the competitive field zone: «Silver» restaurant:  $4.529 < R_s \le 5.701$  — is in the untapped potential zone; «Magnum» restaurant:  $4.612 < R_M \le 5.784$  — is closest to the leader in the attack waiting zone; «Oasis» restaurant:  $4.689 < R_O \le 5.861$  — is in the leaders' zone; «Kvitan» restaurant:  $4.476 < R_K \le 5.648$  — is in the outsiders' zone.

Based on the evaluation results of the «Kvitan» enterprise's position in the food services market, the following proposals for improving its activities and strengthening its competitive positions can be formulated: improving the atmosphere (creating a cozy and aesthetic environment, ensuring rational planning of lighting points, improving musical accompaniment of the service process); increasing comfort and service quality (upgrading the restaurant's material and technical base, replacing used furniture, installing climate control and new ventilation systems, installing sound insulation, replacing decor and menu according to seasons); enhancing staff qualifications (monthly knowledge control of the menu and service standards, forming corporate culture, introducing checklists); greening the restaurant's territory.

Implementing these recommendations will help improve the atmosphere in the «Kvitan» restaurant establishment, making it more attractive to guests, thereby increasing the number of consumers and the establishment's profit.

Conclusions. Conducting an analysis and evaluation of the competitiveness potential of enterprises in the restaurant services market of the Dnipropetrovsk region based on the graph-analytical method allowed identifying leaders and outsiders in this market segment, assessing their potential, determining strengths and weaknesses according to selected criteria parameters, and identifying directions for improving activities and increasing the

competitiveness of these restaurant enterprises. Using this method will allow economic entities to constantly monitor and analyze competitive positions according to various evaluation characteristics and justify management decisions to ensure the enterprise's dominance in the restaurant services market.

### Bibliography:

- 1.Портер М. Конкуренція. Київ, 2001. 387 с.
- 2. Маршал А. Принципи економічної науки. Т. 1. 1983. 401 с.
- 3. Мазаракі А.А., Лігоненко Л.О., Ушакова М.М. Економіка торговельного підприємства. Київ : Хрешатик, 1999. 800 с.
- 4.Осташко Т.О. Аналіз конкурентоспроможності товарів м'ясомолочної групи на внутрішньому ринку України в умовах СОТ. *Освітній портал «Облік і фінанси АПК»*. URL: https://magazine.faaf.org.ua/analiz-konkurentospromozhnosti-tovariv-m-yasomolochnoi-grupi-na-vnutrishnomu-rinku-ukraini-v-umovah-sot.html.

#### References:

- 1. Porter, M. (2001). Competition. Kyiv, 387 p
- 2. Marshal, A. (1983). Principles of economic science. Vol. 1. 401 p.
- 3. Mazaraki, A.A., Ligonenko, L.O. & Ushakova, M.M. (1999) Economy of trading enterprise. Kyiv: Khreshchatyk. 800 p.
- 4. Ostashko T.O. Analysis of the competitiveness of products of the meat and dairy group in the domestic market of Ukraine under WTO conditions. Educational portal "Accounting and Finances of Agricultural Industry". URL: https://magazine.faaf.org.ua/analiz-konkurentospromozhnosti-tovariv-m-yasomolochnoi-grupi-na-vnutrishnomurinku-ukraini-v-umovah-sot.html.