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ASYMMETRY OF THE DEVELOPMENT OF THE WORLD AGRICULTURAL MARKET

Abstract. It was determined that urgent in the 21st century the problem of food security remains quite due to the dynamic of global and trade-integration processes, causing contradictions and asymmetries of economic development. These processes are rather ambiguous because they exert varying effects on countries, depending on the level of their economic development. Such imbalances have led to asymmetries in the development of the World market for agricultural products. It was noted that asymmetries in the agrarian market are a clear manifestation of imbalances in the World economy, which have arisen due to differences in the levels of economic development and the potential of individual regions and countries.

The purpose of the work was to reveal the key characteristics and manifestations of the asymmetric development of the World market for agro-food products and to justify the mechanisms for achieving equilibrium. The purpose of the scientific research is to substantiate the impact of asymmetries on the World economic system, to determine their role in the development of the World agro-food market, their characteristics, to study the structure of the global market.

The following methods of scientific research were used to achieve the goal and to solve the tasks of the article: system-structural analysis of economic processes and phenomena, method of quantitative and qualitative comparisons, tabular method of calculating the degree of influence. A review of the scientific literature was also conducted; the statistical reports and programs of development of global international institutions were analyzed; approaches to leveling the negative impact of asymmetries in the development of the agrarian market were determined.

The scientific novelty of the obtained results is to study the World agro-food system, to identify and to structure the main asymmetries of development, the determinants of their deepening, to substantiate the directions of their overcoming.

It is substantiated that among the main mechanisms of overcoming the asymmetric development of agro-food market the most effective one is the activity of international organizations, mainly concentrating on the development and implementation of local and global projects and programs. In order to overcome the threats and risks arising from the asymmetric

development of the agri-food markets, it is advisable to create international initiatives to support the agricultural sectors and agricultural enterprises of various organizational and legal forms. An effective mechanism to counterbalance the negative impact of asymmetries is to reduce the inequalities in the economic development of individual regions and countries through the implementation of development programs.

Keywords: world agro-food system, agro-food market, asymmetries, world economy, globalization, international trade.

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АСИМЕТРІЇ РОЗВИТКУ СВІТОВОГО АГРОПРОДОВОЛЬЧОГО РИНКУ

Анотація. Визначено, що проблема продовольчої безпеки залишається доволі актуальною у XXI столітті внаслідок динамізації глобальних і торговельно-інтеграційних процесів, зумовлюючи виникнення протиріч і асиметрій економічного розвитку. Ці процеси мають досить неоднозначний характер, адже здійснюють різний вплив на країни залежно від рівня їхнього економічного розвитку. Такі дисбаланси призвели до виникнення асиметрій розвитку світового ринку агропродовольчої продукції. Означено, що асиметрії на аграрному ринку є яскравим проявом дисбалансів у світовій економіці, які виникли внаслідок відмінностей у рівнях економічного розвитку і потенціалу окремих регіонів і країн.

Метою роботи є розкриття ключових характерних ознак і проявів асиметричного розвитку світового ринку агропродовольчої продукції та обґрунтування механізмів досягнення рівноваги. Завдання наукового дослідження — обґрунтування впливу асиметрій на світову економічну систему, визначення їхньої ролі у процесі розвитку світового агропродовольчого ринку, їхня характеристика, вивчення структури глобального ринку.

Для досягнення мети і розв'язання завдань були використані такі методи наукового дослідження: системно-структурний аналіз економічних процесів та явищ, метод кількісного та якісного порівнянь, табличний метод розрахунку ступеня впливу. Також проведено огляд наукової літератури; проаналізовано статистичні звіти і програми розвитку глобальних

міжнародних інституцій; визначено підходи до нівелювання негативного впливу асиметрій розвитку аграрного ринку.

Наукова новизна одержаних результатів полягає в дослідженні світової агропродовольчої системи, виявленні та структуризації основних асиметрій розвитку, детермінант їхнього поглиблення, обґрунтуванні напрямів їх подолання.

Обґрунтовано, що серед основних механізмів подолання асиметричності розвитку агропродовольчого ринку найбільш ефективною є діяльність міжнародних організацій шляхом розроблення і реалізації локальних і глобальних проектів і програм. Для подолання загроз і ризиків, які виникають унаслідок асиметричності розвитку агропродовольчих ринків, доцільним є створення міжнародних ініціатив підтримки галузей сільського господарства, аграрних підприємств різних організаційно-правових форм. Ефективним механізмом нівелювання негативного впливу асиметрій є зменшення нерівності в економічному розвитку окремих регіонів і країн за допомогою реалізації програм їхнього розвитку.

Ключові слова: світова агропродовольча система, агропродовольчий ринок, асиметрії, світова економіка, глобалізація, міжнародна торгівля.

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АСИММЕТРИИ РАЗВИТИЯ МИРОВОГО АГРОПРОДОВОЛЬСТВЕННОГО РЫНКА

Аннотация. Определено, что проблема продовольственной безопасности остается достаточно актуальной в XXI веке вследствии динамизации глобальных и торгово-интеграционных процессов, вызывая возникновение противоречий и асимметрий экономического развития. Целью работы является раскрытие ключевых отличительных признаков и проявлений асимметричного развития мирового рынка агропродовольственной продукции и обоснование механизмов достижения равновесия. Задачей научного исследования является обоснование влияния асимметрий на мировую экономическую систему, определение их роли в процессе развития мирового агропродовольственного рынка, их характеристика, изучение структуры глобального рынка. Научная новизна исследования заключается в исследовании мировой агропродовольственной системы, выявлении и структуризации основных асимметрий развития, детерминант их углубления, обосновании

направлений их преодоления. Обосновано, что среди основных механизмов преодоления асимметричности развития агропродовольственного рынка наиболее эффективна деятельность международных организаций, путем разработки и реализации локальных и глобальных проектов и программ. Для преодоления угроз и рисков, возникающих вследствие асимметричности развития агропродовольственных рынков, целесообразным является создание международных инициатив поддержки отраслей сельского хозяйства, аграрных предприятий различных организационно-правовых форм. Эффективным механизмом нивелирования негативного влияния асимметрий является уменьшение неравенства в экономическом развитии отдельных регионов и стран посредством реализации программ их развития.

Ключевые слова: мировая агропродовольственная система, агропродовольственный рынок, асимметрии, мировая экономика, глобализация, международная торговля.

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Introduction. Modern dynamization of globalization and trade-integration processes is rather ambiguous, because it exerts different influence on countries, depending on the level of their economic development, as well as on different sectors of the economy. One of the most important sectors of material production is the agri-food sector. The agri-food market is quite actively developing and is changing under the influence of global trends. Such processes stimulate the emergence of certain asymmetries both within the individual markets and the World system as a whole. Since development itself is a rather contradictory process, the emergence of symmetries and asymmetries within the global economy is its objective characteristics, and overcoming them is one of the defining goals of the society.

Analysis of research and problem statement. Among scientific works investigating the essence and conjuncture of the World commodity markets, it is necessary to mention the research of such scientists as P. Krugman, V. Nordhaus, M. Porter, A. Strickland, E. Helpman, R. Coase, A. Thompson, A. Filipenko, V. Kopiyka, N. Reznikova, D. Lukyanenko, A. Lieutenant, V. Chuzhikov, T. Tsygankova, O. Shvydanenko, L. Antonyuk, Y. Makogon, O. Sokhatska and others. The uneven nature of the development of the World economy and the emergence of its asymmetries were investigated by G. Anilionis, H. Gjorg, Y. Stolarchuk, A. Galchinsky, A. Kobylianska, S. Sidenko, V. Geyets, etc. Kwash, T. Zinchuk, V. Andriychuk, S. Demyanenko, V. Vlasov, O. Yatsenko, Y. Lupenko, T. Ostashko, and others. Due to the strengthening globalization processes and the dynamic development of the World agro-food market, the study and analysis of current trends, processes and asymmetries is quite relevant in order to justify the mechanisms of leveling their negative impact.

Unsolved aspect of the problem is to substantiate the impact of asymmetries on the World economic system, to determine their role in the development of the World agro-food market, their characteristics, to study the structure of the global market.

The purpose of the article. The purpose of the work is to reveal the key characteristics and manifestations of the asymmetric development of the World market of agro-food products and to justify the mechanisms for achieving equilibrium.

Research results. Regionalization of the World economy makes it possible to determine the level and the pace of the development of the region. Such processes are observed both at the general macroeconomic level and within specific areas or in individual markets. Considering the regional asymmetry of the World agri-food market, it is necessary to pay attention, first of all, to different volumes of production of agro-food products in different regions of the World (Table 1). Although many countries are trying to reduce exports of raw materials and resource-intense products, the share of exports of agri-food is still significant in some regions [1]. These are, first and foremost, the countries of Africa and South America [2; 3]. World agri-food production World declined during 2013—2015, especially due to the respective processes in regions such as Europe, Asia and Africa. First of all, this is due to the strengthening of the position of South American countries in the World agro-food market.

Table 1

Volumes of production of agro-food products by regions of the World during 2014—2016

Region	2014	2015	2016	
	billion dollars USA	billion dollars USA	billion dollars USA	Change to 2014,%
World	4165,5	3846,5	4389,5	5,1
Africa	316,4	261,3	221,1	-43,1
America	910,1	818,8	1379,1	34,0
Asia	2259,2	2217,3	2259,4	0,1
Europe	613,9	498,2	480,1	-27,9
Oceania	65,7	50,8	49,8	-31,9

Source: compiled and calculated by the authors on the basis of [3].

During 2014—2016, the largest production volumes of agri-food products were observed in Asian countries. Production volumes in Asia are much higher than in other regions due to favorable climatic and economic conditions, as well as to much greater demand for agri-food. A large number of the population in the Asian region needs a large amount of agri-food, which is why 60% of World agricultural output is concentrated there. The second place is occupied by the American region, it strengthened its positions in 2016. During 2015—2016 the countries of the American region increased their production volumes by 68.4%, and in 2016 produced 31% of the total volume of agricultural food in the World. Increasing production of agricultural products in Latin America is accompanied by an increase in their share in the World market. Latin America has long been associated with the production and export of a wide range of agricultural products, be it coffee from Brazil and Colombia, beef from Argentina or bananas from Ecuador. Trade data shows that the region is indeed an important net exporter of agricultural commodities in the World, accounting for about 16% of World food and agricultural exports, with Latin America accounting for only 4% of global food and agricultural imports [4]. According to the aggregate export statistics, the region is a leading supplier World of a rather large list of goods to the World market. Countries in the European region reduced agricultural output in 2013—2016 and in 2016 produced 11% of all commodities in the World economy. According to experts, in future the position of the leading exporter of agri-food products will be transferred from the countries of Western and Central Europe to the countries of Eastern Europe [1].

Considering the asymmetry in the production of agro-food products by the regions of the World, it should be noted that the production of crop products, as well as of all agro-food products, was concentrated in Asia during 2012—2016, the second place belonged to the countries of America. Asian countries produced, on average, 60% of all crops in the World during 2012—2016 [2]. First of all, this is due to the high level of demand for crop production in these countries, and intra-regional trade is much more developed than with other countries in the World. The first place was occupied by American countries World regarding the production of livestock products in the World in 2016, despite the fact that during 2012—2015 Asian countries remained firmly in the leading position. Since 2012, the US region has increased its livestock production almost twice — the share in World production has increased by 18.8%. Instead, Asian countries are more stable in manufacturing products in the sector — changes in volumes are quite small, but the share has decreased due to the capacity building in the Americas. Countries in other regions have also reduced their share in the World livestock production, especially the European Region, which share reduced by 7%. The countries of Africa and Oceania are not very active in this sector of the economy, which results in relatively low production volumes and a reduction in the share of global livestock production. Thus, it can be argued that the major changes are the strengthening of the position of the countries of the American region and the contraction in the countries of Asia and Europe.

There are alo asymmetries in the development of the agri-food market from the side of exports and imports of agri-food products to different regions of the World. It is worth noting that the region with the highest production volumes is not the main exporter of this group of goods in the World, due to the high level of domestic demand inside the region [4—6]. Thus, the Asian region World occupied only the third place in World agro-food exports in 2014—2016, while the

European region, which reduced production and was only the third after the American and Asian regions, is the main exporter of agro-food products in the World (Fig. 1). Such European positions are driven by substantial trade in finished goods, since imported raw materials are converted into higher value-added products, thus, generating additional income from their export in ready-to-use form.

The Asian region ranks second after Europe in the import of agricultural products in the World. Such positions are caused by the trade in agri-food products within the Asian region, due to the high level of demand for and consumption of this group of goods. As exports, import volumes are declining in all regions, with only a slight increase in Europe in 2016 (Fig. 2). In 2016 imports also increased slightly in Oceania.

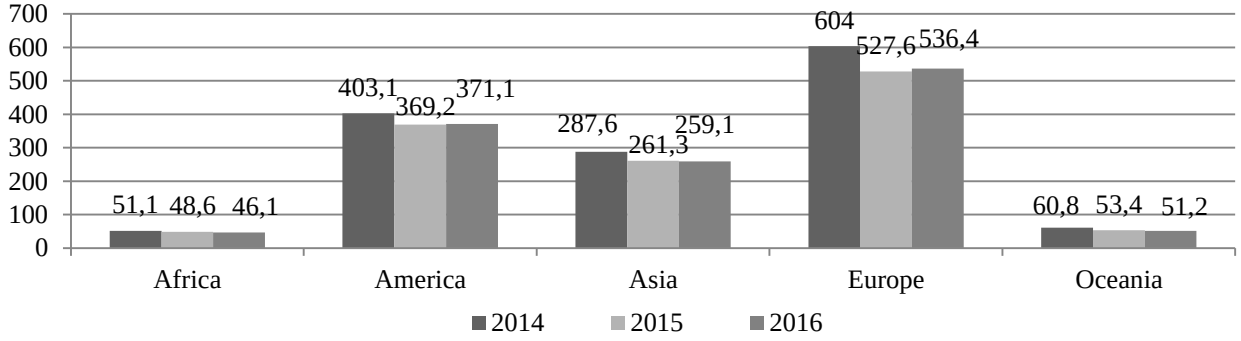

Fig. 1. Dynamics of agri-food exports by regions of the World in 2014—2016, billion USD
Source: compiled by the authors on the basis of [4].

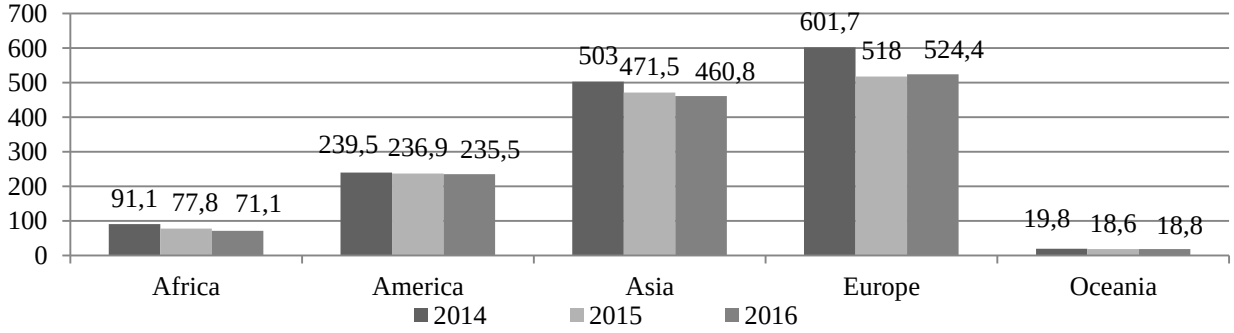

Fig. 2. Dynamics of agri-food imports by regions of the World in 2014—2016, billion USD
Source: compiled by the authors on the basis of [4].

Given the major changes that have taken place in the US, Asian and European regions, one can consider the dynamics in the sub-regions. The dominance of the Americas is worth noting. The next region, which is the leader in World agro-food production, is Asia. Despite the decline in agri-food exports during 2014—2016, the region remains one of the most powerful in the sector. The subregion, which exports the largest volume of agricultural products, is the aggregate of Southeast Asian countries - their share in the Asian region's exports was 43% in 2016. The European Region can be considered as a major exporter and importer of agri-food in the World during 2014—2016. The largest volumes of exports in Europe are attributed to Western Europe, followed by Southern Europe. The main importers of agro-food products from Europe are the countries of the Western and Northern sub-regions.

Today's global economy is characterized by differentiation of countries of different levels of economic development and their subsequent grouping. According to FAO, asymmetries in agri-food consumption can be traced through the analysis of groups such as developing and developed countries. Considering the consumption of agro-food in developed countries, it is worth noting the increase in the consumption rate of kcal per day by one person — according to FAO forecasts, the increase will continue in the future.

The development of the World agri-food market is quite dynamic, so the emergence of certain asymmetries that are shaped by the increasing globalization processes is natural. Global risks and threats cause global problems in social development. Given the very essence, the problem is not a negative element; it simply appears as a phenomenon in the development process. This phenomenon causes contradictions, misunderstandings, results of previous mistakes and irrational decisions. Existing global problems of social development include the lack of effective mechanisms for the progressive development of mankind and the impossibility of preventing imbalances in demographic, economic, social and administrative processes leading to conflicts and wars [7]. Asymmetries can be seen from the emergence of problems and threats that result from imbalances in the global economy. The manifestations of imbalances and asymmetries in the global agrarian market are pronounced due to a number of problems in this sector of the World economy.

Experts say that one of the biggest threats to the future is the asymmetry in production of and demand for agri-food products (Fig. 3). Despite growing production, demand for food is outstripping production. As a result, the malnourished population reaches almost one billion people and this number declines too slowly. FAO estimates that the World's population will increase and reach 8.2 billion by 2030. The population inequality in the World is worth noting, which further complicates World processes and exacerbates existing and new threats. FAO experts also emphasize the intensification of the agri-food shortage in the future, as even increased production will not be able to meet the growing demand of the population. Thus, it is projected that grain production will grow by about 20% in 2030, and will amount to 2,149—2,150 million tons, while the necessary volume will be 2,675 million tons. The similar situation is with meat products - with it will be produced only 230-260 million tonnes in total while the required volume will be 300 million tonnes. According to experts, seafood production will not increase significantly, but will remain at 100 million tonnes, but demand for it will reach 168 million tonnes, indicating a food shortage in future [7—9].

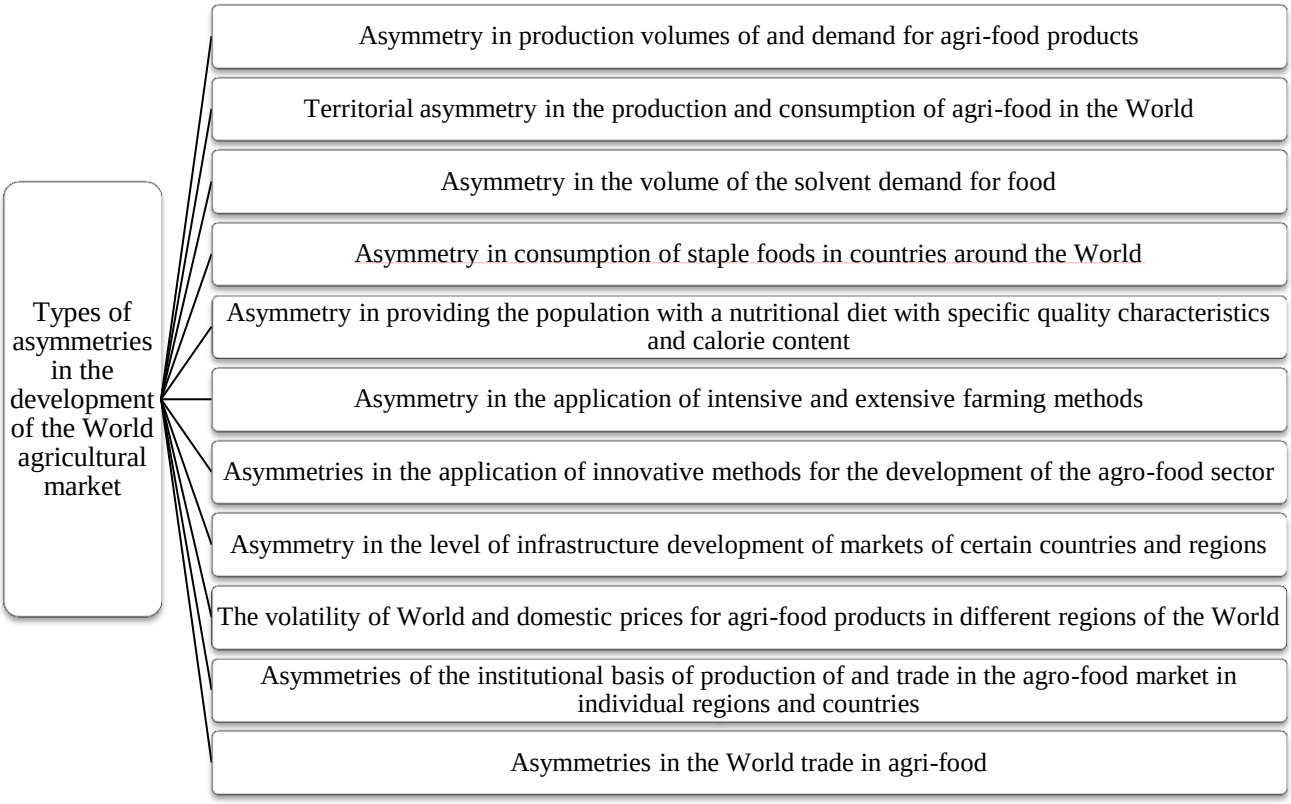

Fig. 3. Asymmetries of development of the World market for agro-food products
Source: compiled and supplemented by authors on the basis of [7—11].

The next asymmetry is the imbalance in the territorial concentration of World producers and consumers of agri-food products. The level of market stability is diminished due to the decrease in stocks of certain countries, which can be compensated by fluctuations in the market. The gap in consumption between certain groups of countries is widening, despite the overall increase in consumption in the World. In developed countries, consumption is approaching to standard levels, and its structure and quality are improving. In developing countries, the availability of food products is more important than their quality. In developing countries, food supply is increasing, but consumption is 6-10% lower than the level reached in the early 1980s of the XX century. Even in the long run, nutrition standards will remain unattainable for a billion people. Positive trends in the problem under the study include the increase in agricultural production in the World [2; 12]. There are certain trends that accompany such imbalances: the need for food in the developed World will remain the same, but will be given higher quality and higher security; the positions of World food exporting leaders will be taken by the US, Australia and New Zealand as opposed to the EU countries which are currently leading exporters; the leading importers of agri-food products will be the countries of Eastern Europe and East Asia, thereby increasing the influence of leading exporters on the agri-food market [2; 8].

Asymmetries in the volume of solvent demand arise, first of all, because of the different level of economic development of the countries of the World. In contrast to the least developed and developing countries, economically developed countries have high standards of living, a sufficiently high level of wages, and a high level of incomes, as a consequence, it is possible to purchase good quality food at affordable prices. Within the state, effective demand also depends on such indicators as GDP per capita and nominal income. Considering the World market, it is worth noting a significant gap between the incomes of population of developed and developing countries, as a result, there is a big difference in the levels of solvent demand of the population in these groups of countries [4; 8].

Another asymmetry in the World agro-food system is the differences in the quality characteristics and caloric intake of population consumption in different regions of the World. Such an imbalance is caused not only by the different level of economic development of the countries, the solvency of the population, but also by the established habits, traditions, characteristics and mentality of the population. The Food and Agriculture Organization of the United Nations stipulates that the recommended standards for humans are the amounts of calories and energy consumed by a person obtained from food of plant and animal origin per day. Thus, every day a man should receive about 2,700 kcal, a woman should receive 2,100 kcal, but not less than 2,000 kcal/day. With regard to the consumption of food of animal and vegetable origin, the share of energy from food of plant origin is recommended to constitute 84.3%, while that of food of animal origin — 15.7% [9].

There are different ways of doing business in different regions of the World, leading to asymmetries in the use of intensive and extensive methods. Asymmetries consisting in the fact that by actively introducing and using intensive methods, developed countries increase agricultural production, thereby increasing exports and share in the World market. Meanwhile, developing and least developed countries are using predominantly extensive methods, which results in depletion of resources and low productivity in agriculture. Although these countries are largely agrarian, their share in global agri-food production is negligible and the population is experiencing a food shortage.

It is worth noting that there is such very important manifestation as asymmetry in the use of innovative technologies in the agro-industrial sector. The importance of using the latest technologies in agriculture is the ability to take advantage of biotechnology, to increase yields, to reduce damage from diseases and pests, to reduce the use of pesticides and herbicides, leveling negative anthropogenic impact on the soil. Production of foods with a fixed content of bark changes the environment through the use of the latest technology.

Another important asymmetry is the differences in the institutional base of production and trade in the agri-food market in individual regions and countries, which foresees institutional risk caused by unexpected changes in regulations affecting the activities of agri-food producers. Changes in regulations can have a significant impact on the profitability of agricultural activities [9].

Another significant asymmetry is the volatility of World and national prices, which are treated as input and output ones in Western literature [10]. The volatility of input and output prices is an important source of market risk in agriculture. Agricultural commodity prices are extremely volatile. Changes in product prices are influenced by endogenous and exogenous factors. In local markets, price risk is sometimes mitigated by the effect of «natural hedging», meaning that an increase (decrease) in annual production tends to lead to a decrease (increase) in the prices of production (though not necessarily farmers' incomes). In integrated markets, price reductions do not generally correlate with local supply conditions, and, therefore, price shocks can affect manufacturers more significantly.

Another type of market risk arises as a result of asymmetries in the levels of market infrastructure development, including the delivery of products to the end consumer. The inability to deliver products to a specific market at the right time can weaken the efforts of manufacturers. Lack of infrastructure and well-developed and organized markets adversely affect the availability and quality of food in many developing countries [10; 11].

Reducing the impact of asymmetries on the global economic system is quite important and needs attention from both individual states and international organizations and institutions. Thus, the common methods of reducing threats and risks of the asymmetric development of the global agri-food market are joint concerted actions of governments of countries and international organizations and institutions. As a result, key agri-food support programs can be identified that can be mitigated by the asymmetry of global development. An important element in overcoming threats is financial support from international institutions and a focus on the particular problems of certain countries. Thus, the World Bank Group approaches to addressing global problems, including the agri-food sector, are noteworthy (Table 2).

Table 2

Key areas of World Bank Group support for the agri-food sector in the Global economy

Direction	**Features of the program**
Improve food security and create agri-food systems that provide access to food for everyone, anywhere, anytime	Collaboration of the World Bank Group with partners from different countries to create agro-food systems capable of providing food security, promoting healthy food ideas and improving food safety and quality
Prudent management of agriculture (CSA)	A comprehensive approach to managing landscapes, farmland, livestock, forestry and fisheries to address the interrelated problems of food security and climate change. The program is aimed at increasing the productivity of production in agriculture, increasing resistance to external factors, reducing the level of environmental pollution.
Providing jobs in the agri-food sector	The program includes four multi-vector strategies aimed at providing access to higher quality and inclusive jobs in the agro-food system and agriculture. The main goals are investment, expansion and development of micro-entrepreneurship, small and medium-sized businesses, involvement of women and young people through skills development, vocational education, digital agriculture.
Agribusiness and production chains	Improving access of small businesses to the global agro-food market and incorporating value chains. Collaboration of the World Bank Group with governments to build road networks and to increase access to reliable power, water and information and communications technologies, infrastructure support to improve product delivery while minimizing losses.

Source: compiled by the authors on the basis of [13—17].

Support and development programs for agriculture and the agrarian market allow the development of countries with different economic potentials and opportunities, and, therefore, taking advantage of the benefits provided by the World Bank Group can reduce the impact of global asymmetries on individual countries and regions. An example of the World Bank's first direction in creating agro-food systems, in particular, was USD 6.8 billion in 2018 allocated for the development of agriculture. An example of the effectiveness of the CSA program is the changes in China's agriculture. Since 2014, a bank-supported project has helped to spread the idea of nature conservation and healthy eating. Water efficiency was increased by 44,000 hectares of agricultural land and the use of the latest technologies allowed to improve soil properties and to increase rice production by 12% and maize- by 9%. More than 29,000 farmers' cooperatives report high incomes and increased resilience to climate change. There have also been positive changes in Mexico, Uruguay, Morocco, Nigeria and Senegal [13].

15 years' experience of the World Bank with Latin American countries (21 projects, 10 countries, financing 1 billion USD since 2000) shows the possibility of increasing productivity in agriculture, trade and economic integration of markets, increasing the income of small farmers through mediation strong links between producers, consumers and the public sector. The average increase in net income of farmers in Colombia and Bolivia was about 30%, and the most productive cooperatives continued to exist long after the project was completed. The positive impact of the project was also felt in agriculture in Madagascar, Cameroon, Kenya and other underdeveloped countries [15; 16].

In addition to the World Bank Group programs, the implementation of the Global Fund for Securities (GAFSP), implemented by the World Bank Financial Guarantee Fund (FIF), is important for overcoming major threats and asymmetries. The GAFSP is a global partnership aimed at combating hunger, malnutrition and poverty, while supporting the stability and sustainability of agriculture in developing and least developed countries, favoring poor and vulnerable farmers. The program directs resources selectively to the areas where they are most needed and efficient, using a range of public and private investment instruments that broaden the agricultural financing horizon. With the GAFSP program and long-term investment in agriculture and food security, there has been significant progress in creating productive employment, generating income and reducing poverty in rural areas. The public sector supports projects that have already reached over 9.2 million people and would reach up to 12 million people by 2022, with an estimated 5.1 million people expected to be women. The public sector supports 48 projects in 31 countries, and the private sector supports 61 agribusiness investment projects in 27 countries, as well as 67 advisory projects in 27 countries [18]. GAFSP has helped empower millions of farmers, with more than 9.2 million people receiving direct support to improve their livelihoods as of the end of 2017. Private Sector Window GAFSP projects target more than 2.5 million farmers, most of them semi-small-scale farmers with less than 2 hectares. Funding for 1.5 billion USD has now been completed, of which 119 million USD were allocated in public sector and 260 million USD - in private sector.

Thus, the main international organizations that initiate the creation of mechanisms to counterbalance the impact of asymmetries on the World economic system are the World Bank Group, the WTO, the UN, the FAO, the OECD and others [19- 20]. In this context, it should be noted that Ukraine can, to some extent, contribute to overcoming global asymmetries and achieving a global economic equilibrium in the agri-food market [21].

Conclusions. The main asymmetries of the agro-food market development are determined: asymmetries in production volumes and demand for agro-food products; territorial asymmetry of agro-food production and consumption in the World; asymmetries in the volume of solvent demand for food; asymmetries in the consumption of staple foods by countries of the World; asymmetry in providing the population with a nutritional diet with quality characteristics and calorie content; asymmetry in the application of intensive and extensive farming practices; asymmetry in the application of innovative methods for the development of the agri-food sector; asymmetries in the

World trade in agri-food; asymmetries of the institutional basis of production and trade in the agro-food market in individual regions and countries; instability of World and domestic prices for agri-food products in different regions of the World; asymmetry in the levels of infrastructure development of the markets of certain countries and regions; asymmetries in the development of the global agri-food market (unevenness in the production, export and import of agri-food in different regions).

The main means of reducing the impact of asymmetries is the pooling of efforts at global, regional and national levels through the development and implementation of international projects and programs. Equally important is the harmonization of international standards and the development of World market infrastructure. However, to overcome the basic asymmetries, it is necessary to improve the economic situation in the least developed countries, since the uneven development of different regions is the basis for many dangers, imbalances and threats not only in the agro-food sector but also in the global economic system as a whole.

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