

## **IMPROVEMENT OF THE ASSESSMENT METHODS OF PRODUCT COMPETITIVENESS OF THE SPECIALIZED POULTRY ENTERPRISES**

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Assessment of the product competitiveness is a major multifactor task, which is reduced to interpretation and evaluation of set indicators that characterize the key product properties and form the level of its competitiveness. It is important objective to increase the level of objectification of assessment product competitiveness of specialized poultry enterprises by quality indicators. The aim of the research is to improve the assessment methods of product competitiveness of the specialized poultry enterprises. Main research results: developed the methodical approach to assess the product competitiveness, and it differs in the definition the level of product competitiveness based on the calculation of the composite indicator as a sum of weighted indicators, in view of the specific requirements for the products of specialized poultry enterprises.

*Keywords: competitiveness of product, expert evaluation, consumer parameters, consumer price, trade mark, specialized poultry enterprises.*

*JEL Codes: D41, Q13, C63, L13.*

### **1. Introduction**

With the increased globalization of the economy, the term competitiveness has become ubiquitous. Most see the term as synonymous with productivity. Harvard's Michael Porter (1998) states, "The only meaningful concept of competitiveness at the national level is productivity" (Porter, 1998). The World Economic Forum's Global Competitiveness Report (2012) defines competitiveness as "the set of institutions, policies, and factors that determine the level of productivity of a country" (Schwab, 2012) and IMD's World Competitiveness Yearbook defines competitiveness

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similarly, but more broadly, as how an “economy manages the totality of its resources and competencies to increase the prosperity of its population” (World Competitiveness Yearbook, 2012).

The performance success of any company depends on the product competitiveness it offers its customers. The assessment of the product competitiveness is a set of actions on choosing criteria (indicators) of competitiveness, the determination of the true values of these indicators for competitive products, and the comparison of values for the goods analyses with the goods taken as base ones. (Kobiliatska, 2003).

Consequently, the company competitiveness is an aggregate indicator of its competitiveness and its ability to respond promptly and fit into external environment changed. The product competitiveness is the most important concern for industry and is decided by the interaction of enterprise with the market environment (Takei, 1985).

Generally, the product competitiveness can be defined as a set of qualitative and price characteristics of products made according to the scheme of economic costs to meet the consumer’s needs, complying with the competitive market requirements in comparison with similar products presented on it (Prodius, 1999; Zaitseva, Stradinya, 2017).

Pogrebnyak D. (2011) notes that the company competitiveness can be defined as a complex characteristic, which reflects the advantage of a set of its performance figures assessed, those determine the company success on a certain market for a certain period of time, regarding a number of competitors figures (Pogrebnyak, 2011). The methods for assessment of the product competitiveness are divided into qualitative and quantitative by means of assessment, and matrix, graphic and indicator ones by reporting of result (Ivanov, 2003; Stepanenko, 2015).

The competitiveness is persuasive power held by a bundle of design information. The product is bundle of design information. The Consumers process this information and create own satisfaction or expectation. Competitiveness is power of product (bundle of information) that persuades potential customers and makes exiting customers consent. However, competitiveness is difficult to be measured. In many cases, an overall evaluation must be made based on measurements of plural number of indicators. and the Competitiveness is measured at the levels of “product”, “brand”, “business”, “industry” (Fujimoto, 2001).

Of course, the most objective methods for assessment are quantitative ones, but failure to express some characteristics of products with quantitative indicators requires the use of precisely qualitative methods for assessment. In this regard, the primary task of our research is to improve the objectification of the competitiveness assessment for the products of specialized poultry enterprises in terms of quality.

In conditions of increasing globalization on general level of competitiveness is affecting more factors, and therefore the question arises about the formation of a composite indicator of competitiveness and search for the most adequate requirements for methods of there assessment. Among the main ones, which are trying in a certain way to more systematically analyze and assess the factors affecting competitiveness (determine it level) should be highlighted the follow: methods for

assessing the product competitiveness are based on their ranking, by sales volume, differential method, complex method and mixed method (Stepankova, 2012).

If the product competitiveness is considering, as a rule, they are determining the price and quality of execution. Influence of these indicators determines the place of a company on the market.

The price is a monetary expression of value, the amount of money has paid or received per unit of products or services. The quality of products or services is one of the most important factors for the successful business of any company. The quality is a set of properties and characteristics of the products, which determine ability to meet specific personal or production needs in accordance with their purpose (Chupyk, 2006).

Therefore, two main parameters determine the basis of the products competitiveness, they are consumer parameters and price. Among the products of the same destination more competitive in the market are owns the one that thanks to their properties brings the greatest effect in relation to the price of consumption. T. Melnyk and O. Xrystofor (2002) consider, that it is necessary to estimate additionally such indicator, as the level of the marketing environment, namely: advertising, company image, prestige of a trademark (Melnyk, 2002; Xrystofor, 2002).

So, from non-commodity factors of competitiveness (advertising activity, the prestige of the company) the indicator of the product competitiveness as “popularity of trade mark” is formed. This indicator at the same consumer parameters and price performs an important role in the installing the level of the product competitiveness.

Consequently, to manage of the product competitiveness it means to provide an optimal ratio of such parameters: improve the product quality, reduce the costs of reduction, increase the popularity of the trademark.

*The aim of this research* is to improve the assessment methods for the product competitiveness of the specialized poultry enterprises.

*The object of the research* is process of the assessing of product competitiveness of the specialized poultry enterprises. The research subject is the product competitiveness of the specialized poultry enterprises as an composite indicator based on the assessment of the consumer parameters of products, the consumer prices and the popularity of trade mark (brand).

## **2. Research methodology**

The research is based on the dialectical method of knowing in economic processes and phenomena, their relationship, continuous development and systematic approach to study of the problem of improvement the assessment methods of product competitiveness. In order solving the tasks in the research, following scientific methods were used (for the analysis of indicators that form the level of product competitiveness), observation and survey (while collecting and grouping information about the consumer parameters of products of specialized poultry enterprises).

To process the data presented in the research, such methods as comparison, grouping, generalization and the method of expert assessment (calculation of individual and group indicators of product competitiveness and for the assess the intra-group significance of each selected indicators), the combined calculation and graphing method for calculation the composite coefficient of product competitiveness and the plotting of a “product competitiveness triangle”).

### 3. Results

To assess the competitiveness of products of the specialized poultry enterprises ( $I_{cp}$ ), it is proposed to use the system of scoring assessment based on the calculation of the composite indicator as a sum of weighted indicators such as: group indicator of competitiveness “consumer parameters of products” ( $GI_{ccp}$ ), indicator “consumer price” ( $I_p$ ), indicator “popularity of trade mark” ( $I_{ptm}$ ).

To obtain values of the individual indicators of group indicator “consumer parameters of products”, indicator “consumer price” and indicator “popularity of trade mark”, the score scale of 2 to 5 points was used, which is shown in Table 1. To assess the competitiveness of products was chosen the carcasses of chicken-broilers because this type of product is accounts for 80% of the total sales volume.

To determine the indicator “consumer price” the price of the company’s products is compared, which is compared with the price of similar products of the main competitor.

Table 1. The scoring system of point the indicators of product competitiveness of the specialized poultry enterprises

Indicators	Score, points			
	5 – “perfectly”	4- “well”	3 – “satisfactory”	2 – “unsatisfactory”
Group indicator of competitiveness «consumer parameters of product» ( $GI_{ccp}$ )				
The appearance of the carcass ( $A_c$ )	The surface is dry, the inner surface is clean, without clots of blood.	The surface is dry, the inner surface is clean, without clots of blood. Can be the minor skin damage, muscles and bones, which is the consequence of the dismemberment of carcass.	The surface is dry, the inner surface is clean, without clots of blood. But there are minor injuries to the skin, muscles and bones.	The surface is dry, but the skin is faded, perhaps there is mold. There are fractures to the femur and tibia, sharp edges of bones and bone fragments, traces of blows, deep cuts of muscle tissue and skin.
Condition of skin ( $C_s$ )	Clean, dry, no scratches, no ruptures, stains and bruises. For frozen carcasses - without freezer	Clean, dry, no ruptures, stains and bruises, but has minor scratches.	Clean, dry, no stains and bruises, but has minor scratches and ruptures	Does not comply with DSTU 3143:2013. Covered with mucus, especially under the wings and in the groin, and in the

	burn, for a chilled - no sign of freezing.			folds of the skin.
Color of skin (Cls)	From white to yellow.	From white to yellow with a slight shade.	From white to yellow, but with a significant shade close to gray	A mucous surface and a yellow-gray color
Smell (S)	Characteristically of benign for poultry meat, no other smells	Characteristically of benign for poultry meat, but has other slight smell	In the thoracic cavity and abdominal cavity is smell	The putrid smell from the surface of the carcass and inside the muscle, the most pronounced in the chest and abdominal cavity
Degree of removal the chicken feather (Dcf)	The chicken feather is completely removed	The chicken feather is completely removed, but there are single residues	The chicken feather is completely removed, but there is a small amount the remains of the pen scattered on the surface of the carcass	The feathers of the chicken are not completely removed, there are significant feathers residues on the wings and tail
Consistency of chilled meat (Ccm)	The muscles are dense and resilient; if press the finger on the chilled meat the small pit which was formed is quickly aligned	The muscles are less dense and less resilient; but if press the finger on the chilled meat the small pit which was formed is quickly aligned	The muscles are dense and resilient, if press the finger on the chilled meat the small pit which was formed is more slower aligned (within one minute)	The muscles are flabby; when pressed with a finger- the small pit is formed, which is no aligned
Color of subcutaneous and internal fat (Cf)	Pale yellow or yellow	Pale yellow or yellow with a slight shade.	Pale yellow with a significant shade close to gray	Pale yellow color, and the internal adipose tissue is yellowish-white with gray shade
State of the bone system (Cbs)	The bone system without fractures and deformities	The bone system without fractures with minor deformation	The bone system has a slight fracture and deformation	The bone system has an explicit fracture and deformation
The information content of the marking (Mi)	Complies with the law of Ukraine «On protection of consumer rights» and technical requirements regarding the	Complies with the law of Ukraine «On protection of consumer rights» and technical requirements regarding the rules of food labeling, the availability of	Complies with the law of Ukraine «On protection of consumer rights» and technical requirements regarding the rules of food labeling	Does not comply with the law of Ukraine «On protection of consumer rights» and partially meets the technical requirements regarding the rules

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	rules of food labeling, the availability of information about the competitive advantages of product and advertising slogans	information about the competitive advantages of product		of food labeling, is estimated as a normative indicator equal to zero
Information and artistic expressiveness of packaging (EPia)	The package has attractive appearance, with compliance the ergonomic requirements, clearly decorated label, which contains the originally of artistic design	The usual appearance of the packaging, high-quality printing performance of the label, the information is clear and easy to read	The usual appearance of the package, does not met the quality of polygraphic execution of label, pale color or wrong combination of colors	The quality of label was not adhere, no resistance to damage and to storage the initial appearance of the package, the information is fuzzy
Indicator “popularity of trade mark” ( $I_{ptm}$ )				
General characteristics	A trademark is well-known, attractive, prestigious	A trademark is well-known, but not enough attractive	A trademark is little-known and not enough attractive	A trademark is unknown
Indicator “consumer price” ( $I_p$ )				
The price scale	The price is lower than have a competitor	The price of products is the same as have a competitor	The price of products is higher than that have a competitor	The price of products is 50 percent is higher than have a competitors

In order to determine the weighted coefficients of the group indicators of the product competitiveness, it is recommended that experts be interviewed in the form of interviews (Kotler, 2007; Mihalovich, 2016). For obtaining the expert assessment, the Delphi method was proposed, which is a kind of method of collective expert assessments, as it has quite significant advantages (Beshelev, 1980; Kapelko, 2016). The total number of interviewed experts are 10 persons, who are middle-level employees and specialists. Assessment criteria of the weight of selected group indicators that influencing the level of product competitiveness was defined for a 10-point scale (Table 2).

Table 2. Assessment criteria of the weight of indicators that influencing the level of product competitiveness for a 10-point scale

Scale, points	Assessment criteria of the weight of indicators
10	The importance of the indicator has a decisive influence on the level of product competitiveness
9	The importance of the indicator has a essential influence on the level of product competitiveness

8	The importance of the indicator has a significant influence on the level of product competitiveness
7	The importance of the indicator has a high influence on the level of product competitiveness
6	The importance of the indicator has a higher than average influence on the level of product competitiveness
5	The value of the indicator has a medium influence on the level of product competitiveness
4	The importance of the indicator has a below average influence on the level of product competitiveness
3	The importance of the indicator has a insignificant influence on the level of product competitiveness
2	The importance of the indicator has almost does not influence on the level of product competitiveness
1	The importance of the indicator has does not influence on the level of product competitiveness

The obtained experts assessments of the weight  $q_{ij}$  of each  $j$  group indicator in points are averaged and normalized to obtain the weight coefficient  $q_{jn}$ . To analyze the coherence of experts the coefficient of variation of the answer variants ( $v$ ) is used.

The group indicator of competitiveness “consumer parameters of products” is calculated as a sum of weighted individual indicators.

The calculation of the weight coefficients for the product competitiveness and individual indicators of the group indicator “consumer parameters of product” of specialized poultry enterprise based on the expert’s answers determining the weight of the coefficients and the variation coefficient are given in Table 3.

Table 3. Calculation of the weight coefficient of the product competitiveness of specialized poultry enterprise

Experts	Method of calculation	Weighting coefficients of individual indicators of the group indicator “consumer parameters of product”										Weighting coefficients of indicators of the product competitiveness		
		Ac	Cs	Cls	S	Dcf	Cc m	Cf	Cbs	Mi	EPia	GI <sub>ccp</sub>	I <sub>ptm</sub>	I <sub>p</sub>
1	The results of expert’s answers, point	10	8	5	8	6	9	7	4	8	4	8	6	7
2		8	7	7	10	4	9	6	4	6	3	9	4	9
3		7	8	7	8	5	8	8	6	7	4	10	5	5
4		10	10	6	7	3	10	5	5	6	3	10	3	7
5		9	9	4	10	4	9	7	4	5	6	8	4	6
6		8	5	8	9	5	8	6	3	7	3	9	4	8
7		8	6	5	10	3	10	7	5	8	3	10	5	6
8		9	9	6	10	4	8	6	4	5	5	7	4	8
9		9	8	8	8	5	7	8	4	8	4	10	3	7
10		10	8	6	9	3	7	5	3	6	5	9	6	6

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$q_{ij}$	$q_{ij} = q_1 + q_2 \dots q_n / n$	8.80	7.80	6.20	8.90	4.20	8.50	6.50	4.20	6.60	4.00	9.00	4.30	6.90
$q_{jn}$	$q_{jn} = q_{ij} / \sum q_{ij}$	0.14	0.12	0.09	0.14	0.06	0.13	0.10	0.06	0.10	0.06	0.44	0.22	0.34
$\sigma$	$\sigma = \sqrt{D(q_{ij})}$ $D(q_{ij}) = \frac{1}{n} \sum_{i=1}^n (q_{ij} - \bar{q}_{ij})^2$ where $n$ – number of experts	0.96	1.96	1.56	1.09	0.96	1.05	1.05	0.76	1.24	1.00	1.12	1.02	1.26
$v$	$v = \sigma / q_j$	0.11	0.25	0.25	0.12	0.23	0.12	0.16	0.18	0.19	0.25	0.12	0.23	0.18

The degree of coherence of experts is determined by the following characteristics of the coefficient of variation (Vasylieva, 2015; Weiss, 2010):

- $v \leq 0,10$  – coherence is high;
- $v = 0,11-0,15$  – coherence is above average;
- $v = 0,16-0,25$  – coherence is medium;
- $v = 0,26-0,35$  – coherence is below average;
- $v > 0,35$  – coherence is below the permissible norm.

The Table 3 shows that coefficient variation is changing in the norm (obtained coefficients variation is not higher 0.25).

The obtained distribution of the weight criteria of competitiveness was confirmed by the survey of consumers of products, which were almost unanimous in their statements, both in Ukraine and in Poland (Fig. 1).

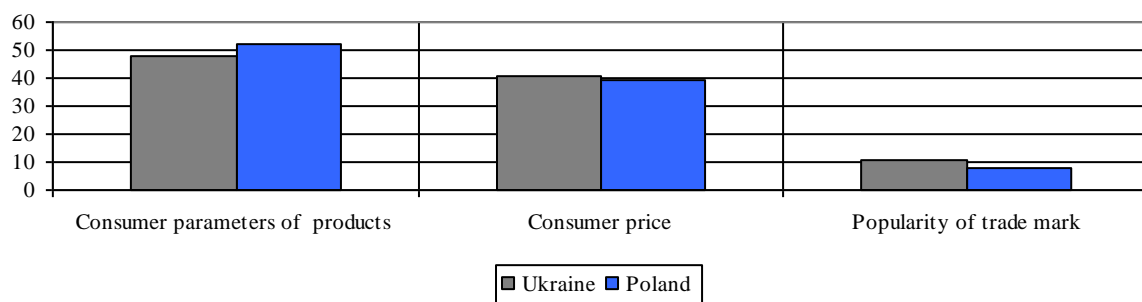


Figure 1. Distribution of the weight criteria of competitiveness after survey of consumers of products in Ukraine and in Poland

According to the results of the expert appraisal, the following relation of the group indicator “consumer parameters of product” ( $GI_{cp}$ ), which can be formed into a mathematical model, is recommended (formula 1):

$$GI_{cp} = 0.13 * Ac + 0.12 * Cs + 0.09 * Cls + 0.14 * S + 0.06 * Dcf + 0.13Ccm + 0.10 * Cf + 0.06 * Cbs + 0.10 * Mi + 0.06 * EPia \quad (1)$$

The composite indicator of product competitiveness ( $I_{cp}$ ) can be expressed as follows (formula 2):



$$I_{cp} = 0.44 * GI_{cp} + 0.22 * I_{ptm} + 0.34 * I_p, \quad (2)$$

where  $I_{cp}$  – composite indicator of the product competitiveness;

$GI_{cp}$  – group indicator of competitiveness “consumer parameters of products”;

$I_{ptm}$  – indicator “popularity of trade mark”;

$I_p$  – indicator “consumer price”

We calculate the product competitiveness for carcasses of chicken-broilers chilled of trade mark “Znatna kurka” (Ptahokompleks Dniprovsky LLC – competitor 1 ( $C_1$ )) in comparison with the products of the main competitor trade mark “Nasha Ryaba” brand (Mironivsky Hliboproduct PRJSC - competitor 2 ( $C_2$ )) is prepared (Table 4).

Table 4. Calculation of the composite indicator of product competitiveness

Indicators	Valuation, points		Weighting, points	Weighted assessment of individual indicators, points		Weighted assessment of indicators of the product competitiveness, points	
	$C_1$	$C_2$		$C_1$	$C_2$	$C_1$	$C_2$
<b>Group indicator of competitiveness «consumer parameters of product»</b>	-	-	<b>0.44</b>	<b>4.16</b>	<b>4.81</b>	<b>1.83</b>	<b>2.12</b>
The appearance of the carcass	(4+4+4+5+3+3+4+4+4+5)/10=4.00	(5+5+5+5+4+5+5+5+5+5)/10=4.90	0.14	0.56	0.64	-	-
Condition of skin	(5+3+3+4+3+3+4+4+4+4)/10=3.70	(5+5+5+4+5+5+5+4+5+5)/10=4.80	0.12	0.44	0.58		
Color of skin	(5+4+4+5+3+5+4+4+5+4)/10=4.30	(5+5+5+5+4+5+5+5+5+5)/10=4.90	0.09	0.38	0.44		
Smell	(4+4+3+5+4+5+4+3+5+4)/10=4.10	(5+5+5+5+5+5+5+5+5+5+4)/10=4.90	0.14	0.57	0.69		
Degree of removal the chicken feather	(5+5+4+5+4+5+5+4+4+4+4)/10=4.50	(4+5+5+5+5+5+5+5+4+5+5)/10=4.80	0.06	0.27	0.28		
Consistency of chilled meat	(5+4+4+5+5+4+4+5+4+4)/10=4.40	(5+5+5+5+5+5+4+5+4+5+4+5+5)/10=4.80	0.13	0.57	0.62		
Color of subcutaneous and internal fat	(5+4+4+5+4+4+4+5+4+4)/10=4.30	(5+5+4+5+5+5+5+4+5+5+5)/10=4.80	0.10	0.43	0.48		
State of the bone	(4+5+5+4+4+4+4+4+4+4+4)/10=4.30	(5+5+5+4+4+4+4+4+4+4+4)/10=4.30	0.06	0.24	0.28		

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system	+3+4+4+4+ +4+4)/10=4.10	+5+4+5+5+ +4+5)/10=4.70					
The information content of the marking	(5+5+4+4+ +5+5+5+4+ +4+5)/10=4.60	(5+5+5+5+ +5+5+5+5+ +5+5)/10=5.00	0.10	0.46	0.50		
Information and artistic expressiveness of packaging	(4+4+4+ +4+3+4+4+4+ +5+4)/10=4.00	(5+5+5+5+ +5+5+5+5+ +5+5)/10=5.00	0.06	0.24	0.30		
<b>Indicator “popularity of trade mark”</b>	<b>4.00</b>	<b>5.00</b>	<b>0.22</b>	-	-	<b>0.88</b>	<b>1.10</b>
<b>Indicator “consumer price”</b>	<b>5.00</b>	<b>4.00</b>	<b>0.34</b>	-	-	<b>1.70</b>	<b>1.36</b>
<b>Composite indicator of product competitiveness</b>	-	-	<b>1.0</b>	-	-	<b>4.41</b>	<b>4.58</b>

After calculation of the competitiveness coefficient of the company products, the obtained score and the maximum possible (5 points) are compared and establish the level of its competitiveness is defined:

- from 0 to 1 point – the products are uncompetitive;
- from 1 to 3 points – the level of the product competitiveness is below the average;
- from 3 to 4 points – the level of the product competitiveness is average;
- from 4 to 4.5 points – the level of the product competitiveness is above average;
- from 4.6 to 5 points – the high level of the product competitiveness;
- 5 points - the highest level of the product competitiveness (“example of products”).

In view of the results what were obtained on the basis of the composite indicator of product competitiveness, the level of competitiveness of the enterprises: the trade mark “Znatna Kurka” (Ptahokompleks Dniprovsky LLC) can be assessed as an above average level of the product competitiveness – 4.41 ( $\approx 4.40$ ) points and the trade mark “Nasha Ryaba” brand (Mironivsky Hliboproduct PRJSC) can be assessed as the high level of the product competitiveness - 4.58 points ( $\approx 4.60$ ) (Fig. 2).

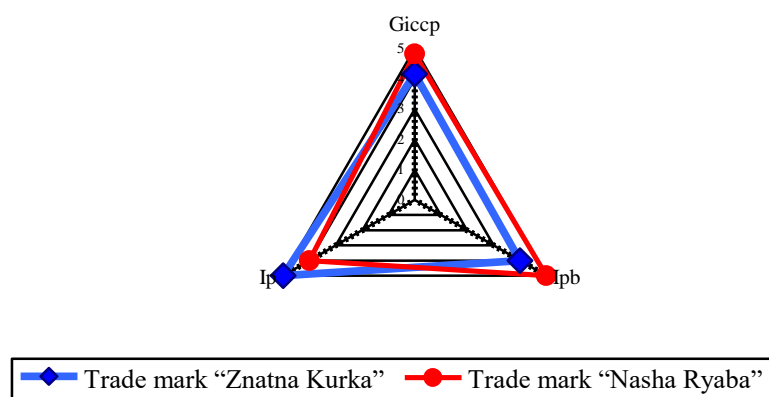


Figure 2. The triangles of product competitiveness (carcasses of chicken-broilers chilled)

#### 4. Conclusions

1. The analysis of modern approaches to assessment of the product competitiveness showed that none of the approach known is not adapted to assess the competitiveness of products of the specialized poultry enterprises. To improve the objectivity of assessment of the product competitiveness of the specialized poultry enterprise, it was proposed to use a system of indicators in view of the consumer parameters of product, consumer prices and the popularity of trade mark manufacturer.

2. The methodical approach to assessment of product competitiveness of the specialized poultry enterprises is developed which differs in determining the level of product competitiveness based on the calculation of composite indicator as a sum of weighted indicators in view of the specific requirements for the products what were made by the specialized poultry enterprises. The assessment results are represented by a triangle, the vertices of which are three indicators (indicator “consumer parameters of products”, indicator “consumer price” and indicator “popularity of trade mark”) that are underlie the assessment of the product competitiveness.

3. The level of product competitiveness of trade mark “Znatna Kurka” (Ptahokompleks Dniprovsky LLC) and trade mark “Nasha Ryaba” brand (Mironivsky Hliboproduct PRJSC) was assessed by the combined calculation and graphic method. It was defined that the level of product competitiveness of trade mark “Znatna Kurka” is above average and the trade mark “Nasha Ryaba” is high. And it is allowing the chance for both enterprises to compete successfully the local markets at the expense of less transportation costs.

#### References

- Chupyk, G.R. (2006). Scientific approaches to the definition of “competition” and “competitiveness” categories // *Visnyk Lvivskoyi KA*. No. 22: 55-58.
- Ivanov, Yu. B. (2003). *Enterprise competitiveness: assessment, diagnostics, strategy*. – Kharkiv: KHGEY. 349 p.

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Fujimoto, Takahiro (2001). Concept of Competitiveness and Its Factors Business. – [https://ocw.u-tokyo.ac.jp/lecture\\_files/eco\\_01/7/notes/en/BusinessAdministration1\\_07.pdf](https://ocw.u-tokyo.ac.jp/lecture_files/eco_01/7/notes/en/BusinessAdministration1_07.pdf) [24 01 2019]

Kobiliatska, L. S. (2003). Competitiveness Management. – Kyiv: Zovnishnya torgivlya. 304 p. Kotler, F. (2007). Basics of Marketing. – Moscow: Publishing house “William”. 656 p.

Mihalovich, M. (2016). Performance Comparison of Multiple Discriminant Analysis and Logit Models in Bankruptcy Prediction // *Economics and Sociology*. No. 9(4): 101–118. – doi:10.14254/2071-789X.2016/9-4/6 [24 01 2019]

Melnyk, T. S., Xrystofor, O. V. (2002). Comprehensive assessment of the competitiveness of goods in the modern market // *Visnyk VPI*. No. 3: 23-28.

Prodius, Yu. I. (1999). The formation of a system for ensuring the competitiveness of industry. – Odessa: Astroprint. 72 p.

Pogrebnyak, D.V. (2011). The methods of diagnostics of enterprise competitiveness // *Problemu pidvushchennya efektyvnosti infrastrukturi. Zbirnik naukovih prats*. No. 32: 45-51.

Porter, M.E. (1998). The competitive Advantage of Nations. – New York: Free Press. – <https://hbr.org/1990/03/the-competitive-advantage-of-nations> [29 12 2018].

Stepanenko, T. O. (2015). The analysis of functional relationships of elements in integrated system of materials management // *Technology audit and production reserves*. No. 2/6(22): 58–62. – <https://doi.org/10.15587/2312-8372.2015.41753> [29 12 2018]

Stepankova, A. A. (2012). Methods of assessment of the product competitiveness // *Efektivna ekonomika*. No. 2. – <http://www.economy.nayka.com.ua/?op=1&z=954> [05 03 2019]

Schwab, Klaus (2012). “Global Competitiveness Report 2012- 2013” (World Economic Forum, September 2012). – <http://reports.weforum.org/global-competitivenessreport-2012-2013> [12 01 2019]

Vasylieva, N. K., Vinichenko, I. I., Katan, L. I. (2015). Economic and mathematical evaluation of Ukrainian agrarian market by branches // *Economic Annals-XXI*. No. 9–10: 41–44.

Weiss, Dan (2010). Cost Behavior and Analysts’ Earnings Forecasts // *The Accounting Review*. Vol. 85. No. 4: 1441–1471. – <https://doi.org/10.2308/accr.2010.85.4.1441> [12 01 2019].

World Competitiveness Yearbook. (2012). – <http://www.imd.org/wcc/wcy-world-competitivenessyearbook> [12 01 2019]

Zaitseva, E., Stradiny, S. (2017). Innovative clustering and its development factors as a source of Latvia’s competitiveness // *Economic Annals-XXI*. No. 168 (11-12): 28-32. – <https://orcid.org/0000-0003-3409-3922> [12 01 2019].

## **PRODUKTŲ KONKURENCINGUMO VERTINIMO METODŲ TOBULINIMAS SPECIALIZUOTOSE PAUKŠTININKYSTĖS ĮMONĖSE**

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### **Santrauka**

Produktų konkurencingumo vertinimas – tai svarbi užduotis, kurią sudaro daugybė veiksnių ir kurios metu aiškinami ir vertinami tam tikri nustatyti rodikliai, apibūdinantys pagrindines produkto savybes ir padedantys nustatyti jo konkurencingumo lygį. Svarbus tokio vertinimo uždavinys – užtikrinti kuo didesnę objektyvumo lygį vertinant produkto konkurencingumą specializuotose paukštininkystės įmonėse, naudojant kokybės rodiklius.

Šio tyrimo tikslas – patobulinti produktų konkurencingumo vertinimo metodus specializuotose paukštininkystės įmonėse, atsižvelgiant į produktų vartojimo parametrus bei jų svorį. Pagrindiniai tyrimo rezultatai: sukurta produkto konkurencingumo vertinimo metodika, padedanti nustatyti produkto konkurencingumo lygį atlikus integruoto rodiklio, kaip svertinių rodiklių sumos, skaičiavimus, atsižvelgiant į specialius reikalavimus, taikomus produktams specializuotose paukštininkystės įmonėse.

*Raktažodžiai: produktų konkurencingumas, ekspertų vertinimas, vartojimo parametrai, pardavimo kaina, prekės ženklas, specializuotos paukštininkystės įmonės.*

*JEL kodai: D41, Q13, C63, L13.*