

DEVELOPMENT OF INTEGRATION PROCESSES OF THE DAIRY SUBCOMPLEX OF UKRAINE IN THE CONTEXT OF GLOBALIZATION OF THE WORLD ECONOMY

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Abstract. The article analyzes the current state of the world market of milk and dairy products. It was found that trade in dairy products is developing faster than its production. The rating of producing countries and Ukraine's place in the foreign market are determined. In the process of analysis of world consumption, the potential of dairy products in the domestic market was determined.

The most noticeable modern structural trend in the production of livestock products, including dairy, is the growing importance of intensive vertically integrated formations located near large cities. Thus, from horizontal integration (cooperation and consolidation of production, sales and other opportunities), large companies are increasingly moving to vertical integration, which involves the diversification of their activities in relation to basic production. In addition, the world leaders in the dairy industry are increasingly seeking to merge.

It is revealed that the food supply system at the global level is undergoing large-scale changes. In this regard, the process of integration of the Ukrainian dairy subcomplex into the world system is possible both through the creation of Ukrainian transnational corporations (TNCs) and through the entry into the Ukrainian economy of foreign TNCs. It is studied that on a number of grounds, Ukraine belongs to those countries in which some conditions for civilized business have already been created, but a stable national socio-economic system of modern technological structure has not yet been formed. Such countries are of particular interest for foreign direct investment, as they have the necessary infrastructure, skilled workers and other established factors necessary for the functioning of TNCs. The combination of created and natural factors brings double benefits to TNCs.

Research has shown that TNCs in the context of globalization are the driving force of many key processes in the world and national economies. Acting as a basic player in the process of international competition, they compete with each other, as well as small and medium-sized businesses, transform the institutional environment, structure and boundaries of the national consumer market, form new consumer standards.

Foreign multinational corporations are ready to operate in Ukraine, but are hampered by factors such as unstable and excessive regulation, lack of a sustainable strategy and appropriate national action plan in Ukraine, imperfect national legislation, unclear legal system, instability of economic and political situation, high level of corruption in all spheres of economic activity and inability of the judiciary to perform its functions properly, critical situation in the sphere of independence of the judiciary, low effective demand of Ukrainian consumers, difficulties in communicating with government and privatization bodies, regulatory overload and complexity of the tax system tax burden. Crisis processes are increasingly deteriorating Ukraine's position in the world economy in the medium term.

Keywords: dairy products, integration, market, transnational corporations, production, consumption, world economy, perspective, development, globalization.

JEL Classification: E02, F50, O10

Formulas: 0; **fig.:** 6; **tabl.:** 1; **bibl.:** 4

Introduction. In the conditions of intensive development of processes of globalization of economy the main task of agrarian and industrial complex is the decision of one of global problems of the present - a food problem, that is satisfaction of growing needs of the population in foodstuff. In fact, the threat to the food security of the country arises when the integrated aspect of the agro-industrial complex begins to be ignored, namely when the interests of all major areas of agriculture are not taken into account in the processes related to food production and circulation. Abuse in recent years by buyers and suppliers of machinery and materials of their monopoly position in the food market in relation to agricultural producers, their discriminatory prices and conditions of purchase and sale of goods have led to a sharp decline in agricultural production, deteriorating financial condition of agricultural producers.

This, in turn, has had a negative impact on suppliers who have lost significant markets and buyers, in particular on processing plants, which, without receiving sufficient raw materials, are forced to work underutilized and lose potential markets.

Literature review. Foreign and domestic economists have made a significant contribution to the development of the theory and practice of integration processes of economic entities: M. Adelman, G. Bakker, P. Gohan, G. Dinz, S. Seisel, L. Roy, F. Krueger, D. Helmink, M. Hendon, V. Andriychuk, P. Borshchevsky, L. Deineko, A. Zainchkovsky, P. Sabluk, Y. Lupenko, M. Pugachev, O. Kovalenko, M. Sychevsky, O. Shpychak.

Aims. The aim of the article is to study the prospects for the development of integration processes of the dairy subcomplex of Ukraine in the context of globalization processes.

Methods. The following research methods were used to solve the tasks: systematic and logical approach, which allowed to generalize scientific concepts, developments and proposals of leading domestic and foreign scientists on the problem of agro-industrial integration and integration processes in the milk product subcomplex; graphical analysis - for visual display of empirical data; systematic and comprehensive analysis in the generalization and evaluation of factual materials; abstract-logical analysis to identify promising areas of integration processes in the context of food and energy security of the state; calculation-constructive and economic-mathematical methods - to substantiate the strategic directions of development of the dairy industry.

Results. Globalization processes are a comprehensive and extremely powerful phenomenon, so the question of the place of the nation-state in the modern global environment is extremely important [1].

The results of the analysis of significant scientific achievements of domestic experts prove that globalization and integration are closely interrelated, as both processes are forms of internationalization of economic, political and cultural life of society. Globalization is considered by researchers as a stage of internationalization widely, and integration as a result of its development - deep [2].

Dairy products are also the most supported export goods, which in different periods accounted for from one third to more than half of total world export subsidies. At the same time, it should be noted that the current situation on the world

dairy market is recognized as so favorable that for the first time in 40 years of the EU's common agricultural policy, the European Commission suspended export subsidies on these products from July 1, 2007. The growing demand for milk powder in recent years, especially in Asia and North Africa, has led to its rise in price on the world market and provoked a rapid increase in relevant exports from the European Union. This, in turn, led to a shortage of dairy products (and rising prices for them) in European countries, which could not fully prevent them and the abolition of export subsidies.

World milk production has grown steadily over the past decades, adding an average of 2% annually. Already in 2015, it reached 800 million tons, according to the OECD-FAO Agricultural Outlook 2016-2025 [3]. The largest producers are the EU, India and the United States, which all three produce half of the world's milk. China produces only 5% and shares 4th and 5th place with Pakistan.

Prior to 2018, Ukraine was in the top ten largest producer countries with a volume of 10.6 million tons and had a share of 1.3% in world production.

According to statistics, Ukraine, producing 10 million tons of milk in 2018, ranked 18th in the ranking of producer countries, in the 90-s, Ukraine ranked 6th (Fig. 1 and Fig. 2.). As of 2020, Ukraine ranks 22-nd in the ranking.

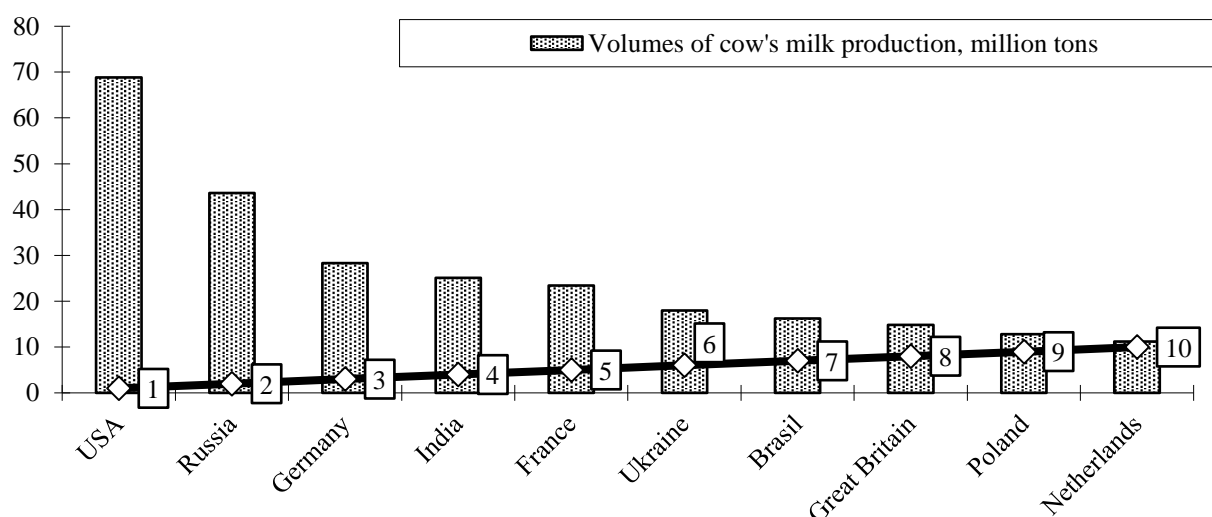


Figure 1. Ranking of cow's milk producers in the period 1991-1995

Source: OECD-FAO Agricultural Outlook 2016-2025

The production of skimmed milk powder in the world in 2019 was 5.4 million tons. Interestingly, the production of this product has recently grown at the fastest rate among other dairy products - an average of 5% per year during 2015-2019. Top 5 producers - the EU (34%), USA (23%), New Zealand (12 %), Australia (5%) and India (5%). The highest growth was observed in the EU and India (on average 9% per year during 2010-2015). Ukraine, according to OECD-FAO Agricultural Outlook 2016-2025, ranks 8th among the largest producers of SPM and has a share of 2.5% in world production, but domestic statistics, unfortunately, do not confirm this. According to the statistics of the State Statistics Committee, it is impossible to

separate skim milk from whole milk powder, and their total volume in 2019 was 64 thousand tons.

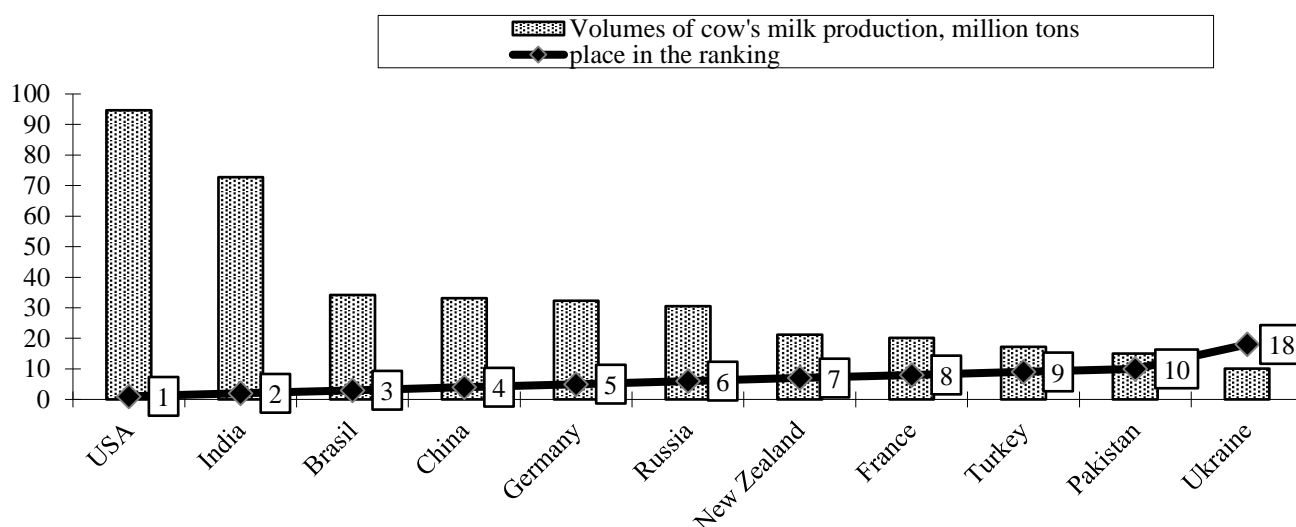


Figure 2. Ranking of countries producing cow's milk in the period 2013-2018

Source: OECD-FAO Agricultural Outlook 2016-2025

World production of whole milk powder amounted to 6.2 million tons in 2019. Leaders - New Zealand (34%), the EU (19%), Brazil (14%), Mexico and Argentina (7% each). Ukraine, according to OECD-FAO Agricultural Outlook 2016-2025, ranks 17th in the world with a share of 0.3%.

The largest cheese exporters in the world - the EU, the US and New Zealand - together accounted for 56% of all sales in 2019. Ukraine entered the top 10.

New Zealand is the sole leader in butter exports, accounting for more than half of global sales of this product. Ukraine's share was 1%, and ranks sixth in terms of supplies in the world. The EU, the US and New Zealand account for 75% of skimmed milk powder exports. For this product, demand on the world market has grown at the fastest pace in recent years, adding an average of 7% per year. Ukraine also significantly increased supplies, rising to sixth place in the top exporters (table 1).

According to the global forecast, today's largest international milk-exporting regions are expected to be able to increase supplies by only 36 million tons by 2040, with a demand of 45 million tons. That is, the projected deficit of milk will be 9 million tons. It is these global needs of the world dairy market that can provide Ukraine with a much higher level of export capacity, and give Ukrainian producers the opportunity to increase exports.

According to IFCN analysts [4], about 70% of the 1,282 million tons of milk produced in the world will go to processing, which will increase by 388 million tons. On average, its annual growth will be 2.6%. At the same time, by 2024, 83% of milk will be consumed at the place of its production, although supplies to foreign markets will increase by 17%. At the same time, world consumption of dairy products by 2040 will increase by 20% and will be about 140 kg per capita.

Table 1. Ukraine's place in the foreign market, 2019

Top exporters of butter			
Countries	Export volume, thousand tons	World share (%)	CAGR (Compound Annual Growth Rate) (%)
New Zealand	410	45	2,1
EU	151	14,3	2,5
Australia	45,3	6,1	-5,4
USA	43	3,2	-14,2
Ukraine	14,6	1	42,1
Argentina	10	1	-13,9
India	9	1	-3,2
Mexico	7,2	1	32,1
Saudi Arabia	6	1	9,0
Top cheese exporters			
EU	824	31	2,6
USA	315	13	12,7
New Zealand	303	12	1,7
Australia	159	6	-1,5
Saudi Arabia	119	4	-13
Egypt	114	5	-9,4
Argentina	73	3	3,2
Iran	52	2	14,2
Turkey	38	2	10
Ukraine	11	0,4	-2,8
Top exporters of skimmed milk powder			
EU	676	31	12,4
USA	545	25	7,3
New Zealand	449	20	0,8
Australia	186	8	8,2
Malaysia	51	2	50,5
Ukraine	34	2	19,9
Uruguay	28	1	19,8
Argentina	26	1	12,3
India	15	1	-3,3
Canada	14	1	7,0
Top exporters of whole milk powder			
New Zealand	1363	55	8,6
EU	386	16	-2,8
Argentina	131	5	-8,6
Australia	69	3	-5,3
Uruguay	62	3	0,3
Brazil	30	1	42,4
Saudi Arabia	26	1	-3,3
Malaysia	22	1	10,6
USA	20	1	14,9
Chile	14	1	9,6
Ukraine (17)	2	0,3	-16,5

Source: OECD-FAO Agricultural Outlook 2016-2025

In the context of globalization, each subsequent model of world development must become more perfect and adapted to the new conditions formed as a result of transformational changes in society, the modernization of its obsolete elements with

the establishment of new structural interconnections. At the same time, an important condition for social development is the implementation of the main criterion - stability, which is ensured by the modernization of public administration systems.

Although the volume of milk consumption per capita in Ukraine lags behind physiologically justified standards, and even more so, the level of developed countries, national dietary characteristics suggest that the domestic market of milk and dairy products is quite saturated. This gives grounds to predict a slow growth in demand in the future in most market segments, mainly under the influence of increasing incomes, expanding the range of products. In terms of consumption of dairy products, Ukraine is not among the ten largest consumers in any of them in terms of volume, but a comparison of consumption per capita can show the potential of certain products in the domestic market (Fig. 3-5).

For example, the consumption of factory-made cheeses has significant growth potential when looking at the performance of developed countries in Europe and America. Butter also has potential, but much less, as Ukraine already has a fairly high rate.

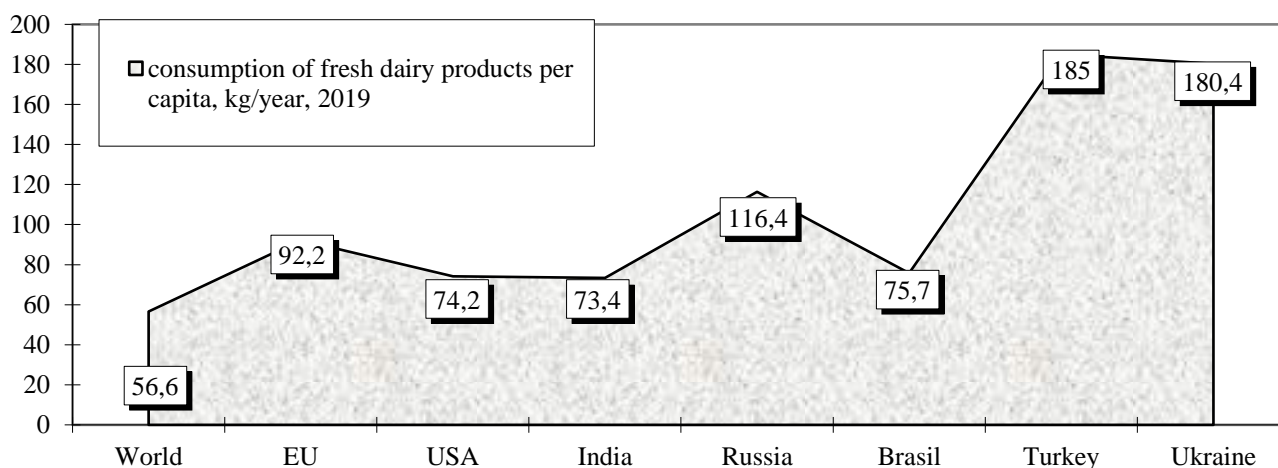


Figure 3. Consumption of fresh dairy products per capita, kg/year, 2019

Source: develop by author

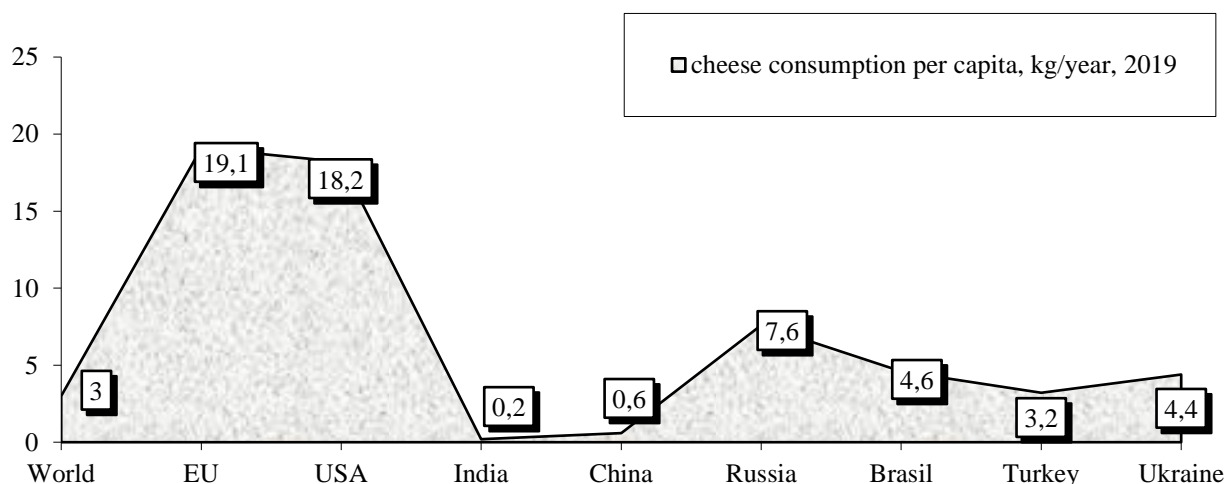


Figure 4. Cheese consumption per capita, kg/year, 2019

Source: develop by author

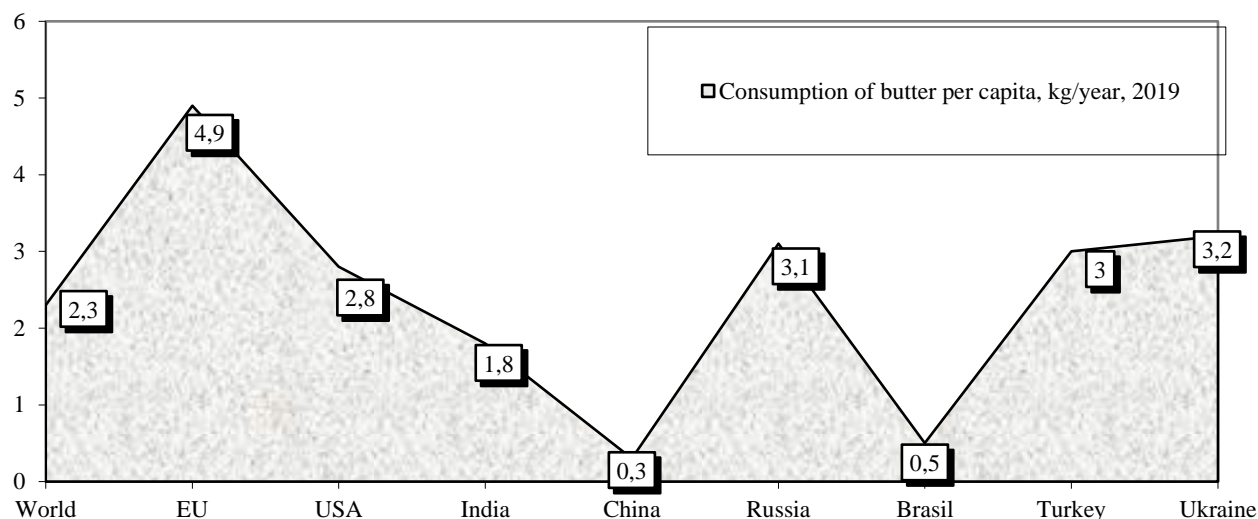


Figure 5. Consumption of butter per capita, kg/year, 2019

Source: develop by author

It should be noted the constant fluctuations of the Dairy Price Index, which according to the FAO as of January 2021 increased by 0.9% due to high demand for imports of butter, cheese and skimmed milk powder (Fig. 6). The index was calculated on the basis of 8 price quotations for 4 groups of dairy products (butter, cheese, skimmed milk powder and whole milk powder in two representative markets. prices for dairy products were determined in proportion to the average share of groups in total exports for 2014-2016.

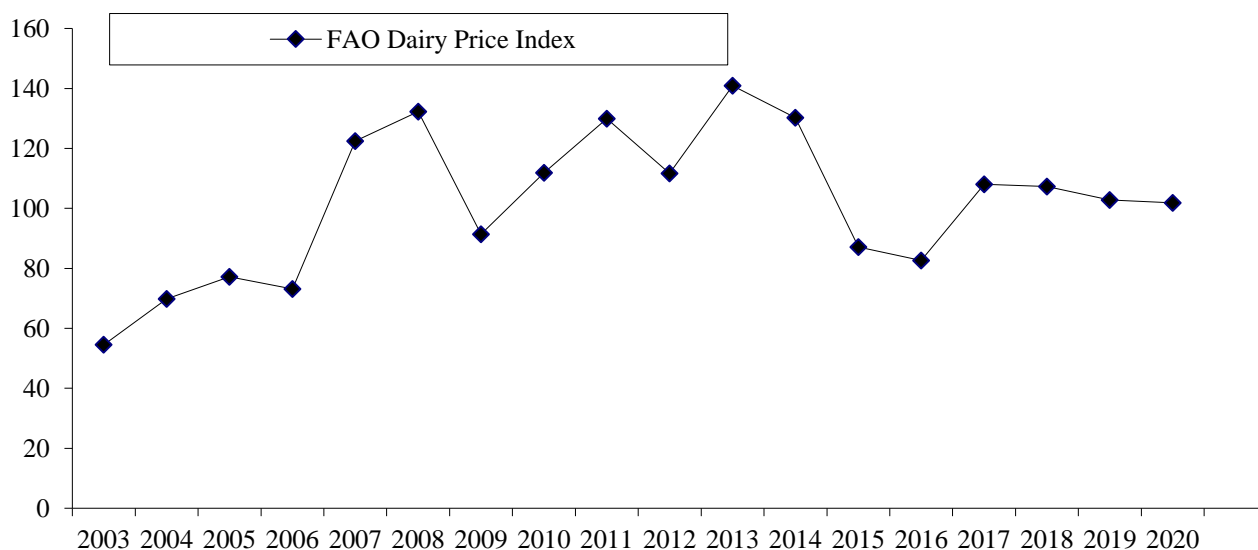


Figure 6. FAO Dairy Price Index 2003-2020

Source: develop by author

The food security system at the global level is currently undergoing changes, including:

- the capacity of the world market expands by simultaneous deterioration of resource formation conditions (instability of production and imbalance of markets);
- reduced stability of markets;
- globalization of the food industry and new rules of world trade increase competition in the market, promote expansion of application of regulatory measures;
- priority in the formation of world resources remains with export-oriented countries;
- deteriorating world market conditions and rising prices provoke a food crisis in import-oriented countries;
- a number of countries (developing and transition economies) are becoming net importers of food with limited opportunities for export procurement;
- in the agricultural market, the focus on innovative production development, multifunctionality of agriculture and product quality is growing.

The dominant type of food systems at the global level has become high-tech transnational food production and distribution chains, which include vertically integrated producers of goods, processing plants, supermarkets and catering companies.

Conditions for the emergence of such systems arose as a result of: 1) the opening of domestic markets for international food trade and foreign direct investment; 2) expanding the influence of multinational food companies on the world market. As a result of these changes, the concentration of corporate business is increasing, and control over food production is increasingly passing into the hands of multinational agri-food and retail companies.

Theoretically, the process of integration of the Ukrainian dairy subcomplex into the world system is possible both through the creation of Ukrainian TNCs and through the arrival of foreign TNCs in the Ukrainian economy.

In practice, the transnationalization of Ukraine's agro-industrial complex follows the second scenario. When studying TNCs from the standpoint of the host party, it is important to keep in mind that the consequences of foreign investment depend on the stage of socio-economic development of the recipient country. According to the World Bank classification, Ukraine belongs to the group of emerging market countries, which necessitates additional study of the specifics of the presence of non-residents' capital. In any case, the universality of the causal link: «foreign TNCs - foreign investment - national development» requires significant clarification.

Our study focuses on the processes of transnationalization of the dairy subcomplex of Ukraine in the context of the presence of foreign TNCs. This choice of topics is due to the lack of study of international integration of capital at the meso level, the significant diversity and features of food subcomplexes, among which, it is the dairy sector that focuses on the collision of national and transnational capital in agriculture.

This is due to the fact that the dairy subcomplex differs: the severity of the conflict of interests of dairy farming and the dairy industry; the affiliation of dairy

farming to the "particularly sensitive industry", which is of particular importance in the context of rural development; high social significance of the final product - milk and dairy products; the biggest, in relation to other large subcomplexes of agro-industrial complex, problem of development, especially at the expense of lag of dairy cattle breeding; difficulties in achieving government-defined food safety parameters for milk and dairy products; intensification of transnationalization processes in this subcomplex.

To develop an effective policy in this area requires a comprehensive analysis and evaluation of the process of transnationalization of agriculture, including milk product subcomplex of the country. This approach allows us to look at the applied tasks of development of a particular segment of the agro-industrial complex of Ukraine through the prism of global processes of capital internationalization.

In the context of financial globalization, the main goal of the largest TNCs in the real sector is not so much the production of material goods and profit from their sale, as the growth of the value of the company's shares on international stock exchanges.

As mentioned above, according to the classification of a number of international organizations, Ukraine is part of countries with emerging markets. The emergence of this rather vague term is primarily due to the needs of financial analysts (including the World Bank Group), who are studying the possibilities of the most effective international investment by multinational companies and financial institutions in the economies of developing countries. Grouping countries according to the degree of market formation helps global investors to choose a country and a way to use capital that will maximize profits while minimizing risks.

On a number of grounds, Ukraine is one of those countries in which some conditions for civilized business have already been created, but a stable national socio-economic system of modern technological structure has not yet been formed. Such countries are of particular interest for foreign direct investment, as they have the necessary infrastructure, skilled workers and other established factors necessary for the functioning of TNCs. The combination of created and natural factors brings double benefits to TNCs.

Discussion. The study of existing theories of TNCs allowed to generalize the motives for the movement of foreign direct investment, which underlie the strategies of companies. These include:

1. Continuing the life cycle of goods created in the donor country, expanding sales. At the stage of standardization of goods and saturation of the domestic market of its country of origin, in order to prolong the life of the product, production through foreign direct investment is transferred to developing countries, where goods are exported to other countries (including the country where the product was previously created) .

2. Achieving savings through economies of scale. The increase in production on an international scale is carried out by TNCs in search of reducing production costs per unit of output by saving on fixed costs. By placing foreign direct investment around the world, TNCs seek to reduce prices, change the structure of markets in the direction of oligopoly and monopoly.

3. The presence of three determinants: the desire to extend the company's advantages to foreign markets; establish market control in more than one country; reduce market risks through commodity and geographical diversification. All risks from foreign investments are offset by increased return on investment.

4. Search for effective geographical location and effects of internationalization of innovations within one company. Creation of a managed internal corporate internal market, which uses transfer prices, internal corporate loans and other instruments, the value of which differs from the level of the external (external) market.

5. Combination of three factors: competitive advantages of ownership over competitors in the host country (O); local factors that give benefits to the company's activities (L); advantages of internalization of the company (I). OLI-advantages determine the choice of company strategies, the breadth of which largely depends on the scale of the company. Incentives for TNC investments are: the desire to gain access to natural resources, the desire to enter new markets, the restructuring of existing foreign industries through the rationalization of created assets.

6. Achieving competitive advantages of companies, the main determinants of which are: corporate strategy, structure, level of competition; state of factors of production (supply); state of demand; as well as government monetary, fiscal, trade, currency, FDI policy and risk minimization factor. Geographically dispersed divisions of companies are "looking" for components of their competitive advantage in other countries.

Conclusions. Currently, the countries of the world are covered by transnational food chains, which include all technological stages of creating a finished food product: from agricultural production to the final consumer. The internal contradiction of this chain is that the core of creating the consumer value of food is agriculture, and the bulk of profits are formed in subsequent sectors of the chain (processing, wholesale and retail trade, catering).

Due to the uneven economic development of countries, the distribution of resources and capital, some fragments of the international agri-food chain have a special interstate distribution. Agriculture, in fact, is concentrated mainly in the bosom of national economies, while all other links, with the help of PPI, can be transferred to areas with local advantages in terms of foreign TNCs.

Leading TNCs operating in the first and third spheres of the agro-industrial complex (in the production and marketing chain above and below agriculture) have parent companies exclusively in developed countries. In the host countries, TNCs carry out production on the basis of: purchase of agricultural land, long-term land lease. The most widespread form of contractual relations with farmers without the share of the latter in capital.

Agriculture is much less involved in the process of financial globalization than other related industries. TNCs in manufacturing and trade, as a rule, have passed the IPO (Initial Public Offering) and are listed on world stock exchanges, have access to cheap international loans, in their assets a large share of the intangible component. National agriculture, in turn, is tied to the productive process of creating real goods

and, as a rule, lacks financial resources, it is no coincidence that agriculture is, in the terminology of the World Trade Organization, a "particularly sensitive" industry.

Unlike related industries, it has a limited market character. This is due primarily to the high natural and climatic dependence in the reproduction of living organisms, multifunctionality, limited opportunities to intensify production, concentration and centralization of capital in relation to other sectors of the economy, the inertia of production. These features are combined with the high social significance of products that ensure food security of the country, low price elasticity of demand. This fully applies to the milk food subcomplex, the basis of which is dairy farming. Moreover, this industry has an increased "sensitivity" associated with longer than in other subsectors of animal husbandry, payback periods of investment, which leads to even greater inertia of response to market signals.

During the global financial crisis, against the background of a significant decline in global foreign direct investment flows, it is developing countries and emerging markets that have become the center of gravity of more than half of total foreign direct investment. The factor of intensification of the investment process in the agro-industrial complex is the presence of actively growing economies with large populations, such as China, India, Brazil, the Republic of Korea, where along with economic success remains the problem of food security.

Potential investors are not only developed countries, but also those developing countries, where high effective demand for food is combined with severe restrictions on agricultural land and a shortage of fresh water (especially Arab countries).

In the world for all types of milk and dairy products there is an excess of effective demand over supply, which is a factor in the growth of world prices for these products against the background of their high fluctuations. The predominance of the growing price trend is a positive signal for international investment in dairy subcomplexes of emerging markets, unsatisfied demand and favorable conditions for the successful operation of enterprises in the dairy industry and dairy farming.

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