

# Competitive Potential Branding Model of Subjects of Agro-food Economy Sector Ukraine

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**Abstract:** The article examines the special conditions for the development of the competitive potential branding model of subjects of agro-food sector of economy of Ukraine. It is proven that the branding model in the system of subjects competitive potential of the agri-food sector of the economy ensures the value and effectiveness of the agricultural raw materials supply chain in the market with a low degree of processing, and also regulates the inter-industry interaction of its participants. It is substantiated that the methodological basis of the competitive potential branding model of subjects of the agro-industrial sector of the economy is the calculation of the additional value of products in the supply chain of agricultural raw materials on the market with a low degree of processing, by combining global and national “Input-Output” indicators of a certain country, in the flow of bilateral trade. The method of evaluating the competitive positioning of subjects of the agro-food sector of the economy on the market is presented. A collection of brand evaluation methods is grouped according to the factor indicator of the development of competitive branding of agro-food products. The economic activity of the dairy industry and the dairy production structure in the priority regions of Ukraine were analyzed. World and Ukrainian leaders of dairy companies on the market have been identified. Moreover, it has been proven that the competitive branding of subjects of the agro-industrial sector of the economy of Ukraine in the integration interaction with the EU countries contributes to the acceleration of investment activities for the modernization of the dairy production technology and their quality. An assessment of market attractiveness and competitive potential of the leaders of branded dairy products in Ukraine was carried out. The “McKinsey” matrix was built and the positions of dairy product leaders on the market were determined. Proposed measures to increase the competitive potential of dairy companies of the agro-food sector of the Ukrainian economy according to the composite scoring index Market Score, which determines the market opportunities and branding capabilities of the studied entities on the market. The difficulties faced by dairy companies of the agro-food sector of the economy of Ukraine during the war and the ways to solve them are analyzed as well.

**Keywords:** Branding, competitive potential, agro-food sector of economy, agro-food products, market scoring.

## INTRODUCTION

The emergence of a market elasticity crisis in Ukraine, which, under the influence of price volatility for agro-food products (goods) and the use of limited criteria for the use of agricultural raw materials (as an initial resource for determining the level of profitability of food processing, animal husbandry and bioenergy enterprises), caused the dealloca-

tion of resources between the branches of agriculture with long-term negative consequences for the organizational structure of the agro-food sector as a whole. Globalization processes limit the state's ability to regulate the price of food products, as it can have a vector of a slightly open economy and not affect world market prices. In addition, international agreements within the framework of Ukraine's membership in the World Trade Organization impose certain restrictions on the amount of direct support for agriculture, which is related to the impact on prices.

The current development stage of the agri-food sector of the Ukrainian economy is characterized by strong positions in the

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world export of agricultural raw materials and a certain degree of import dependence for certain products of deep processing, as well as a critical need for means for their production. It is obvious that such a situation does not contribute to ensuring the food security of the country, but is also a tangible obstacle in increasing the global competitiveness of the studied sector and the country as a whole. At the same time, the formed inter-industry connections in the agri-food sector of the country's economy are complex, characterized by an unbalanced reproductive structure, low efficiency of production resource use, weakening of inter-industry flows and proportions, and a decrease in the efficiency of the agri-food sector as all at once. New possibilities necessitate the deepening of practical recommendations regarding the substantiation of directions for the development of agro-food supply chains, the improvement of targeted scientifically based indicators and their resource support. In addition, it is necessary to develop effective tools for the regulation of inter-industry relations, which would take into account the economic interests of supply chain participants, the formation priorities of inter-industry proportions in order to identify new reserves of increasing added value at each level of the agro-food chain and ensure their sustainability and competitiveness. The military escalation of the Russian Federation worsened not only the logistical aspects of the agri-food sector of the Ukrainian economy, but also generally undermined the credibility of the rebranding "Ukrainian food" due to the impossibility of exporting Ukrainian products due to constant shelling of trade routes and enterprises.

The priority of our research is the development of a branding model that is complicated by the war in the competitive potential system of subjects of the agro-food sector of the economy, which ensures the value and effectiveness of the supply chain of agricultural raw materials on the market with a low degree of processing, and also regulates inter-industry interaction its participants.

### Approaches to Formation of Product Value

The general theoretical and methodological foundations of the value approach to the formation of the products value in the context of the multi-faceted development of inter-industry relations in the agri-food sector of the economy on the basis of such a tool of marketing policy as branding acquired fundamental research in the works of J. Bair (2005), N. Chukhrai & O. Hirna (2007), P. Gibbon, J., Bair & S. Ponte (2008), S. Hosseini & N. Shah (2011), V. Hrynychuk & B. Blashchak (2018), O. Kovalenko (2018), O. Shmahlii (2017), O. Tomilin (2017). V. Khrypiuk (2018), M. Lendiel & O. Zhulkanych (2015), S. Mathias (2014), O. Nelson, W. Mancilla & S. Sepúlveda (2017), D. Prajogo, D., & J. Olhager (2017), B. Sharma, R. Ingalls, C. Jones & A. Khanchi (2013), O. Shpychak (2015), B. Wells, S. Gradwell & R. Yoder (1999), P.S. Korniienko (Korniienko et al., 2023).

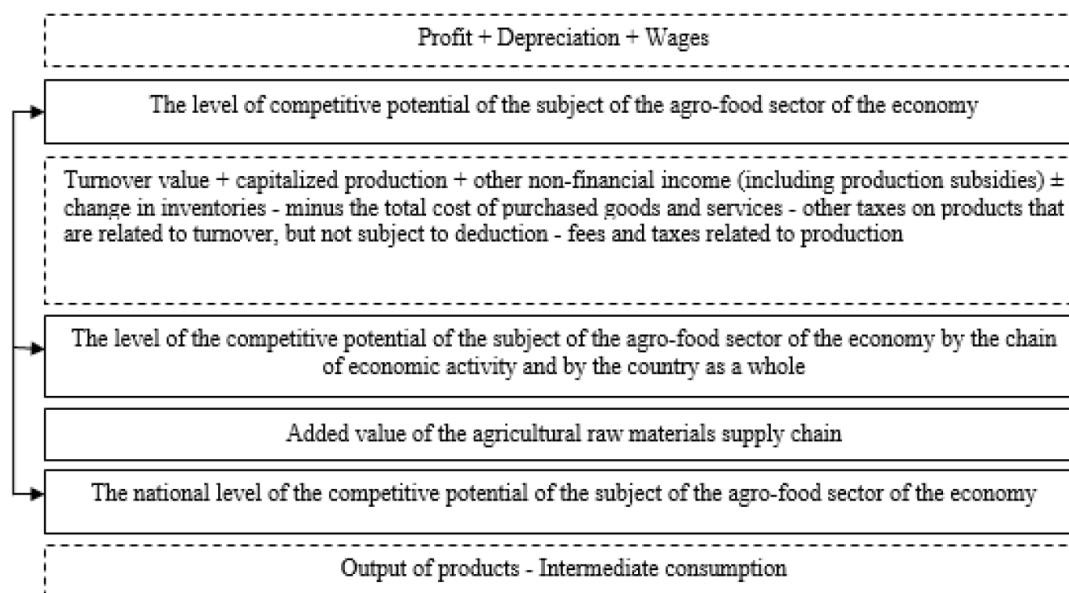
The development of economic relations in the chains of business entities of the agri-food sector of the economy is aimed at integration, cooperation, standardization of production processes that ensure the functioning of their competitive potential. According to the concept of the value theory, the amount of stimulating production elements while ensuring

the functioning of competitive potential is distributed in the form of: income on invested capital (the share of distributed profit to the owners, the state, to accumulation and consumption funds, to depreciation, to the income of the land owner); in terms of employees and entrepreneurs income; in the part of the income transferred by the subject of the agro-industrial sector for social needs, for indirect taxes as part of the market price (Davydov, 2017). At the same time, the methodological basis for ensuring the branding model of the competitive potential of subjects of the agro-industrial sector of the economy is the calculation of added value in the supply chain of agricultural raw materials on the market with a low degree of processing - Trade in Value Added (TiVA). Calculations according to TiVA, by combining global and national "Input-Output" indicators of a certain country, in the flow of bilateral trade. The creation of global supply chains of agricultural raw materials in the market with a low degree of processing and the movement of their value is determined at the country level with their involvement in the process of international division of labor, which can be estimated on the basis of the indicator of the share of intermediate imports in exports, which is usually higher for small open economies and has growth trend (Krysanov & Varchenko, 2017; Methodological provisions on the organization of state statistical observation "Table of expenditure issues", 2018).

Considering the changes made to the TiVA methodology, an effective system of indicators is distinguished: 1. Indicators of the country's participation in global value chains - indicators of progressive integration in the global chain, indicators of reverse integration; 2. Indicators of the origin of added value in gross exports in final demand; 3. Indicators of added value in national exports (Methodological provisions on the organization of state statistical observation "Table of expenditure issues", 2018; Shpychak, 2015).

The main indicator of TiVA, which is important for assessing the amount of added value of national origin in the export of agricultural raw materials with a low processing degree, is the degree of economy integration into global agro-food chains. The value of national origin in exports is influenced not only by the added value of the industry, but also by the degree of its integration with other economy sectors, as well as the share of domestic resources used by this industry in intermediate consumption. The calculation of the component that characterizes the added value of the agricultural raw materials supply chain of national origin to the market, which is reflected in the intermediate costs of exported products, is complicated. This condition arises when the amount of gross added value increases in each export-oriented branch of the agro-industrial sector, which is due to an increase in the amount of material resources used in the intermediate consumption of agricultural raw materials on the market. Note that the value of this indicator is influenced by such factors as changes in the import price of raw materials and export of products of their processing and changes in the volume of imports of raw materials and exports of products of its processing (Methodological provisions on the organization of state statistical observation "Table of expenditure issues", 2018; Varchenko, 2020; Vlasniuk, 2016).

It should be noted that for sustainable growth, it is necessary to develop the production of the agro-food sector products of



**Fig. (1).** Algorithm for determining the added value in the supply chain of agricultural rawmaterials at the micro and macro levels.

Source: Kravtsova, 2016; Methodological provisions on the organization of state statistical observation “Table of expenditure issues”, 2018; Shpychak, 2015; Varchenko, 2020; Varchenko et al., 2018.

the economy with a high share of the added value of the supply chain of agricultural raw materials. However, the traditional, less complex production of agro-food products is an “integrator” of national supply chains of agricultural raw materials. At the same time, the direct added value may not be high. However, due to the use of only national agricultural raw materials by the agro-food industry, high added value of the entire production chain is ensured (Shmahlii, 2017; Volkova et al., 2013). That is why the main emphasis is placed on the creation of added value of the supply chain of raw materials within the production agro-food industry (Fig. 1).

A systematic approach to ensuring a sufficient amount of added value in the agricultural raw materials supply chain, which forms the competitive potential of subjects of the agri-food sector of the economy, is implemented through the effective development of branding.

### Competitive potential branding models of subjects of the agro-food sector of the economy

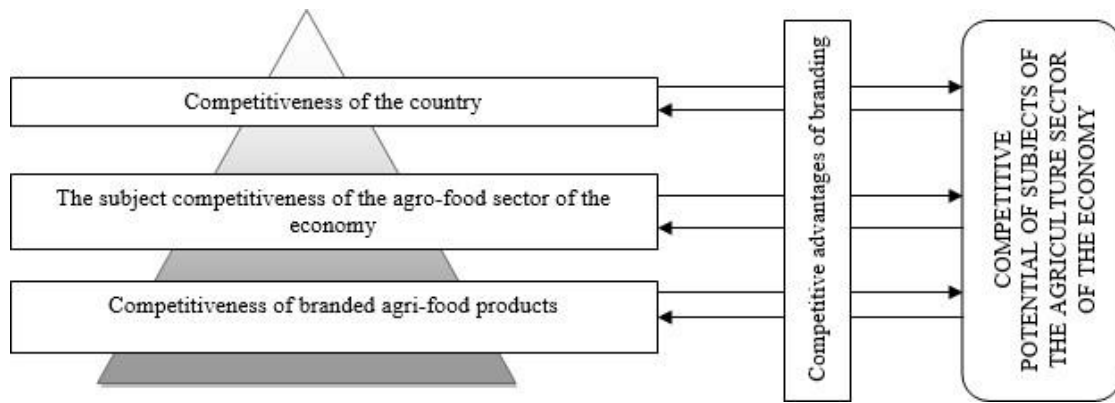
Market participants are interested in the final release of branded agri-food products with the determination of the competitive advantages of branding, aimed at improving the economic activity of processing and agricultural enterprises, at increasing the level of the country’s competitiveness, which are interconnected by a set of interacting components (Figure 2). These components have a multifactorial impact on competitiveness, in particular: competitiveness of services according to evaluation criteria (price, quality, cost), resource potential (technology, technological, finance, information, personnel), competitiveness of potential, competitiveness of services and after-sales service, competitiveness of organizational potential (organizational structure, management structure, organizational interaction of common stakeholders, organizational form of management, organiza-

tional form, functional structure), competitiveness of communication relations (with suppliers, investors, consumers, contact objects), competitiveness of the management system (management mechanism, management stage, the ability to form and use opportunities, predict the rhythm and timely respond to changes, the development and provision of management subsystems and the strategic direction of management) (Chukhrai & Hirna, 2007; Varchenko & Krysanov, 2017).

The formative basis for choosing a branding model for the competitive potential of subjects of the agro-pastoral sector of the economy is a generalized indicators set that make it possible to assess the quantitative dynamics of ensuring the supply chains effectiveness of agricultural raw materials and products of a low processing degree in the conditions of accelerated integration processes of the world raw materials market, which regulates inter-branch interaction and competitiveness of its participants. At the same time, the subjects competitiveness of the agricultural sector of the economy is determined on the basis of combined methodological approaches, which embody matrix, index, criterion, expert, graphic, calculation methods (Chukhrai & Hirna, 2007; Davydov, 2017).

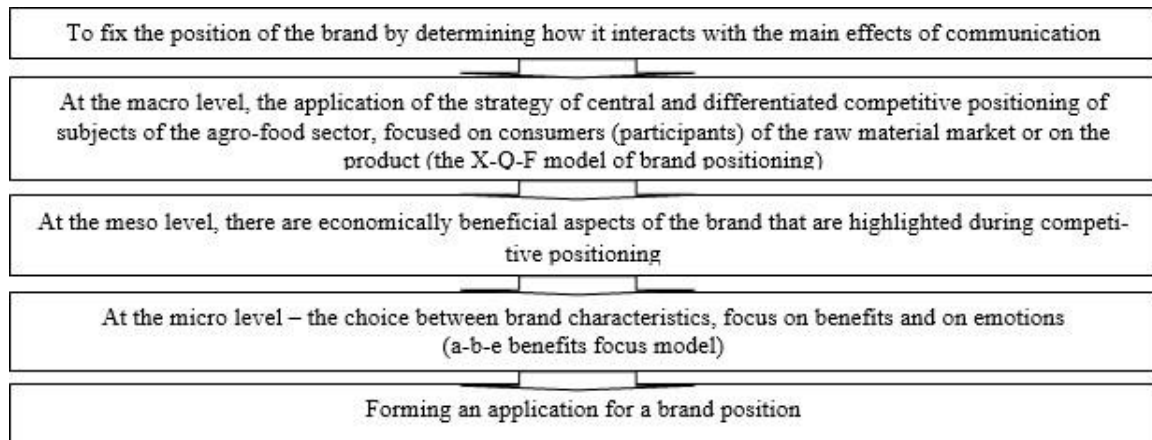
From the perspective of a process approach, the branding model of competitive potential implements a certain set of marketing functions that form the basis of a methodical approach to creating a portfolio of brands according to the three-level model of competitive positioning (macro model X-YZ, meso model I-D-U, micro model a-b-e) (Branding – a portfolio of brands, 2021; Kuzmynchuk et al., 2014; Zoska et al., 2020).

The methodological approach allows you to determine the main criteria and characteristics of monitoring the competitive positions of the agro-food sector of the economy on the



**Fig. (2).** Hierarchy of subjects competitive potential of the agro-food sector of the economy.

Source: Kuzmynchuk et al., 2014; Varchenko, 2020; Varchenko & Krysanov, 2017; Varchenko et al., 2018.



**Fig. (3).** Stages of evaluating the competitive positioning of entities in the agro-food sector of the economy.

Source: Branding – a portfolio of brands, 2021; Kuzmynchuk et al., 2014; Zoska et al., 2020.

raw-wine market, as well as to diagnose the competitiveness of the participants among themselves using the graph-matrices of the brand portfolio (Branding – a portfolio of brands, 2021; Kuzmynchuk et al., 2014; Zoska et al., 2020).

The model for evaluating the competitive positioning of subjects of the agri-food sector of the economy allows you to associate brands with a trademark and develop an advertising campaign for the promotion of products (goods), in order to ensure competitive positions on the market (Fig. 3).

The decision to apply the branding model for the competitive positioning of subjects of the economy agri-food sector directly depends on its technology, which is a key aspect of advertising agri-food products and allows to demonstrate to the consumer (participant) of the raw material market the peculiarity, specificity and favorable conditions of the brand and what are its benefits. It should be noted that a brand has its own life cycle and the specifics of its management depend on the life cycle stage of subjects of the economy agro-food sector. Accordingly, the formula for the formation and development of the brand has the following form: “branded agro-food products + the consumer’s attitude towards it + benefit for society”. The three levels of this model have the following characteristics (Branding – a portfolio of brands, 2021; Kuzmynchuk et al., 2014; Zoska et al., 2020):

- macro model X-Q-F. This formula means the main positioning parameters: X – what product is offered; Q – to whom the advertising message is intended; F - what benefits (help) this product offers to consumers. Differentiated competitive positioning makes it possible to define the brand in relation to the consumer: where X decides whether agri-food products will occupy a central position in the market or only a niche. QF - involves making a decision about who is the main figure in the messages that are transmitted using integrated marketing communication (IMK) - consumers or the product;
- I-D-U mesomodel. This model emphasizes the benefit of the brand. The meso model is based on eight types of consumer motives: Negative (informational) motives (eliminating the problem, avoiding the problem, incomplete satisfaction, normal exhaustion, mixed motive “Permissible – avoidance”); positive (transformational) motives (sensory pleasure, intellectual stimulation or overcoming, social approval). Consumer motives are at the heart of brand benefits. The meso model is based on three key requirements: the importance of the benefit (Importance) – the emotional importance of the benefit; presentation of an important benefit by the

**Table 1. Rossiter-Pearson Matrix.**

Brand Awareness (Brand – Need in this Category)		Brand Recall (Need in Product Category – Brand)	
	Informational motivation	Transformational motivation	
low involvement (easy purchase decision)	making a purchase with low risk, if necessary	making a purchase with low risk, “reward” (without extreme necessity)	
high involvement (difficult purchase decision, long thinking)	making a purchase with a high risk, if necessary	making a purchase with high risk, “reward”	

Source: Hosseini & Shah, 2011; Nelson et al., 2017; Zoska et al., 2020.

**Table 2. A Portfolio of Brand Assessment Methods.**

Model/Consulting Company	Characteristic of Methodology	Brand Assessment
Interbrand Group	Evaluation of the economic value of the brand	Estimating brand revenues, evaluating financial indicators, analyzing brand power and role, conducting consumer segmentation, evaluating brand risks, calculating the net realized value of brand profits
Brand Asset Valuator (BAV)	Brand evaluation using 4 factors that determine brand viability, its status and consumer perception	Evaluation of brand factors (differentiation), relevance, esteem, knowledge Evaluation of brand image characteristics and brand identification based on archetypes Comparative analysis of brands, identification of their strengths and weaknesses
Taylor Nelson System (Conversion model)	Assessment of consumer preferences	Assessment of satisfaction with the brand; consumer involvement in making a decision on choosing a brand
Brand Finance	Evaluation of financial indicators of branded capital	Market analysis, calculation of financial indicators Assessment of risk factors, brand beta analysis and discount rates Estimation of brand value added index
V-RATIO – brand listing	Simulating modeling	Evaluation of the brand by means of analysis: basic information of the company (year of release of the
		brand, product category, etc.), indicators of management accounting (volume of sales, volume of expenses for brand promotion, expenses for marketing, etc.)

Source: Brand capital management model, 2021; Branding – a portfolio of brands, 2021; Ostapchuk & Pash-chenko, 2021; Zoska et al., 2020).

product (Delivery); uniqueness (Uniqueness) - the ability to present benefits that are better than those of competitors. Assessment at this level is carried out for each target audience separately;

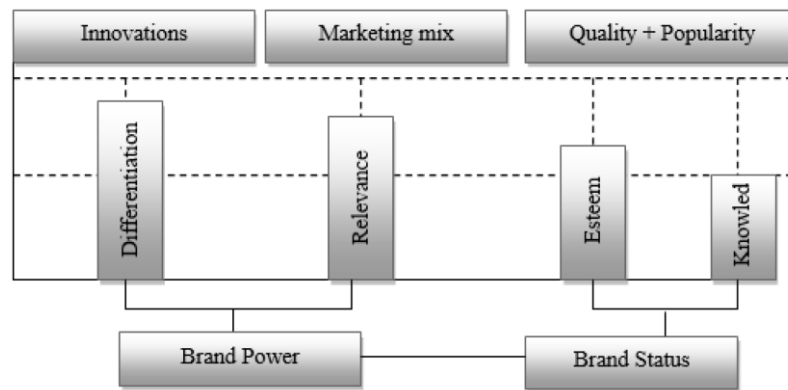
- micromodel a-b-e. According to the a-b-e formula, it is necessary to decide what to focus attention on in the first place - on the characteristics of agro-food products (attribute), product benefits or on emotions. Based on these concepts and their complexes, at least three focal points and three links can be used in advertising: 1) emphasis on the characteristics of agro-food products (experienced target audience; the subject of advertising is an elusive service; the emphasis on characteristics is an alternative to the emphasis on emotions for homogeneous trade brands. The meaning of this strategy is that with the help of a separate characteristic, even an insignificant one, you can distinguish a brand from a number of similar ones, since it has special additional properties); 2) emphasis on benefit (the benefit of the brand is difficult to copy; negative motivation when buying; attitude to the brand

is based on emotions); 3) emphasis on pure emotions (brand benefits are difficult to copy; positive motivation when using; attitude to the brand is based on characteristics).

Intentions to carry out the branded products purchases chain of subjects of the agro-food economy sector are formed according to the Rossiter-Pearson matrix with two variants of brand awareness and risk perception: a) at a low level of involvement (the level of perceived risk is small); b) with a high level of involvement (the level of perceived risk is high), (Table 1).

The creation of a portfolio of brands takes place according to a hierarchical approach and a three-dimensional, volumetric model - based on the brand molecule. The three-level branding model of competitive positioning, with aggregate interaction, allows the subject of the agro-food economy sector to distinguish its own brands and brands of competitors, identify relationships and make a decision on the formation of the brand portfolio structure (Table 2).

To determine the effectiveness of the branding model of the competitive potential of subjects of the agro-food economy



**Fig. (4).** Factors for evaluating the competitive branding of agro-food products according to the BAV method.

Source: Kovalchuk, 2018; Kravtsova, 2016.

**Table 3. A Model for Assessing the Level of Branding Development.**

Indicators	Ability Score (allows to provide a unique promise for the consumer)	Level indicator (allows to determine the level of brand penetration in the market)
Brand Power	Differentiation – is the ability of a brand to differ from competitors, to define its individuality and uniqueness. Differentiation is the main indicator of the ability to dictate prices and a key factor in the success of the brand;	Relevance - the degree of brand importance to satisfy consumers requirements. This is an indicator of the brand market penetration degree. The significance of the direction is related to the 4P indicators (Product, Price, place, Promotion) - product, price, place and promotion;
Brand Status	Esteem - this factor is closely related to the reputation of the brand and shows the level of buyer’s loyalty to it. It is based on the brand’s ability to fulfill its promise to consumers. This factor is closely related to the quality and popularity of the product.	Knowledge – reflects the degree of consumers awareness according to the brand and their experience of communication with the brand. High levels of knowledge indicate that the brand has become consumers part of the everyday life.
Indicator	The ability indicator allows you to implement a promise given	An indicator of the brand penetration level into the minds of buyers

Source: Brand capital management model, 2021; Branding – a portfolio of brands, 2021; Ostapchuk & Pashchenko, 2021; Zoska et al., 2020.

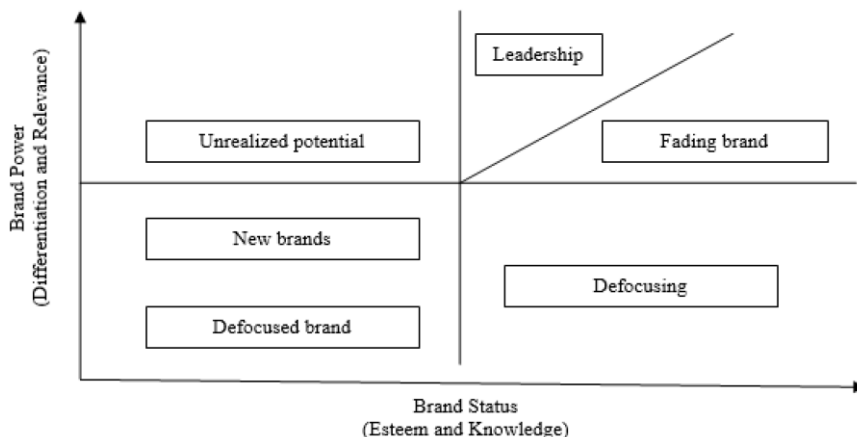
sector, a benchmarking process is used, which, using the BAV (Brand Asset Valuator) method, allows you to calculate its effective value based on factor indicators of the development of competitive branding of agri-food products, which determine the status of the brand and its strength (Fig. 4).

BAV - is a model for evaluating the branding of agri-food products in the market which is based on four factors (differentiation, relevance, esteem, knowledge), which help to ensure the growth of the company’s profit (Kovalchuk, 2018; Kravtsova, 2016). In the field of marketing, the factors “Differentiation” and “Relevance” create the Power of the brand - the leading indicator of the vitality of the brand. It protects itself from competitors, generates cash flows and economic value. The other two factors – “Esteem” and “Knowledge” - create the Status of the brand and strengthen its position on the market (Table 3).

After researching the factors of agro-food brands competitiveness, a coordinate system (power grid of brands) is built, which is an indicator of the brand development level and makes it possible to determine to which category it belongs: a brand with unrealized competitive potential, leadership, new (or fading) competitive potential (Fig. 5).

This coordinate system makes it possible to analyze the brand’s ability to determine the position of the market leader

or the possibility of its decline. If the brand has a high level of Brand Power and Brand Status (market leader), then it is directed to the second square of the coordinate system. If the brand is significantly different from competitors and does not have a high level of respect and knowledge for it on the part of consumers, then it will be considered as such that it is not able to realize the competitive potential of the subject of the economy agro-food sector. Successful agri-food brands expand their living space by increasing volumes. At the same time, over time, brands lose their uniqueness and it becomes difficult for them to respond to changes in the market environment. If the brand leader begins to lose its uniqueness, then it falls into the “fading brand” column, for which consumers do not feel a certain passion. Once a brand enters the “fading brand” zone, it enters the “defocus” zone, where the consumer has a negative attitude toward the brand (Ostapchuk & Pashchenko, 2021; Zoska et al., 2020). With the formed differentiation, relevance (degree of relevance) is built, the brand moves into the area of unrealized products, where it can stay for a long time, provided it gains market status and the scale of mass consumer demand. If a strong brand develops quickly, it becomes the leader in the product category. Over time, the brand, losing its differentiation and power, becomes destructive, because it is focused on the lack of consumers interest in it (Ostapchuk & Pash-



**Fig. (5).** Matrix of competitiveness of the brand of the subject of the agro-food economy sector

Source: Ostapchuk & Pashchenko, 2021; Zoska et al., 2020.

chenko, 2021; Neganova & Smelik, 2011; Zoska et al., 2020).

Thus, once established in the consumers minds, a brand deserves esteem, and differentiation, relevance and respect lead consumers to knowledge about the significance of this brand. That is, the development and conquest of the brand on the commodity market and the strengthening of its position among consumers forms a model of a two-dimensional space in which a scheme is built for evaluating the power of the brand and its status. Brand power corresponds to the vertical axis, and Status corresponds to the horizontal axis. New brands that have not yet formed will be located in the lower left sector with a low level of power and status. As the brand grows, it moves first to the upper left sector, where brands with undisclosed competitive growth potential are located and which, in the future, should become famous. To maximize the value of the brand in the product supply chain, the subjects of the economy agro-food sector move to the upper right sector, where the leading brands are located. When the brand begins to weaken, the first thing that decreases is the differentiation indicator, which leads to the loss of leading positions. The aging of the brand begins: the brand still holds positions of popularity, but with the loss of differentiation, the brand's ability to spread among consumers and market segments weakens. The weakest sector for a brand is fading, when the brand has no power and low status.

### Competitive Potential of Subjects of the Agro-food Sector of Ukraine

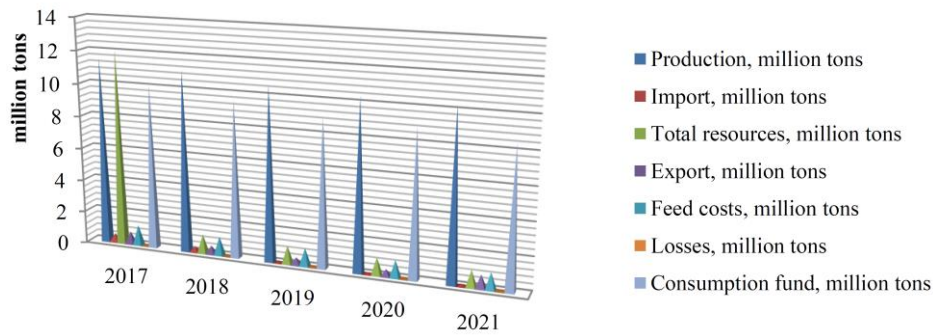
The competitive potential of subjects of the agri-food sector of Ukraine is approximately 19% of the country's GDP and is the main budget-forming sector of the national economy, the share of which in the country's budget is about 12%, and in the commodity structure of exports - a third (Krysanov & Varchenko, 2017; Shmahlii, 2017; The State Statistics Service of Ukraine, 2018). An important role in ensuring the food security of the state is played by the dairy complex, which includes enterprises of agricultural and industrial production. Currently, the topic of healthy nutrition is developing in society, according to which the demand is increasing and the transition from regular milk to vegetable milk is

gradually taking place. A modern market study shows that eco-brands are not widely popular, but the demand for them is gradually increasing (Hinrichs, 2003; Radko, 2018; Shoi-ko, 2017; Yatsiv, 2020). This direction specifically affects the industry and the competitiveness of Ukrainian dairy products on the world market.

There are up to 400 milk processing enterprises in the modern dairy market of Ukraine, of which 10-15 are the main players, the share of products of which reaches more than 30%. Dairy associations were formed not according to territorial principles, as was the case in Soviet times, but according to the principle of increasing the share of dairy production (Antoniuk et al., 2018). These are powerful dairy companies that aim to become the main players and be present in the entire trade network of Ukraine without exception. A characteristic feature of most of these companies is practically completed or complete reconstruction of the enterprises that are part of them.

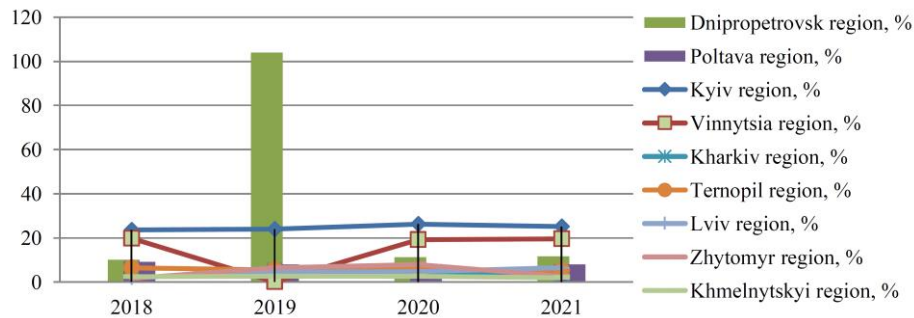
The dairy industry, which includes the butter-making, cheese-making, milk-canned sub-sectors, as well as the production of products from whole milk, is one of the leading branches of the agro-food sector of the state economy, which makes up 9% of the entire processing industry of Ukraine. The development of the milk processing industry directly depends on the state of dairy farming, the growth of which has significantly decreased in 2017-2021. (Figure 6).

Thus, during 2017-2021, milk production decreased by 10.5%. During this period, there was a tendency to reduce the imports volume, which amounted to only 76%. The general trend of the dairy industry production potential deterioration is caused by a decrease in the volume of dairy products by 14.2%. At the same time, milk exports increased by 8.6%, feed costs decreased by 17.3%. The total offer of dairy products consumption during this period decreased by 15.5%. The total volume of milk production in the regions of Ukraine was: in 2018 – 8.17 million tons, in 2019 – 8.07 million tons, in 2020 – 7.91 million tons, in 2021 – 9.8 million tons. In 2020, the best indicators of milk production were observed in Vinnytsia, Poltava and Dnipropetrovsk regions (Fig. 7).



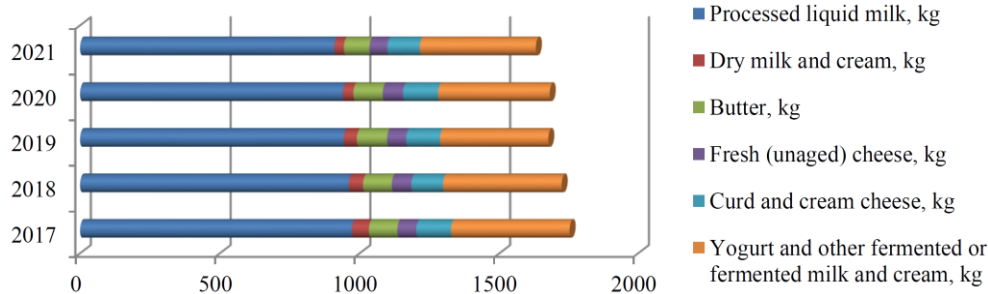
**Fig. (6).** Economic activity of the milk processing industry of Ukraine for 2017-2021, million tons.

Source: About AMS. Agricultural marketing service, 2021; From quantity to quality: analysis of the dairy market in Ukraine, 2021; Market of dairy products in Ukraine, 2021.



**Fig. (7).** Structure of dairy production in priority regions of Ukraine for 2018-2021, %.

Source: From quantity to quality: analysis of the dairy market in Ukraine, 2021; Market of dairy products in Ukraine, 2021; The State Statistics Service of Ukraine, 2018.



**Fig. (8).** Production volumes of dairy products in the industrial sector of Ukraine for 2017-2021, kg.

Source: From quantity to quality: analysis of the dairy market in Ukraine, 2021; Market of dairy products in Ukraine, 2021; The State Statistics Service of Ukraine, 2018.

The volume of dairy products production in the industrial sector of Ukraine in 2021 is gradually decreasing in the following categories: dry milk and cream (by 48.3%), butter (by 19.6%), fresh cheese (unripened by 14.3%). However, there was a tendency to increase the production of yogurt and other fermented products, fermented milk and cream - by 12% (Fig. 8).

Companies, which see milk production as a priority are constantly working on improving the business management system - they have appropriate profitability indicators, which creates opportunities for expansion. Other business entities simply leave the market, unable to withstand internal competition in terms of price and quality. Entrepreneurs who specialize in the production of milk must significantly increase the quality of their products by directly reconstructing the means of production (Kovalova, 2017). An effective tool for this

will be the creation of family farms, the consolidation of businesses, and their union into cooperatives. In this context, a government program to support farming and cooperation was created this year, which provides for the compensation of costs for equipment purchased by newly formed associations in the amount of 70% of its value. The Ministry of Agrarian Policy and Food of Ukraine has laid down UAH 1.35 billion in the general fund of the state budget for 2023 for the overall support of animal husbandry under government programs: the establishment of gardens, the "5-7-9%" lending program, the provision of partial compensation for the cost of construction and reconstruction of livestock farms and complexes, milking parlors, enterprises processing agricultural products (Nemtseva, 2022). In 2023, international aid will be used to support farmers.



After the loss of the Russian market, the main task for domestic processors became the diversification of sales markets, the discovery of new countries with a different consumption culture and business methods. Establishing new contacts takes considerable time, so this process will continue in the future (Osiejewicz, 2020). However, in the end, there are already positive developments in this direction. Countries such as Egypt, Bangladesh, Turkey, Malaysia, etc. have opened up for Ukrainian dairy products. Ukraine resumed the supply of dairy products to China and currently continues cooperation with the aim of increasing the volume of whey supply to this country (59% of its total exports) (Ukrainian whey is in world demand, 2022). In addition, some domestic milk processing enterprises received Euro numbers and confirmed that their products meet European standards, and this positively affects the image of Ukrainian goods on the world stage.

The assessment of the dairy industry global brands proves that they are developing under the influence of innovation and intelligence, as this allows dairy companies to increase their "share of the consumer's wallet" by 7.0 times. Accordingly, the economic expediency of such influence increases the significance of the brand by 10% and makes it possible to increase the price premium by 10.4% (Global trends 2030, 2012; Top 20 world milk processors, 2018; Volkova et al., 2013). In the table 4 presents the Top-20 global dairy companies that have a stable level of competitive potential in the agri-food sector of the country's economy and on the market.

**Table 4. Top 20 Global Dairy Companies.**

The Company Name	Country of Head Office	Cash Flow, Million EUR
Nestle	Switzerland	24.2
Lactalis	France	19.9
Danone	France	17.6
Dairy Farmer of America	USA	14.7
Fonterra	New Zealand	13.7
Friesland Campina	Netherlands	13.6
Arla Foods	Denmark/Sweden	11.7
Saputo	Canada	10.8
Yili	China	9.9
Mengniu	China	8.8
Dean Foods	USA	7.5
Unilever	Netherlands	7.0
DMR	Germany	6.5
Kraft Heinz	USA	6.2
Meiji	Japan	5.8
Sodiaal	France	5.8
Savencia	France	5.5
Muller	Germany	5.1

Agropur	Canada	5.1
Schreiber Foods	USA	5.0

Source: Global trends 2030, 2012; Top 20 world milk processors, 2018

The industrial production of dairy products in Ukraine includes about 20 companies, which own 76% of the entire national market and produce more than 1.1 million tons of products per year. It is worth noting that dairy companies produce their products under 90 brands. These are the brands "Prostokvashino", "Ferma", "Halychyna", "Rud", "Molokiy", "Yagotynske for children", "Dobryana" and others. Manufacturers respond quickly to consumer preferences for premium brands, and for this annual brand portfolio capacity is reviewed to expand the line of cheap brands and save money for consumers. At the same time, the Ukrainian dairy market is developing and has leaders: dairy company No. 1 (TM Yagotynske), LLC Danon Ukraine (TM Prostokvashino) and LLC Wimm Bill Dunn (TM Slavyanochka), whose share is 30 % on the market (Table 5). Almost every company has several categories in its portfolio - milk, kefir, sour cream, butter, yogurts and desserts, cheese products with various additives, and others. The Top-8 main leaders of the dairy products market have been determined (Table 5).

**Table 5. Top 8 Companies on the Market of Milk and Dairy Products of Ukraine in 2021.**

Dairy Company	Income, million EUR	Market Share, %
MC No. 1 (TM "Ferma")	172-175	12.4
MC No. 2 (TM "Prostokvashino")	121-125	8.8
MC No. 3 "Milk Alliance"	105-108	7.7
MC No. 4 (TM "Selyanske")	95-98	6.9
MC No. 5 (TM "Rud")	72-75	5.3
MC No. 6 (TM "Halychyna")	65-69	4.8
MC No. 7 (TM "Como")	62-66	4.6
MC No. 8 (TM "Molokiy")	59-62	4.1

Source: From quantity to quality: analysis of the dairy market in Ukraine, 2021; Market of dairy products in Ukraine, 2021; The State Statistics Service of Ukraine, 2018.

#### All these Companies use the Following Positioning Strategies:

1. Positioning according to product features. A number of companies position their products as made from natural raw materials without preservatives and using the latest technologies.
2. Positioning by quality indicator.
3. Price positioning.
4. Positioning according to cultural symbols.
5. Positioning on the positive properties of technologies.

The competitiveness of the branding of the subjects of the agro-industrial economy sector of Ukraine for 2017-2021 opened the borders of long-term trade with EU countries, and now stimulates investment activity for modernization of the dairy products and their quality production technology.

### Competitive Potential of Subjects of the Dairy Processing Industry

A key feature of the competitive positioning of the brand of dairy products of subjects of the agro-food economy sector is the study of consumers wishes and needs (Makeieva et al., 2021). Therefore, it is necessary to study the competitive potential of subjects of the milk processing industry according to the degree of attractiveness on the market and the state of branding development, since the demand for these products increases every year. The study was conducted using the McKinsey matrix, which is based on a combination of two criteria - market attractiveness indicators and indicators of the competitive potential of agro-food market entities. Their

final assessment is determined by multiplying the weighting factor of a certain indicator by its rating on a 10-point scale. The assessment is summarized within each criterion and thus the overall assessment by factor is derived (Multi-factor portfolio matrix “McKinsey”, 2021).

The general assessment of the market attractiveness and the competitive potential of dairy companies on the market of Ukraine (MC No. 1 TM “Ferma”, MC No. 4 TM “Selyanske”, MC No. 5 TM “Rud”, MC No. 8 TM “Molokiya”) is presented in Table 6.

The McKinsey matrix was constructed (Fig. 9), where in the upper left part of the matrix (the first zone), at the intersection of market attractiveness assessment (8.64 points) and competitive potential (9.28 points) in accordance with existing competitors, there is a dairy company MC No. 1 TM “Ferma”. The position of MC No. 1 means that the company operates in a promising market and has powerful opportunities to promote the brand of dairy products.

**Table 6. Assessment of Market Attractiveness and Competitive Potential of Dairy Companies on the Ukrainian Market.**

Attractiveness of the Market	Weighting Factor	Rank	Q	Competitive Potential	Weighting Factor	Rank	Q
Dairy company No. 1 TM “Ferma” on the Ukraine market							
Market size national production export/import balance	0.16	10	1.60	Product quality	0.20	10	2.00
Growth ratemarket	0.18	10	1.80	Absolute market share	0.14	10	1.40
Return on assets	0.17	8	1.36	Relative market share	0.08	10	0.80
Level of competition	0.16	10	1.60	The attractivenessof the range	0.14	10	1.40
Sensitivity to inflation	0.12	6	0.72	Effectiveness of sales channels	0.08	8	0.64
Presence and availabil-ity of material and technical resources	0.03	8	0.24	Effectiveness of advertising activities	0.08	8	0.64
				Market risk	0.17	6	1.02
Social environment	0.03	4	0.12	Financial resources	0.08	10	0.80
				Production capabilities	0.08	8	0.64
Total score	1.00	64	8.64	Total score	1.00	82	9.28
Dairy company No. 2 TM “Molokiya” on the Ukraine market							
Market size national production export/import balance	0.12	6	0.72	Product quality	0.20	6	1.20
Growth ratemarket	0.14	4	0.56	Absolute marketshare	0.08	8	0.64
Return on assets	0.12	4	0.48	Relative market share	0.05	8	0.40
Level of competition	0.18	6	1.08	The attractivenessof the range	0.14	6	0.84
Sensitivity to inflation	0.18	6	1.08	Effectiveness of sales channels	0.04	6	0.24
Presence and availabil-ity of material and technical resources	0.05	4	0.2	Effectiveness of advertising activities	0.04	5	0.20
Social environment	0.03	4	0.12	Price sensitivity	0.17	6	1.02
				Financial resources	0.14	8	1.12
				Productioncapabilities	0.14	5	0.70
Total score	1.00	39	5.14	Total score	1,00	58	6.36

Dairy company No. 3 TM “Selyanske” on the Ukraine market							
Market size national production export/import balance	0.14	6	0.84	Product quality	0.20	8	1.60
Growth rate market	0.16	10	1.60	Absolute market share	0.20	8	1.60
Return on assets	0.14	8	1.12	Relative marketshare	0.06	10	0.60
Level of competition	0.16	6	0.9	The attractiveness of the range	0.12	8	0.96
Sensitivity to inflation	0.12	8	0.96	Effectiveness of sales channels	0.07	6	0.42
Presence and availability of material and technical resources	0.12	8	0.96	Effectiveness of advertising activities	0.07	8	0.56
				Market risk	0.12	8	0.96
Social environment	0.02	6	0.18	Financial resources	0.13	8	1.04
				Production capabilities	0.13	6	0.78
Total score	1.00	60	7.64	Total score	1.00	70	7.72
Dairy company No. 3 TM “Milk Alliance”							
Market size national production export/import balance	0.14	8	1.12	Product quality	0.20	8	1.60
Growth rate market	0.16	10	1.60	Absolute market share	0.14	10	1.40
Return on assets	0.14	10	1.40	Relative marketshare	0.08	10	0.80
Level of competition	0.16	8	1.28	The attractiveness of the range	0.12	8	0.96
Sensitivity to inflation	0.14	6	0.96	Effectiveness of sales channels	0.08	10	0.80
Presence and availability of material and technical resources	0.05	8	0.4	Effectiveness of advertising activities	0.08	10	0.80
				Market risk	0.14	8	1.12
Social environment	0.05	4	0.12	Financial resources	0.08	10	0.80
				Production capabilities	0.08	8	0.64
Total score	1.00	62	8.16	Total score	1.00	82	8.92
Dairy company No. 5 TM “Rud” on the Ukraine market							
Market size national production export/import balance	0.12	6	0.72	Product quality	0.20	8	1.60
Growth rate market	0.12	6	0.72	Absolute marketshare	0.12	8	0.96
Return on assets	0.14	6	0.84	Relative market share	0.08	10	0.80
Level of competition	0.16	8	1.28	The attractiveness of the range	0.10	8	0.80
Sensitivity to inflation	0.16	7	1.12	Effectiveness of sales channels	0.06	8	0.48
Presence and availability of material and technical resources	0.10	6	0.60	Effectiveness of advertising activities	0.08	8	0.48
				Market risk	0.17	6	1.02
Social environment	0.04	4	0.16	Financial resources	0.09	8	0.72
				Production capabilities	0.10	10	1.00
Total score	1.00	49	6.40	Total score	1.00	74	7.86

Source: calculated by the authors.

		Competitive potential of dairy companies			
			High 6.67-10.00	Average 3.33-6.66	Low 0.0-3.34
Attractiveness of the market	High 6.67-10.00	MC No 1 TM “Ferma”MC No 4 “Selyanske”			
	Average 3.33-6.66	MC No 5 “Rud”	MC No 2 “Molokiya”		
	Low 0.0-3.34				

Fig. (9). Matrix of market attractiveness and competitiveness “McKinsey” dairy companies.

Source: calculated by the authors.

In the first zone are MC No. 3 “Milk Alliance” (7.64 points and 7.72 points) and MC No. 4 “Selyanske” (8.16 points and 8.92 points). These companies are encouraged to maintain competitive advantages, make investments and expand branding. In the second zone is MC No. 5 “Rud” (6.4 points and 7.86 points). This company, with an average level of competitive potential and an average level of market attractiveness, is recommended to develop a branding strategy through: investing in the most profitable segments, increasing income by saving on the scale of production. In the second strategic zone is also MC No. 8 “Molokiya” (5.14 points and 6.36 points), which is offered a strategy of selective development of branding: finding ways to obtain competitive advantages, investing in those segments where profitability is high and risk is low.

The evaluation of the agro-food economy sector of Ukraine dairy companies positions based on the formed portfolio of dairy product brands on the consumer market makes it possible to substantiate the market (marketing) scoring to identify the possibilities of producers in promoting brands.

**Market Scoring of Dairy Companies of Ukraine According to the Market Score Index**

The calculation of the composite index Market Score (scoring index of the company’s market opportunities (power)) is based on 10 indicators. These indicators show the market share of subjects of the agro-food sector of the economy, their place in the market and dynamic growth, comparing with competitors of the selected industry. The limit of this index can vary from 1 to 4, with a combination of economic indicators (where 1 is the minimum market opportunity, and 4 is the maximum) (Brand capital management model, 2021).

$$\text{Market Score} = B_i \times F_i \quad (1)$$

where,

$B_i$  – score obtained by the company according to a criterion that has limitations:

$$1 \geq B_i \leq 4 ;$$

$F_i$  – factor weight

$B_i$ , that has limitations:  $0 \geq F_i \leq 1, \geq F_i = 1$ .

The Market Score index of the investigated dairy companies of Ukraine for 2017-2021 is presented in Figure 10.

Thus, the scoring index of market opportunities and capacity of dairy companies on a four-point scale in 2021 is as follows: MC No. 5 “Rud” - A:3.7, MC No. 4 “Selyanske” - A:3.8, MC No. 8 “Molokiya” - A:3.8, MC No. 1 “Ferma” - D:1.1. This shows that the three dairy companies of Ukraine have the conditions for the qualitative development of branding, which ensures a high level of competitive potential with maximum market power and opportunities.

**Dairy Companies of Ukraine in War Conditions**

Among the entire agricultural sector of Ukraine, the dairy products export in 2020/21 accounted for approximately 0.8%. Exports were established to 107 markets. The main importers were Europe (41.8%), the countries of the Eurasian Economic Union (EAEU) (17.4%), Asia (14.8%) and the Middle East (10.9%) (K. Kapustina, 2022).

From February 24, 2022, the dairy companies of the agro-food sector of Ukraine faced anew challenge in their activities - military escalation by the Russian Federation into Ukraine. In the first months of the war, the market opportunities and capacities of dairy companies in Ukraine were significantly reduced, and the name branding “Ukrainian food company” suffered losses.

Dairy farms of different size, which found themselves in the zone of active hostilities and occupation after February 24, faced a number of problems:

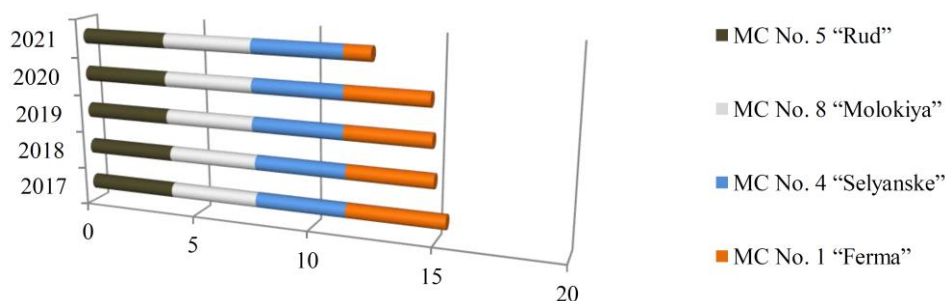
- Destruction of farm infrastructure and death of animals
- Threat to workers’ lives
- Lack of fodder and forced changes in rations
- Shortage of veterinary drugs and disinfectants
- Diseases of large and small cattle
- Logistical problems of supply, processing and sale
- Loss of dairy products produced in the occupied territories and in the war zone
- Mined lands and crop rotation adjustments

During the first months of the full-scale Russian invasion of Ukraine, dairy farms and milk processing enterprises were forced to completely or partially stop their work in some places. However, the dairy industry was able to quickly re-

**Table 7. Market Scoring of Ukraine Dairy Companies According to the Market Score Index.**

Indicator (2017/2021)	MC No5 “Rud”	MC No 8 “Molokiya”	MC No 4 “Selyanske”	MC No 1 “Ferma”
Share in the sector, %	0.14/0.12	0.09/0.10	0.15/0.18	0.27/0.00
Market share, %	3.67/3.20	2.42/2.71	3.98/4.97	7.06/0.00
Submarket share, %	3.84/3.44	2.54/2.91	4.16/5.34	7.39/0.00
The place of the company in the agro-food sector of the economy	97/102	159/131	87/62	49/32332
The company’s place in the market	5/5	11/8	4/4	1/368
The place of the company in the submarket	5/5	11/8	4/4	1/332
Absolute increase in net income, million EUR(+; –)	245.1/13.1	304.6/76.4	436.7/520.5	-289.9/-245.4
Relative increase in net income, %	16.0/0.6	35.1/4.2	29.3/17.8	-7.8/-100.0
Absolute average annual increase in net income, million EUR (+; –)	257.5/147.3	199.0/234.5	274.7/505.4	716.6/1139.2
Cumulative average annual growth rate(CAGR) of net income, %	21.0/7.7	26.8/17.0	20.5/21.4	39.2/-100.0
Market Score Index	A:3.8 / A:3.7	A:3.8 / A:3.8	A:3.8 / A:3.8	A:3.5 / D:1.1

Source: calculated by authors.

**Fig. (10).** Market Score index of dairy companies of Ukraine for 2017-2021.

cover and continue its activities compared to other agricultural industries.

In March 2022, the Government included all types of dairy products in the list of critical goods. Experience has shown that despite the war in Ukraine, Ukrainian producers and processors of milk can independently satisfy people’s need for such products on the domestic market. According to the experts of the Union of Dairy Enterprises of Ukraine, they do not correspond to “critically imported goods” concept essence, as they are produced in sufficient quantities by Ukrainian producers. Already at the beginning of May, milk and dairy products (except cheese and baby food products) were excluded from that list. The Combine is confident that the dairy industry is capable of providing domestic demand and exports at the same time. On the part of the EU, a high level of trust in products from Ukraine remained. This is confirmed by the fact that even during the war three new dairy enterprises were included in the list of exporters of food products to EU member states. After all, according to the Committee on Agrarian and Land Policy of the Verkhovna Rada, the total export of Ukrainian dairy products in April 2022 amounted to 5.6 thousand tons, which is only 21% less than in April 2021.

Taking into account the data regarding the export of dairy products, it can be confidently stated that the rebranding “Ukrainian food” not only survived and quickly adapted to new realities, but also proved itself to be able to withstand even a war, which will have only positive consequences.

However, logistical issues remain the main problem for exporters. Deputy Head of the State Production and Consumer Service O. Shevchenko noted that as of today, enterprises have the right to transit their products to third countries through the EU, which is currently carried out in two ways. The first is in containers that are sealed and certified accordingly by inspectors of the State Production and Consumer Service for third countries. The second way includes the reloading procedure, which is complicated by certification, since certificates issued in Ukraine for third countries after reloading do not contain up-to-date information about new vehicles. Work is currently underway to organize transshipments at warehouses in Poland. (DERZHPROD-SPOZYVSLUZHBA, 2022).

Considering the situation that occurred after February 24 this year, dairy companies of the agro-food sector of Ukraine expect a list of problems, the solution of which can only be predicted, in particular:

- Ukrainian dairy companies need support both domestically and internationally, in particular from non-governmental institutions.
- The dairy business will focus on solving its most priority-specific problems, which were mentioned above, which will lead to a freeze in the promotion of brands on the foreign market.
- Prolongation or postponement of the production facilities modernization and the global transition to high international dairy standards, which would help Ukrainian agro-industrial complex to integrate more quickly in the international market.
- The cost of milk production will increase due to a number of military factors, which will mean an increase in prices for milk-containing products.
- A reduction in domestic demand due to a decrease in the purchasing power of Ukrainians caused by the economic crisis associated with Russian aggression.
- Milk and dairy products should become one of the food security guarantees vectors for Ukraine and the world, and therefore communities and the state should increase purchases of domestic dairy products. Using the rhetoric of “productivity despite the war” in the development of a branding model of the competitive potential of dairy companies in the consumer market not only of Ukraine, but also in the world will give the subjects of the agro-food sector of Ukraine advantages in the sales markets.

## CONCLUSIONS

Thus, an important direction of supporting the development of the competitive potential of dairy companies branding model in the consumer market of Ukraine is the leader brand promotion strategy formation, which in turn is based on the creation of competitive advantages (the need for a large amount of investment in the development of the brand; investing capital in the marketing activities of these sub entities of the agro-food economy sector in order to preserve their market share and absorb competition). At the same time, effective marketing communications play vital role in the development of the brand portfolio, consequently ensuring the maximum approximation of the brand individuality to its image under certain market conditions. Note that communication is the voice of the brand through which consumers form an opinion about it; brand promotion strategy is a synthesis of integrated marketing communications in accordance with the competitive positioning and marketing strategy of the brand.

That is, integrated brand communications should be based on all components of the communication complex of brands, which are interconnected by elements (price, quality, cost, resource potential (technology, technological, finance, information, personnel), competitiveness of communication relations (with suppliers, investors, consumers, contact objects), the competitiveness of the branding management system (management mechanism, management stage, the ability to form and use opportunities, predict the rhythm and respond in a timely manner to changes in the external and in-

ternal marketing environment) in the structure of agro-pro dairy companies - sufficient sectors of the economy of Ukraine, where each of them is integrated with other tools of marketing and the market environment of the company and is reinforced by them.

It should be noted that brand promotion directly depends on determining the right marketing strategy, which will have a positive impact on the target audience. The key goal of our proposed branding model of the competitive potential of subjects of the agro-food economy sector is to create additional values for consumers and achieve the goal of competitive positioning. That is, the evaluation of the dairy products value as a brand provides the ability to develop a competitive positioning of the portfolio of brands. To do this, it is necessary to apply a strategy of deep penetration into the consumer market and a strategy of market development, which in turn are oriented towards increasing the sale of products for existing consumers, attracting new consumers in existing sales markets and intensive distribution of products to new sales markets.

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