

**FORMATION OF ORGANIZATIONAL AND ECONOMIC MECHANISM
FOR REGULATION OF AGRICULTURAL MARKET**

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Abstract: *The article considers the essence and components of the organizational and economic mechanism for regulation of the agricultural market. The peculiarities of the functioning of the organizational and economic mechanism in agri-food production are formed. Structural and functional model of the organizational and economic mechanism for regulation of the agricultural market adapted to the conditions of uncertainty and risk, which involves a combination of instruments of market self-regulation and purposeful influence of state regulation levers, is proposed. Using the proposed model will allow optimally combine the components of the mechanism, which will increase the resistance of enterprises to negative factors, which in turn will provide an operational response to replace the risk conditions of the market environment, the balanced functioning and development of the agricultural market.*

The system of indicators of the efficiency evaluation of the organizational and economic mechanism's functioning for the agricultural market regulation is considered. The factors influencing the current state of the agricultural market, which is characterized by the growing dynamics of various segments' development and the commodity market volatility, are substantiated. The current state of agricultural production in Ukraine is considered, proposals on perspective directions of agricultural market stable development are substantiated.

Key words: *agricultural market, state of the market, state regulation, credit resources, price disparity, inflation, risk.*

JEL Classification: Q11, Q13, Q18

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Introduction

The modern agricultural market of Ukraine functions, as well as the country's economy as a whole, under very complex and ambiguous socio-economic conditions, moreover the military conflict in the east has led to the industrial vulnerability of the country's economic system. Current conditions for the development of the agri-food industry are characterized by imbalances in the interests of economic actors, high costs and resources, monopolistic pressure on the intermediary market, processing and trade, disparity between the stages of the reproduction process. At the same time, the process of adaptation of the agrarian sector to European conditions, which stems from the globalization and integration processes, is being carried out.

The functioning and further development of a balanced agricultural market requires the development of such a mechanism that would ensure the creation of prerequisites and conditions for highly efficient production and full satisfaction of the needs of the country's population in the products of the agrarian sector. In the context of growing crisis phenomena in the investigated industry and the volatility of the market environment, there is a need to develop an effective organizational and economic mechanism for the regulation of the agri-food market, which aims to ensure the effectiveness of state support for agricultural producers, which includes budget subsidies and loans, interventional commodity-finance measures, credit subsidies, customs clearance, pricing, etc. for increasing production of food products, reducing its value by improving the organizational principles of the agricultural market.

Analysis of recent researches and publications

The question of the formation and improvement of the organizational and economic mechanism for regulation of the agricultural system of Ukraine attracted the attention of a large number of economists. General aspects of construction of the organizational and economic mechanism for regulating the agro-industrial market were outlined in the works of such scholars as V. Besedina, A. Brivenko, M. Dergaliuk, T. Zinchuk, V. Geyecz, L. Mikhova, I. Knyazhenko, N. Runchcheva, O. Shubravskaia and others. Undoubtedly, their scientific works are important and serve as the basis for contemporary economic views on the problems of formation and development of a balanced agri-food market under conditions of uncertainty and risk. However, much of the issues related to the directions of the organizational and economic mechanism for regulating the agri-food market still require further research and improvement.

Paper's objective is to assess the state of the agricultural market and to justify the effective levers of the organizational and economic mechanism for its regulation, which will promote its balance under conditions of uncertainty and risk.

The main body of the academic paper

The basis for the formation and development of the agri-food market is agro-industrial production, which provides deliveries for the sale of agricultural raw materials and food. The structure of the agri-food market as a basic element of the food market is formed as a complex of specific markets by type of food delivered by the agrarian sector of the economy, in contrast to those which are present on the food market of chemical and biological synthesis products. The product range of the food market is the result of the integration of the subsystems of the agri-food market with the market of synthesized products (products derived from chemically synthesized nutrients, enhancers of flavors and aromas, biologically active additives, etc.).

We believe that organizational and economic mechanism of management in agri-food production should be considered as a way of organizing production, whose organic structure is determined by specific-branch relations, forms and methods of interaction, organizational structure, motives and incentives, regional conditions of development of agricultural production.

In essence, the organizational and economic mechanism for the regulation of the agri-food market is a system of organizational and economic relations, which includes a self-regulatory system of functioning and interaction of agricultural producers of various organizational and legal forms with other market agents, the economic relations between which are based on the equivalence of exchange at a rational level of state interference in markets.

An important aspect that forms an integrated approach to improving the organizational and economic mechanism of management is the allocation of two interrelated areas of influence on reproduction processes in the industry at all levels of its manifestation (macroeconomic, regional, sectoral and economic) – state and market regulation. At the same time, it is important to optimize the combination of regulatory functions of the state, which are manifested through the use of specific instruments of regulation and industry support, with the self-regulation of economic entities. The combination of self-regulation of the economic entities activities and the regulatory functions of the state determines the market character of the organizational and economic mechanism of management and its internal structure [1].

The emphasis in the proposed definition of the organizational and economic mechanism of management in agri-food production is made taking into account the uncertainty and the risk of its functioning, which is related to the objective nature of the relations that are reflected in this category and due to fact the points of view on the impact of environmental factors on processes of their functioning are dominated in the theory of economic mechanisms. According to some scholars, external conditions act as objective prerequisites for the formation of an economic mechanism for the management of agricultural enterprises [2].

Consequently, it is necessary to adapt all aspects of the industrial and managerial system of the industry to the risky business conditions that are inherent in a market economy. At the same time, it

must be borne in mind that the formation of an organizational and economic mechanism and its development occurs not only under the influence of conditions of the external environment, which is a source of uncertainty and as a result of systematic (objective) risk, but also under the influence of the internal environment of economic entities, in which a non-systematic (subjective) risk is formed.

A rational combination of elements of the organizational and economic mechanism for regulating the agri-food market is determined by the achievement of the main objective of its functioning – the ability of economic actors to counteract the negative effects of risk factors and adapt quickly to changes in the market environment.

The basic tasks of the organizational and economic mechanism for regulation of the agri-food market are the formation of the necessary prerequisites and conditions for achieving the organizational unity of economic entities (agricultural producers, processing, service and trade), improving the efficiency of functioning and sustainable development of the agri-food complex, improvement of the economic relations for the promotion of the economic agents interests both within the agri-food market and with the needs of society.

The organizational and economic mechanism of management in the agri-food industry includes the established system of goals, resource constraints and information provision, as well as economic efficiency indicators of evaluation. Its structure with regard to the industry can be represented as a set of norms of organizational, economic, legal and social character, which will promote the rational formation of economic relations of agricultural producers with other market participants and consumers in a risky market environment.

Summarizing the foregoing one can single out the features that are characteristic of the functioning of the organizational and economic mechanism as a whole in the agricultural sector and in the agri-food industry. This feature is due to the fact that this mechanism is formed and manifested at all levels of agrarian production: macroeconomic (state), mezzanine (regional and branch) and macro level (agricultural organizations, processing and food processing enterprises). With a certain coincidence of the use of methods, levers and regulatory instruments at these levels, the manifestation of their influence on the industry is different as macro level generates general conceptual approaches to the development of all components of the organizational and economic mechanism, the specification of regulatory influences is implemented at the sectoral and regional level and their practical implementation – at the macro level. Accordingly, each level of implementation will be characterized with their priority directions of improvement of organizational and economic mechanism.

The proposed model of the organizational and economic mechanism for regulation of the agri-food market adapted to risky conditions involves the optimal combination of market self-regulation instruments and purposeful influence of state regulation levers (fig. 1). In accordance with the proposed model, organizational, economic, legal, environmental and social tools at the macro- and meso-levels should be considered in the complex as they together form the vector and the intensity of external influence on market processes.

The results of regulatory influences of macro- and meso-levels subjects ultimately affect the activities of business entities and end-users, characterizing the effectiveness of the organizational and economic mechanism of market regulation. The optimal combination of elements of the mechanism creates conditions for increasing the resistance of enterprises to negative factors, which facilitate prompt response to the risk conditions of the market environment, ensures the balanced functioning and development of the agri-food market. In this context, it should be noted that the notion of balanced functioning of the market should not be limited to economic entities, but should be considered more broadly as the ability of the industry to withstand the negative dynamics of macroeconomic processes and to meet the consumer's needs of the country's population in safe and high-quality products [3].

Institutional transformations in the agrarian sector led to the necessity of transforming the mechanism for regulation of the agricultural market in order to develop agrarian entrepreneurship and to strengthen the competitive position of domestic agrarian commodity producers, to enhance globalization and integration processes in order to reconcile the interests of all business entities and end users. At the same time, despite the fact that institutional reforms are aimed at replacing the administrative levers of influence by economic ones in the agri-food sector, Institute of State and Law remains a determining element in the system of organizational and economic regulation's functioning.

The development of the agricultural sector is one of the basic priorities of the State's economic policy, which emphasizes the need to develop new approaches and methods of state regulation and support adequate to the operating mechanism of management, as well as the objectives of its improvement.

That is why the fundamental point of a correct understanding of the nature of the organizational and economic regulation for the agricultural market is recognition of the fact that it is formed under the influence of the agrarian policy of the State, which determines the general factor of the industry's development and a system of purpose-oriented measures and methods of their implementation aimed at the whole set of economic agents for achievement of defined target parameters. The system of state support and regulation of the industry with determined priorities, terms, specific quantitative indicators and parameters forms a comprehensive economic program for the development of the agrarian sector of the economy.

An important aspect in forming the organizational and economic mechanism for regulating the agri-food market is not the contradictory nature of regulatory influences (including those defined by the goals and objectives of the State's agrarian policy), but the principles of harmonizing the economic interests of all subjects throughout the chain of goods from the agricultural field to the final consumer.

The importance of this functional component's implementation of the organizational and economic mechanism of management is determined by the close correlation between the indicators of economic, ecological and social efficiency and the level of harmonization of commodity producers interests and importers, processing enterprises, logistic and trading infrastructure companies, exporters, consumers, since the implementation of priority state measures of agrarian policy and the effectiveness of the management tools` use are not achievable if they do not create conditions, form incentives for economic activity of the industry or fully meet the needs of consumers in safe and high quality agricultural products.

The managerial block of the organizational and economic mechanism for regulating the agri-food market is implemented in the proposed model based on the use of different economic categories, approaches and principles of management, incentives, methods, levers and regulatory instruments within the existing and established legislative framework; also with the help of information and methodological support. A specific list of methods, incentives, levers and instruments for regulating the market is determined by the combination of external and internal factors at each level of the management system in the structure of the organizational and economic mechanism. At the same time, the differences in the levels of control of this mechanism are manifested not only in the structure of the elements that form it, but also in the content of functions implemented in each of the elements. Some scholars consider it expedient to systematize the toolkit used, distinguishing legislative, financial and economic, organizational and administrative methods [4-5]. We believe that it is more expedient to allocate organizational, economic, legal, ecological and social units, for each of which there is a specific tool of mechanism functioning on the macro-, meso- and microlevel.

Due to the fact that the agri-food market is an open economic system, there has been also identified a range of factors of the external market environment (*Figure 1*).

That is, all market processes that take place within the organizational and economic mechanism of market regulation are influenced by the direct and indirect effects of these factors, which create the macroeconomic, regional and sectoral risks for the market participants that determine the level of systematic risk that is constantly present in their activities. In connection with this, there is a need to identify and structure the organizational and economic mechanism for regulating agricultural products taking into account the risk component due, in our opinion, to the following:

- the development of an economic mechanism of any type can not be considered irrespective of the market environment in which it operates and for which the probabilistic and indefinite nature is characteristic. As a matter of practice, the activity of market agents is manifested through the existence of diverse risks that directly affect the parameters of financial and economic activity;
- state regulation measures and industry support should take into account the most significant risks and other regulatory influences. Comprehensive account of risks (and not only the risks of implementing program measures formally declared in the relevant regulatory documents) is an

essential condition for increasing the effectiveness of the program-target method's use of planning and state regulation in general;

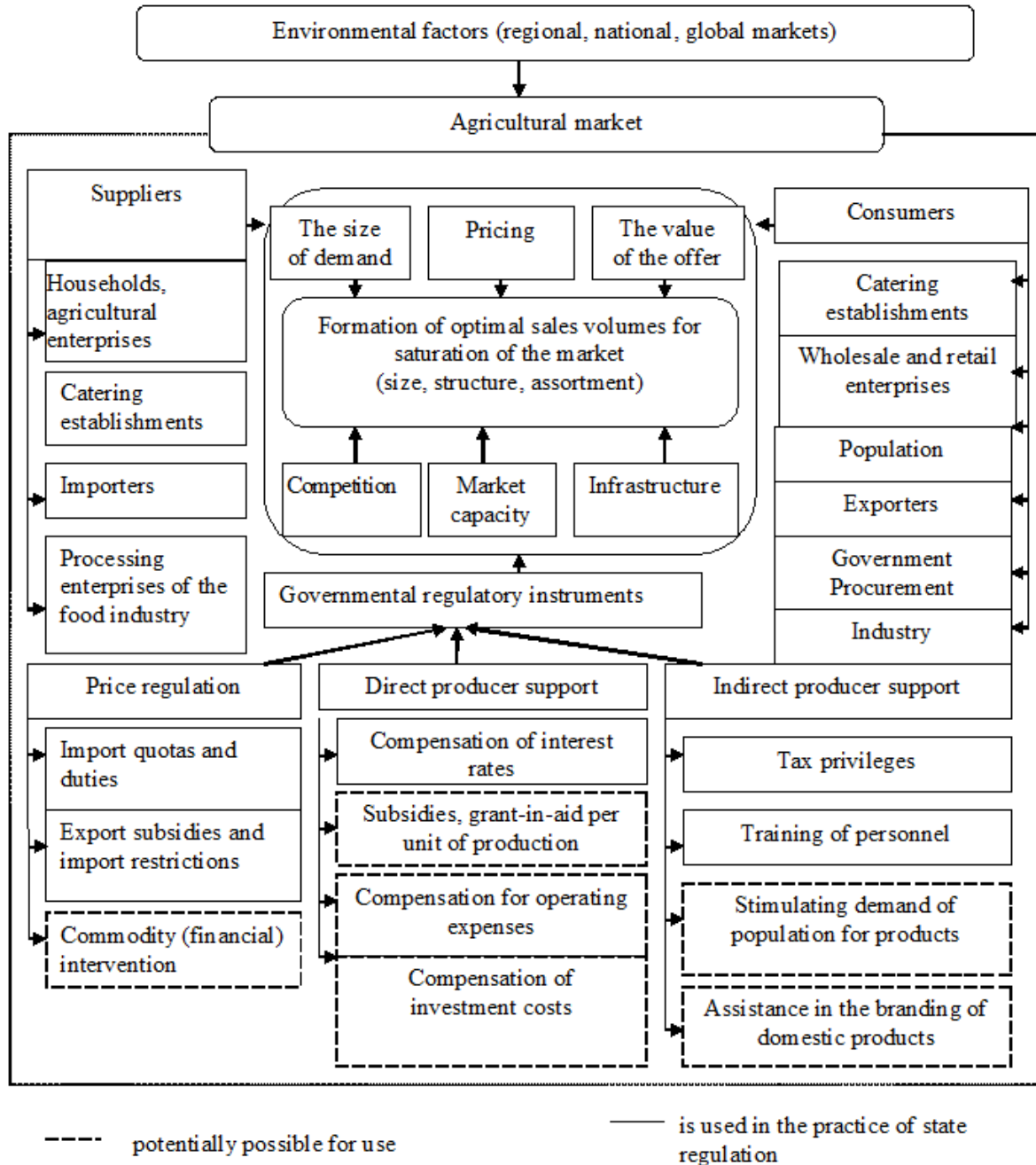


Figure 1: Structural and functional model of the organizational and economic mechanism for regulation of the agri-food market

Source: developed by the author.

- the level of operational efficiency and financial condition of economic entities correlates with the efficiency of their use of risk management procedures in current economic practice. The study of the effectiveness of the organizational and economic mechanism for regulating agricultural market allows us to conclude that the forms and methods of influencing the processes of its formation that are adequate to the modern conditions of development of agrarian production have not been formed yet, in particular, no conditions have been created for: increasing the use efficiency of the existing resource

potential of the industry; regulation of the management processes and development taking into account the necessary production volumes that meet the medical standards of consumption, and the available resource potential of the industry; rationalization of mechanisms of economic entities economic and organizational interaction within the functional and sectoral structure as well as regional, national and world markets; organization of processes for improving the industry's economic structure in the direction of strengthening the role of organized agricultural producers and weakening the role of personal peasant farms.

We believe that the effectiveness of the functioning of the organizational and economic mechanism for regulating the agri-food market is characterized by indicators of the efficiency and financial status of the industry, the industry's influence on the main socio-ecological and economic parameters of rural development, the level of food security of the country (regions) and the pace of agricultural production's development in general.

The detailed description of the proposed system of indicators allows us to identify the problem areas of the functioning mechanism, to evaluate the rationality of specific methods use and regulatory instruments, to determine the priority directions of their improvement in the future. The undoubtedly effective organizational and economic mechanism for regulating the agri-food market maximizes the potential and internal reserves, provides interaction of the industry with other spheres, branches and components of agro-industrial production as a more complex system that is part of the external macro environment. Separation of agricultural production as an economic subsystem from the system of branches of agrarian production, in addition to agricultural and technological aspects, is conditioned by the specific characteristics and directions of economic and financial relations development, which form unique conditions of economic activity in this particular period of time.

We propose the following basic parameters for assessing the effectiveness of the organizational and economic mechanism for regulating the agri-food market: creation of motives and incentives for market participants (first of all for agricultural producers), which can be estimated by such parameters as the growth of production volumes, increase of management efficiency, increase of responsibility for the results of production and economic activity, maximization of incomes of commodity producers; creation of conditions for the coordination of economic interests of the main market actors, which will be expressed in the optimization and parity of distribution and redistribution of value added between agricultural producers, processing enterprises and trade companies, the integrated development of all segments and parts of the agricultural sub-complex, and ultimately in maximizing the gross domestic product of the industry and economic growth; Risk minimization – those enterprises that are at different stages of the bankruptcy procedure can be used as a formal feature of the assessment; providing food security by type of food – this parameter can be considered the most integral, which gives the most generalized assessment of the effectiveness of the organizational and economic mechanism's functioning of the agri-food market, since it allows to assess the main objective's attainability, namely, to fully meet needs of consumers in safe and high-quality products as well as to create conditions for extended reproduction in the investigated branch.

The current state of the agri-food market is characterized by the growing dynamics of various segments development and the volatility of the commodity market, which is formed under the influence of various factors. These issues include the following factors: the competitiveness of manufactured products in world markets, which is characterized by the profitability of the output unit, productivity and yield, cost, etc .; natural and climatic conditions, including agroclimatic and bio-soil; size, quality and composition of agricultural lands; territorial placement criteria of production and products consumption (transport criterion); the criterion of production concentration on a specific territory, taking into account environmental safety; availability criterion and sufficiency of labor resources [6-7].

World experience is convincing that an effective form of state regulation of the agro industrial market is the sale of products to the wholesale food markets that are regulated by the state. Through the system of wholesale agri-food markets, the quality of perishable food products is maintained, and they serve as an information center for the study of supply and demand. The main objectives of the agri-food policy are to expand the economic and trade potential of domestic agricultural producers and other actors in the agrarian sector; in increasing productivity through increased competitiveness of

production and the functioning of balanced markets; in supporting the development of rural areas on the basis of improving the financial stability of agricultural producers, diversifying opportunities and prospects for employment and income growth of the rural population; in creating a mechanism for the competitive development of livestock production; in increasing the availability, reliability and safety of food; in preserving the potential and reproducing natural resources.

It is obvious that the abide of scientific agrotechnical and technological requirements for the organization of agricultural production is a prerequisite for the stable development of the agri-food market. The orientation of agricultural production in the directions that harmoniously combines natural and economic fertility creates conditions for the cultivation of animals and crops. It becomes a key requirement in improving the placement, concentration and production and marketing of agricultural products in the country, and it influences the conditions of market development.

Today, in the market of agri-food there are negative trends that are the reasons for the formation of world food markets: the faster pace of development of certain world regions, especially India and China, the new industrialized countries, where there is a significant increase in solvent demand for food with high consumer properties; the rapid development of bioenergy associated with agricultural production, which led to a revision of the crops structure in the main exporting countries, primarily the US, whose market changes have caused a serious chain reaction in countries around the world due to the modification of the crops structure with an increase in the share of corn and oilseeds, which led to a decrease in the volumes of commodity supply of agricultural products and caused a rise in prices; reducing the size of world food supplies, caused by the first two factors, as well as frequent natural disasters.

If we evaluate the implementation results of state measures of our country in the agriculture field on the basis of official statistics, we can conclude that in recent years they appear to be quite positive, especially in crop production. Thus, agriculture has become more stable in its development compared with the functioning of the entire economy of the country, which has allowed reducing the share of lucrative agricultural organizations as the main commodity producers of agricultural products. At the pace of production growth, agriculture exceeded the growth rate of the physical volume of GDP.

Moreover Ukraine has developed a Single Integrated Strategy for the Development of Agriculture and Rural Areas for 2015-2020, which outlines the long-term concept of agricultural and rural development, provides a basis for a stable, predictable and transparent legal system aimed at improving the business climate, counteracting corruption and stimulating investment for the modernization of the agricultural sector. To implement the measures envisaged by this Strategy, 50 million euro will be attracted during the first stage of implementation.

Under these conditions, the threshold values of food independence for major crop products have already been achieved, while the share of domestic livestock production remains below target values (*Table 1*).

At the same time, the macroeconomic conditions of the agrarian sector functioning of the economy, which affects the attraction of investment capital, has deteriorated. The NBU discount rate remains at a very high level (17.5%), which leads to an increase in the cost of borrowed funds. Under such condition, real incomes were reduce by due to the accelerating inflation, the restraining growth in demand for food.

It should be pointed out that the growth of retail prices for food does not mean a similar increase in prices for agricultural products. At the same time, the growth of prices for material and technical means for agriculture continues as a result of the increase in import resources used in agricultural production and domestic resources. As a result, significant economic risks for agriculture are maintained, which in turn reduces the sustainability of its economic growth. Thus, in spite of the positive results of the functioning of the agricultural sector as a whole, the situation in the last two years remains ambiguous.

In order to substantiate the system of factors of development of the agri-food market that affect its balanced development and the level of food security of the state, in the current conditions, we will use an integrated approach that takes into account both the national features of production or import, the subsequent distribution and consumption of food, and the development peculiarities of the world market.

Table 1: Dynamics of production, consumption and index of self-sufficiency of basic food products in Ukraine

Indexes	2000	2005	2010	2015	2016
Meat and meat products (in terms of meat)					
Actual consumption fund, thousand. ton	1611	1844	2384	2179	2195
Fund of consumption on the basis of rational norms, thousand ton	3929	3773	3668	3425	3416
Production, thousand ton	1663	1597	2059	2323	2324
The level of resources procurement which is based on					
• actual rates, %	103,2	86,6	86,4	106,6	105,9
• rational standards, %	42,3	42,3	56,1	63,7	68,0
Milk and dairy products (in terms of milk)					
Actual consumption fund, thousand ton	9789	10625	9470	8995	8942
Fund of consumption on the basis of rational norms, thousand ton	18683	17897	17435	16284	16219
Production, thousand ton	12658	13714	11249	10615	10382
The level of resources procurement which is based on					
• actual rates, %	129,3	129,1	118,8	118,0	116,1
• rational standards, %	67,8	76,6	64,5	61,3	64,0
Bread and bakery products (in terms of grain)					
Actual consumption fund, thousand ton	7748	7750	6808	5897	5745
Fund of consumption on the basis of rational norms, thousand ton	6265	6338	6178	5771	5745
Production, thousand ton	24459	38016	39271	60126	66088
The level of resources procurement which is based on					
• actual rates, %	315,7	490,5	576,8	1019,6	1150,4
• rational standards, %	390,4	599,8	635,7	978,9	1150,4
Vegetables					
Actual consumption fund, thousand ton	5002	5663	6581	6890	6984
Fund of consumption on the basis of rational norms, thousand ton	5410	5182	5045	4713	4693
Production, thousand ton	6195	7606	8873	9792	9998
The level of resources procurement which is based on					
• actual rates, %	123,9	134,3	134,8	142,1	143,2
• rational standards, %	114,5	146,8	175,9	195,2	213,0
Potatoes					
Actual consumption fund, thousand ton	6660	6386	5914	5892	5966
Fund of consumption on the basis of rational norms, thousand ton	5411	5180	5047	4714	4694
Production, thousand ton	19838	19462	18705	20839	21751
The level of resources procurement which is based on					
• actual rates, %	297,9	304,8	316,3	353,7	364,6
• rational standards, %	366,6	375,7	370,6	415,4	463,4

Source: calculated by the author according to the data of the State Statistics Service of Ukraine.

According to the analysis of statistical data, domestic agriculture in recent years has provided an increase in production volumes, which positively influenced the improvement of the financial condition of agricultural producers and their profitability. This is evidenced by the fact that in 2016 the

agriculture sector against 2010 provided an increase in sales volumes on the domestic market, but this figure slightly decreased (by 5%) against 2013. It should be noted that the increase in the volume of production and products sales was provided by agricultural enterprises at the expense of highly profitable cereals and oilseeds (in the structure of gross production, these types occupy 74.2%, while labor-intensive and low-yield species account for 25.8%. At the same time, labor-intensive types of production which are produced by farms populations have formulated commodity offers on the domestic agri-food market of milk, wool, potatoes, vegetables and fruits.

One of the restraining factors affecting the growing development of the agrarian sector of the economy and the possibility of increasing the value added in the agri-food chains is the reduction of agricultural production and technical potential. We have shared the opinion of the scientists that the production and technical potential represents the volume of production is capable of producing the investigated industry that is characterized by its objective capabilities. Increasing the level of agricultural production potential is a prerequisite for ensuring a balanced functioning of the agri-food market and is one of the important conditions for ensuring the country's needs in food and food commodities, ensuring and maintaining food security.

The inaccessibility of long-term lending, reduced profitability of agricultural production, the absence of effective state support instruments for financing the construction of modern production facilities and the purchase of machinery and equipment led to a significant reduction in the technical park of agricultural enterprises, as well as to a high level of deterioration of the basic assets of the agrarian sector. This suggests that, even if the consumer demand for agricultural products is expanded, domestic producers will not be able to meet this demand due to resource constraints and the inability to quickly upgrade their production capacity.

A deterrent factor in the build-up of the productive potential of agricultural producers, and as a consequence, the realization of potential opportunities in the growth of commodity supply is the price disparity manifestation. It was established that the dynamics of price parity for agricultural producers was profitable, since between 2013 and 2016 prices for agricultural products increased by 2,09 times, and prices for material and technical resources for agricultural production rose by 1,82 times [8].

However, in 2017 there were significant changes in the market situation of the agri-food market: the export market increased, export prices and increased export volumes of agri-food products; in the domestic market there is also a rise in prices and sales volumes but inputs and sales of agricultural products have increased disparity in the purchase prices. Thus, in 2017, the prices of agricultural producers' sales increased by 12%, while the prices of material and technical resources for agriculture increased by 24.6%, which leads to a reduction in profits and a decrease in profitability. We believe that under such conditions, there is a need for the development of effective anti-inflationary instruments, as well as levers of intensifying innovation in the agrarian sector, which will contribute to increasing labour productivity and reducing resource intensity in the industry.

The macroeconomic instability of the country's economy, due to high rates of devaluation of the national currency, generates high inflation, has a negative impact on the state of the domestic agricultural market. It should be mentioned that inflation limits domestic demand and creates favourable economic conditions for the export of agricultural products, as evidenced by statistics on the dynamics of external supply. Thus, for domestic commodity producers, the situation on the external market is favourable, although there is a fall in export prices and an increase in its physical volume. We believe that, provided that the growing inflationary and depreciatory dynamics is not overcome, Ukrainian agro-industry will be guided by an external market that will become a threat to the country. The proof of this conclusion is that in 2016 the volume of the domestic agrarian market amounted to 380 billion hryvnias, while the external market was 330 billion hryvnias, so the ratio of capacity of these markets was 55:45, while in the USA this figure was 3: 1 . It is obvious that if the country's incomes rise, the capacity of the domestic market of agroforestry will rise at an accelerating pace, and this indicator can be used as an important indicator of the national level of well-being.

Today, the processes of increasing the prices of food products of the food group continue, as a result of the growth of inflation and the drop in the hryvnia, which negatively affected the economy of the industry. An explanation for this may be the fact that is unobtrusive for the end user, the sharp rise in the cost of resources that are purchased by manufacturers to organize the production process. Thus,

in crop production such crops as corn, sugar beet, sunflower, vegetables, seeds are imported from 40 to 80%, in livestock the same situation is traced with feed additives, pedigree animals, veterinary preparations for the treatment of animals. This factor exacerbates the negative impact of rising food prices, given that equipment and technology for livestock farms and poultry farms, as well as the lion's share of technical resources in the park of agricultural enterprises are foreign-made. Thus, without solving the issue of inflation and devaluation of the national currency, the food security of the country can not be guaranteed, which proves that this problem is not so much sectoral and agrarian, but, first of all, systemic interbranch and macroeconomic.

The insufficient financial security of agricultural producers is determined by the inadequate effectiveness of the economic mechanism levers in agriculture, which do not provide the necessary guarantees for their stability, and, ultimately the stable development of the agro-vegetable market. Thus, in 2016, the share of credit resources attracted by agriculture amounted to 6.7%, or increased by 0.8 percentage points compared to 2013. In 2016, the average interest rate on agricultural loans was 17%, or by 0.8 percentage points compared to the indicator for all industries. It should be borne in mind that investment lending, especially in livestock with a long period of production, has an inertial character. We believe that a decrease in state support for investment lending may result in falling production rates, especially livestock production.

Such negative processes, without taking appropriate measures, can increase the tendency not to have access to credit resources, which will reduce the financial stability of agricultural producers; therefore, taking into account the existing macroeconomic situation, it is necessary to pay attention to the issue of maintaining the volumes and availability of lending to the agricultural sector. In these conditions, it is advisable to keep subsidizing interest rates on long-term loans, especially for medium-sized and small agricultural enterprises, and extend compensation for the cost of building livestock farms and pedigree livestock.

An important place in ensuring a stable market situation in the agri-food market, in the formation direction of a commodity supply, belongs to the agriculture state support. So, agriculture in the United States is allocated 10% of agricultural production value and in the EU countries - 20%, then in Ukraine, this indicator, which in 2007-2008 was more than 7%, since 2016, is set at 1%. At the same time, in 2017, only 5.52 billion hryvnias was allocated from 6.3 billion hryvnias, and by 2018 the government gave only 6.3 billion instead of 7 billion hryvnias which were planned and that is less than per hectare of land and such figures are lower than in European and other countries [8]. The main disadvantages of providing state support to agriculture include: lobbying, lack of rational territorial and sectoral distribution, because of insufficient financial support of a poultry factory located in the Kyiv region; the stabilization instruments of market prices stipulated by the Law of Ukraine "On State Support to Agriculture" and other acts are not used; wholesale markets do not function, PJSC "Agrarian Fund" does not perform interventional and other regulatory functions; the limited possibility of participation in state programs of medium and small agricultural enterprises (during the years 2000-2017 only one fifth of them applied); complicated control over spending of public funds; there is no state support for personal peasant and other small farms; an imperfect system of information provision of state support programs to small and medium-sized producers.

The next unresolved issue in the regulation of the agri-food market is the creation of equal and transparent conditions for agribusinesses of all management forms to the state regulation instruments. So, in a context of increased competition in the agri-food market, it is important to ensure equal access to loans, resources and sales markets. For small-scale agribusiness this can be facilitated by a system of state support for agricultural servicing and sales cooperatives, development of family farms.

At the same time, consideration of differences in the production of agricultural products and, accordingly, in the living standards of the rural population should be ensured through the establishment of the mechanism and instruments of state regulation that will create motives and incentives for the production of agricultural products for nation-wide specialization, as well as low-income and non-transferable ones. In drafting strategic agri-food market development programs, globalization must also take cultural and historical peculiarities into account, all these constituents are the peculiarities of production and consumption in certain regions of the country. We agree with the opinion of the scholars who believe that the main directions of state support transformation of agriculture in conditions of

limiting financial capacity and taking into account world practice should be: the exclusion from support system of large mono-cultural farms with less than 0.3 goals. 1 hectare of cattle, as well as poultry farms-agroholdings; orientation of support for producers of livestock industries, to create a meat herd, to increase milk production; in support of the growth of the merchantability of small farms, the creation of production objects and market infrastructure, the machinery purchase and equipment for joint use on a cooperative or contractual basis; support the production of organic products, organizing the transfer of knowledge to their managers; the normalization of the state's participation in financing the withdrawal from cultivation and temporary conservation of degraded land, the creation of high-yielding cultural pastures for cattle breeding [8-10].

The generalization of changes in the world economic system allows us to conclude that the degree of economic, scientific and technical, legal, information interdependence of national economies has reached such a state, which can be called the formation of the global economic system. These figures are constituents of reality and conditions for the implementation of the economic policy of any state, which is guided by the optimal level of economic development. Accordingly, the concept of agrarian policy and state support should take into account the process of globalization, in order to help the country's agricultural producers to realize themselves as the operating entity of the economic space. The nature of international integration processes in the agri-food market has allowed allocating a system of influences on the formation and competitive advantages strengthening of the globalization and state processes. It is true that there are various ways of regulating the agri-food market, including the growth of prices for basic food products, monitoring of raw materials and prices for agro-foodstuffs, state regulation in the field of accounting, control and certification of production at the sale of agricultural products and foodstuffs, as well as others.

Obviously, it is advisable to focus on the following objectives in substantiating the transformation directions of the regulation economic mechanism of the agri-food market: food security; increasing food security; development of agri-food chains on the principles of sustainability and innovation; expansion of export opportunities at the expense of agricultural products with high added value. New threats are emerging for the domestic agri-food industry with the globalization of the world economy: dependence on world prices for energy resources and food; increased monopolization and reorientation of productions into more profitable and export-oriented industries; economic losses due to the export of raw materials, the impact of which must be offset by the instruments of state regulation.

An integrated approach to the study of internal factors affecting the agri-food market has allowed us to highlight the following: social factors, determine the provision level of economic actors involved in the agri-food process, labour resources, which also determine the socio-demographic structure and population; economic factors determine the production state of agricultural products, the industrial processing possibility of raw materials, the potential of inter-farm and interregional ties. An important aspect of economic factors is the structure and level of prices for foodstuffs; innovation and technical factors; determine the level of mechanization and automation of production, compliance of the material and technical base of the agrarian sector with the latest practice.

At the same time, functioning of the agri-food market should take into account the following features of its development: the subjects of agro-industrial production ought to provide the supply of the necessary volume of food products and satisfy the needs of the population in quality and safe products; the relationship between market participants should be based on the establishment of mutually beneficial and stable links; the expansion of the market capacity of certain food products should be directly dependent on household incomes and its solvency, as well as on the state of infrastructure; the development of the agri-food market needs to be optimized taking into account market self-regulation and state regulation instruments. It should be noted that the agri-food market has seen an increase in competition between participants, due to the presence of specific barriers that do not allow unrestricted entry into any market. As a result the most significant barriers are: economic, which are related to the tax, credit, investment, price policy of the state, etc .; administrative barriers that are associated with a low-scale and limited market capacity; barriers caused by underdevelopment of market infrastructure.

Conclusions

Thus, identifying the features of the agri-food market, identifying the factors affecting it, will allow to substantiate and introduce an effective system of regulation of the agri-food market. However, current trends in interbranch exchanges, functional relationships, clustering, and the expansion of the global agri-food market require a scientifically balanced combination of state regulation measures with the mechanism of market self-regulation of relationships between market players. We believe that identifying trends and opportunities in an optimal combination of market self-regulation and economic state regulation will improve the relationship between different forms of management and interaction in the market, as well as reduce the impact of risks on the agri-food market.

In order to achieve the effectiveness of state regulation instruments, it is appropriate to ensure the adaptation of the country's agrarian policy to the conditions of globalization on the basis of: strategic reserves creation, monitoring and forecasting of production and consumption of agricultural products, raw materials and foodstuffs in order to ensure the economic and physical accessibility of agro-foodstuffs, the necessary quantities formation of raw materials for industrial processing.

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**PRINCIPLES AND METHODOLOGICAL APPROACHES TO ESTIMATE
THE EFFICIENCY OF EXPENDITURE MANAGEMENT IN MEAT FARMING
ENTERPRISES**

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Abstract: *It is proved that cost management is a dominant factor in improving the efficiency of an enterprise, but this notion has no generally accepted definition. The analysis of the evolution of the basic concepts of cost management made it possible to identify the following scientific approaches: the approach to management as a process based on the achievement of goals through the management functions; situational approach based on adaptation to new situational conditions and requires the use of methods that are appropriate in a particular situation; the system approach, which involves the construction of a cost management system, taking into account the principles that contribute to the creation of prerequisites for ensuring the effectiveness of the enterprise.*

Management of costs in poultry enterprises is considered as a continuous purposeful activity of the management apparatus, aimed at cost planning, the organization of cost-saving expenditure in the form of cash at all stages of the production process, control over the implementation of the production plan by all structural units of the enterprise. Organizational and economic support for the process of managing the costs of agricultural production is a system of interrelated goals, principles, functions and methods that must be balanced in order to effectively develop it.

It has been established that the process of managing production costs of an enterprise includes four main stages: a strategic analysis of the internal and external environment from the standpoint of assessing the conditions of management of production costs; strategic and tactical planning of the process of management of production costs of the enterprise; realization of functional strategy of management of production costs of the enterprise; strategic, tactical, operational control and making corrective changes in the functional strategy for managing production costs.

Key words: *costs, cost management, enterprise, production, budgeting, poultry farming.*

JEL Classification: M11, M21, Q12, Q13

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Introduction

In the current conditions, the main factors of economic growth of an enterprise are appropriate to allocate methodical approaches to management, which include a set of structures, communications and communications that provide analysis and evaluation, adoption and implementation of sound management decisions. Agricultural enterprises need to be managed on the basis of economic levers, management structures, information systems, and modern methods, which is a significant reserve for

increasing the efficiency of using limited production resources, stabilizing and increasing the production of agricultural products, including poultry meat production.

It should be emphasized the many-sidedness and complexity of the interpretation of the term "cost management of the enterprise", but most of the authors most often understand the concept of an important type of coordination of work groups of people, units, enterprises in general, aimed at achieving the goals through the effective use of material, labor, financial and other resources. All functions of the control system interact, forming a single process, that is, a continuous chain of interrelated actions.

Analysis of recent research and publications

Some issues related to the deepening of the theoretical and methodological principles of the development of various aspects of the formation of production costs and their management, in particular agricultural enterprises, are considered in the works of domestic scientists: V. Andriychuk, V. Zbarsky, I. Ohrimenko, I. Balanyuk, C. Demyanenko, M. Demyanenko, V. Diesperova, V. Zinovchuk, M. Malik, S. Mohernogo, V. Messel-Veselyak, N.Prozorova, M.Khorunzhego, O.Spichaka, Yu.Tsal-Tsalka.

These scientific studies are a significant contribution to the development of theoretical foundations and the development of measures aimed at improving the process of managing the production costs of the enterprise. However, the volatility of the external environment and the intensification of crisis phenomena are actualizing the modern approaches to the research problems, taking into account the need to solve a number of tasks aimed at improving the system of management of production costs of meat poultry enterprises, diagnosing the external environment of enterprises and ensuring their economic sustainability in the long run.

Research results

Formation of the methodical principles of cost management of an enterprise is based on the corresponding concepts, which result in the use of which achieve effective results from the use of appropriate techniques, methods and methods for managing production costs of the enterprise. Each concept of the management of production costs of an enterprise involves the implementation of a certain methodological approach and is based on the use of certain methodological principles. In order to determine the concepts of management of production costs, in our opinion, it is necessary to take into account the evolutionary stages of improving the process of managing current costs in the enterprise. Taking into account this, the main concepts of management of production costs of the enterprise should include the following: the concept of accounting for production costs and calculating the cost of production; the concept of rationing of production costs; concept of production cost planning; the concept of strategic management of production costs [1 - 3].

The key factors of economic growth of an enterprise in the current conditions should be the status of management, which includes a complex of structures, communications and communications, which provide the necessary analysis and evaluation, adoption and implementation of sound management decisions. An agricultural enterprise needs to be managed with the help of economic levers, management structures, information systems, modern management methods, which is a powerful reserve for increasing the efficiency of using limited resources, stabilizing and increasing the production of agricultural products, including poultry industry, in the general background of the decline and declining agricultural commodity.

The variety of interpretations of the concept of "management" is explained by the complexity and complexity of this phenomenon, which at the present stage of development of science of management is very difficult to correctly identify. The authors suggest different definitions of "management" focusing on certain aspects. Most often under management is understood the most important type of activity for coordinating the work of groups of people, units, enterprises in general, aimed at achieving the goals through the effective use of material, labor, financial and other resources.

All functions of the control system interact, forming a single process, that is, a continuous chain of interrelated actions.

Cost management is part of a single business management process. Some authors treat it as the ability to save resources and maximize the return on them, others as one of the means of achieving a high economic result of the enterprise, and the third as a plan of measures that will allow companies to reduce their costs and, accordingly, increase their efficiency.

A number of researchers define cost management as a system with specific features and management criteria. S.F. Trowel allocates functional and organizational aspects to the cost management system. This system includes such functional subsystems: the identification of resource saving factors; valuation of expenses of resources; resource planning according to their types; accounting and analysis of resource costs; stimulating savings and resources and reducing their costs. These functions are performed by the respective structural units of the enterprise depending on the size of the latter (departments, offices, and individual employees) [4].

According to other scholars, it is advisable to distinguish between the economic and legal, organizational, technical and information aspects of the company's cost management system. The economic and legal side can be regarded as a set of economic and legal methods, rules, recommendations, principles of organization and management of costs, the relationship between management and production services of the enterprise, their rights and responsibilities. Organizational and technical side - a set of technical facilities and structures (production and organizational) enterprises. The combination of economic and mathematical methods and software tools that provide the preparation of rational management decisions, is the economic and mathematical side. The information side includes links between elements of the system, the system for collecting, transmitting, storing, processing and issuing information [5].

As M.O. Danilyuk, cost management system contains the following main elements: expenditure management objects (formation and cost structure); technology of cost management (implementation of procedures necessary to detect deviations of actual cost indicators from planned ones); expenditure management entities (structural divisions of the enterprise implementing cost management procedures); subjects of cost management (separate characteristics of the state of expenditure: compliance with the limits of the wage fund, the cost of raw materials and materials, etc.) [6]. The issue of cost management can not be considered separately from such indicators as sales revenue and profit. Definition of "cost and profit management" in the general form IO The blank formulates as a dynamic system process for regulating the level of living expenses and labor costs [7]. It is this mechanism that promotes the adaptation of agricultural producers to the external and internal environment, implemented to provide the managing entity with maximum efficiency, in order to achieve competitive advantages in a market environment in accordance with available resources based on the use of modern information technologies.

Consequently, the management of production costs is considered as the most important direction in the formation of their optimal level for competing enterprises, which is necessary to maximize profits on the basis of reasonable maneuvering costs.

However, cost management of the business entity can be considered in two contexts: as a process (activity) and as an institution. On the one hand, management refers to the management of any system or enterprise as a whole, on the other hand, the totality of subjects of this activity, that is, the personnel of the enterprise. Consequently, cost management should be complex, in addition, the adoption and implementation of management decisions in the field of costs involves their systematic consideration, which determines the need to study cost management as a system. In this case, the system of cost management is represented by us as an element of the general system of enterprise management, which has certain properties, functions and connections, the implementation of which is aimed at increasing the efficiency of the enterprise through a set of targeted actions to optimize costs.

The main purpose of this system is the preparation of information for the adoption of operational and predictive management decisions. If we summarize the thoughts of the authors about the content, goals and objectives of cost management at the present stage, then they can be reduced to the following conclusions.

Under current conditions, the main purpose of creating a cost management system is to: identify the price the buyer would agree to pay for a certain set of goods and services in the most effective way and explore the possibility of selling buyers of data sets at that price; optimize the financial result by maximizing profits (with a detailed study of the main factor-making chain of profit: costs-volume of production-profit); objectively evaluate the results of the enterprise's business; to take well-grounded short-term and long-term management decisions.

The most important tasks of cost management are: improving the efficiency of the business entity; definition of expenses on the main functions of management; calculation of the cost of funds for individual structural units and the economy as a whole; calculation of production costs per unit of production - calculation of the cost of production; Determining the cost of major business functions and production units of the enterprise; identification of savings reserves at all stages of the production process and in all farm-based production units; carrying out an analysis of production costs in order to make managerial decisions on improving production processes, forming assortment and pricing policies, choosing investment options, forecasting volumes of production and sales of products [8].

In practice, the principles of cost management are reduced to the following: a systematic approach to cost management; methodical unity of cost management; cost management at all stages of the product life cycle (services); optimality combined with lowering costs and improving product quality; search for effective methods and tools to reduce costs; improvement of the information base of cost management; raising the interest of the centers of responsibility in reducing costs [9]. Usually, a system of cost management foresees the implementation of certain functions by scientists: planning, forecasting, intermediate control, accounting, control, analysis (final control). However, in our opinion, it is expedient to allocate such a function of cost management as their optimization.

Consider the features of each function of cost management. Planning and forecasting costs can be promising in the long-term planning phase, while current spending is in the short-term planning stage [10]. If the accuracy of long-term cost planning is not high and due to the impact of the investment process, the behavior of competitors, state policy in support of industries and markets, and sometimes force majeure, then the short-term cost plans reflect the needs of the near future and are accompanied by annual and quarterly calculations.

Organization of the cost management process is an essential element of effective cost management, which implements the management mechanism and the main cost centers and liability centers [11].

Control and regulation of expenses is a comparison of their actual level with the planned, the definition of deviations and the adoption of operational measures to eliminate differences. Timely coordination and cost management allow enterprises to avoid a breakthrough in achieving their planned economic performance.

Accounting as an element of cost management is necessary for the preparation of information when making informed decisions. In a market economy, accounting was divided into two types: productive and financial [12]. Production records, as a rule, are identified by taking into account the costs of production and the calculation of the cost of production. In its development, production records have been transformed into managerial, which is an active tool for enterprise management. Production accounting is oriented on the methodology of reflecting the cost of production, and managerial - on the analysis of the situation, decision-making, the study of consumer information requests, analysis of deviations. Financial accounting has to provide information to users outside the business, and involves comparing the expense with income to determine the profit. In the process of cost management, information about them is used primarily to estimate the level of costs and determine the profit. This direction involves calculating the cost of production and profits. Reducing the cost of agricultural products - the most important reserve for generating profits. Correct calculation of production costs contributes to a more efficient management of the process of its formation, use and mobilization of domestic reserves, further reduction of production costs.

Cost analysis is an element of the final control function in the cost management system and allows us to assess the efficiency of utilizing all resources of the enterprise, to identify reserves for reducing the cost of production, to prepare materials for making sound management decisions.

The control function in the cost management system provides feedback to compare scheduled and actual costs. The effectiveness of control is related to corrective management actions aimed at bringing actual costs into line with planned or refined plans, if they cannot be met due to objective changes in the production conditions. In turn, planning, forecasting, organization, coordination and regulation, accounting and analysis are only ways to manage the costs inherent in the above-mentioned functions. As a separate method of cost management, called activation and stimulation, which involves the impact on participants of production, which induces them to follow the established cost plan and find opportunities for their reduction. To motivate such actions, both material and moral incentives are used [13].

Hence, cost management is a dynamic management process for regulating the rational use of the material, labor, financial, as well as natural resources and natural conditions of the organization's economic activities in order to provide competitive advantages aimed at achieving the best economic performance of the agricultural enterprise. In this regard, in our opinion, the system for managing the costs of poultry farming can be presented as follows (*Figure 1*).

The proposed management system for meat poultry costs is considered by us as a set of interconnected elements that allow for a reasonable impact on production in order to optimize costs and increase the economic efficiency of agricultural enterprises. This system combines three main blocks - informational, methodological and managerial-analytical, with the information block reflects the parameters of the external and internal environment of the enterprise.

The methodological block contains theoretical bases of the system of management of expenses of poultry meat, which determine the criteria and approaches to the management of economic efficiency and production costs, their economic nature, factors of their formation. This block also determines the composition and set of methods used in the management of the costs of poultry meat. Cost management begins with an analysis of the peculiarities of the natural and climatic and economic conditions that determine the production costs in egg poultry farming, the current state and trends of the industry, the current structure of costs and factors affecting the level of production costs of meat, assessing economic efficiency agricultural producers on trends in cost formation in developing standards for meat poultry costs, as well as instruments of state support to agricultural enterprises.

Increasing the effectiveness of cost management will allow forecasting of production volumes and production cost planning, taking into account the climatic and technological and technological conditions of enterprise management [14]. The basis of the organization of production is the system of norms, which includes the technology of production, norms of production or the time of execution of each technological operation, the rate of consumption of production and support materials, etc. In this case, these specifications will be specific for each enterprise or group of enterprises that conduct production activities under similar conditions of management. The most accurate and detailed are calculations made using the primary norms and norms for the conditions of a particular economy based on technological maps. At development of the technological map at the same time the questions of planning of production processes in time, the definition of the need for technical means, labor and material resources, the ability to control costs inoperative.

Consequently, through the methodological and managerial-analytical units, the direct management of the costs of poultry meat is carried out. First of all, it is a question of planning the optimal cost of the existing external conditions of management, operational accounting and control of resource consumption, the regulation of possible deviations of actual values of costs from the planned values.

The task that solves the functioning of the cost management system in poultry industry is to choose such an option of cost, which, on the one hand, provides savings of resources, and, on the other hand, the planned production result is achieved, namely, the production of the maximum volume of production at a certain level of utilized resources, obtaining maximum profit at a minimum cost [15].

Cost optimization is an important component of management activity aimed at optimizing costs, identifying opportunities for more efficient use of enterprise resources, saving them and maximizing returns at all stages of the production and life cycle of products [16]. To form the accounting and analytical support for managing the costs of meat production, it is proposed to use a scheme for organizing cost optimization: an analysis of strategic areas of management; business process analysis,

calculation of target cost; development of the structure of accounting and analytical support; cost accounting; cost analysis; making management decisions, monitoring.

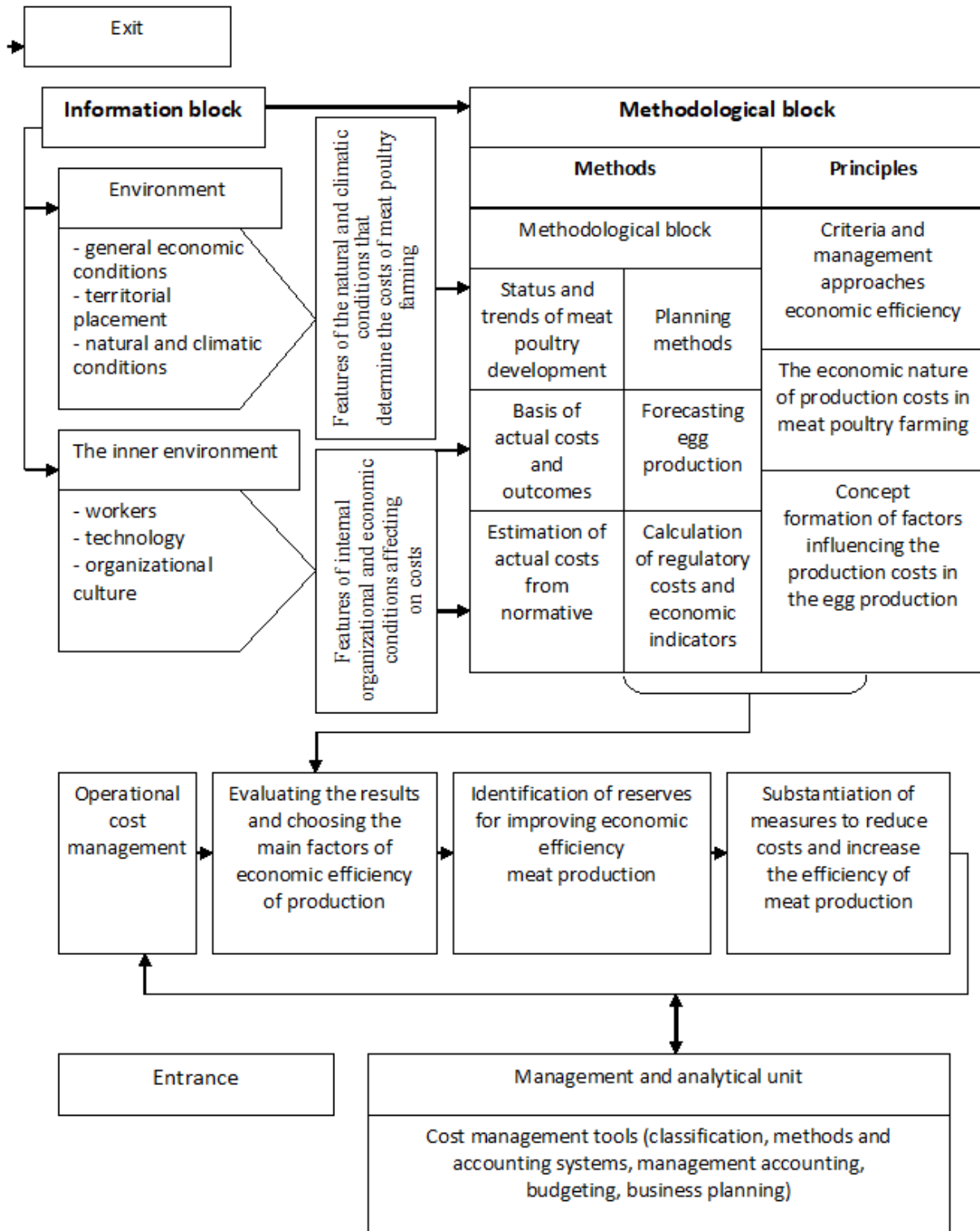


Figure 1: Cost management system in poultry farming

Source: developed by the author.

At the first stage of cost management it is advisable to conduct market research and segmentation of the market. This will enable to identify the most important directions of development of the product range of products produced by the enterprise as an economic entity engaged in production of products, and to determine the related structure of accounting and analytical support associated with the development. Depending on the characteristics of each type of production, it is necessary to formulate a set of requirements for accounting and cost analysis, which allows to fully ensure the process of making economic decisions.

The analysis of strategic areas of management involves the study of the formation of the cost of meat and egg products. On the basis of the requirements of potential buyers to the characteristics of meat and egg products (color, grade, freshness, weight, purity, brand, etc.) it is necessary to form a map of consumer preferences, which is a prerequisite for optimizing business processes of the enterprise in order to satisfy the consumers of the market that determines the structure of accounting and analytical support.

At the second stage, cost planning, costing, and defining product cost margins are being carried out, which uses the data of the first stage in terms of demand curve, range of expected prices, and so on. If the costs of production and sales exceed the target value of the cost, then the research is repeated.

The third stage of implementation and formation of accounting and analytical support - "Organization of accounting and cost analysis" involves the development of a direct structure of accounting and analytical support, relevant structure of information needs of enterprise management.

At the fourth stage of the implementation of the accounting and analytical support system, registration and unification of the data on the results of the economic activity of the enterprise, related to the accounting of expenses in the system of accounts, articles.

At the fifth stage of the organization of accounting and analytical support - "Cost Analysis" in accordance with the specified hierarchy of the management of the range of tasks provides for the processing of analytical methods of accounting data and the transfer of processed data in a form that is accessible to the perception of the appropriate circle of people who make managerial decisions. The main tasks of cost management are related to the following areas: the strategic level of management involves forecasting production volumes; calculation of the target level of cost of production; identification and analysis of factors influencing the level of cost; Optimization of loading of production capacities, which is expedient to perform quarterly; tactical level - analysis of deviations of actual costs from planned indicators by individual structural subdivisions and the enterprise as a whole; search of reserves for cost reduction at all stages of the production process, which management of the company should spend on a monthly basis; operational level - analysis of the costs of the technological process, cost centers, taking measures for the elimination of deviations; calculation of standards, development of recommendations for changing regulatory indicators when changing the conditions of the internal environment of the enterprise, which should be conducted on a daily basis.

Traditionally, analytical methods are classified according to the directions: methods of statistical theory, financial mathematics, operations research, probability theory, mathematical-statistical, and economic-mathematical methods. Initiation of the process of formation of accounting and analytical support is due to the information needs of the manager for the implementation of management functions, so within the limits of this study, the classification of methods of analytical support is proposed to perform, depending on the levels of the hierarchy. The accounting and analytical support should provide information about each level of the management hierarchy tailored to the needs of users.

It should be noted that for this purpose, it is expedient to use the following methods of analytical support: at the strategic level - SWOT-analysis, analysis of competitive advantages, Ishikawa's diagram, matrix analysis, analysis of the potential of the enterprise, etc.; tactical level - factor analysis, target tree, hierarchy analysis method, heuristic methods for developing solution options, budgeting, etc., operational level - balance method, optimization methods, valuation, etc.

Consequently, the methods of strategic analysis are aimed at identifying the weak and strong sides of the enterprise, threats and advantages, identifying the potential and introducing new business management methods. Tactical methods of analytical support are used in search of reserves for

reducing costs per unit of output, optimizing prices and implementing a plan (budget) by cost centers and the entire enterprise. Reification of costs and their control in the production of products are realized through operational methods of analysis.

In the sixth stage - "Management decision making, monitoring" on the basis of information on the state and trends of the current situation development, development plans, management decisions are made directly. After that, measures based on the principles of feedback, and measures to ensure the implementation of the adopted decisions are implemented. In the framework of monitoring, the development of a system of key indicators that give an idea of the structure of critical business processes.

The results of activity of poultry enterprises of Ukraine prove that the main factor of its increase is the intensification of meat production at all stages of the technological process. It involves the introduction of innovative technologies, high-yielding breeds and crossbreds, the use of state-of-the-art equipment. Despite the dynamic development of poultry farming in agricultural enterprises in Ukraine, modernization of the industry has not yet been completed. Most of the equipment used in the enterprises of the investigated industry, foreign production, which requires a decisive change in this situation. In addition, an important task is to intensify the investment activity of meat poultry enterprises, but the constraining factor here is the high cost of borrowed funds and, consequently, their inaccessibility. It is known that capital investments in egg poultry farming are aimed at the construction of new and reconstruction of existing production facilities, the purchase of agricultural machinery, process equipment, inventory and tools, and the formation of the main herd.

Meat poultry farming is the most dynamic industry in comparison with other branches of agricultural production, due to some specific features: industrial and perishable nature of production; price volatility and supply fluctuations; availability of alternative types of egg products; specialization of production. For many years, the growth of production has been the main goal of both foreign and domestic producers of poultry meat. However, in recent years, the emphasis has shifted towards safety and product quality. Consequently, quality control becomes the main tool for setting new standards for the final product.

Economic growth in the poultry industry is ensured by well-organized selection work aimed at improving productive and breeding qualities, creating new breeds, lines and crosses of all types of poultry, as well as full and balanced feeding, implementation of highly efficient resource-saving technologies. At the same time, an important place in improving the efficiency is the improvement of meat production technology. As you know, industrial meat poultry farming consumes a lot of heat, electricity, water and other material resources, which exacerbates resource conservation. So, a significant amount of electricity is spent on lighting livestock - more than in other technological processes in aggregate.

In the future, the efficiency of the meat poultry industry will be enhanced by the introduction of innovative resource-saving technologies and technological solutions. Of great importance in resource conservation is also the saving of feed and water, reducing the percentage of bird death, increasing its stress resistance at different stages of ontogeny. In order to save fuel and energy and other resources, effective technological schemes for growing young animals are created, which determine the needs in production facilities, feed costs, labor costs, the quality of grown chickens and productivity of poultry.

Increasing the efficiency of poultry farming and the most complete satisfaction of the needs for meat poultry production is also achieved as a result of improving its quality. High quality products - ultimately save material, financial and labor resources, increase the level of profitability and competitiveness of products. Consequently, the listed factors can greatly affect the development of the poultry industry. However, the situation in the field of meat poultry farming, which has developed in recent years, is due to increased competition in the domestic market and requires commodity producers to search and mobilize domestic reserves to increase the efficiency of meat production, including on the basis of the formation of a cost management system.

In domestic practice it is accepted to evaluate the effectiveness of cost management based on the principles of organization of the production management system. As the efficiency of the enterprise as a whole is determined by the efficiency of management of production costs, therefore,

the system for managing the costs of meat production should be based on the implementation of the general principles of management: the science of management; planned management of the economy; rational selection and placement of personnel; responsibility; material and moral stimulation of labor; Innovation; efficiency and effectiveness; continuity of economic decisions; hierarchy in management; a combination of sectorial and territorial governance.

Summarizing foreign experience and domestic practice, we have identified the main principles of the functioning of the production cost management system: the unity of approaches at different levels of management, planning, accounting, calculation, evaluation and analysis; cost management at different stages of the technological process; an organic combination of reducing costs with the achievement of high-quality products; preventing unnecessary expenses; wide introduction of the most effective methods of reducing costs; orientation of the system of planning, accounting and calculation for cost reduction, improvement of information provision; increasing the interest of managers and staff in reducing costs; identification and management of transaction costs. Compliance with these principles of management provides an opportunity to provide competitive advantages of products at the expense of reducing the cost of its production.

Consequently, all known theories of production cost management largely confirm that the management of enterprise costs is a component of the enterprise management system as a whole. When constructing a system for managing costs in poultry industry, in order to ensure its effectiveness, it is necessary to take into account the impact of both external and internal factors, as well as a number of specific characteristics specific to meat production.

We share the opinion of the researchers that the effectiveness of management activity is the effectiveness of a particular control system, which is reflected in various indicators of the object of management and management activities. These indicators have both quantitative and qualitative characteristics [17].

The effectiveness of management activities can be considered as a socio-economic category, which reveals the relationship between the results of management activities, expressed technical and economic and social effects, the cost of living and ordinarily managed work to achieve effective results. Obviously, an objective assessment of the effectiveness of management makes it possible to compare different options management organization, give them an assessment, outline ways to improve, increase the responsibility of managers and management of the enterprise for the results of their work.

We believe that in conducting an evaluation of the efficiency of management in egg production it is advisable to ensure that the following conditions are met: management efficiency must be determined on the basis of generally accepted methods for evaluating the overall production efficiency; the specifics of managerial labor is that, as productive labor, it is characterized by the results of the work of the whole collective, and therefore, should be evaluated for influencing the results of the enterprise as a whole or its units; to determine the efficiency of the management system is necessary taking into account the time gap between the investment of funds and their results; it is important to take into account the specifics of meat production in the assessment of the management system, since these features significantly affect the efficiency of production; It is advisable to make an assessment on the basis of comparison [18].

Since the efficiency of management, the cost of production, is part of the management system as a whole and reflects the efficiency of production, then the characteristics of the latter are indicators of the efficiency of management, both production costs and management systems in general.

Scientists distinguish three groups of indicators for assessing the effectiveness of the control system: overall performance indicators; performance indicators of the management apparatus; performance indicators of managerial work [19-21].

At the same time, the assessment of the entire complex of measures to improve the efficiency of the enterprise management system involves comparing the effectiveness of the management system before and after its improvement. The next step is to assess the cost-effectiveness and productive activity of the management apparatus. Formation of an effective system of production cost management requires an assessment of the impact of all factors, as well as specific features of the industries included in the managed system, on the results of management decisions.

Taking into account the peculiarities of meat production, as well as the system for assessing the efficiency of production management, we believe that the assessment of the efficiency of cost management at the enterprises of the investigated industry must be carried out on the basis of a certain system of indicators.

It should be noted that in the economic activity of poultry enterprises, the following indicators are most frequently used:

- feed costs (in feed units) per unit of product;
- labor productivity, which is characterized by the amount of meat received in natural terms, calculated on the worked man-hour and on the average annual worker employed in poultry farming; labor costs by 1 ts. meat; the value of gross meat production per person-hour and average annual employee of the industry; cost of 1 ts meat - production and full (commercial), taking into account the expenses for the sale of products; the amount of profit from the production and sale of meat and its share in the total amount of profits from the sale of all agricultural products (calculated on the broiler, per man-hour or man-day, on the average annual worker employed in poultry farming);
- profitability of meat production (%);
- payback period of capital investments (years).

Conclusions

On the basis of the generalization of methodical approaches to the estimation of the system of management of production costs, their drawbacks were revealed and a universal method based on the calculation of the system of indicators and the integral indicator of the efficiency of the enterprise was proposed. According to the proposed approach, it is expedient to use the following groups of indicators of efficiency of cost management: general performance indicators of the enterprise; indicators of economy of enterprise management and indicators of labor productivity management.

Management of expenses at meat poultry enterprises is a continuous purposeful activity of the management apparatus aimed at cost planning, the organization of economic spending of expenses in the form of cash at all stages of the production process, control over the implementation of the production plan by all structural subdivisions of the enterprise. The mechanism of production cost management is considered as a set of relationships that arise between the managing and managed subsystems in the process of planning, organizing expenditure, monitoring, analyzing and accounting for the costs of producing goods, works and services provided.

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**ANALYSIS OF REPRODUCTION FEATURES OF MATERIAL AND TECHNICAL
BASE OF AGRICULTURAL ENTERPRISES**

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Abstract. *In this article we highlighted external and internal reproduction factors of MTB, considered the dynamics of components of material and technical base of agricultural enterprises. We analyzed the dynamics of indicators of reproduction of fixed assets of agricultural enterprises, and also analyzed the impact of level of technical support of agricultural enterprises on load of 1 tractor and combine harvester. The dynamics of availability of tractors depending on area of land use was drawn up. An analysis of the dynamics of size and structure of tractor park of agricultural enterprises was conducted.*

Keywords: *agrarian enterprises, machinery, material and technical base, reproduction.*

JEL Classification: Q12, Q13

UDC: 631.11(477)

Material and technical base (MTB) of agricultural enterprises as a set of necessary elements allows to carry out a continuous production cycle with minimal expenses of labor. A process of MTB reproduction for agricultural producers is determined by a number of internal and external factors, among which are the following: a possibility of investment resources from external and internal sources of funding, an efficacy of state support, organization of production activities, which focused on resource conservation, size and specialization of the enterprise, a stability of financial state, efficiency of production activity, product competitiveness, investment activity, technical efficiency of the machinery, its physical and functional wear and perception for innovation [1].

A structure of material and technical base of agricultural commodity producers includes all necessary means of production, which at the same time are subjected to reproduction processes, which cause qualitative improvement. A composition of means of production of agricultural commodity producers is characterized by actual availability of fixed and current assets, including buildings, structures, equipment, as well as seeds, fuel, spare parts, plant protection products, fertilizers, which provides continuous production of agricultural products.

The means of production involved in economic turnover should be updated regularly to ensure a continuous creation of social product. Reproductive processes in material and technical basis of agriculture can be carried out through a purchase of new additional productive resources and a creation of their insurance reserves at enterprises. Reproduction of certain types of means of production is carried out by agricultural enterprises on their own. Machinery and equipment, fuel and lubricants, fertilizers and other means of production should be purchased only from suppliers, specializing in their manufacture [2]. In the presence of appropriate technological conditions on farms, seeds, organic fertilizers, and certain types of spare parts are reproduced, as a rule, without the participation of outside organizations.

The necessary condition for the restoration of material and technical resources of agricultural enterprises is an investment of funds in projects of reconstruction and construction of industrial premises, repair and restoration of equipment, procurement of raw materials. Note that reproduction

processes in development of the material and technical base of agriculture is characterized by clear periodicity due to the impact of seasonal production in crop and livestock sectors.

In order to find out features of the reproduction process, consider the structure of the material and technical base in agricultural enterprises, which in value terms is reflected in Form 1 "Statement of financial condition" (Table 1).

Table 1: Dynamics of components of the material and technical base of agricultural enterprises

Indexes	Year					2016 in% to	
	2012	2013	2014	2015	2016	2012	2015
Fixed assets	73471.0	81768.5	85534.4	103733,8	143380,8	195.2	138.2
% to all	48.3	48.9	45.5	43.3	43.7		
Long term biological assets	6659.7	7679.4	7098.2	8091.3	8955.0	134.5	110.7
% to all	4.4	4.6	3.8	3.4	2.7		
Current biological assets	12088,8	11793.8	11892.0	14047.6	16740.7	138.5	119.2
% to all	8.0	7.1	6.3	5.9	5.1		
Stocks	59,753.4	65955.5	83650,8	113907.0	158935.9	265.9	139.5
% to all	39.3	39.4	44.5	47.5	48.5		
Total	151972.9	167197,2	188175.4	239779,7	328012.4	215.8	136.8

Source: compiled according to the State Statistics Service of Ukraine.

Data in Table 1 convinces that during investigated period there is a significant increase in cost of components of material and technical base of enterprises of corporate sector of agrarian economy. This circumstance is due to both increase in cost of incoming material resources, as well as their quantity, especially inventories. In structure of material and technical base, the largest share is occupied by fixed assets and stocks. It should be noted that during investigated period there is a decrease in proportion of MTB structure. This circumstance is caused by several reasons. First, long-term biological assets were allocated on a basis of regulatory-legal acts from fixed assets. Second, most households of corporate sector of agricultural economy in process of production modernization prefer to use as temporary grain storage facilities not designed to this needs. Thirdly, most agricultural enterprises do not revalue fixed assets. It should be noted that a revaluation of basic assets is a matter of purely voluntary nature. It is this conclusion that follows from clause 16 P (C) BO7: "An entity may revalue an item of property, plant and equipment if the residual value of that object is significantly different from its fair value at a balance sheet date" [3]. According to recommendations of the Ministry of Finance, the criterion of materiality may be set at a rate equal to 1 percent of net profit (loss) of the enterprise (p. 34 Methodological Recommendations No. 6161, pp. 2.20.1 of Methodical recommendations № 635) [4, 5] or in an amount equal to a 10 percent depreciation of the residual value of property, plant and equipment from their fair value (paragraph 34 of Methodological Recommendation No. 561). However, these recommendations are not binding, and company has a right to disregard them and independently establish the criterion of materiality. Fourth, there is a process of modernization of material and technical base of business entities in a field of agribusiness, especially large ones, which are the leading producers of certain types of agricultural production, especially energy-intensive ones.

According to calculations by scientists of the Institute of Agrarian Economics, increase in cost of basic agricultural products is largely due to their revaluation (9%) and inflationary factors (43.3%). During this period, prices for tractors, agricultural machinery and motor vehicles grew by 1.4 times, for construction and installation work by 1.2 times, for construction materials by 1.3 times [6].

It should be noted that there is a slight increase in value of long-term biological assets. This circumstance is caused by a renewal of main herd of farm animals, mainly due to their acquisition.

Growth in stock prices is also caused by two main factors. First, an increase in cost of fuel, seed, as well as plant and animal protection and mineral fertilizers. Second, as evidenced by the results

of observations on the activities of farms in corporate sector of agrarian economy, most of them, especially those who belong to middle and large categories, try to provide themselves with main types of production stocks in accordance with technological norms.

It should be noted that fixed assets are the basis of material and technical base, which combine active and passive parts of means of labor. It is established that now there is a gradual increase in indicators characterizing reproduction of fixed assets of agricultural enterprises (*Table 2*).

Table 2: Dynamics of indicators of reproduction of fixed assets of agricultural enterprises

Indexes	Year					2016 to	
	2012	2013	2014	2015	2016	2012	2015
Update factor, incl.	19.9	16.2	15.7	19.2	23.3	3.4	4.1
purchased in% to revenue	56.1	60.7	55.3	51.5	50.2	-5.9	-1.3
Fixed assets retirement factor	8.5	6.1	7.0	5.8	19.1	10.6	13.3
Written due to wear in% to availability	12.2	15.7	12.9	11.8	11.5	-0.7	-0.3
Wear factor	7.5	7.1	6.8	6.7	6.5	-1 , 0	-0.2

Source: compiled according to the State Statistics Service of Ukraine.

On guided calculations in *Table 2* it is shown that during 2012-2016 a coefficient of reproduction is exceeding a coefficient of disposal and significant growth is observed during 2012-2015. This fact demonstrates an implementation of investment funds in agricultural production in corporate sector of agrarian economy. It should be noted that more than a half of fixed assets would come through their acquisition, rest through other sources of investments, in particular by adding fixed assets to share capital.

It has been established that during the investigated period a disposal of fixed assets is gradually decreasing because of wear, which can be explained in two ways. Firstly, most agricultural enterprises, mainly medium and large, completed the modernization of fixed assets. Secondly, agribusiness entities can continue to use fixed assets that are fully depreciated. In accordance with Item 33 of the P (C) BO 7 "Fixed Assets" an object is written off from balance due to a free transfer or non-compliance with the criteria for recognizing an asset [7]. The same norm is contained in clause 40 of Methodological recommendations on the accounting of fixed assets, approved by the order of MFU dated September 30, 2003, No.561: the object of fixed assets ceases to be recognized as an asset (written off from the balance sheet) in case of its retirement due to sale, liquidation, free transfer, final deterioration or other reasons for non-compliance with the criteria for recognizing the asset.

An important part of fixed assets is an active part, represented by vehicles, machinery and equipment. The processes of reforming enterprises of the agrarian economy caused and to a certain extent is a manifestation of crisis phenomena in formation of material and technical base, led to a decrease in the amount of agricultural machinery, transport vehicles and equipment (*Table 3*).

During analyzed period, the greatest rates of reduction in numbers were allowed for tractor trailers, potato planters and cattle feeders. In our opinion, a reduction of the last two types of technical equipment is due to a significant reduction in the volume of potato and livestock production in most of state-owned enterprises.

At the same time, a significant reduction in number is observed for technical means: tractors and combine harvesters. We share the opinion of scientists who say that this situation leads to significant losses in agricultural production by reducing opportunities for timely implementation of agro technological operations. However, in order to objectively assess such a situation, it is necessary to take into account the technical capacities of the machinery and its productivity.

It has been established that a reduction of tractors and combines fleet has also taken place in other countries. Thus, the US park of combine harvesters during 2000-2015 declined from 607 thousand units to 349 thousand units, or in 1,7 times; tractors from 4609 thousand units to 4390 thousand units, or 1,05 times. In Canada, a tractors fleet in 2000 was 728 thousand units, in 2015 - 733 thousand unit, so it practically remained at the same level; The park of combine harvesters has

decreased from 158 thousand units up to 103 thousand units, or in 1,5 times. In Germany, the park of tractors in 2000 was 1374 thousand units, and in 2015 decreased to 798 thousand units, grain harvesters 155 thousand units and 84 thousand units in accordance [8].

Table 3: Dynamics of number of certain types of technical equipment and transport of agricultural enterprises

Indexes	Year					2016 in % to	
	2000	2010	2014	2015	2016	2012	2015
Tractors all brands	318927	168532	130811	127852	132686	41.6	103.8
Tractor units trailers	207766	84968	52176	49004	48547	23.4	99.1
Seeders all types	131972	77807	65596	65492	67157	50.9	102.5
Potato cutters	7116	2664	1689	1631	1573	22.1	96.4
Sprinkler machines and installations without irrigation	12991	4145	3723	3815	4103	31.6	107.5
Mowers tractor	18878	9983	8014	7892	8228	43.6	104.3
Headers roller	34768	16332	13485	13595	14477	41.6	106.5
Combines grain harvesting	65240	36783	27196	26735	27366	41.9	102.4
Milking installations and aggregates	33498	10547	10476	10232	10305	30.8	100.7
Feeders:							
• for livestock	15755	5219	3561	3484	3465	22.0	99.5
• for pigs	2960	1043	3364	3452	3140	106.1	91.0

Source: compiled according to the State Statistics Service of Ukraine.

We will analyze an impact of level of technical support of agricultural enterprises on a load per tractor and combine harvester (*Figure 1*).

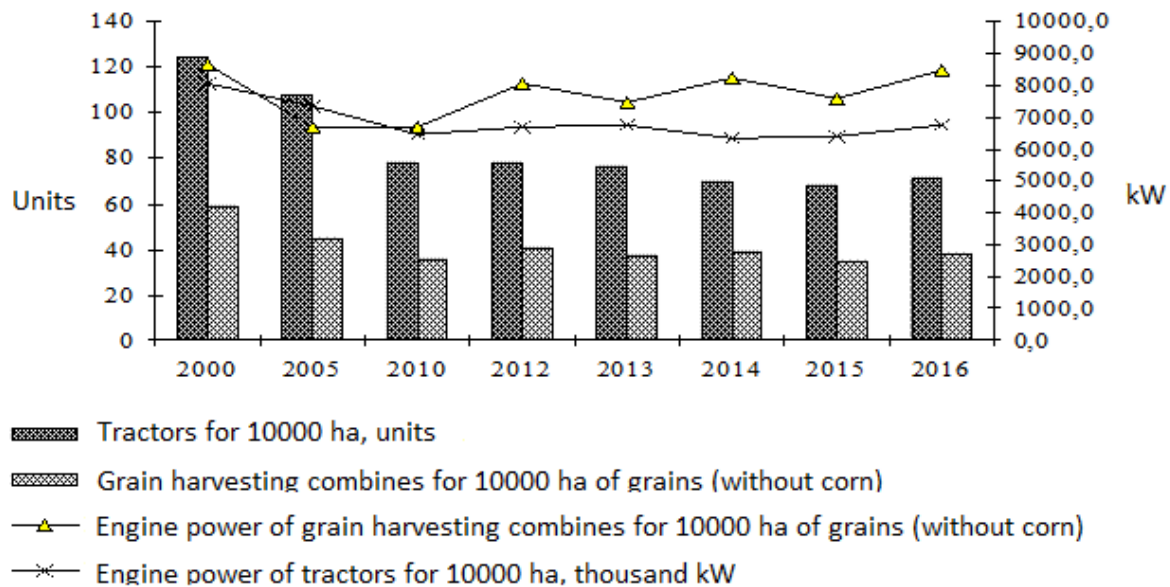


Figure 1. Dynamics of a number of tractors per 1000 hectares of arable land and grain harvesters per 1000 hectares of grain (without corn)

Source: compiled according to the State Statistics Service of Ukraine.

Data presented on Figure 1 shows that during 2000-2016 number of agricultural enterprises per 1000 hectares of arable land decreased by 44%, grain harvesters by 35% per 1000 hectares of

grain. At the same time, a power of tractor engines per 1000 hectares of corresponding type of agricultural land decreased by only 16%, and grain harvesters by 2%. Consequently, with a significant decrease in number of technical means there is a lag in decline in power of technology, which allows us to conclude that it was replaced with more powerful models.

Today among environment scientists acquires a popularity comparison of indicators of loaded arable land per one tractor or sown grains for 1 grain-harvesting combine. If one tractor load average in Ukraine is 14 hectares, in the US 38 hectares, in France 14 hectares, while in Germany 12 hectares. The load on one grain harvester in Ukraine is 26 hectares, in USA it is 63 hectares, in France 53 hectares, the United Kingdom 80 hectares [9]. However, we share the opinion of scientists that the indicators for a level of supply of tractors and combine harvesters of agricultural enterprises in Ukraine and foreign countries for many reasons are not comparable. Currently, in most farms of corporate sector of agrarian economy there is a process of optimization of technical means, due to use of innovative agricultural production technology.

An important factor in assessing of technical support of agricultural machinery is its availability in agricultural enterprises, depending on the level of land use (*Table 4*).

Table 4: Dynamics of presence of tractors in agricultural enterprises, depending on area of land use (per 1 farm)

	Year			2016 in % to	
	2014	2015	2016	2014	2015
Enterprises that had agricultural land	7	10	7	100.0	70.0
incl. area , ha					
to 50.0	2	4	2	100.0	50.0
50.1-100.0	2	5	2	100.0	40.0
100.1-500.0	4	6	4	100.0	66.7
500,1-1000,0	7	7	7	100.0	100.0
1000,1-2000,0	11	11	11	100.0	100.0
2000,1-3000,0	16	16	16	100.0	100.0
3000,1-4000,0	20	20	20	100.0	100.0
4000,1-5000,0	24	24	24	100.0	100.0
5000,1-7,000,0	28	27	28	100.0	103.7
7000,1-10000,0	35	35	34	97.1	97.1
more than 10000,0	70	74	78	111.4	105.4
Enterprises that did not have agricultural land	7	9	9	128.6	100.0

Source: compiled according to the State Statistics Service of Ukraine.

It should be noted that during the investigated period there was a process of optimization of the number of tractors on farms of corporate sector of agrarian economy, depending on the area of land use. Thus, in agricultural enterprises with an area of land use 500,1-5,000 hectares, during three years, no significant changes in the number of tractors were observed. However, small agribusinesses in 2016 against 2015 saw a decrease in the number of tractor park. This circumstance is caused by a decision of management of agricultural enterprises to focus on ensuring implementation of mechanized works only in their own economy. The provision of services by farmers to private farms by this category of agricultural producers is minimized due to existence of tax barriers and increased saturation by means of small-scale mechanization of rural households.

The growth of size of agricultural enterprises land banks leads to increase in the number of energy-intensive tractors with a power output of 100 kW or more (*Table 5*). According to the results of the study, energy-intensive tractors are concentrated in agricultural enterprises with an area of land use of more than 7,000 hectares and a purpose for mechanization of production processes in crop production.

The largest share in the structure of the tractor park of enterprises of corporate sector is occupied by tractors with an engine power of 60 to 100 kW, which are represented mainly by production of the Minsk tractor plant. They are used in all agricultural enterprises, regardless of the area of land use. A positive tendency of increasing their quantity should be noted.

Gradually there is a reduction of low-power tractors with an engine power of up to 60 kW. This circumstance is caused by absence of positive trends in development of horticulture and gardening of agricultural enterprises, as well as reduction of the number of small farms of corporate sector of agrarian economy where they were the most common means of mechanization of production processes.

Table 5: The dynamics of the number and structure of the tractor park of agricultural enterprises

Indexes	2010		2013		2016		2016 in % to	
	unit	in % of total	unit	in % of total	unit	in % to of all	2010	2013
Tractors - all	151287	100	146004	100	132686	100	87.7	90.9
incl. power tractors								
less than 40 kW	9798	6.5	8587	5.9	6817	5.1	69.6	79.4
from 40 to 60 kW	57584	38.1	50746	34.8	41303	31.1	71.7	81.4
from 60 to 100 kW	43929	29.0	45420	31.1	44250	33.3	100.7	97.4
100 kW or more	39976	26.4	41251	28.3	40316	30.4	100.9	97.7
of the total number of tractors								
tractor wheel	133851	88.5	132714	90.9	123439	93.0	92.2	93.0
crawler tractors	17436	11.5	13290	9.1	9247	7.0	53.0	69.6

Source: compiled according to the State Statistics Service of Ukraine.

As the data shows, the agricultural enterprises are gradually reorienting to wheeled tractors, which, by their purpose, are universal, which makes it possible to carry out a wide range of works on production of agricultural products.

Consequently, during 2010-2016, majority of agricultural enterprises has completed a formation of technical base. Currently, movement of technical means is happening under the influence of introduced technologies of agricultural production. Evidence of this is relatively low indicators of release of the main types of agricultural machinery, coefficient of retirement in the main types of agricultural machinery tends to decrease. In addition, relatively low percentage of write-offs of technical equipment at the enterprises of corporate sector is an evidence of established technical base of most agricultural enterprises.

Favorable weather conditions provided farmers with high yields, and devaluation of hryvnia in 2014-2016 made a positive impact on income of agrarian enterprises even in dollar terms. Accordingly, demand for equipment was supposed to be at the level of 2012-2013. However, it was much smaller, resulting in delayed demand, which agricultural producers actively implemented in 2016, restoring a market of agricultural machinery by 70% compared with 2013, and above all an important role here played a stabilization of hryvnia exchange rate.

Despite increased prices of foreign machinery because of devaluation in 2.6 times, agricultural enterprises in 2016 purchased grain harvesters and tractors worth almost 5.5 billion UAH. This amount exceeds are similar index of 2013 in 4 times. An increase in annual amount of purchased equipment took place at the expense of 70% increase in number of purchased machinery and a 2.6 times increase in prices.

Specify that in 2016 among 902 purchased by agricultural enterprises combine harvesters most of the machines were John Deere (211) and Claas (95). Among the purchased 1557 tractors with a power output of more than 100 kW 404 John Deere machines, 220 New Holland and Belarus, 205 Case.

In domestic specimens of indicated machinery occupy a small part on the market, but recent initiatives of Ministry of Agrarian Production with a 20% compensation of cost of domestic production machinery should correct this situation and Ukrainian machinery will gradually occupy decent positions in a highly competitive agricultural machinery market.

Promising direction of reproduction of technical means is a development of secondary market of agricultural machinery. During 2012-2016 agricultural enterprises purchased about 10% of used agricultural machinery. So, in economically developed countries (USA, Germany, etc.) there is a

system of sale of used machinery on secondary markets, on which old tractors are sold on average 3 times more than new ones. Lifetime of most old tractors is 4-5 years, combines 3-4 years. It is known, that this technology is implemented through a dealer system after good repair and maintenance, its cost 30% of the initial [10]. In Ukraine, sale of used equipment is currently poorly developed, and even in study of the reproductive process, this problem is not getting enough attention. However, it should be noted that this is one of the promising options for financially weak or small businesses. Outlined directions of the reproduction process require considerable refinement and search for factors that determine possibilities for their application by identifying disadvantages and essential features of each option of formation and rational use of basic productive assets in agriculture.

We suggest that an important factor of technical re-equipment should be the state program "Actual compensation of the cost of agricultural machinery and equipment of domestic production". According to project of the State Budget for 2018 for partial compensation of purchase of domestic agricultural machinery and equipment it is proposed to allocate 950 million UAH. Next year's maintenance of the program "Financial support for agricultural producers " in the direction "Partial compensation of the cost of agricultural machinery and equipment of domestic production" is an extremely important step to stimulate domestic agro-mechanical construction and creation of conditions for activation of renewal of machine-tractor parks of agricultural enterprises.

According to paragraph 8 of the Resolution of the Cabinet of Ministers of Ukraine dated 01.03.2017 № 130 "On Approval of the Procedure for Using the Funds Provided in the State Budget for Partial Compensation for the Cost of Agricultural Machinery and Equipment of Domestic Production" in the list of domestic machinery and equipment for the agrarian sector which value is partly compensated by the state budget, stated: name and code of manufacturer and its subsidiaries (separate units) with its own code and his dealer; type and brand of machinery and equipment; reference price of equipment. We believe that low effectiveness of the program of compensation of the cost of agricultural machinery is primarily caused by bureaucratic aspects of the process filing of application, submission of information to fill the forms, opening of additional accounts with state banks, etc.

However, negative impact was caused in 2017 by extension of application deadline for inclusion of their products to the list of domestic machinery and equipment for agriculture, cost of which is partially compensated by the state budget to 1st of May. Indeed, by this time agrarian enterprises have not only carried out most of the spring field work, which could be purchased agricultural machinery for within a framework of the state program, but also partially already decided on its acquisition in the autumn period.

In addition, according to the Ministry of Finance's budget note, first payment of compensation took place only in the fourth quarter (October), while purchase of equipment is carried out throughout the year. Consequently, delay in obtaining compensation reduces attractiveness of the state support program.

But the most important factor that led to a failure of implementation of the state program "Financial support for agricultural producers " in the direction "Partial compensation of the cost of agricultural machinery and equipment of domestic production", is a lack of quality and efficiency of domestic machinery in comparison with foreign analogues, demotivating potential applicants to participate in this program.

However, we believe, that the mechanism of agricultural program of cheapening of domestic machinery production should be improved in order to increase its effectiveness. During nine months of 2017 and with a budget envisaged by the state budget of UAH 550 million, only 2.3% 11.58 million UAH were used for the program. According to the Ministry of Agrarian Policy and Food of Ukraine, 96 agricultural enterprises had to be compensated for such amount for the purchase of 149 units of Ukrainian agricultural machinery.

Conclusions

It is proved that during the investigated period there is a significant increase in cost of incoming material resources, and in the structure of the material and technical base the largest share is occupied by fixed assets and reserves. It should be noted that there is a partial reduction in the share of

major stocks in the structure of MTB, due to an exclusion of long term biological assets from fixed assets based on regulatory and legal acts; most of the farms in a process of modernization of storage facilities prefer temporarily facilities; and they do not carry out revaluation of fixed assets.

Excess of refresh rate in comparison with indicator of outflow rate during 2015-2016 is revealed, which ensures a growth of number of important element of the material and technical base of agricultural enterprises technical means. In order to ensure a normal reproduction of the machine-tractor park it is justified, that it is needed to update 8-12% annually. So, in 2016, only value of index of renovation of machines for sowing and planting, sprinkling and for the protection of crops, as well as combine harvesters, corresponds to normative meaning.

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MODERNIZATION AS KEY DEVELOPMENT TOOL AND SAFEGUARD AGAINST RISKS ASSOCIATED WITH RAPID INNOVATIVE PROGRESS

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***Abstract.** The article reviews modernization at an angle of the need to ensure that any technological advancement in the economic sphere should be focused on as well as guarantee beneficial effects for the population as the key fundamental priority of the revolutionary technological transformations taking place at present. The effect of widespread robotization coupled with extensive efforts to advance artificial intelligence may inevitably lead to replacement of human labour which phenomenon should be "cushioned" by effective modernizational policies and efforts through efficient integration and adaptation of innovative technologies primarily for the benefit of the improved well-being of the people.*

Modernization is explained from various aspects of economic development; its components, factors and evaluation of its progress are substantiated along with analysis of various processes taking place under the transformational-modernizational activities in the economic system. Also, modernizational potential is reviewed and detailed as a basis and foundation for successful modernizational activities' implementation.

Key words: modernization, modernizational potential, transformations, technological advancement, economic factors, social-economic system, infrastructure.

JEL Classification: M10, M19, O30

UDC: 334.012.2(477)

At present, globalization still remains the key factor of the world economic development even despite recent tendencies of protectionism and in some cases attempts to isolate national economies from extraneous influences and risks. Increasing inter-dependence of world economies both industrially and financially brings about new interpretations of the key economic development trends and objectives, sets about new strategies and playbooks with the purpose of finding one's way to be successful in the ever growing competitive environment. In this regard, the notion of modernization which is traditionally construed as the qualitative change or development of the entire social-economic system of a country (or region) taking effect under the influence of innovations' generation and diffusion processes in various spheres should inevitably be added with the important component of "safeguard capability" serving as a protection against the negative outcomes of rapid technological transformations.

Most notably, modernization as a space- and time-related process of self-development of the social-economic system characterized by cyclical phases and based on available local development resources should be used to guarantee balanced development of the entire economic system through effective combination of technological advancement, on one hand, and respective accommodation or reinvention [1] of the human labour, skills and expertise, on the other, to respond to the new challenges of the scientific-technical progress. (As a practical example, further pervasive spread of the driverless technology may inevitably result in making the profession of a driver redundant as happened, for instance, with the profession of a hunter which was still in high demand less than a century ago).

The dawning era of artificial intelligence will undoubtedly bring sea changes in both the way we tackle economic problems as well as in the need for humans to re-adjust to new realities of the labour market. As scientific thought predicts, the pressing need for humans to reinvent themselves in the face of the era of robots, in order to remain competitive and efficient, will grow and persist, so perhaps it is the right time to already dwell on a sort of protective mechanisms which would guarantee support for human labour when a choice is made between a human worker or a machine. Obviously, this is just a sketchy prediction of the risks the exponentially progressive technological advance will bring, but it is quite clear that similar challenges will be faced in all economic sectors, including

production, services and trade.

To support this approach, it is also worth mentioning a military sector where intense debate is currently underway on introducing a set of adequate limitations for killing machines in the battlefield. Therefore, quite serious attention now deserves a perception that modernization, which is clearly the instrument of human beings to successfully implement technological achievements, should as well encompass a sort of "checks and balances" mechanism to make sure that technological progress brings more benefit than sacrifices and downsides to the development of the socio-economic system. This mechanism should be granted further elaboration and significantly more comprehensive consideration, while the starting point for this discourse could be the introduction of something like a "human labour factor" where labour efficiency, for instance, shall not be simply judged by the performance results on the same job by a human worker or robot, but also must take into consideration the fundamental premise that any technological advance should ultimately be focused on bringing social benefit.

In general, it is recognized that modernization is aimed at improvement of an entity, and if such entity presents a part of the economic system then such improvement should result in increased production efficiency. In this respect, modernization is naturally interconnected with innovative activities which allows to use the following principle - innovative development is the basis of economic modernization. So, modernization envisages advancement of technologies, creation of institutional pre-conditions for innovative-technological development of a country, thus making this notion quite multi-faceted.

Modernization helps the system to achieve its new potential form, for instance in the technological sphere it means higher technological development stages, in the social sphere - post-industrial and network society, in cognitive aspect - informational society. It also helps reach increased level of efficiency and competitiveness of the social-economic system in general, and thus should not be merely narrowed down to simple introduction of innovations in a specific sphere and within a limited area. Broadly, modernization is a spatial process encompassing the entire social-economic area, which is though more relevant for the so-called "centers" of innovation generation and absorption; on the other hand, peripheral areas absorb innovations at a much later stage based on their capabilities to accommodate such innovations. Therefore, in spatial terms modernization presents waves (or stages) pervading specific social-economic areas of a country or region when each and every level of such pervasion (macro-, mezo-, and micro-level) goes through its modernizational or innovative stage at a specific period in time.

Levels of modernization in the ideal uniform social-economic space of the "locked" social-economic system with unhindered dissemination of information and energy and no extraneous influences present a pyramid-like structure from the centre to periphery (*Figure 1*, line A).

Such scheme can be called ideal distribution, however in reality any space has different extents of density, permeability, number of available communication channels which result in the waves spreading inconsistently and being distorted by the space (line B). Moreover, there are no locked social-economic systems per se, and therefore the distribution of the waves in developed countries demonstrates more steeper angle corresponding to the higher level of advance technological systems compared to the developing countries where such distribution has more of a flat-like course. The movement of waves in the centre and periphery will also have very different character, as the waves in the center would be more regular and uniform, although this does not rule out possible large crises. Then, middle periphery is characterized by significant process variations in time with less regularity compared to the centre, while the ultimate periphery, due to the "scaling down" of innovations, will have more flat-line like indicators of development with visible shift to the right and considerably lesser in value.

With a large number of approaches existing toward definition of modernization there are two aspects generally recognized as the most important ones in the process of realizing modernizational principles, namely: scientific substantiation of the proposed actions, and innovative direction of such actions. As a result, modernization is often regarded as the ability of modern people to scientifically direct changes in the society [2], and as such it must be closely related to the process of transformation which essentially translates into conversion of one economic system into another accompanied by the dying out of old elements, traits and properties that are ultimately

replaced by new ones. Profound modernization can bring about transformations resulting in new properties in the modernized system, and this practically allows to declare that the new system has actually arisen. In turn, transformation of the system may be associated with modernizing such elements of the old system which are required to be preserved in the new system as a result of necessary adjustments required by the new operational conditions.

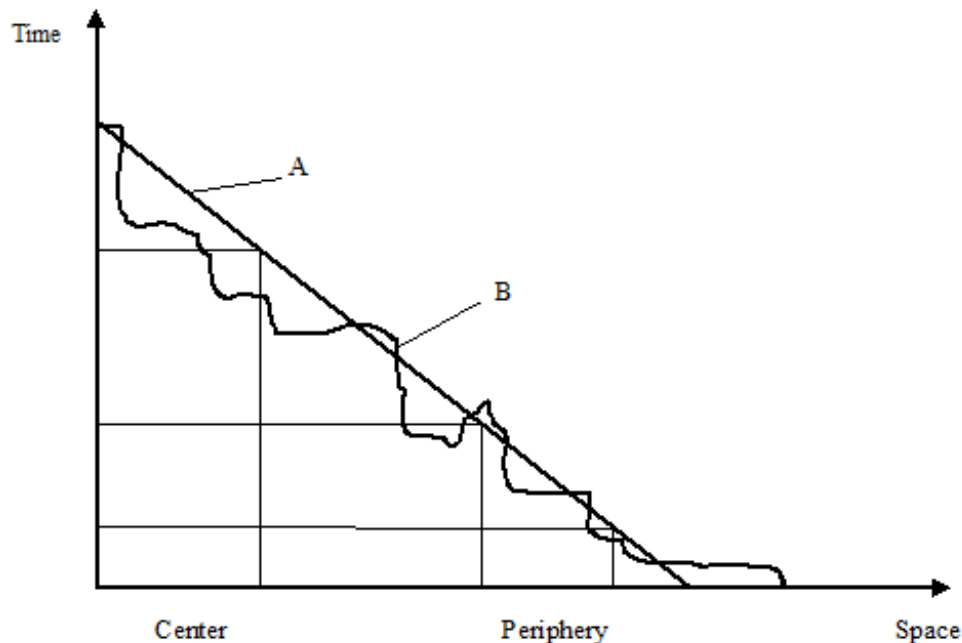


Figure 1: Modernizational waves.

Obviously, modernization introduces improvements which should completely correspond to the requirements of modern time, and in this sense it means improvement of various processes: reformation, reconstruction, restructuring, reorganization, reinvestment, etc. For instance, modernization as a qualitative change aimed at increasing the efficiency and innovativeness of management techniques becomes a sub-structure of reformation that generally reflects a reaction to the crisis of the existing management system and aims to stabilize parameters of functioning of a regional social-economic system. Modernizational reformation therefore becomes a long-term process with the purpose of ensuring compliance of the economy with the dynamically changing outward environment.

Yet, transformational-modernizational processes present not only changes of qualitative parameters of the economic system, with gradual transition toward the new quality, but also reinvention of functions and substance of specific spheres as well as optimization of conditions of such changes on the basis of modernizational activities. It is therefore the process of development, improvement and accumulation of positive changes as well as creation of necessary conditions for continued modernization for the next periods of development. Also, modernizational activities reflect the process of partial or full renewal and thus become one of key directions of strengthening intensive development and growth of economic efficiency. To summarize this, it can be said that modernization is a process of reinvention, structural shifts, and renewal occurring within the economic system on the basis of intensified investment-innovative activities.

Effective modernizational efforts directly depend on proper evaluation of modernizational potential, which essentially encompasses investment and innovative potentials. Investment potential means provision of necessary capital with the purpose of its further increase as well as investment capabilities to pursue, support or preserve some processes. It is also an accumulation of resources which allows capitalization of labour and enables economic entities to operate available resources, provide stable economic revenue and increase labour efficiency. In turn, innovation potential presents

a component of investment space which includes target functionalities as the combination of scientific-technical, production-social, financial-economic and cultural-educational capabilities required to efficiently implement innovative and transformational-modernizational development of a country and its regions.

Innovative and modernizational activities share similar functional objective as they are both aimed at revitalizing key spheres of economic activities and territorial-production complexes, yet they bear some differences in their nature. The basis for innovative activities lies in the improvement of production processes through development and implementation of new or significantly improved products as relates to their properties or methods of usage. Thus, in the center of innovative activities sit the scientific-technical research efforts which are systemic by nature and based on existing knowledge obtained as practical experience, and aimed at creation of new materials, products, processes, devices, services, systems or techniques. The very purpose of such activities is to ensure considerable improvement of already existing entities and systems. Modernizational activities, on the other hand, primarily relate to comprehensive transformation and reconstruction on the basis of new progressive advancement of the structure, substance, organization and management in key spheres of activities in response to the challenges of modern times. So produced and created products become not only partially improved but assume entirely new character as they are obtained on the principles of a completely new knowledge-based economy.

Based on such approaches, the modernizational potential can be generally explained as the combination of prospective and already mobilized resources used to provide structural reinvention of production processes in key spheres of economic activities combined with coordinated operation of its key components, namely: scientific, organizational, informational, labour, technical and technological. All these components should be integrated into a well-coordinated structure which would ultimately provide the basis for the formation of a new innovative development model with the purpose of ensuring increased economic competitiveness and improved well-being of the people.

Key elements of the modernizational potential can be presented in the following diagram (Figure 2):

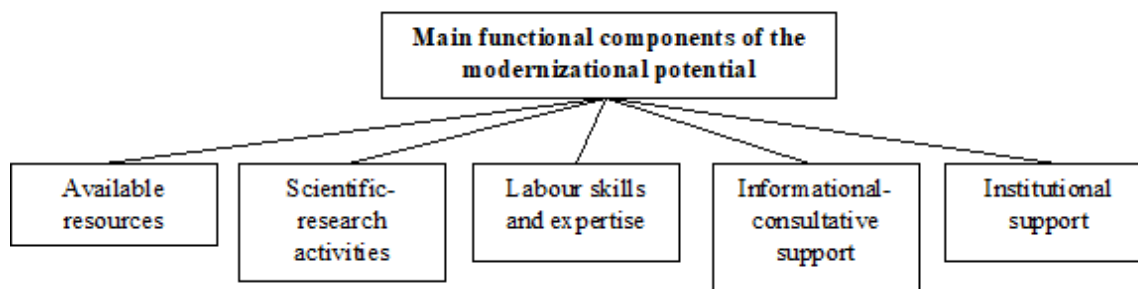


Figure 2: Structure of the modernizational potential.

Modernization also heralds new stages of economic reforms in a country and forms a basis for establishment of the new innovative model of development aimed at increased economic competitiveness and improved well-being of the population. It becomes a leading force in the context of formation of the new world architectural model of the digital economy with the network infrastructure arising as its key element that enables efficient response to the global social, ecological and technological challenges. Technological innovations under modernizational activities inevitably bring about new ideas and realities (big data, artificial intelligence (AI), quantum technologies, virtual and augmented reality, e-trade and e-currencies, etc.) as well as create new products: AI, machine learning, blockchain and cloud technologies, etc. Institutional base for such technological innovations includes crowd-funding services, mutual crediting platforms, online banking, e-currencies, mobile payment systems, forex, digital data exchange platforms, high-frequency trading, e-trading and many others, while efficient digital data processing makes it possible not only to predict the consumer behaviour, but also build new business models which eventually transform entire markets. Such

innovations lead to a much tighter mutual dependence between the progress of digital technologies and their efficient usage in various spheres of economy which thus requires establishment of highly innovative digital sectors as well as re-invention of digital innovative capabilities of all existing economic spheres.

Modernization with internal evolutionary parameters is usually called organic, and such organic modernization is usually taking place in countries-leaders. On the other hand, others simply have to follow the leader with their modernization processes stimulated exclusively by extraneous factors. Obviously, multi-faceted nature of innovations creates multi-directional modernizational trends as well as multitude of guiding principles. In order to examine the very essence of modernizational processes and specific features of its realization they should be broken down into two interconnected domains: substance and internal processes. From the point of view of the substance, modernization can be presented as a desire to bring economic development closer to some kind of ideal state through implementation of improvements required by modern realities in the world. Thus, modernizational paradigm can be determined as the research of problems and consistencies of development as well as efforts to use pre-conditions regarding establishment of a more competitive and efficient operational regime for the economy by transforming its main institutions and technological level. Dissemination of innovative practices and introduction of the new forms of integration of economic spheres should ensure transition of the economy to a new higher functional level.

Resulting from the modernizational processes would always be the preservation by the economy of key structural properties, followed by acquiring of new properties primarily through the transformation of ties between the sub-systems and components. Overlap and gradual replacement of the existing system will occur with the main purpose of transforming functional model into non-linear one and sectoral structure into the network one. Upon such a replacement a diversification will be observed in interaction of the properties of components which will result in mutual offsetting, mutual enhancement or modification with the radically new system coming into being and inheriting both novelty and preserved old features.

Innovative vector of modernizational processes within the economic system is based on internal structural creation and practical implementation of technological and institutional novelties, and therefore revolutionary changes will ensue in technological systems and social-economic institutions as a result of innovative modernization which is truly characteristic of the modern global technical-economic development. On the other hand, the "catch-up" or "follow-up" models enable only selection and adaptation of leading advance technological and institutional practices which had already proven their efficiency within other systems. However, such models are not limited to mere imitation, because the adequate adaptation of such novelties requires unique efforts together with coordinated efforts on their successful implementation aimed at ensuring they compliance with the specific features of a host-system.

Differences in the development stimulus also become very distinctive. The innovative progressive social-economic model is characterized by an almost exhausted potential which pressingly requires evolutionary changes as well as transition to a new stage of development. On the other hand, in the "catch-up" system the main stimulus would be the desire to preserve and maintain the integrity of the existing system in the face of increasing extraneous challenges and problems resulting from the lost momentum in technical-economic advancement as well as ever deteriorating adaptive capabilities. With all this, it has to be noted that the key driving force (social subjects) of any modernizational change almost always presents an internal structural phenomenon.

Based on the existing methodological approaches toward the formation, development and functioning of the regional economic systems the following set of factors seems relevant to better evaluate trends in modernizational advancement which can be essentially grouped into the following clusters: natural resources, economic, social-demographic, scientific-technological, and infrastructural which have both endogenous and exogenous character. The main components of the structure of available potential, based on key factors of its development, should therefore include three fundamental elements: basic, modernizational and labour (*Figure 3*).

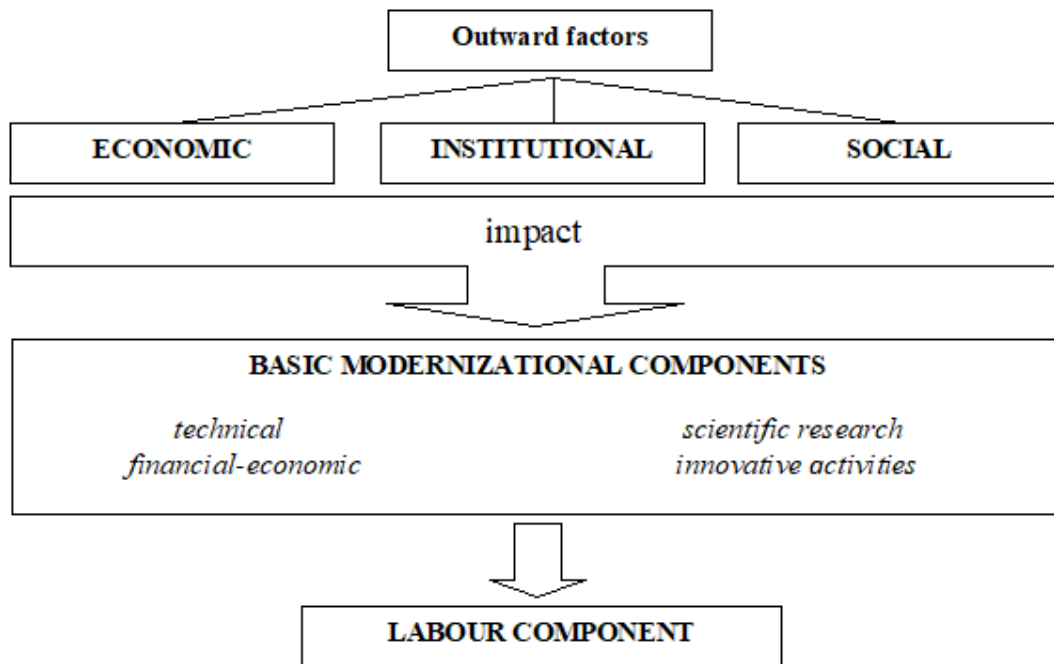


Figure 3: Modernizational potential development factors.

Presented structure of the modernizational potential factors allows to analyze not only its targeted results (as cumulative resources) but also the character of such factors' usage (increase and development of resource potential of an economic system in terms of both quality and quantity) through involvement of additional resources (enhancement of basic component) as well as improvement of efficiency of their usage (development of modernizational component).

While structuring the modernizational processes it is important to determine the following parameters: purpose and key objectives of the process; mechanisms that will ensure formation, realization and regulation of the modernizational activities; methodological approaches toward evaluation (gauging) of pre-conditions for implementation as well as the extent of goals' achievement in modernizing economic activities. Determining the extent of necessity as well as directions and models of economic modernization on the basis of identifying their development character and specifics will require the assessment of the existing potential as well as growth capabilities inherent to the regional social-economic systems along with the comparative analysis to determine the role of each and every region based on indicators of economic performance.

Systemic evaluation of the transformational-modernizational development can be determined and presented by the calculation of a respective generalized integral index based on key components of the modernizational potential. Such index will serve as a comprehensive multi-faceted indicator encompassing five main elements of the modernizational potential which reflect specific stages of transformation and modernization of the economy, namely: efficiency of the processes related to investment, innovative, scientific-technical, personnel-intellectual and institutional activities. This approach will allow to realistically determine effectiveness of the transformational-modernizational processes with the purpose of making right managerial decisions.

The important indicator for the development and functioning of the modernizational potential will therefore be its cumulative efficiency that can be presented in a broadly used general formula for efficiency criteria:

$$R_{ef} = \frac{W}{Z} \rightarrow \max ,$$

where: R_{ef} is efficiency criterion; W – size of the ultimate positive effect; and Z – total expenses.

Further, the modernizational development efficiency ratio can be determined as a correlation between volumes of realized modernizational products and total amount of modernizational expenses:

$$K_{ef} = V_{in}/V_{exp} ,$$

where: K_{ef} is the ratio of efficiency; V_{in} – volume of realized innovative products; and V_{exp} – all expenditures on innovative products.

The current situation in Ukraine is characterized by the existence of considerable progressive technological ideas and achievements along with the unique scientific-production base and highly qualified personnel, however the efficient advancement is hindered by extremely low motivation for modernizational transformations resulting primarily from the "drying up" of financial sources required to pursue creation and implementation of scientific-research developments. Another challenge is the unbalanced innovation system itself doubled with low acceptability of innovations by entrepreneurial sector because of their not very high and quick profitability. In order to resolve such long-time crisis the effective modernizational policy should be introduced as a leverage to increase productivity in economic spheres of the country and its regions as well as stimulate structural revitalization of the economy.

In addition, the very recognition of the fundamental principle of modernizational processes that by being a key tool of revolutionary transformations occurring in the global economic systems it must ultimately lead to the improvement of the people's wellbeing should embed a very important "safeguard" element into any technological advancement in order to ensure universal social benefit of such new technologies' application.

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**UKRAINIAN AGRI-FOOD SECTOR: FOREIGN TRADE AMID
GLOBALIZATION**

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Abstract. *It is specified in the article, that globalization as the international economic system (global economy) embraces global production, exchange and consumption carried out by enterprises in national economies and in the world market. Now days it is not simply an environment where certain social and economic events occur, it is the principal moving force for the said events, this also being true for the economic activity in the agri-food sector. The data on the behavior of the production parameters of foods in Ukraine (namely cereals and flour, meat and milk products, food oils, alcohol), adduced in the article, prove the toughest effect of world agri-food market upon the domestic food and processing industry. The conclusion is drawn, that Ukraine has a sufficient raw material base, high potential of self-sufficiency in products and development of export. At the same time, the technical and technological level of production, the state of fixed assets will require substantial renewal. They slow down the growth of domestic industrial production: the low purchasing power of the population and the lack of financial capacity of enterprises.*

Key words: *food industry, globalization, foreign trade, agri-food sector, world food market, export, import.*

JEL Classification: L66, O52

UDC: 338.43:339.1(477)

Globalization has become an entity in the world economic life. Now days it is not simply an environment where certain social and economic events occur, it is the principal moving force for the said events. This is true also for the economic activity in the agri-food sector. The intense globalization of economic activity has turned internationalization into an essential condition for the survival and success of some agri-food firms [1]. Globalization contributes to the solution of the food problem, since most countries form national food resources at the expense of both their own production and attracting the opportunities of the world food market. This is connected with objective (uneven distribution of natural resources, climatic conditions, weather disasters), and with subjective (consumer interest in respect of goods of foreign origin, advertising and other marketing activities, unification of standards and technologies) reasons [2]. Agri-food sector is reasonable priority of the economic policy according to its specific position and its importance by nutrition providing, by natural resources managing and by realization of the socially important non-production functions [3, 4]. The food industry is the main manufacturing industry in Europe, representing 15.6% of total sales and over one third of world trade in agricultural products and food [5].

Globalization is a complex process. Consumers, farmers, workers, retailers and processors are all connected through the production and consumption of world commodities. Central to this process

is the existence of standards and the agencies and agents that allow their existence. The quality is constructed revealing how farmers and workers are working under both tight control of regulations and regulators. To establish quality, instruments (standards and regulations) are created and actors / groups operate to employ these instruments. The proper attention shall be paid to the complexity of relationships linking processes and agents [6]. The food markets have changed dramatically in recent years. This applies both to the production side and to the demand side. The markets have become more volatile on the one hand, but have also remained surprisingly stable over the longer term. Controversial is the question of how food speculation is responsible for the fluctuations in food prices [7]. The scenario of the production and commercialization of food has changed substantially in the last 30 years. The emergence of new financial circuits, productive technologies and commercial formats have revolutionized the food markets. At present, agricultural products from different parts of the world are transferred daily between different countries and continents, competing in the destination markets with local productions, under different combinations of prices and quality [6, 8].

The commonly-accepted idea of international expansion being good for the company is a recurrent argument used by politicians and the press, and promoted by business associations and organizations. However, entering international markets is still a challenge for a number of companies in the industry. Crossing the border involves the initial costs of internationalization and then competing and organizing activities in a more uncertain and complex environment [1]. Although numerous factors have been proposed in the literature as explaining recent commodity price movements, there is no general consensus on the relative weight that should be attributed to each of them. Many authors have stressed that more consideration should be given to the effects of growing food demand in developing countries, especially in China and India, and also to the lower production growth rate as being among the causes of the recent food price spike [9].

There are all the necessary prerequisites for the Ukrainian agri-food sector to achieve the proper competitiveness of domestic products in the international markets due to the innovations being an important factor in the sustainable development of the national economy, is the innovative nature of industrial development. Now the innovative potential of the food industry in Ukraine is growing more dynamically than that of other sectors of domestic industrial production. Unlike high-tech products, for which the Ukrainian market is chiefly operated by foreign producers, most part of food products, both by volume and nomenclature, is made from domestic raw materials at the industrial capacities within Ukraine [10, 11].

The rapid development of the international trade creates the prerequisites for a significant deepening of the globalization process outside commodity markets, in particular in the sphere of international movement of capital and labor resources. The growing level of globalization in international trade, including food, significantly affects the nature of food self-sufficiency. In actual conditions, economic transformations in the state should be consistent with the globalization processes in the world economy, and also with their forecast estimates. Ukraine must define and constantly clarify its place, its perspective, its role in the integration processes with respect to the leading players in the international arena.

Along with providing the domestic market, it is important to achieve growth in the export potential of the food industry. It is characterized by the availability of raw materials and modern facilities for its deep processing, as the processing of agricultural land and ensuring the quality characteristics of products, compliance of existing standards with international requirements. The agri-industrial complex is Ukraine's export leader, in 2017 its share being more than 35%.

Comparing the export and import of basic foodstuffs (*Table 1*), it can be concluded that there is a lack of production of ready-made food products of meat and fish, which could be a potential for import substitution. At the same time, imports of live animals are growing.

On the contrary, the Ukrainian products of plant origin, as well as fats and oils of animal or vegetable origin, are produced in excess, which provided their share in total exports of Ukraine to amount of 21.3 and 10.6%, respectively in 2017. In terms of foreign trade of food, the share of exports of these goods amounted to 56.7 and 28.3%, respectively.

Table 1: Products and costs structure of the foreign trade of foods in 2017

Codes and nomenclature of products according to the Ukrainian classification of goods of foreign economic activity	Export			Import			Surplus, million USD
	Million USD	% to 2016	% to total	Million USD	% to 2016	% to total	
Foods in total, incl.:	16265.7	116.2	100	3596.3	108.7	100.0	12669.4
I. Live animals; products of animal origin	1109.0	143.1	6.8	731.5	116.8	20.3	377.5
02 meat and edible by-products	531.3	137.0	3.3	112.0	138.7	3.1	419.3
03 fish and crustaceans	26.4	155.2	0.2	455.4	111.1	12.7	-429.0
04 milk and milk products, bird eggs; natural honey	494.4	149.6	3.0	84.9	142.7	2.4	409.5
II. Products of plant origin	9216.4	113.9	56.7	1368.0	106.5	38.0	7848.4
07 vegetables	235.3	154.2	1.4	76.0	93.1	2.1	159.3
08 edible fruit and nuts	195.3	131.8	1.2	477.2	100.2	13.3	-282.0
09 coffee, tea	13.6	96.6	0.1	194.1	103.4	5.4	-180.5
10 food grains	6501.6	107.0	40.0	176.8	118.8	4.9	6324.8
11 products of flour and	182.0	131.3	1.1	32.2	145.8	0.9	149.8
12 seeds and fruit of oil plants	2060.2	134.2	12.7	358.3	112.1	10.0	1702.0
III. 15 Fats and oils of animal or plant origin	4605.7	116.2	28.3	266.6	108.4	7.4	4339.0
IV. Ready-made food products	2827.3	115.4	17.4	1933.2	111.5	53.8	894.1
16 products of meat, fish	15.6	108.6	0.1	82.1	133.0	2.3	-66.5
17 sugar and confectionery products of sugar	417.3	118.6	2.6	47.6	84.7	1.3	369.8
18 cocoa and products thereof	183.7	113.3	1.1	236.2	108.8	6.6	-52.5
19 ready-made products of grain	296.4	139.5	1.8	117.8	133.3	3.3	178.6
20 products of processing vegetables	176.5	125.8	1.1	142.4	128.5	4.0	34.2
21 miscellaneous food products	121.0	120.8	0.7	363.9	110.8	10.1	-242.8
22 alcohol and alcohol-free beverages and vinegar	209.2	127.7	1.3	372.8	128.8	10.4	-163.6

Source: developed according to data of State Statistic Service of Ukraine

In 2017 compared to 2016, there was an increase in exports (due to meat, dairy products and finished food products) and a slight decrease in food imports (mainly due to vegetables).

According to Eurostat, in 2016, Ukraine ranked forty-second in the world ranking of dairy product exporters (for comparison, in 2014 Ukraine ranked twenty-eighth, in 2015 - fortieth). At the same time, according to the European Commission, in 2017, Ukrainian producers become the leaders of the global market for certain types of dairy products, entering the TOP-10 exporters of butter and casein, ranking 10 and 7, respectively.

The dynamics of exports and imports of food indicates an increase in the balance of its main groups in 2017. The main share of exports of food products of Ukraine is provided by grain crops (40%), mainly wheat (17,7 million tons worth \$ 27 billion USD) and corn (19,4 million tons amounting up to 3.0 billion USD); 65% of wheat was supplied to Asian countries, mainly India, Indonesia and Thailand (10%, 12% and 11% of bulk weight, respectively); corn – to the countries in

Africa (23%), Egypt, China and Iran; 12.3% of the production was exported to Spain, this being a positive factor for the integration of Ukraine into the EU. An increase in honey exports was also observed.

The protectionist actions of the EU countries, the quality of raw materials and finished products, the limited quotas for duty-free supply of those, and the lack of harmonized standards restrain entry into international markets.

Throughout the entire period of independence, Ukraine retains its raw material orientation and in the structure of world exports it takes no more than 1% (Figure 1). Therefore, the priority of development is to increase the export potential at the expense of food products of deep processing.

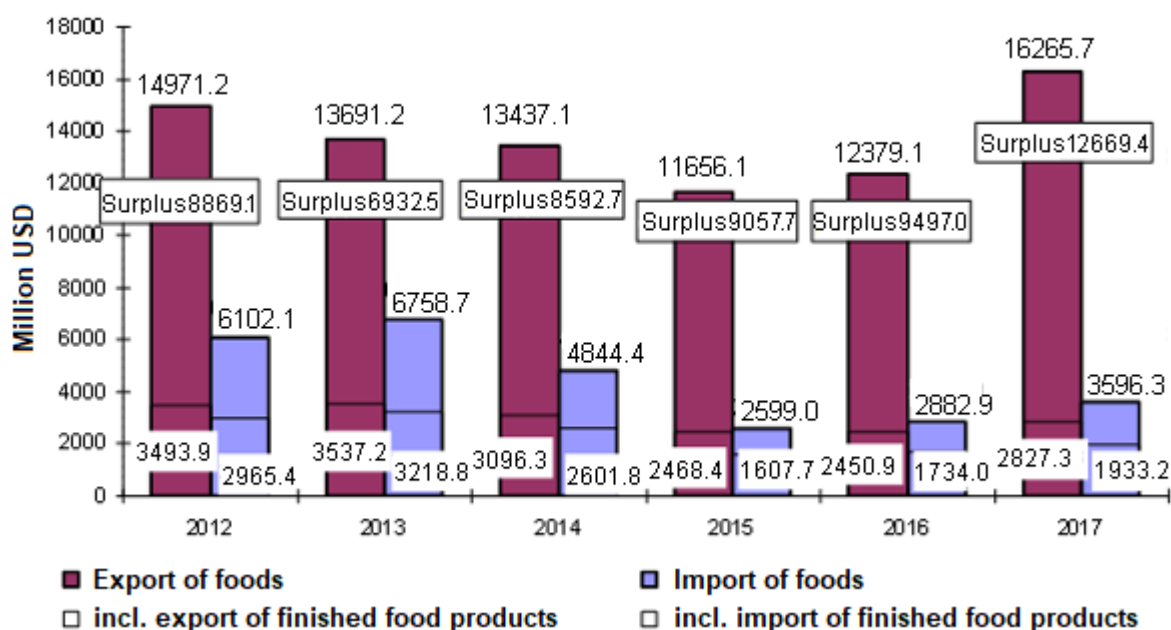


Figure 1: Behavior of foreign trade of foods in 2012 – 2017

Source: developed according to data of State Statistic Service of Ukraine

Unfortunately, even export-oriented and export-capable areas of agri-industrial production significantly lose profits in foreign markets, since Ukraine exports unprocessed agricultural products or products of low degree of processing. On the other hand, sales of ready-made food products or high-value-added food raw materials on foreign markets would significantly improve the financial position of processing and food enterprises, and would allow them to have the necessary funds for innovative renewal of applied technologies and specialized equipment.

The state of provision of the population with food, its physical and economic accessibility have a direct impact on the stability of the social and economic situation in society.

In actual conditions, foreign economic activity of Ukraine is characterized by the need to establish and expand trade relations with food products. This is due to a decrease in demand for traditional goods of Ukraine's foreign economic partners and the creation of a favorable market situation in the agricultural raw materials and food market.

The role of the state in the international division and integration of labor is determined by the sectoral specialization of exports. In recent years, exports of food products have shown quite sharp fluctuations.

In 2017 compared with 2010, exports of food products increased (in USD) by 63.7%. Moreover, the main factor behind this growth was the export of fats and oils of animal or vegetable origin to have increased by 76% and the share of which to have increased from 26.4% to 28.3% in the overall structure of exports of food products. Taking into account the export of products of plant origin, it

should be noted that Ukraine's access to world markets for agricultural and food products increased significantly: the share of food exports in exports from Ukraine increased from 19.3% (2010) to 37.5% (2017), and imports decreased from 9.4% to 7.3% respectively (Figure 2).

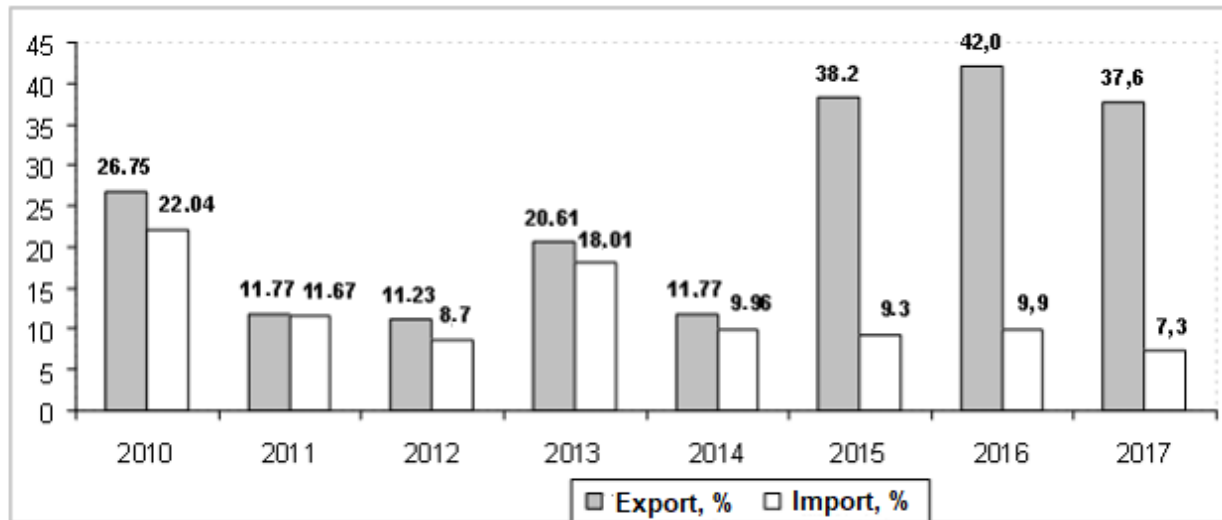


Figure 2: Share of food products in overall export and import of goods and services in Ukraine in 2010 – 2017

Source: developed according to data of State Statistic Service of Ukraine

However, over the period studied there was no improvement in the structure of exports of agricultural and food products from Ukraine. In the overall structure of food exports, the share of ready-made food products has significantly decreased – from 25.8% in 2010 up to 17.3% in 2017

It should be noted that the increase in the share of agricultural goods in the country's total exports during the crisis was one of the important factors in reducing the losses of the national economy. Geographically, the post-Soviet and Asian states dominated among Ukraine's export directions of agricultural and food products. However, with regard to agriculture, the European market is promising, but with the appropriate certificates to comply with high EU standards. The revival of trade relations is possible, given the stable need of the EU countries, even during a financial crisis, for food and products with an unfinished production cycle.

Analyzing the export-import operations with food and food raw materials in the trade balance of Ukraine in 2017, it is necessary to note the presence of a positive balance in the amount of almost 12.7 billion USD. At the same time, a significant contribution to its formation was provided by such groups of goods as products of plant origin – 7.8 billion USD, fats and oils of animal or vegetable origin – 4.3 billion USD, and ready-made food products – 0.89 billion USD.

At the same time, exports of live animals and animal products during 2010-2017 significantly decreased, as a result of which, in this group of goods, the balance changed from negative (11.6 billion USD in 2010) to positive (0.37 billion USD). Despite the fact that the foreclosure of the Russian market created temporary difficulties for the functioning of the industry as a whole, it did not significantly affect foreign trade. Domestic producers quickly reoriented to other markets.

It should be noted that the massive import of agricultural products leads to the destruction of entire industries. Thus, in Ukraine, the number of sheep and pigs has decreased several times, the number of cattle livestock has dropped significantly, and their material and technical base has been decommissioned accordingly.

The markets of food export goods of Ukraine are characterized by increased rivalry of participants and an increase in price competition, which may affect the volume of foreign exchange earnings, an increase in physical volumes of exports. Direct competitors of Ukraine in these markets

are countries that have great advantages, clearly narrowing prospects and reducing the possibility of improving the position of our country [12].

Ukraine's weak export position in the world food market for these types of products indicates the need for its further diversification in the direction of increasing the share of food products.

The economic feasibility of deep processing of food raw materials convincingly proves the state of exports from Ukraine of unprocessed and refined sunflower oil (*Figure 3* and *Table 2*).

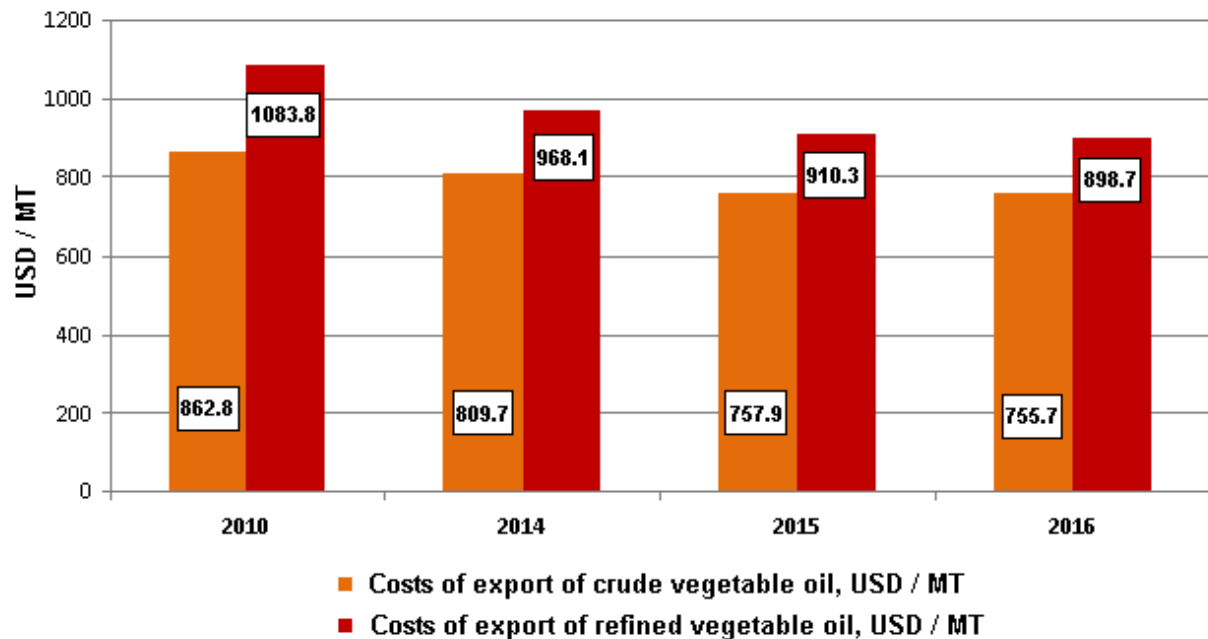


Figure 3: Behavior of export prices for sunflower oil

Source: developed according to data of State Statistic Service of Ukraine

Table 2: Export advantages of advanced processing of food raw materials

Foregone earnings of sunflower oil export, million USD	2010	2014	2015	2016
	557.4	648.4	561.5	646.8

Source: developed according to data of State Statistic Service of Ukraine

One of the key areas is the export of flour and other products of advanced processing of wheat. In 2017, Ukraine exported 443.3 thousand tons of flour. This is 14% more than in 2016 and 2 times more than in 2013. Products were mainly exported to Asian countries (64% of the total), including China (22%), Palestine, Israel, Korea and Azerbaijan (by 8%). The export geography expanded from 44 countries in 2014 to 69 countries in 2015 and to more than 90 countries in 2017 (*Figure 4*).

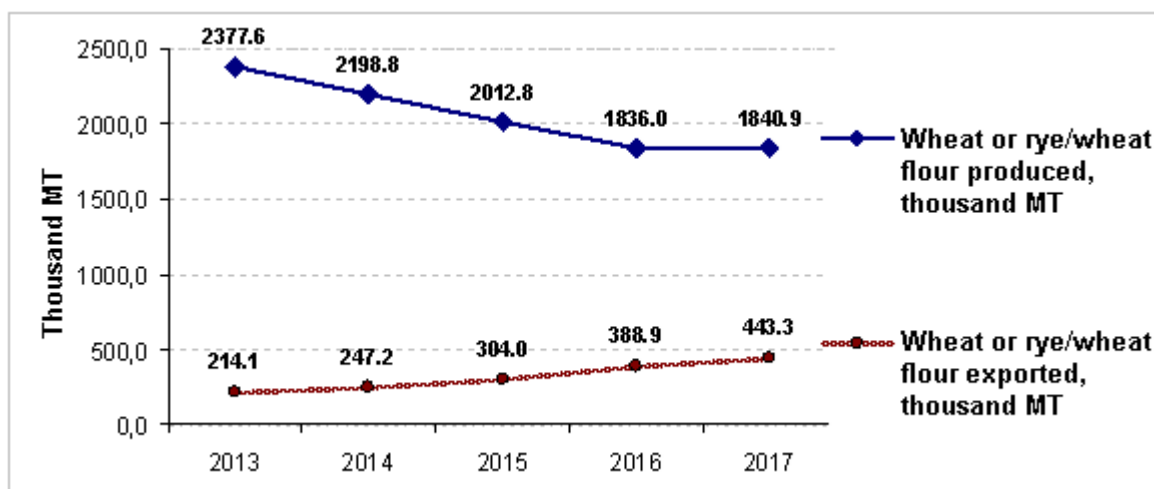


Figure 4: Behavior of production and export of wheat and rye/wheat flour

Source: developed according to data of State Statistic Service of Ukraine

In monetary terms, exports of domestic flour and cereals increased by 32% compared to 2013 (from 137 to 182 million USD). Import volumes were the lowest in 2015, and in 2017 they increased slightly, up to 32 million USD (Figure 5).

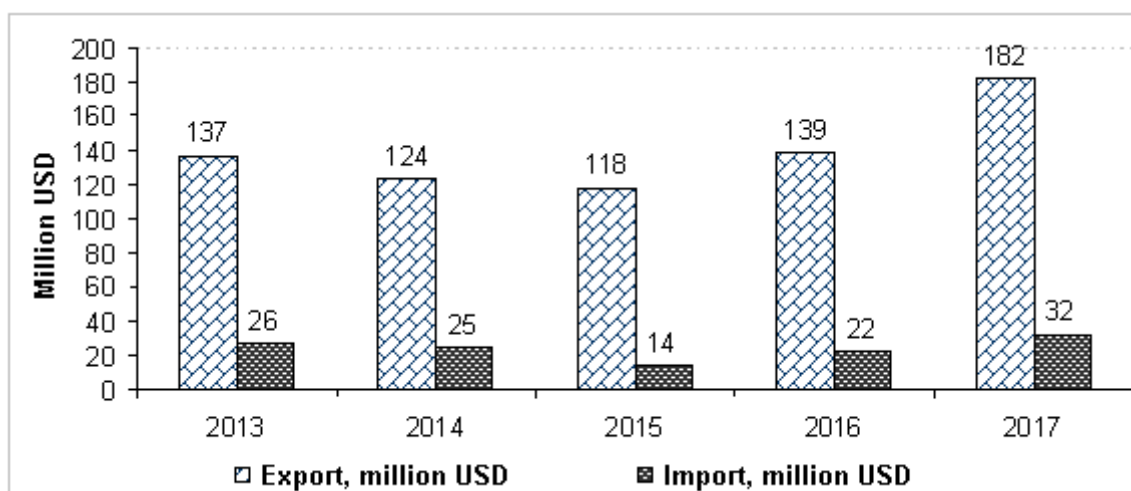


Figure 5: Behavior of export and import of the products of flour-and-cereals industry

Source: developed according to data of State Statistic Service of Ukraine

If the export volumes of wheat flour increased over the past five years, the export of ready-made grain products decreased and in 2017 these products were exported to the amount of 296 million USD, which is 28% less than in 2013 (Figure 6). In proportion to the export volumes, the import volumes also varied.

It should be noted that the countries of the European Union, among the largest exporters of flour, are taking all measures to limit the access of Ukrainian products to this large solvent market. However, the export of flour, even in small quantities, to countries such as the United Kingdom and Switzerland, testifies to the high quality of domestic products, but the main buyers of this product are China (18% in 2017), Moldova (9.2%) and Somalia (8.3%). These markets have opened up thanks to the active search for domestic producers, which in 2014 merged into the Union of the Millers of Ukraine. Deliveries of products to the United Arab Emirates (5.8%) and Palestine increased

significantly. The most promising flour market is the African market, the potential volume of which ranges from 1.8 to 2.3 million MT per year.

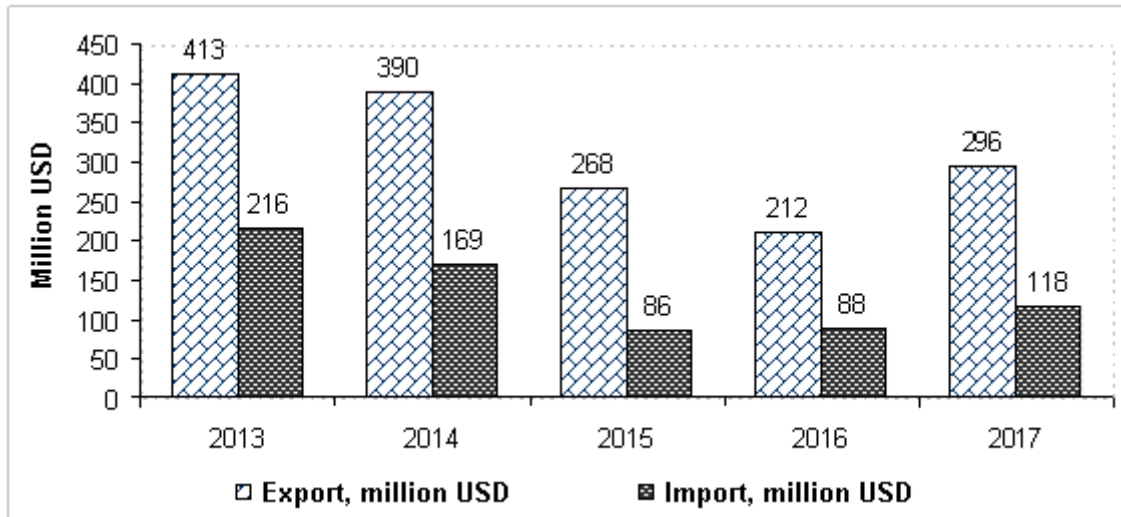


Figure 6: Behavior of export and import of ready-made grain products

Source: developed according to data of State Statistic Service of Ukraine

In the structure of the export of cereals, the most significant are the positions of Egypt (49.1%) and Belarus (14.2%), which mainly buy corn and wheat cereals.

The climate in Ukraine is the reason for the purchase of significant amounts of rice to cover domestic needs. In 2017, Ukraine purchased 76.8 thousand tons of rice (hulled and semi-hulled) in the amount of 3.6 million mainly from India, Pakistan and Vietnam. At the same time, exports of domestic rice amounted to 1.2 thousand tons, mainly to Moldova.

For Ukrainian manufacturers, the EU market is interesting not only financially, but also because of reputational bonuses. In the European Union there are strict requirements for the quality of food products. And if an enterprise supplies its products there, then this, first of all, testifies to its high quality. When trial lots of flour were delivered to the EU outside the quota in 2014, the partners were convinced that the quality of Ukrainian flour was comparable to the average flour originating from EU.

At the same time, due to limited duty-free quotas, flour exports have now slowed. Deliveries to countries in Africa are growing (up to 22% of exports in 2017). The demand for flour in the UAE is significant (7.4% in terms of quantitative indicators for 2017). To increase external demand, one should ensure the quality of wheat and flour, marketing activities from both enterprises and industry specialists and associations shall also be enhanced. The main condition for improving the competitiveness of milling enterprises is their reconstruction, the introduction of energy-efficient equipment, and proper capacity utilization. It should be noted that the potential of milling enterprises allows to supply more than 500 thousand MT of products to the external market.

Although advanced technologies allow for the long-term storage and transportation of dairy products, most of it is produced close to the places of consumption – therefore, the export product range of milk processing enterprises is largely limited to dry milk products, canned milk, butter, cheese (except for farmer cheese), casein etc. The situation with the export of dairy products over the past five years has changed significantly. First of all, this applies to butter, milk powder and cheese. Thus, the exports of butter for this period increased by more than 8 times (up to 27 thousand MT in 2017), and the volume of imports decreased to 300 MT (Figure 7).

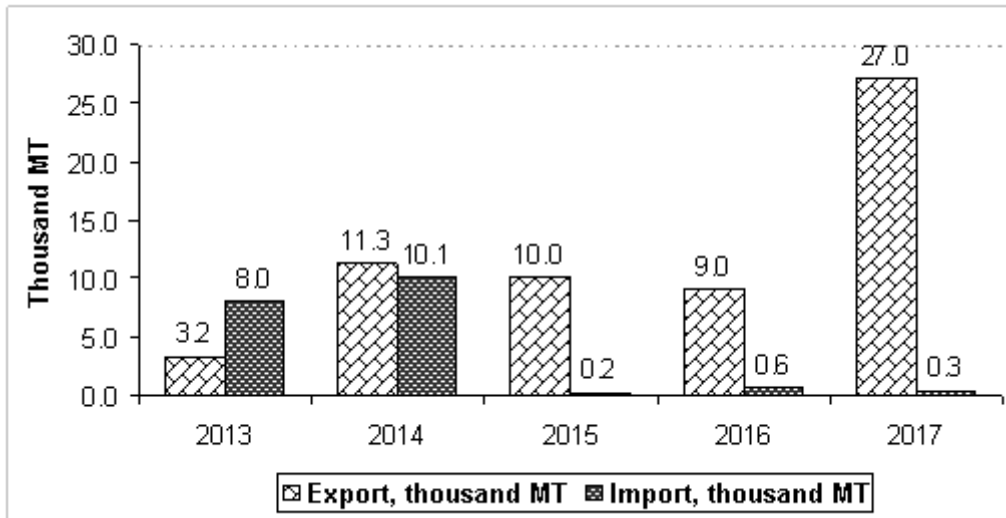


Figure 7: Amounts of butter export and import, thousand MT

Source: developed according to data of State Statistic Service of Ukraine

The main importers of the Ukrainian oil are Morocco, Turkey and Georgia. At the same time, butter was imported to Ukraine from Finland, France and other countries. Exports of powdered milk increased by 30% (to 28.7 thousand MT, 2017), the largest volumes of which were purchased by Armenia, Kazakhstan, Bangladesh (*Figure 8*). But the situation has worsened with the export of cheese, which in 2017 decreased by almost 6 times compared with 2013 (*Figure 9*). The main importing countries of Ukrainian cheeses are Kazakhstan, Moldova and Egypt. Foreign exchange earnings to the country from the export of milk and dairy products in 2017 amounted to 281.7 million USD. The cost of imports of milk and dairy products in Ukraine amounted to 64.8 million USD.

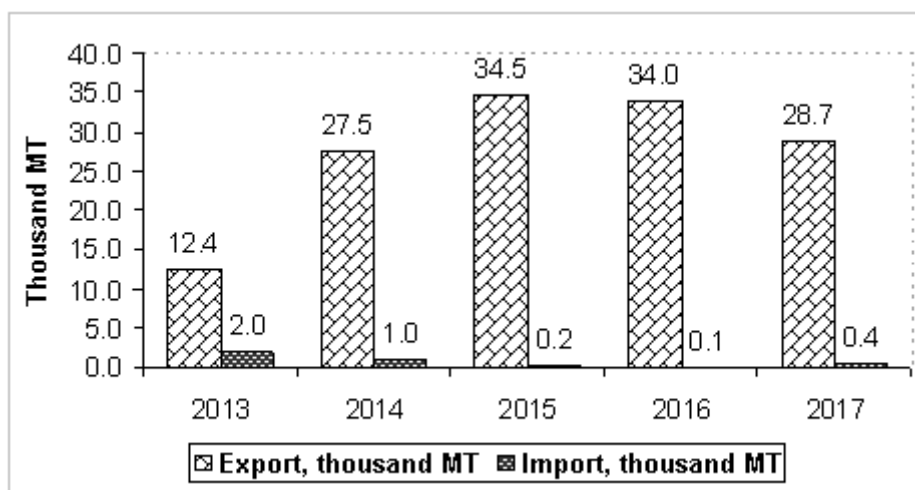


Figure 8: Amounts of export and import of milk powder, thousand MT

Source: developed according to data of State Statistic Service of Ukraine

Domestic prices for dairy products, which are significantly higher than prices in other regions of the world, are of some concern. This is especially true of such products of the export group as butter, powdered milk and cheese – in many cases, the domestic market prices for these products are much higher than the world average.

To halt the growth trends in dairy products exports and achieve its growth, it is first and foremost important to restore the cattle population through farmer support programs, achieve high quality characteristics of products through market surveillance and quality control throughout the entire process chain – from feed to ready-made meat and dairy products. The promising segment of exports of products is condensed milk and cream delivered to the external market in 2017 in the amount of 46.8 thousand MT in the amount of 80,6 million USD, mainly to Kazakhstan (17% of exports), Turkmenistan (15%) and Asian countries (34 %); dry milk, which was exported in 2017, 28.7 thousand MT in the amount of 53,2 million USD.

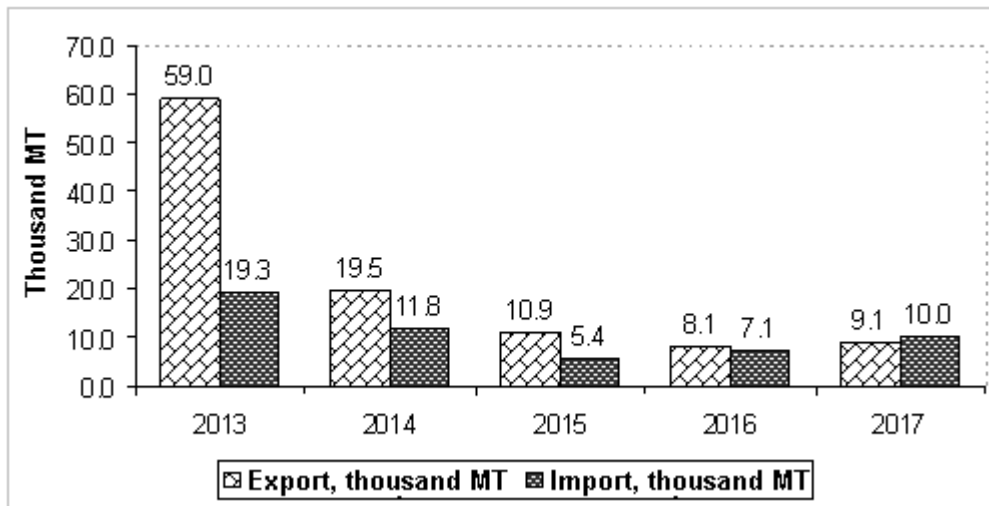


Figure 9: Amounts of export and import of all varieties of cheese, thousand MT
Source: developed according to data of State Statistic Service of Ukraine

The market of certain types of meat products has become livelier. Over the past five years, physical exports of fresh or chilled cattle meat increased by 7% (to 12.3 thousand tons in 2017), of frozen cattle meat increased 2.4 times (to 29.6 thousand tons). A positive phenomenon is that the increase in export volumes in the listed commodity groups of meat products was accompanied by a decrease in the volume of its imports (Figures 10, 11).

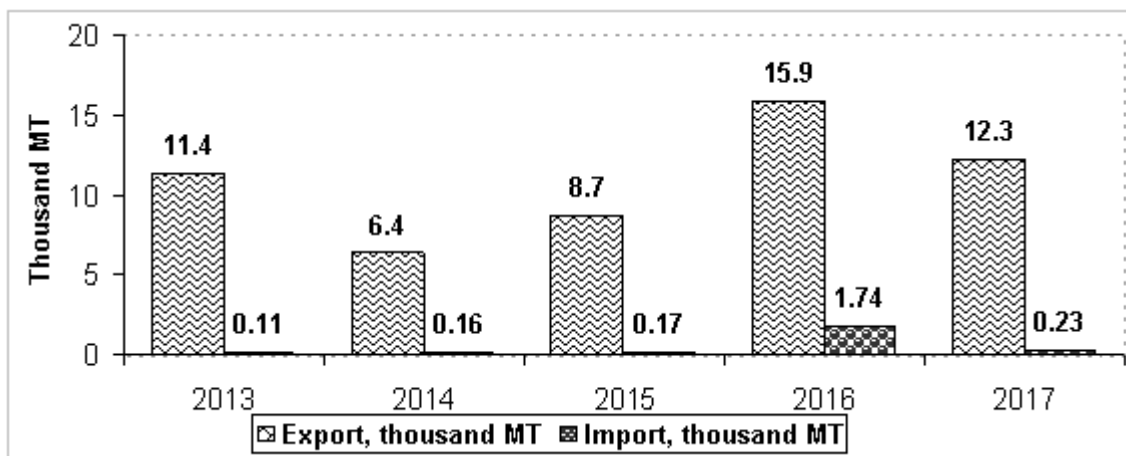


Figure 10: Behavior of export and import of fresh and chilled cattle meat, thousand MT
Source: developed according to data of State Statistic Service of Ukraine

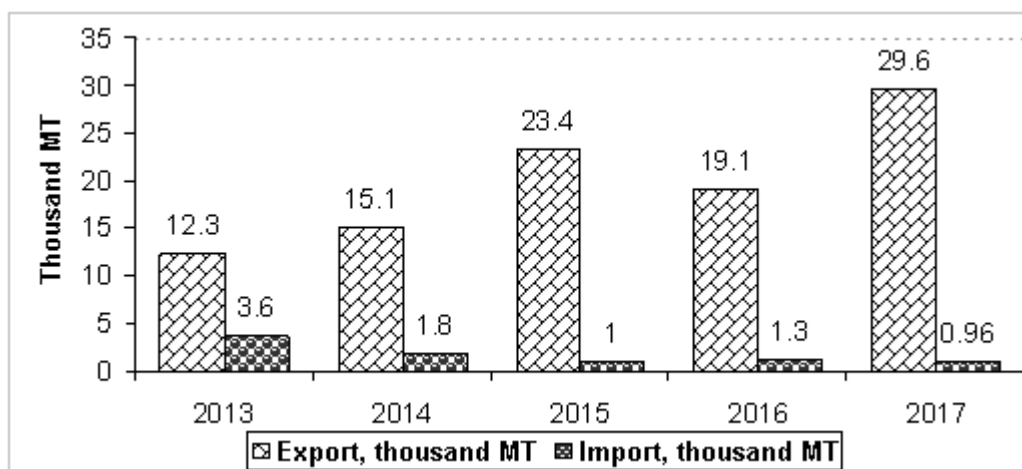


Figure 11: Behavior of export and import of frozen cattle meat, thousand MT

Source: developed according to data of State Statistic Service of Ukraine

At the same time, there is almost no Ukrainian pork in the foreign market today, the main reason for being the spread of African swine fever in some regions of Ukraine. In 2017, export deliveries amounted to only 4.9 thousand MT (mainly to Georgia), and import deliveries to 5.6 thousand MT (from European countries) (Figure 12).

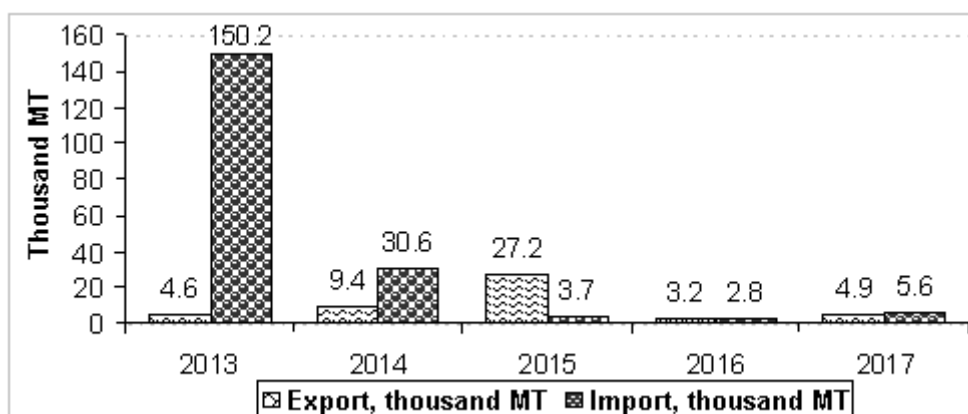


Figure 12: Behavior of export and import of fresh, chilled and frozen pork, thousand MT

Source: developed according to data of State Statistic Service of Ukraine

The export of poultry meat has a growth vector by 1.8 times (271.3 thousand MT for the amount of 389,6 million USD in 2017 compared to 145.6 thousand MT for the amount of 232.1 million USD). This trend can be maintained by establishing foreign trade relations, existing infrastructure, road ways, etc. In 2017, deliveries were made to more than 100 countries, mainly in Asia (more than 40% of total exports) (Figure 13).

In 2017, foreign exchange earnings from the export of meat and meat products amounted to 531.0 million USD, while imports amounted to 112.0 million USD.

Sunflower oil producers made a great contribution to food exports (5,7 million MT in the amount of 4.3 billion USD in 2017, exported to 130 countries). The export of products of a higher degree of processing was started, which is a positive thing to be worth developing.

In 2016–2017, Ukraine significantly increased sugar exports compared to previous years. New markets are being developed. There was a reorientation of exports from the CIS countries to the markets of other European countries (Macedonia), Asia (Afghanistan, China, Myanmar, Sri Lanka)

and Africa (Ethiopia, South Africa, Somalia, Sudan). It should be noted a significant recent improvement in the quality of domestic sugar. Already in the first quarter of 2017, our country has fully chosen the annual quota for duty-free exports to the European Union (20.07 thousand MT). In the first half of the year, Sri Lanka (11% of total exports), Libya (10%), Côte d'Ivoire (8%), Turkey (7%), Sudan (7 %) were the leaders in terms of sugar supplied from Ukraine. In 2017, 598 thousand MT of beet sugar was exported in the amount of 279,6 million USD (Figure 14).

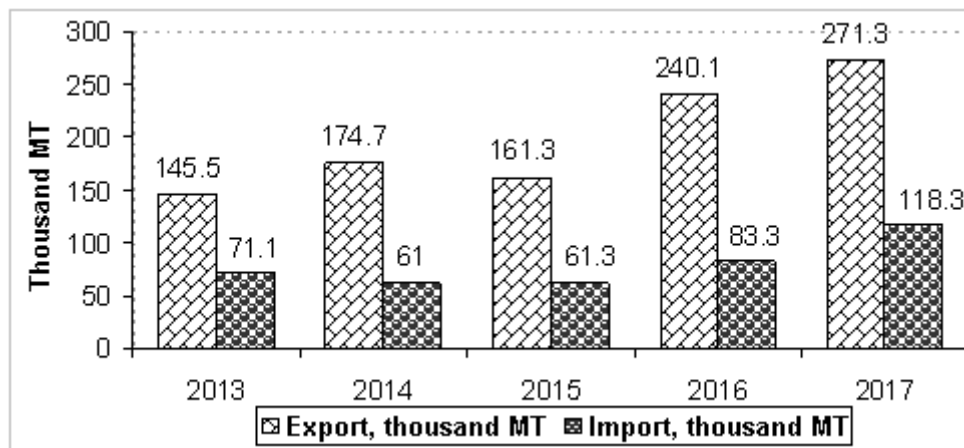


Figure 13: Behavior of export and import of poultry meat and edible by-products, thousand MT
Source: developed according to data of State Statistic Service of Ukraine

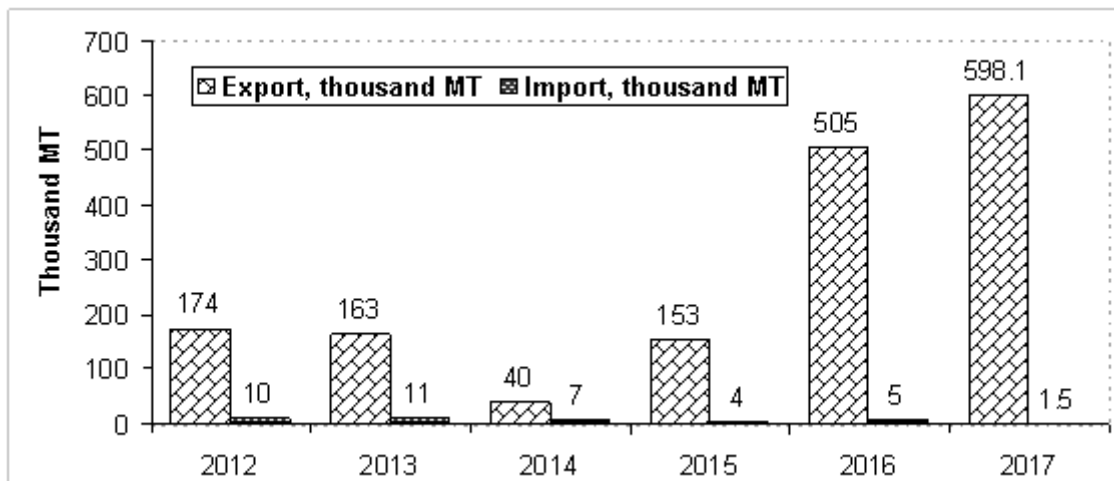


Figure 14: Behavior of export and import of sugar, thousand MT
Source: developed according to data of State Statistic Service of Ukraine

The export of ethyl alcohol in the past five years has decreased by 99%. Such an unprecedented drop in the volume of alcohol exports occurred mainly due to the high cost of its production and, consequently, an insufficient level of competitiveness on the price factor in foreign markets. Note that the record, by volume, export of alcohol was in 1996, when more than 45 million dal of alcohol were exported from the country amounting to 288 million USD.

The largest importers of ethyl alcohol from Ukraine have traditionally been Turkmenistan, Poland, Georgia, Azerbaijan and Turkey. However, since 2013, the export structure of alcohol has completely changed – only 5 countries imported Ukrainian alcohol in very small and constantly falling volumes. At the same time, Slovakia became the largest importer in 2017 – 70.18%. Other major

importers were Moldova – 14.95% and Latvia (14.43%). Experts predict a possible gradual increase in alcohol exports to the EU, Turkey, Armenia, and others. The dynamics of exports of non-denatured ethyl alcohol (with an alcohol concentration of 80% by volume or more) is characterized by the diagram in *Figure 15*.

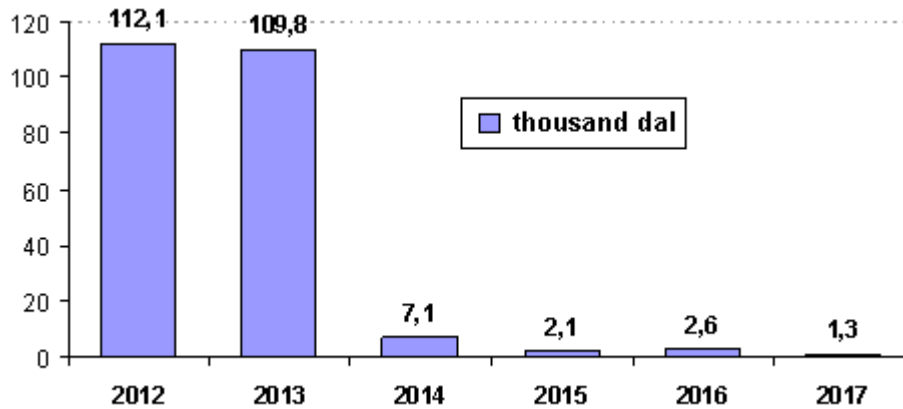


Figure 15: Behavior of export and import of ethyl alcohol not methylated (of concentration 80 vol. %, or more)

Source: developed according to data of State Statistic Service of Ukraine

The volume of the domestic market for honey is estimated at 100 thousand tons, of which honey produced by beekeeping enterprises is almost 60 thousand MT. These figures are somewhat approximate, since a good share of apiculture products is produced by amateur beekeepers, and their sales volumes are not taken into account by official statistics. In 2016, 96% of honey produced by beekeeping enterprises was exported, of which about 18% was to the USA, and the rest – to the EU countries. Interestingly, in 2016 the EU annual quota for duty-free delivery of honey (4 thousand tons) was used in the first 10 days of the year, which indicates a high demand for this product. In 2017, the EU quota was doubled (to 8 thousand tons), which was also quickly exhausted. Unfortunately, one should state the actual absence of export supplies of processed honey in retail packaging – it means that a high-quality Ukrainian product is sold at retail under foreign trademarks or used in recipes of various sauces and marinades.

The main factors for the long-term success of Ukraine's export potential are:

- creating and maintaining a favorable investment climate for the food industry;
- redistribution of the structure of exports of food products to increase the share of high value added products of its processing;
- introduction of the principles of the international system of technical regulation, food safety (HACCP) into the practice of the activities of food production enterprises.

In terms of the financial availability of food in Ukraine, it occupies the fiftieth place due to the low income rate of the consumers living below the poverty line, lower import duties on agricultural products, as well as through the maintenance of food safety programs (3 points out of 4 when the world average is 2.6).

The main characteristic feature of modern markets, including food markets, is the increasing influence of globalization processes on their functioning.

It should be noted that the main area of globalization is the international economic system (global economy), i.e. global production, exchange and consumption carried out by enterprises in national economies and in the world market. In addition, globalization causes an increase in labor productivity as a result of the intensification of production, the introduction of advanced technologies, and organizational, economic, product and other innovations.

Significant manifestations of globalization are associated with the benefits of trade on a mutually beneficial basis, satisfying all parties, which can be individuals, firms and other organizations, countries, trade unions and even entire continents.

The most important trend in the development of modern food markets is expressed in their deregulation, gradual weakening and removal of inter-country and inter-regional trade barriers. Liberalization is supported by developed countries that have significant export potential in food markets. However, the removal of trade barriers, favorable for most food consumers, may appear contrary to the interests of some agrarian and agro-industrial enterprises and industries of certain countries of the world. Therefore, the liberalization of food markets faces some resistance. In particular, international agreements in agriculture enable large farmers from Europe and North America to sell to developing countries their subsidized grains, oilseeds and other products at lower prices. Such a "price expansion" leads to the fact that the products of local producers (an example is the Ukrainian hop growing) become non-competitive, there is a reduction in food production, the number of rural producers, and ultimately, the level of food security of the country.

Now days there is an integration of markets between the countries of the world, which is a tendency to organize interstate blocks, within which trade restrictions have been eliminated or significantly relaxed. Integration associations between countries are formed by evolution, moving from one state to another:

- free trade zones in which duties on all or certain groups of goods are reduced or abolished;
- customs unions, which are characterized by a common customs policy in relation to third countries;
- common market, provides for the liberalization of intergovernmental markets for goods, services, capital and labor. All these markets are becoming common for the common market countries [13].
- There are forecasts regarding the main trends in the development of world food markets for the next 20 years:
- the demand for food remains at about the same level in the most developed and richer countries, the changes will mainly affect the structure of consumption and the quality of food;
- trade in processed and ready-to-eat products will develop faster than in products that have not undergone processing;
- in United States, Australia and New Zealand, are expected to move the first place in world exports instead of the EU countries;
- a number of developing countries – in Eastern Asia and Eastern Europe – will turn into net importers of agricultural products, and as a result, new sales markets will appear in large countries producing agricultural products and foodstuffs;
- as a result of the weakening of protectionist measures, the Organization for Economic Co-operation and Development (OECD) countries will increase imports from 7% in 1992 up to 20% in 2020, this forcing the said countries to restructure their agriculture. It should be noted that the United States forms about 22% of the budget of this organization, Japan takes the second position (13%), and Germany is the third (8%) [14].

Negative factors capable of restraining the further increase in world production of agricultural products and foodstuffs include: limitations in both developed and developing countries, areas of land suitable for agriculture, which is associated with a high level of urbanization and the need to preserve forests; environmental complications in connection with the subsequent involvement in the turnover of unused land; limited water resources; reduction of financing of agricultural production. It shall be noted that in conditions of sufficient world food production, the problems of providing food will be particularly acute for the poorest countries that do not have the funds to finance food imports.

Today the main exporters and importers of agri-food products are predominantly the developed EU countries, the USA, Canada, as well as Argentina, Brazil, and China. Moreover, for developed countries, not only export orientation is characteristic, but the use of the advantages of importing cheaper products, which also contributes to export growth. In an effort to maximize the benefits of international trade, developed countries import at lower prices on the world market, as evidenced by FAO statistics, and then export or resell these products at higher prices in other markets,

including that of Ukraine. Developed countries are interested in preserving their jobs and promoting their agri-food products to the Ukrainian market, this, in contrast to the markets of developing countries, having more solvent consumers.

When choosing its foreign trade strategy in the agrarian sphere, Ukraine should determine national interests and find real ways to protect them in the context of globalization development.

The game on world markets does not occur in relation to established and unified principles. Some countries subsidize imports, others exports, some impose taxes on imports, others tax exports, most countries try to organize assistance to their agricultural producers in the form of various production programs. From this it follows that market signals in the international turnover of agricultural products do not always reflect the real situation of supply and demand, which would be expected in a liberalized market.

For Ukraine, the processes of liberalization present problems of competitiveness in world markets, which, along with the reduction of the subsidy policy, can have a negative impact on all agricultural production and related industries. Achieving a competitive level in the food market requires significant and long-term financial investments in almost all areas, especially in the field of scientific research and agricultural education. So, the development of agriculture and domestic agribusiness will largely depend on the economic strength and increasing its leaders in this market, the US and EU countries.

Intensification of the international trade liberalization in the late XX and early XXI century did not create equal conditions for all countries. For countries with less developed market economies in the new global trading system, there remain significant obstacles to the realization of the benefits of free trade, primarily determined by their institutional underdevelopment, lack of adequate financial and staffing [15].

The further development of the world agri-food system is associated with various development scenarios that are inseparable from food security issues. In the first scenario: in the case of deepening the process of international division of labor in world agriculture, food aid to developing countries will be crucial. The modern system of international division of labor in the agri-food sector is formed on the basis of two groups of countries: the first group consists of developed countries, their share being only 20% of the world's population. This group occupies the leading position in the global agri-food system, since the said countries produce and consume more than 2/3 (in value terms) food. In the second group are the developing countries, with their 80% share of the world population, 1/3 of food is produced there and about 1/3 of the total food is consumed [15].

According to another development scenario, the expansion of production capacity and the access of the poorest developing countries to the free market are envisaged. These countries should not only rely upon imports and help due to the instability of the global agri-food market. To ensure food security, it is necessary to increase investment in agricultural development. The main priority areas for this should be the following: an increase in production; increased performance with environmental requirements; strengthening of international specialization on the basis of regional associations.

The second scenario of the development of the world agri-food system is more promising, because the orientation of developing countries for food aid was a factor to cause the world food crisis. In the 1970s at the request of world financial organizations, instead of producing food for self-sufficiency, they had to produce export goods for the world market, and for the funds received to import food and return foreign currency loans (obtained from the same world financial institutions).

In connection with the entry of Ukraine into the WTO, there was a further liberalization of its trade regime in the agri-food sector. Most experts are convinced that global trade trends are the result of an economic and trading game between the US, the EU and some other competitors in the field of agricultural production. A significant number of specialists in the field of international trade emphasize that the United States, while offering effective liberalization of international trade, at the same time, does not cancel out various forms of government intervention when it is useful for agriculture or consumers.

The globalization of agrarian markets and the emergence of transnational corporations have destroyed the perfect competition that has recently been. A characteristic feature of the modern world

food market is the development of global food companies (GFC), which have certain national identities, but carry out significant activities abroad.

So, Ukraine has a sufficient raw material base, high potential of self-sufficiency in products and development of export. At the same time, the technical and technological level of production, the state of fixed assets will require substantial renewal. They slow down the growth of domestic industrial production: the low purchasing power of the population and the lack of financial capacity of enterprises.

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HOUSEHOLD AS A SUBJECT OF FINANCIAL ACTIVITY IN UKRAINE

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Abstract : The essence and functionality of personal finance in the financial system of the state, of Old Identifications conceptual apparatus, determine Hainaut economic substance and content of financial behavior and financial activities howl households consideration will be given to the purposefulness and factors of ensuring the financial activity of the population in the context of the development of market relations .

Key words : finances, household finances, financial behavior, savings, financial activity, factors, finances of the state, cash.

JEL Classification: G10, G19

UDC: 336.5:330.567.4(477)

Household as an economic entity should be considered, on the one hand, as an open system that interacts with the external macro-profile , responds to its changes under the influence of a combination of economic, social and social factors, and, on the other, as a closed structure with its own laws, motives, patterns, contradictions. However, in any case, this set of individuals having common economic interests, functions, behavior and sources of funding [4]. According to the recommendations of the UN, the household is defined as "a person or a group of persons combined to provide all that is necessary for life" [5, p. 161], that is, united by the common management of the economy .

Thus, the existence of a household as a subject of the economic system is directly related to its main functions, in particular supply, production, consumer, savings, implementation of which is carried out in accordance with the formation, distribution and use of the common budget. This determines the basis of the development of household finances and the need for theoretical justification of the principles and mechanism for their implementation in accordance with the laws of a market economy, according to which the behavior of any subject is determined by an economic choice in the context of growing needs and limited resources.

The review of the economic literature (*Table 1*) gives grounds for generalization that household finances are a set of economic relations in relation to the formation, distribution and use of funds of funds in order to meet the personal needs of citizens.

The peculiarity of financial relations of a household is:

- Distributive character, which reflects the process of distribution and redistribution of GDP, national wealth between households and economic entities, households and the state, individual households, individual households;
- Monetary nature;
- The ultimate goal is to meet their socio-economic interests.

Financial relations of a household are divided into internal and external [15, p . 12].

The internal financial relations of the household include those that arise among its individual participants in the field of the formation, distribution and use of trust funds of funds (life support funds, development, reserve funds for restoration, savings, investment, improvement of the environment, the formation and support of the image), in particular:

- 1) financial relations related to current consumption;

- 2) financial relations in the sphere of savings;
- 3) financial relations with regard to investing.

Table 1: Interpretation of the essence of the term "household finances" by domestic and foreign economists

Author	Content definition
Vorobyov V. Yu. [6, p.7]	Household finance is an economic category that characterizes the process of distributing and redistributing part of the value of the country's GDP in order to generate financial resources, cash and non-monetary incomes at the household level, ensuring their financial interests, and raising the overall level of well-being of each household member.
Dimitriyeva E. Yu. [7, p. 7]	Finances households - This is a set of monetary relations about formation and use of funds cash, in which come in household and him individual members at the process social and economic activity.
Zhmaylo AF [8, p.43], Okunev L.P. [9, p.307]	Finances housekeeping - economic monetary relations in the field of formation and use funds money for the purpose software material and social conditions of life members farms and their play.
Ivanova V.V. [10, p. 9]	Household finances are a system of monetary relations in which the population participates, receiving their share of the aggregate social product in the form of wages, business income and other forms of redistribution, paying taxes and other obligatory payments, that is, relations related to the formation and the use of income and expenditure of the population.
Kizima T. O. [11-12]	Household finances in the form are income and expenses as the material expression of financial relations entered into by households in the process of economic activity.
Lolland L. S. [13, sec. 5]	Household finances are regulated in a specific legal field by means of special methods, techniques and tools the flow of funds through the micro - level system of funds that ensure the functioning and development of people as individuals, their economic activity for the purpose of housing, health care, education , getting a pension, providing other aspects of human activity.
Chornaya O. M. [14, p. 33]	Household finances as an economic category are a set of embodied in cash flows of economic relations, which enter households in the process of forming, distributing and using funds of funds in order to meet the needs of its members, reproduction and development of human capital.
Yuriy S. I., Fedosov V. M. [15, pp . 12]	Household Finance - a set of economic relations that arise in the formation, distribution and use of cash incomes, savings and funds of citizens and their families in order to meet the personal needs of households.

Source: compiled by the authors on the basis of conducted research [6-15]

External financial relations are characterized as relations of households with the external environment in the field of financial transactions. Depending on the characteristic features of the subjects, determine:

- 1) financial relations with other households;
- 2) financial relations with consumers of resources belonging to households (employers, etc.);
- 3) financial relations with enterprises related to household consumption of goods, services, works;
- 4) financial relations with the state (taxation, social transfers, etc.);
- 5) financial relations with financial market institutions (banks, insurance companies, pension funds, credit unions, investment funds and companies, etc.).

The distribution of GDP is accompanied by the movement of cash in the form of income, income, and accumulation, which together form the financial resources of households, which, in turn, are used through funds of the intended purpose (current consumption, savings, investments, etc.) in the

form of payments, expenses, deductions This cash flow is a material bearer of financial relations of households. Note that the formation of household finances takes place in the second phase of the reproduction process - the phase of the distribution of GDP. As a result, households receive primary incomes from productive employment (wages, business income, self-employment) and property income (rent, interest). The participation of households in the secondary distribution (redistribution) is accompanied by payments in the form of taxes, compulsory payments, contributions that, in turn, determine the income of other entities (households) in the form of state transfers (pension, scholarship, material assistance), inheritance.

If financial resources are a combination of funds available to the state and business entities [16], the financial resources of households are a set of own and borrowed cash and non-cash funds received as a result of the distribution and redistribution of income and available financial assets, as well as monetary equivalent of the value of natural proceeds. The structure of their formation can be represented as shown in Figure 1

The internal nature of household finances manifests itself in functions whose realization determines their role, place in the financial system, and the impact on the socio-economic development of the state.

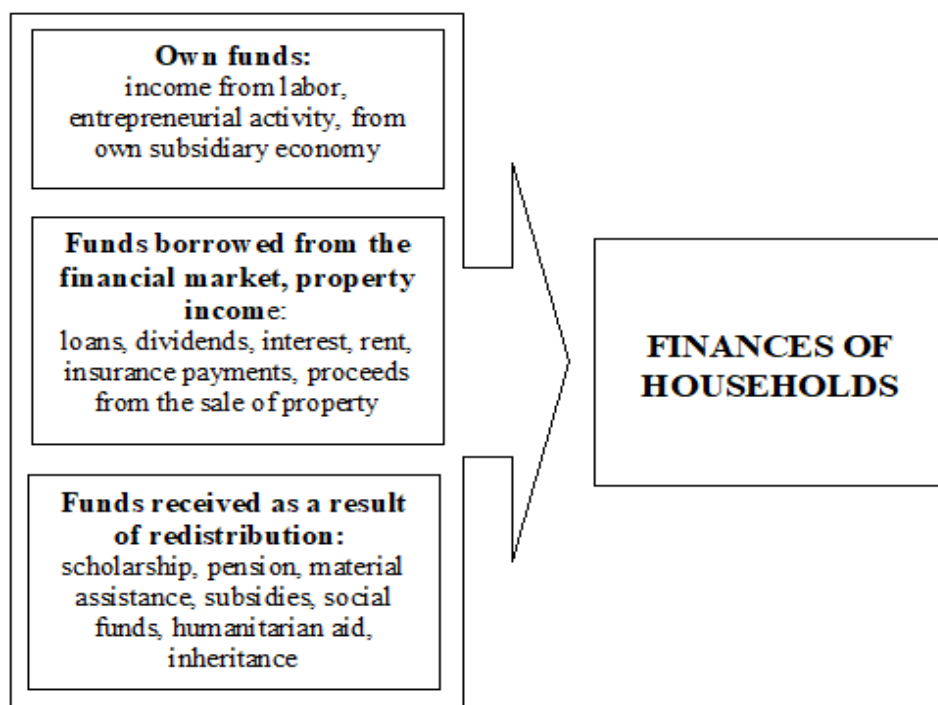


Figure 1: Structure of financial resources of households

The review of the economic literature [6, 11-12, 16-18] makes it possible to distinguish the following functions: resource-generating, distributive, reproductive, regulatory, investment, control.

1. The resource-forming function is the primary, basic and reflects the process of formation of the structure, the size of incomes of households from a variety of sources, primarily of their own (income from individual labor activity, individual entrepreneurial activity, investment activity and activities in the securities market, inheritance, state transfers, lotteries) and borrowed (consumer, mortgage loans).

2. Distributive function covers the primary distribution and redistribution of national income and the formation of financial resources of material needs of households (current consumption, current liabilities, savings).

3. Realization of reproductive function involves the formation of conditions for the existence of each subject of the household in accordance with the need for competitiveness of the individual in the labor market, strengthening his physical and psychological health, which also implies domestic investment in human capital.

4. Given that a household is a set of individuals whose interests do not always coincide (ie, its identification in a market economy as an individual requires a balanced development of individual members), an important role is assigned to the regulatory function, which determines the optimal proportions of income distribution among individual members, predominantly by self-regulation, but taking into account the totality of institutional, socio-psychological, social factors (motivation, traditions, expectations, general economic preconditions).

5. The use of funds in the form of active savings of the population in order to increase the capital of households reflects the investment function. Its implementation determines the movement of investment resources through financial market institutions from households to business entities that affect socio-economic development in general, thanks to the mechanism of domestic investment.

6. The control function ensures the efficiency of financial relations in the field of the formation, distribution, and use of household finances through a rational choice of sources of formation, distribution proportions, and the use of limited financial resources of the population.

Consequently, these functions of household finance outline their current role. Considering that this category is complex, it should be investigated not only from the point of view of economic and financial, but also social and public opinion. Accordingly, the economic role of household finances is that they are, firstly, the basis of resource provision of the national economy, and secondly, it is households that are the main end consumers (consumers) of goods and services. The main motive in this case is the desire of individuals to meet their personal needs as much as possible.

Participation in the financial market of households as an investor through the placement of personal savings, as well as taxpayers, compulsory payments to state and local budgets, targeted state funds, the funds of which form the resource base for the implementation of functions and tasks of the state, determines the financial role of the household.

In addition, a number of authors [for example, 18] justify the active and passive financial role of households depending on the structure of the budget, and, given the internal motivation, is constructive and deconstructive. Active participation of the population manifests itself in direct influence on economic and financial processes through savings, investment, income generation, demand and expenditure, participation in budgetary relations with the state; and passive - in overwhelming savings through the purchase of gold, real estate, antiques or "home" savings, the consumption of budget funds through the system of social protection of the population. With regard to the constructive role, it manifests itself in the financial relations of households that provide enhanced reproduction, the growth of socio-economic welfare of the nation, the development of human potential (professional development of workers, the establishment of a healthy lifestyle, transformation of savings in investment). In a deconstructive role, financial relations are realized at a loss for an organized financial system (shadow transactions, savings outside financial institutions, unorganized financial services market). Motivating factor in financial role is income, growth of personal well-being, and in the case of financial relations with the state - receiving services to meet their own interests, needs.

The social role of household finances is characterized by the fact that it is based on the family. Joint family decisions on the production and consumption of goods, the birth of children, migration, as well as established norms, rules for household management determine not only the status of the family in society, but also affect the economic and financial behavior of the population in general, the level of his responsibility before society. The social role of household finance is related to the realization of the interests of household members as individuals. It is based on the motives of achievement, affiliation, and power, which determines the development of a personal social position of the individual in relation to economic, social and political behavior, which is formed under the influence of social norms, traditions, institutions.

The formation of a market economy in the domestic economy during the last decades was accompanied by a transformation of the behavior of business entities. And if the behavior of the enterprise has fundamentally new characteristics, households remain the least developed subjects of the economic system - their behavior cannot be characterized as rational, economically expedient or effective. This is primarily due to the lack of proper theoretical and practical substantiation of financial behavior of households in domestic economic and financial science, and therefore insufficient level of understanding of functions, role and place of households in economic activity. As a consequence, when developing financial and economic policies, at both macro- and micro-level, households are not given due attention as actors that perform resource-generating, distributive, reproductive, regulatory, investment, controlling functions. Lack of substantiation of household behavior is conditioned by a high level of income differentiation, relatively small volume and instability; low financial and economic literacy; the lack of institutional, organizational and legal consolidation of the norms of economic and financial behavior of households under conditions of market mechanisms. That is why economic decisions of households are usually formed under the influence of noneconomic factors, and their behavior can be considered in the context of irrational adaptation.

Given the instability of financial and economic relations in the national economy, it is expedient to study the factors that influence the adoption of financial decisions by households. This allows us to scientifically substantiate the optimization of their financial behavior in order to ensure sustainable socio-economic development of Ukraine.

As already noted, household finances are a set of economic relations in the area of the formation, distribution and use of cash funds in order to meet the personal needs of citizens. Consequently, their peculiarity is, firstly, the distributive nature that manifests itself in the processes of distribution and redistribution of GDP, national wealth between households and economic entities, households and the state, individual households, and individual households; and secondly, monetary nature; and third, their ultimate goal is to meet the socio-economic interests of households. Accordingly, in the general sense, the financial behavior of households should be understood as individual decisions regarding the formation of cash incomes, their distribution and use in order to meet individual social and economic interests.

The motives for achieving one or another purpose of financial behavior, in particular the preservation of available funds or the receipt of additional income, are determined by the needs of the household:

- 1) in investment, which is manifested in the need to invest temporarily free money in order to increase wealth (interest, entrepreneurial income, wages, dividends, rent);
- 2) in financing, which causes the formation of the necessary resources to finance the needs of current and future consumption;
- 3) in rationalizing the turnover of financial assets in order to save money, optimize their movement and use.

It should be noted that the above needs reflect not only the financial interests of households, but also socially significant, and correspond to the principles of rational behavior of the household. However, some researchers [29] emphasize the importance of motives of affective or emotional nature, in particular, fear (the motive of mischief), satisfaction (the motive of extravagance, the need for communication) and self-affirmation (the motive of increasing wealth) that should be attributed to the irrational motivation of financial behavior. The last motive, as a rule, manifests itself, first of all, as a social one, and then as a financial one.

Thus, it can be argued that effective financial behavior of households is possible only on the basis of financial forecasting and planning, accounting and control, minimization of financial risks, use of savings, investment, lending, insurance, purchase and sale of financial assets and services, etc. At the same time, efficiency depends to a large extent on the rationality of decisions that maximize the welfare of households in specific socio-economic conditions under the influence of a combination of factors.

The analysis of the evolution of economic thought shows that the modern theory of household finance is based on the concepts of "economic person" (18th century - the middle of the 20th century),

Keynesian theory (40-60s of the 20th century), "a new household economy" (60 the 20th century.), "behavioral finance" (70-80s of the 20th century), neo-institutional approaches (90s of the 20th century to the present).

The neoclassical approach to household research is based on the following postulates [30]:

- The household and the individual are identical concepts;
- Household - a subject that operates fully rationally;
- A household is a subject that operates under full information conditions;
- Perfection of settlement and cognitive abilities of households;
- The household does not violate the formal and moral norms;
- A rigid distinction between advantages and limitations, goals and means;

The object of the study of the neoclassical theory is the "economic man", the concept of which was first formulated by A. Smith, but introduced into the scientific revolution A. Marshall. The main characteristics of an "economic person" are as follows [31]:

- a determining role in motivation plays a personal interest; in a market situation, personal interest is balanced with the public through the mechanism of the "invisible hand of the market";
- "Economical person" is competent in economics;
- the main purpose of economic activity is maximization of profit.

So, summing up, we note that the neoclassical theory (the theory of marginal utility, consumer equilibrium, optimal consumer choice) considers the behavior of households in the context of the full rationalization of individual benefits, maximizing utility in the absence of uncertainty, a clear distinction between advantages and limitations, goals and means, the absence of violations informal rules of conduct and moral norms. The purpose of an "economic person" is to maximize the usefulness of individual behavior, where the needs, desires determine the influence of subjective factors on financial decisions, and opportunities, limitations - objective.

The main limitation of the "economic person" in the neoclassical theory is its income and the prices of goods that are intended to meet the needs. In the 50 years of the 20th century. The neoclassicians proposed to consider households in the economy as an optimizer, which aligns the marginal utility of own costs in time, distributing available resources between current and future consumption in the same way that it distributes them among different types of consumption in a certain period [32, p. 47].

In the early 1970's, based on the concept of economic rationalism of the neoclassics, a theory of rational expectations was formed, according to which economic actors are guided not only in their limited experience but also in information, including government, in making decisions.

An important contribution to the development of the theory of the household belongs to the theory of JM Keynes [33]. If neoclassic form a predominantly microeconomic theory of individual behavior, then the Keynesian theory focuses on macroeconomic models of household consumption: theories of absolute income, intermediate-time choices, relative income, constant income, life cycle. In the context of this, the Keynesians deny the dependence of financial decisions on the interest rate and emphasize the differences in the motives of the consumer, savings, investment behavior of the individual, as well as their diversity. The main factor affecting consumption, the savings of the individual, is his income in the form of personal aggregate (JM Keynes), permanent and transitory (permanent and temporary) (M. Friedman [34, p. 21]), or the aggregate lifetime of the individual (F. Modigliani and R. Bramberg [35]). In the first case, the main factors of financial behavior are caused by such motives of the individual as the desire to get a percentage, to save on a "black day", to provide an inheritance to children or reluctance to spend money; in the second case, permanent income factors that are decisive for equity or wealth. - these are the material or monetary assets of households, the personal qualifications of family workers (education, personal abilities) and its economic characteristics (occupation, place of work), for transit capital - all the rest, which can be classified as minor or random, although on the other hand, they can be predicted by the action of specific forces, in particular cyclical fluctuations in economic activity [34, p. 21-22]; in the third case - these are the factors that the most important reason for the rapid decline in the level of income of the individual is the retirement, and the main motive for long-term savings is the motive of saving on old

age. An important addition is the wording of the psychological law, according to which "people tend to increase their consumption as a result of rising incomes, but relatively less than income growth" [33, p. 96-97].

The new household economy (G. Becker [36], J. Minster) explores households, unlike the neoclassical ones, as a productive unit that generates profits and functions as a separate market entity through the use of its own means of production, savings and investments, which gives the ability to explore the impact of their behavior on the macroeconomy. In this regard, financial behavior is determined by the life cycle of a household in accordance with economic, social, psychological patterns of behavior of individuals.

Behavioral Finance (D. Kaneman , A. Tverskaya [37]) (theory of prospects, investor behavior, noise trading, and the efficiency of the trader's operations) describe the empirical patterns of behavior of entities in the financial market in terms of uncertainty and risk. Thus, studies of behaviorists show that neither education, nor market forces, nor processes of evolution guarantee the effectiveness of models of rational behavior [38, p. 84-86]. That is why they suggest combining economics and psychology to study market situations that are characterized by irrationality, limitedness.

In particular, the following theoretical conclusions deserve attention:

- in most cases, households consider loss of profitability to be about twice as high as the profit gains from a similar value of profit growth [39, p. 137];
- households are aware that over time their interests are changing; agents, in the case of positive income forecasts, are more likely to increase their consumption than negative ones in the case of negative ones [40];
- Savings are affected by peculiarities of payroll and other income;
- the subject does not always care for his own benefit, often he is inferior to his own interests for the sake of helping others (the "factor of reciprocity") [41].

The most famous empirical laws of behaviorists are Engel's law , the "crowd effect", or the "effect of the information cascade", "the effect of the day of the week", "the illusion of control," the effect of the trap, the paradox, and so on.

Institutional theory (J. Hodgson [42], J. Hobson , E. Etzioni) denies the existence of rational behavior of households and determines that the main factors of their behavior are the scale of information, its complexity, uncertainty, the limited cognitive ability of agents, knowledge accumulation by actors , communication of agents, and therefore the main motives are orientation to the average opinion, habits and customs, patterns [42]. Financial decisions in this case are determined by the rules as conditional and unconditional patterns of thinking or behavior that can be assimilated by actors consciously or unconsciously , and habits as rules that repeatedly repeated. Not all habits are effective and rational for all subjects, but, at the same time, they are needed, especially in difficult, ever-changing conditions. Since social distribution and reproduction of these rules and habits are determined by the institutions [41], it can be argued that the rationalization of financial decisions of households should be ensured by the improvement of institutions on the basis of influence on factors of financial behavior, in particular moral obligations, traditions and culture, religion, political development [43].

Such conclusions are the result of the key aspects of institutional analysis of households: meeting their own needs through a mutually beneficial exchange of benefits, rather than at the expense of self-sufficiency, informal relationships with other actors; subordination to legal norms regulating market relations; equality in relations with other actors (lack of hierarchy) [42]. Consequently, market-oriented behavior of the household in institutional analysis is defined as behavior aimed at mutually beneficial, legal, equal exchange relations.

Consequently, a retrospective analysis of the work of economists on household finances makes it possible to determine that the target instruction of households in neoclassical and institutional theories as the main ones in relation to the methodology of their financial research is: the first is "following personal interests", the second - "follow the institutional space" . Given the limitations of the neoclassical concept, its unrealistic nature and the advantages of the second approach to match the real conditions of the development of the modern economy, it should be recognized that institutional analysis as a combination of "opportunism", "obedience", and sometimes "unfair" freedom "it is

advisable to take as the basis of the modern scientifically grounded theory of financial behavior as a concept of modeling of financial behavior of households in accordance with the conditions of one or another economic environment (consumption, savings, investment), prediction of behavior in different scenarios of financial market development.

An important issue in determining the patterns of financial behavior in view of targeted guidance in a market economy is the structuring of factors that determine their role in the socio-economic and financial system, the structure and dynamics of income and expenditure generation of households. Such studies make it possible not only to outline the rules for the implementation of households' finances, but also to justify an effective system for managing them (household financial management) as a holistic management system with its own methodology.

Consequently, the analysis and generalization [6-7; 11; 30; 43-44] provide an opportunity to distinguish such approaches to structuring the factors of financial behavior of households.

First of all, depending on the influence and level of controllability, the factors of financial behavior of households should be divided into micro and macroeconomic ones.

Microeconomic factors directly reflect the specifics of financial relations of households with regard to formation, distribution and use, which, unlike others, are least regulated and regulated in the economic system. The main ones are:

- system and forms of remuneration;
- motivation and activity of the workforce;
- copartnership;
- income and expenditure structure of households;
- level of financial literacy;
- propensity to financial risks;
- others

Macroeconomic factors are characterized by indirect influence of the state on financial relations of households, in particular through social and insurance payments, taxation, social standards, regulation of the labor market, the image of the state as an investor and a creditor, etc. The main macroeconomic factors are:

- the state of the national economy and the dynamics of its development;
- fiscal and monetary policy of the state;
- social, age structure of society;
- social policy of the state;
- level of development of financial system, financial market;
- the level of openness and information of the financial market;
- guarantee of financial security;
- trust in the state and financial and credit system;
- others

In addition, financial decisions of households are determined by a set of factors which by the nature of origin are appropriate to be divided into economic, social, political, psychological, institutional, demographic:

- 1) Economic: level and structure of income; inflation; interest rate; activity and efficiency of financial markets; terms of consumption, lending, investment; supply of financial products; system of insurance of financial risks; tax system; economic and financial expectations, level and structure of employment, macroeconomic stability, etc. These factors determine the financial potential of households.
- 2) Social: education; education; trust in parents; social structure of society; social and family values; counseling environment; level of collectivization (school influence, work on individual decisions); Media and social networks; culture; religion.
- 3) Political: political system, trust in power, political stability.
- 4) Psychological: type of personality; risk aversion; experience in financial transactions; trust in financial institutions; motivation for current consumption, investment or savings; attitude towards money, loans, deposits, securities; personal beliefs.

- 5) Institutional: the ratio of formal and informal financial relations; the financial market infrastructure, the variety of sources of financial information and their competence; system of contractual (contractual) law; debt collection system; the perfection of the legislative framework.
- 6) Demographic: gender; age; household structure; employment sector; language skills; national mentality.

The financial behavior of a household is realized in the financial market. On the one hand, the economic interests of households that are realized through financial relations affect their financial behavior and determine the structure, volume of the financial market, its ability to fulfill its own functions, and, on the other, the level of development and the structure of the financial market in accordance with the target instruction " following the institutional space "directly determines the financial behavior of households. In the context of this, it is necessary to establish the fundamental factors of the financial market, which are divided into internal and external [44, p. 18].

The internal factors, that is, those that directly affect the financial behavior of households, include the following:

- type of economic and political system;
- social and political stability;
- ownership structure;
- model of economic behavior of the population;
- culture and religion;
- financial depth and financial structure of macroeconomics;
- economic and financial policy of the state;
- life cycle of financial market development;
- accumulated imbalances and problems in the organization of the financial market;
- economic cycle phases;
- others

External factors that directly affect the financial behavior of the population can be attributed to:

- affiliation of the market to a developed or emerging market;
- saturation of the market by financial instruments;
- world prices for oil, raw materials, gold;
- Dependence on market leader or other countries;
- regional affiliation of the market;
- comparative competitiveness of the country;
- degree of proximity to industrially developed countries;
- long-term cycles of the world economy;
- others

Many studies [6-7; 11; 30; 43-44] confirm the direct impact of many of these factors on the financial behavior of households. However, it should be noted that the degree of influence and lag will be determined by the conditions of management, in particular, in accordance with the cyclical nature of macroeconomic development. In addition, in the conditions of transformation, there can be observed the influence of other additional factors.

Thus, the further development of the financial system of Ukraine depends on the optimization of household finances. In this regard, taking into account the factors influencing the financial decisions of the population, we note that, firstly, it is necessary to raise the level of financial awareness of the population, understanding of financial products, acquisition of skills of their consumption, and, secondly, strengthening capacity should be ensured. consumers of financial services, which is possible only with adequate legal and institutional support for the realization of their rights. This requires the implementation of the following measures: development and implementation of a national program to increase financial literacy of the population; restoration of trust in the state as a law-making institution, institute of executive and judicial power in favor of citizens; formalization of financial relations by implementing contractual (contractual) law, reduction non-banking turnover, increase information

transparency and efficiency of financial markets; the formation of trust, a positive image of financial institutions due to the understanding of banks, insurance and investment companies, non-state pension funds, that households in a market economy are the systemic supplier of resources to the financial system, the main consumer of financial services.

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**BUDGET-FINANCIAL DECENTRALIZATION AS A FACTOR OF
STRENGTHENING LOCAL SELF GOVERNMENT IN UKRAINE**

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Abstract. Decentralization of the public administration system in Ukraine is one of the most urgent tasks. Decentralization is one of the forms of development of democracy, which allows creating the foundation for the independence and viability of local authorities, provides an opportunity for local authorities to participate in the development of the territory entrusted to it, promotes the effective provision of public services to the population of the region. The reorganization of the budget system is not limited to improving the relationship between the levels of the budget system, as this is not enough for real decentralization of decision-making in the issues of drawing up and implementation of independent local budgets. The main direction of research should be the separation of financial flows between the state and self-government, which is based on the division of powers, functions and responsibilities. The subject of the study is the impact of fiscal decentralization on the financial capacity of local budgets. The purpose of the article is to assess the level of budgetary and financial decentralization in Ukraine at the present stage and to find ways to further strengthen the financial capacity of communities and regions.

Keywords: decentralization; territorial communities; inter-budgetary relations; local budget revenues; financial viability; local self-government bodies.

JEL Classification: G28, H61, H72

UDC: 35.08:336.5(477)

Formulation of the problem

Decentralization of the public administration system in Ukraine is one of the most urgent tasks. Decentralization is one of the forms of development of democracy, which allows creating the foundation for the independence and viability of local authorities, provides an opportunity for local authorities to participate in the development of the territory entrusted to it, promotes the effective provision of public services to the population of the region. The reorganization of the budget system is not limited to improving the relationship between the levels of the budget system, as this is not enough for real decentralization of decision-making in the issues of drawing up and implementation of independent local budgets. The main direction of research should be the separation of financial flows between the state and self-government, which is based on the division of powers, functions and responsibilities.

Methodology of work

Methodology of work - the position of the theory of fiscal federalism, which reflects the complex schemes of relations between budgets of different levels, the concept of fiscal decentralization. Balancing financial resources at the level of local self-government bodies to finance their delegated authority. Proposals for strengthening the financial independence of local self-government bodies are developed.

The results of the work

The results of the work – grounded the necessity of launching a new model of financial provision of local budgets and intergovernmental fiscal relations, which envisages the process of distribution of functions, rights, financial resources and coherence between central and local levels of government and administration. Changes in the formation of local budget revenues are analyzed. An estimation of the level of budget decentralization is conducted. Practical recommendations for solution of problem issues are offered.

Analysis of research and publications on the problem

The questions of the reform of local self-government on the principles of decentralization of power are dealt with by Ukrainian scientists and practitioners: J. Beskid, O. Kirilenko, V. Kravchenko, I. Kogut, I. Lunin, V. Oparin, C. Ogon, O. Suntsova, V. Fedosov, S. Yurii et al. The exceptional legal norms of the problems of budgetary autonomy of the regions, requires further study, development and practical implementation of tools for increasing financial capacity.

Presenting main material

Local budgets are a special form of distribution relations, which is characterized by the separation of the part of the value of social product in funds of funds of local authorities and used for extended reproduction. Local budgets are for redistribution of value between territories, branches of the national economy, sectors of the economy and areas of social activity.

Local budgets are a set of economic relations that arise in connection with the creation and use of funds of local government funds in the process of redistribution of national income in order to provide expanded reproduction and satisfaction of social needs of society. On a material basis, local budgets are centralized funds of funds held by local authorities and are financially secured for their activities.

Local budgets are: an important factor in economic development and financial stability; macroeconomic regulation tool; leverage implementation of redistributive processes; financial base of local self-government; a tool for the implementation of the state regional policy; plans for the formation and use of financial resources of territorial entities; the main leverage of financial equalization; the main source of financial resources for the maintenance and development of local economy, the solution of local problems. Local budgets play an important role in ensuring constitutional guarantees, solving social problems, raising the level of well-being of the population.

The largest number of the budget system in each country are local budgets. Ukraine has 10838 local budgets. *Table 1* shows the dynamics of distribution of budgetary resources in the consolidated budget of Ukraine over the past five years. From the given data it is clear that there is a negative tendency to decrease the share of local budget revenues in the consolidated budget. This trend contradicts the need to strengthen the financial base of local self-government. According to this indicator, the degree of decentralization of Ukraine's budget resources is less than 25% and tends to decrease.

The share of GDP, which is distributed through state and local budgets, shows how much of the aggregate of goods and services created in the state during the year accumulates and redistributes through budgets. Local budgets (*Table 1*) have a much smaller role in the redistribution of GDP than the state budget. In 2012, the share of GDP, which was distributed through local budgets, amounted to 7.1%, and in 2016, - 7.2%. It should be noted that the share of local budget revenues in GDP is 3 - 3.5 times lower than the share of state budget revenues in GDP. This indicates a significant centralization of the country's financial resources in the state budget and the financial dependence of local authorities on central government decisions.

It should also be noted that the share of transfers transferred from the state budget to local budgets has decreased by only 1.8% over the last five years and is 53.4%. This indicates the further centralization of budget funds and their redistribution through the state budget.

Table 1: Income of the consolidated, state and local budgets of Ukraine for 2012-2016.

Indicator	2012	2013	2014	2015	2016
Consolidated budget, billion UAH	445,5	442,8	456,1	652,0	782,9
State budget *, billion UAH	344,7	337,6	355,0	531,6	612,1
Local budgets *, billion UAH	100,8	105,2	101,1	120,5	170,7
Share of state budget revenues * in GDP,%	24,4	23,2	22,7	26,9	25,7
Share of local budget revenues * in GDP,%	7,1	7,2	6,5	6,1	7,2
Share of state budget revenues * in consolidated budget,%	77,4	76,2	77,8	81,5	78,2
Share of local budget revenues * in consolidated budget,%	22,6	23,8	22,2	18,5	21,8
The share of transfers from the state budget in the revenues of local budgets,%	55,2	52,4	56,4	59,1	53,4
The share of transfers from local budgets in the state budget revenues,%	0,4	0,5	0,6	0,6	0,7

* Excluding intergovernmental transfers

Source: calculated by the author according to the Ministry of Finance of Ukraine: <https://www.minfin.gov.ua>.

The budget system in Ukraine is characterized by a rather high level of centralization of budgetary resources, which indicates the concentration of key powers at the central government level, the lack of development of local self-governance and the weakness of local budgets.

Budget and financial decentralization involves the process of allocating functions, rights, financial resources and coherence between central and local levels of government and management, resulting in increased efficiency in the management of budgetary funds. Decentralization strengthens the capacity of territorial communities and greatly enhances their socio-economic development.

The main task of fiscal decentralization is the creation of multilevel budget systems, which enables people to provide high-quality local public goods and services.

In the process of decentralization, the redistribution of rights and responsibilities between the authorities is carried out. In horizontal decentralization there is a redistribution of powers between the authorities of one level, and with vertical decentralization between the central and local authorities.

Horizontal decentralization is aimed at eliminating disparities in the levels of budgetary provision in terms of local government budgets. Its main content is the financial equalization of budgets by territorial criterion. Moreover, horizontal equalization is carried out only within the budgets of territorial communities.

Vertical decentralization aims at providing the necessary revenue sources with budgets of different levels in accordance with the current procedure for delimiting powers between public authorities and local self-government. The solution to this task is achieved by demarcating expenditures between budgets and providing them with sufficient income to finance certain expenditures.

The main task of financial decentralization is to overcome horizontal and vertical fiscal imbalances.

Horizontal fiscal imbalance is a discrepancy between the volumes of financial resources of one or several territorial units of the same level of tasks that are borne by them and provided by other territorial units of this level. Horizontal fiscal imbalances arise when one or more areas of the same level do not have sufficient financial resources to provide public and public services in volumes provided by other territories in accordance with certain standards.

These imbalances may also be due to the fact that some territories have more needs than others. One more reason for horizontal imbalances may be higher costs of public and public services within certain territories compared to others.

The main tool of horizontal alignment is the special funds of equalization. The funds of these funds in the form of universal transfers are distributed among local budgets in accordance with certain criteria for the needs of funds of these budgets.

The region, and in the long term, every territorial community that meets the criteria of a territory that needs or needs special support may receive a transfer from such a fund.

Under vertical fiscal imbalances are the discrepancy between the volumes of financial resources of a particular level of government, regional or local, and the scope of tasks and responsibilities that are assigned to it in the process of allocating competences between central and local authorities. Vertical fiscal imbalances mean insufficient financial resources and a certain level of government to provide public and public services within its mission.

Vertical fiscal imbalances can be eliminated in several ways: central government or higher territorial power can take on some of the responsibilities of providing state and public services and thus reduce the range of responsibilities of the level of government in which the vertical fiscal imbalance arose, the introduction of that level of power, which has a vertical fiscal imbalance, additional taxes, the transfer of part of its taxes by the central government to the territorial level of power that has such an imbalance, the provision by the central government of grants, subsidies and other transfers. The concrete choice of the way to eliminate vertical fiscal imbalances is determined by budget policy.

In Ukraine, fiscal decentralization began in 2015. by providing territorial communities with certain budgetary rights and sustainable sources of income for its implementation. The interest of territorial communities in merging and transitioning to direct inter-budgetary relations with the state budget with the corresponding material provision at the level of cities of oblast legal norms. Introduction of legal norms in raising the financial and economic capacity of local self-government bodies.

In 2015 159 united territorial communities (UTGs) were founded that united 793 territorial communities. From January 1, 2016 they switched to direct budget calculations with the State Treasury, which positively influenced their economic development.

In 2017 524 UTGs were created in Ukraine, which included 2525 territorial communities or 22.5% of their total, and their area is 17.7% of the total territory of Ukraine [4]. To create and modernize the infrastructure of the united territorial communities in 2016. a subvention was allocated from the state budget in the amount of 945.6 million UAH. The transfer was intended for new construction, reconstruction, overhaul of communal ownership infrastructure objects. The subvention was distributed among the united communities according to their area and the size of the rural population. Territorial communities that have united the largest rural population or rural area received the largest amount of subvention. Lyman Territorial Community in Donetsk Oblast, which is the largest community in Ukraine and has united 22 thousand rural population and 25 thousand. the urban population received 27 million. UAH subventions The ways of financial support are aimed at accelerating the processes of community association [2].

A problem for today is that the overwhelming majority of UTGs are not in line with the approved long-term plan for the formation of territories of communities in the regions. This tendency applies to each of the areas. The process of making changes to the long-term plan is rather complicated and is often hampered at the stage of approving these changes by regional councils on the ground. This means that in the absence of a mechanism for recognizing them as capable, such communities may not enter direct intergovernmental relations with the State Budget of Ukraine, not receive funds for the implementation of delegated authority for the maintenance of educational institutions and health care and not receive financial support in the form of a subvention for the formation infrastructure. Leaving without the financial support of such communities can impede the implementation of the decentralization reform [6].

At the same time, there is considerable disparity between the regions in carrying out the administrative and territorial reform. Most united territorial communities in Ternopil, Dnipropetrovsk, Zhytomyr, Khmelnytsky, Lviv, Vinnytsia and Zaporizhzhia regions. At the same time, some regions are significantly behind in the process of formation of UTGs, including Kyiv, Kharkiv and Zakarpattia oblasts. The difference between the regions in terms of the number of united territorial communities is due to the opposite attitude of local self-government bodies to the introduction of a decentralization reform.

The need to achieve financial stabilization in Ukraine raises new challenges in the field of intergovernmental fiscal relations, the optimization and streamlining of which should contribute to solving many financial, economic and political problems in the state. New approaches to determining

the amount of intergovernmental transfers have created opportunities for objective and impartial equalization of budget security of territories. From 2015, the Budget Code of Ukraine defines new types of intergovernmental transfers: basic grant, reverse grant from local budgets to the state budget, stabilization grant, educational subvention, and subvention for training of workers, medical subvention, and subvention for provision of medical measures of individual state programs. The system of balancing revenues and expenditures of local budgets has been changed by a fundamentally new system of equalization of the capacity of territories.

The regulation of intergovernmental fiscal relations, in particular the methods of balancing income and expenditure of budgets, largely depends on how the income between the levels of the budget system is differentiated. Horizontal equalization of the tax capacity is carried out separately for the income tax receipts of enterprises (oblast budgets) and personal income tax (oblast budgets, budgets of cities of oblast legal norms and districts, budgets of united territorial communities). The implementation of the equalization mechanism takes into account the value of the tax compliance index of the relevant budget (the amount of revenues from the corresponding tax per capita to the average for Ukraine). If the index value is less than 0.9 - the basic grant is given to the corresponding budget in the amount of 80% to 0.9; more than 1,1 - a reverse grant from a corresponding budget of 50% over 1.1 (sent to provide a basic grant) is transferred [1].

Indices of fiscal capacity should be calculated only on the basis of constant sources of budget revenues. Actual volumes of revenues can vary widely, which depends on changes in tax legislation and lead to revision of tax rates, tax objects, tax breaks, and the creation of free economic zones. The determinants of internal factors affecting the volume of actual revenues are the effectiveness of the work of the fiscal authorities.

A positive consequence of the reform of inter-budgetary relations is the self-formation of local budgets and the approval of local budgets independent of the timing of the adoption of the state budget (by December 25, the year preceding the planned one). The indicative planning by the Ministry of Finance of Ukraine (MFU) of indicators of local budgets and bringing them to local budgets was canceled.

The starting point for the organization of intergovernmental fiscal relations is the distinction between the revenues and expenditures of each budget, based on the division of powers between the levels of government, which should be implemented in such a way as to ensure consistency between the expenditures imposed on each budget and the resources necessary for their financing from sources of revenue. In this regard, the issue of further strengthening the revenue base of local budgets, which is the financial basis of local self-government, is of particular importance.

There have been changes in the formation of the revenue part of local budgets in the direction of increasing the resource of local budgets, decentralization of budget funds and transfer of part of the state budget revenues to local budgets:

- There are established common rules for deductions of national taxes for each budget line: personal income tax (60% budgets of cities of oblast sign region, united community, 15% oblast budgets, 25% state budget); profit tax for private sector enterprises (10% oblast budgets).
- The list of sources of general fund revenues is expanded:
 - from the State Budget: 100% of the fee for the provision of administrative services, 100% of the state duty, 10% of the profit tax of enterprises of the private sector of the economy;
 - new payments: a tax on the sale of excisable goods at a rate of 5% of the value of the sold goods;
 - Reforming the property tax, increasing the amount of property taxes (real estate tax, different from land, transport tax, land fee);
 - transfer from the budget of the development of a single tax, property tax (taxation of commercial real estate and cars with a high volume of engine), transfer from the special fund of the environmental tax (except for radioactive waste) with a simultaneous increase in the enrollment rate up to 80%;
 - Inclusion of part of the excise tax on fuel produced in Ukraine and imported into the customs territory of Ukraine (13.44%) into local self-government budgets and provides for daily distribution among them;

- enrollment of 3% of rent for the use of mineral resources for the extraction of oil, natural gas and gas condensate into budgets of cities of oblast importance, budgets of united territorial communities at the location of the relevant natural resources.
- Local bank guarantees and local borrowing from international financial institutions are simples by introducing the principle of "tacit consent" in agreeing such transactions with the MFUs.
- The right to carry out local external borrowing is granted to all cities of oblast legal norms.
- Public sector banks can be provided with funds from the budget for local budgets development and for local budgets financed from local budgets.

The practical implementation of fiscal decentralization means that local self-governments are becoming more responsible and receiving more financial resources at their disposal. Thus, fiscal decentralization has a direct impact on the level of financial autonomy, and hence of the financial independence and autonomy of local self-government bodies.

The introduction of decentralization greatly improved the financial autonomy of the combined territorial communities. Revenues to local budgets of the combined territorial communities doubled, amounting to UAH 3.9 billion, of which the volume of own income increased by 34%. The average income per inhabitant of the community has also almost doubled from UAH 640. up to 1256 UAH. The financial strengthening of communities also affects the development of the regions as a whole. In 2017 there was an increase in revenues from the single tax by 63.0%, personal income tax by 52.8%, and the excise retail tax by 41.3% [2]. Increasing revenues to local government budgets creates favorable conditions for local authorities for the proper functioning of budgetary institutions and independent solution of topical issues.

In addition to the support provided to communities through the state subvention and the State fund of regional development (SFRD), they have the opportunity to attract international financial support for the implementation of infrastructure projects. However, obtaining financial assistance requires the development of a quality project and an active position of local government (LSG).

At the same time, there are a number of unresolved problems that shape the risks for the successful further implementation of financial decentralization. Separate UTGs are created with the purpose of increasing rights and financial resources, but due to the limited economic resources and the lack of appropriate infrastructure, they cannot provide the residents with the proper quality services, to intensify economic processes. The lack of skilled staff in local self-government bodies leads to inefficient use of financial revenues for the development of territorial communities.

To objectively assess whether these actions have become steps towards achieving financial independence and independence of the LSG, consider the indicators of fiscal decentralization in Ukraine in *Table 2*.

Table 2: Indicators of Budget Decentralization in Ukraine,%

Indexes	2012	2013	2014	2015	2016
Decoupling factor	45,2	43,5	43,1	41,2	41,9
Ratio of decentralization of incomes	22,6	23,8	22,2	18,5	21,8
The coefficient of decentralization of tax revenues	23,8	25,8	23,8	19,3	22,6
The coefficient of financial dependence	55,2	52,4	56,4	59,1	53,4
Mode coefficient of decentralization of expenditures	46,6	44,8	45,5	44,6	45,1

Source: calculated by the author according to the Ministry of Finance of Ukraine: <https://www.minfin.gov.ua> [3].

The indicators of fiscal decentralization include:

- 1) the coefficient of decentralization of expenditures - the share of local budgets in the Consolidated Budget expenditures,%;
- 2) the mode coefficient of decentralization of expenditures - the share of local budgets in the Consolidated Budget expenditures (without defense expenditures),%;

- 3) the coefficient of decentralization of incomes - the share of own revenues of local budgets (i.e. income without transfers) in the consolidated budget revenues,%;
- 4) the coefficient of decentralization of tax revenues - the share of local budgets in the tax revenues of the Consolidated Budget,%;
- 5) coefficient of financial dependence - the share of subventions from the State Budget of Ukraine in the revenues of local budgets,% [2].

The decentralization of spending has decreased to 41.2% in 2015 and 41.9% in 2016 the modified coefficient of decentralization of expenditures is 44.6% and 45.1%, respectively. Since 2015 In addition, objects and activities in the field of education, culture, health care, physical culture and sports were transferred for financing from local budgets.

Despite the increase in the resources of local budgets, the decentralization of budget funds and the transfer of part of the state budget revenues to local budgets, the decentralization of tax revenues in 2015 amounted to 19.3% and in 2016 22.6%, while the average for 2012-2014 - 24.5%.

It should also be noted that the share of transfers transferred from the state budget to local budgets has decreased by only 1.8% over the last five years and is 53.4%. This indicates the further centralization of budget funds and their redistribution through the state budget.

Local governments have been declared independent when forming their budgets, but in the structure of their expenditures, a considerable part (about 60%) is made up of expenditures on health care, education, social protection and social security of the population financed by subventions, that is, in fact, determined by the decision of the central authorities. A high proportion of subventions in local budgets indicate that the distribution of expenditures between state and local budgets needs to be reviewed [2].

It is necessary to pay attention to the presence of risks when using subventions for the formation of UTG infrastructure. Balances of subventions on the accounts of the corresponding local budgets cannot be used in the next budget period.

The system of formation of incomes of local budgets of Ukraine should be based on raising the interest of the Ukrainian MIA in increasing their tax and non-tax revenues, and not in "knocking out" transfers from the State Budget of Ukraine [5].

The processes of fiscal decentralization in Ukraine are slow, they are not systematic and do not stimulate local bodies to find sources of activating their own economic resources.

Failure to comply with the principles of the formation of local budgets affects their financial sustainability. The financial sustainability of local budgets is a complex concept that reflects the state of money funds, in which territories can develop stably, while maintaining their financial security. The financial sustainability of the local budget is expressed in the stability of the entire set of monetary funds and each fund separately under the influence of internal and external factors. "

Based on the actual results of the formation of revenues of local budgets, it can be argued that local budgets of Ukraine are not financially stable, with a low level of financial security. We offer a general list of factors that have a negative impact on the level of financial security of Ukrainian regions (*Table 3*).

Budget decentralization should contribute to increasing the financial capacity of local budgets, local self-government's interest in expanding the tax base, and raising local responsibility for regional development, requiring amendments to the budget legislation on the distribution of national taxes between the linkages of the budget system.

New opportunities that financial decentralization has opened for communities and local budgets, namely the development of infrastructure, the provision of their own services, the improvement of medical and educational services, the proper level of social protection, planning of territories, etc., in turn, will gradually affect the overall results local budgets and indicators of socio-economic development of the territories on which the UTG was created [6].

One way of providing financial support to local authorities is to define a new mechanism for redistribution of VAT received in the regions. This tax should be in the joint use of different levels of government, which will sign cantle affect the increase of local budget revenues. To receive their share of such a tax, local self-government bodies will be interested in increasing its total volume coming to the state budget to the subordinate territory. The development and implementation of a mechanism for

such deductions will increase the level of interest of local self-government bodies in expanding production and sales of taxable products. Accordingly, one of the directions of increasing revenues of the region, may be the consolidation of the share of VAT deductions from local budgets. Then, the income to be taken into account when horizontal leveling of local budgets' ability to pay, except for personal income tax and corporate income tax, should include VAT as part of the deductible standard. The rate of deductions from VAT to local budgets should be based on the combination of the formalized method of inter-regional distribution of funds at the national level (based on the formula that defines the region's quota in such revenues) and the subsequent distribution of funds received by the regions to the budgets of individual territorial communities by the quotas of each of them in the formation VAT revenues in the consolidated budget of the region.

Table 3: Threats to financial security of regions

Exterior	Inside
<ul style="list-style-type: none"> ➤ High inflation and inflation expectations; ➤ the state of money circulation; ➤ wide fluctuations in market exchange rates; ➤ high levels of poverty, unemployment and high differentiation in wages; ➤ imperfection of the normative and legal support of the budget process; ➤ Ineffective system of regulation and supervision of the financial system; ➤ integral indicator of the shadow economy level to 40% of GDP; ➤ low level of financial, fiscal, fiscal and tax decentralization; ➤ a large share of centralization of financial resources in the state budget; ➤ adoption of legislative acts that reduce the tax potential of the regions; ➤ Rising energy prices; ➤ Irregularity and instability of the financial market; ➤ the ineffectiveness of government orders that are system-formative for the economy of the regions and promote its development; ➤ imperfect information and technological support for the development of the economy; ➤ low level of competitiveness of domestic products. 	<ul style="list-style-type: none"> ➤ low level of innovation and investment activity of business entities; ➤ Lack of participation of local budgets in the reproduction process of the economy of the territories; ➤ low quality and timely budget planning and formation of local budgets; ➤ increase in the volume of intergovernmental transfers, limiting the financial capacity of local authorities; ➤ Lack of effective incentives for local self-government bodies to fill the revenue side of the budget and increase its economic security; ➤ low efficiency of the control and audit system for the formation of local budget revenues; ➤ reduction of financial discipline of budget funds managers; ➤ Insufficient use of tax potential of territories; ➤ decrease in production volumes and increase in the number of unprofitable business entities; ➤ low level of managerial skills of the region; ➤ Excessive interest rates on loans.

Source: Summarized by the authors

The rate of deductions from VAT to local budgets depends on the amount of its revenues in the respective territory, which will increase the interest of the local governments in increasing the mobilization of VAT, to encourage local authorities to create conditions for the development of entrepreneurship. Thus, additional sums of income that may receive local budgets will make it possible to reduce the dependence of local budgets on intergovernmental transfers from the state

budget, which will ultimately contribute to strengthening the financial independence and financial autonomy of the region.

In order to strengthen the financial autonomy of local authorities, it is necessary to transfer personal income tax to local taxes and transfer 100 percent to local budgets of local self-government bodies. It is worth changing the system of distribution of personal income tax between local budgets, transfer it to the budget not at the place of origin of income taxpayer, and at the place of registration. The PIT will serve as a charge for the use of local infrastructure, as differences in the tax burden determine the differences in the scope and quality of provision of local public goods and services.

The revenues of local budgets form the basis of the financial base of local self-government bodies, that is, they are the basis of their financial independence. In this connection, the problem of strengthening the revenue base of local budgets, the reform of local taxation, and the implementation of effective financial equalization. You can solve these tasks by:

- Further expansion of the list of own revenues of local budgets;
- Study of the market of financial resources of the local budget and determination of the most effective methods of their attraction, development of the market of municipal securities;
- Structural reform of the local economy in order to create new high-efficient production facilities, new workplaces, increase of the tax capacity of the region;
- Encouraging local self-government bodies to participate in international projects, conducting tenders for the best proposals for solving local issues, which can attract international technical assistance;
- Application of the latest management tool, as a geoinformational system for monitoring of regional resources;
- Providing local state administrations with protection of investors' rights and providing guarantees on the stability of business conditions, promoting the opportunities and benefits of creating a form of economic activity, such as an industrial district, which can contribute to the intensification of investment activity in the region;
- Development of the mechanism for the implementation of the state order, as well as the functions of local state administrations in the execution of state orders;
- The use of fiscal levers of stimulating investment inflows, in particular the establishment of a system of tax preferences for economic entities, which must be differentiated from partial to full exemption from taxes for the entire duration of investment projects.
- Combating the shadow economy, which is one of the factors contributing to increasing the financial sustainability of local budgets;
- Effective control over the formation and use of local budget revenues;
- Shadowing the taxation system and, as a result, increasing revenues to the budgets of territorial communities.
- Further improvement of the system and instruments of taking into account regional peculiarities in the calculation of the volume of intergovernmental transfers;
- Distribution of functions and powers between local government bodies and executive authorities, between local councils of UTG and regional administrations and regional councils of districts in the territory of which UTGs are established;
- There is a need for public authorities to introduce forms and methods for monitoring local self-government activities when planning and implementing local budgets and the formation and use of financial resources.
- A clear legislative distribution of spending powers between central and local authorities, excluding their duplication and defining the responsibility for decision-making and the provision of certain types of public goods and services. Considering that the provision of rights without liability creates conditions for corruption and ineffective use of budget funds;
- Transfer of local self-government bodies to most local authorities with the appropriate transfer of financial resources from the state budget to finance them;

- To ensure the preservation and use of the balance of funds on the accounts of local budgets in the next budget period for the subvention for the formation of the STC infrastructure, taking into account the intended purpose;
- Increasing the effectiveness of budget planning at the central and local levels in order to improve the quality of provision of public services and achievement of the planned indicators of local budgets;
- Ensuring transparency of decisions in the activities of local authorities and their accountability to the population.

Effective fiscal decentralization will improve the socio-economic development of the regions: financial autonomy and independence of territorial communities are formed, the processes of redistribution of budgetary resources between territories are optimized, local economic development is intensified, the population of territorial communities is provided with public services at a legally determined level, social problems are solved.

Conclusions

Budget decentralization should contribute to increasing the financial capacity of local budgets, local self-government's interest in expanding the tax base, and raising local responsibility for regional development, which requires changes to the budget legislation on the distribution of national taxes between the linkages of the budget system. One of the ways of providing financial support to local authorities is to define a new mechanism for redistribution of VAT received in the regions. This tax should be in the joint use of different levels of government, which will singingly affect the increase of local budget revenues.

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EXTERNAL EXPERIENCE OF THE MECHANISM OF MORTGAGE LENDING IN AGRICULTURAL HOUSING

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Abstract: *The article generalizes theoretical aspects of mortgage lending in the agrarian sector of the economy. The key indicators of the mortgage market situation are determined. The factors hindering the development of mortgage lending to domestic agricultural producers are formulated and grounded. World experience in mortgage lending development is generalized. Two types of mortgage lending systems are considered, in particular one-level (European) and two-level (American) systems of functioning of the mortgage lending market are schematically presented. A meaningful comparison of these systems was carried out and their differences were formulated on the basis of a detailed study of the mechanism of refinancing of issued mortgages. The main sources of mortgage lending in agriculture are highlighted. The principles of foreign and domestic mortgage lending systems, which should be used to form an effective system of investment-mortgage agricultural lending in modern economic conditions, are singled out.*

Key words: *investment-mortgage lending, mortgage, mortgage securities, land mortgage institutes, primary and secondary markets.*

JEL Classification: G21, Q14

UDC: 347.278:330.322.4 (477)

Introduction

In the market conditions of management for enterprises of the agrarian sector of the Ukrainian economy one of the main problems is attracting investment-innovative resources. Investment attractiveness of the agricultural sector of the country is determined by the main natural means of production - the land, on the quality and use of which its effectiveness depends. Currently, the system of economic levers of stimulating investment activity has not yet been put into operation in agriculture, in particular measures to regulate land ownership relations and property have no investment incentive, the process of creating a stock market does not cover the agrarian sphere sufficiently, financial and credit institutions are not interested in the implementation of investment operations in agriculture, there is no mechanism for supporting the investment in working capital.

Obviously, an important lever in stimulating the development of agricultural production is mortgage lending, which serves as a means of activating the functioning of the land market and the development of the market of financial and insurance services. Conditions of development of market relations in our country require the creation of a powerful mortgage mechanism and smoother organization of its work in the agricultural sector, which would ensure the increase of the efficiency of land use, stabilization of agricultural production. The pledge of land plots of agricultural land and other real estate allows to attract significant investments in the agrarian sector of the economy.

Analysis of recent research and publications

The wide range of problems of investment and mortgage lending in the agrarian sector was covered by well-known domestic economists – O. Gudz, M. Demyanenko, O. Yevtukh, S. Kruchok, P.

Kulinich, M. Malik, N. Revutskaya, P. Sabluk, A. Chupis, S. Yurgelevich and others. Despite the significant theoretical and practical developments of foreign and domestic science on various aspects of mortgage development, until now the problems connected with attraction and stimulation of investment in the agricultural sector of Ukraine still to be insufficiently investigated.

Research results

Mortgages are an integral part of a market economy and one of the forms of property maintenance by the debtor of obligations. Obviously, mortgage is secondary to an obligation that may arise in connection with the attraction of investment for production and for consumer purposes. In the case of a mortgage agreement, immovable property remains in the ownership of the right holder of the property, and the creditor in case of default by the debtor of his obligation acquires the right to obtain benefits through the realization of mortgaged property encumbered with mortgage. The debtor's obligation does not necessarily have to be in front of the bank, they may be based on the sale, lease, other contract, etc. [1].

It is known that the main indicators of the mortgage market situation are interest rates on mortgage securities and mortgage loans. For the successful formation and development of the mortgage lending system it is crucial to create institutions that serve the mortgage market and its infrastructure. Only in the case of the interaction of all elements of the system of mortgage lending, there is an opportunity, first, to reduce the risks of mortgage lenders and thereby increase the availability of mortgage loans, and secondly, to increase the reliability of mortgage bonds and thereby attract additional sources of investment lending.

The subject of mortgages are real estate objects [2], in particular in agriculture, the following may be objects of mortgages: land, buildings and structures, as well as production and property complexes, the right to lease real estate.

Mortgage, as evidenced by foreign experience and current practice, is one of the most effective instruments of the financial market, securities market and real estate market and has a significant impact on the economic processes taking place in these markets.

It is established that in world practice two types of systems of mortgage lending - one-level (European) and two-level (American) systems are used. The difference between a system is the mechanism of refinancing mortgage loans issued. The one-level (European) mortgage lending system has been operating in Europe for more than 240 years. It is based on a system of specialized mortgage lending institutions, through which loans are granted to agricultural producers and regulated by a rigid legislative framework. Interest rates are differentiated depending on the value of the land, the financial condition of the borrower, the level of risk. Along with banks, such loans can also be engaged in savings and loan associations, co-operatives of mutual lending, insurance companies [3]. Such systems are dominated by Denmark, Sweden and Canada, and are also highly developed in Germany, Austria, the Netherlands, the United Kingdom and Finland. In France, Spain and Italy, a one-tier system is implemented through monopoly state mortgage banks. Schematic one-level system is presented in *Figure 1*.

The main source of mortgage lending is the issue by banks of mortgage bonds (mortgage bonded bills, secured by real estate mortgages). This is a type of securities used by European banks to refinance their mortgage pools [4]. It is known that mortgage securities are characterized by high credit quality, high liquidity, different urgency, which allows them to attract long-term and relatively cheap resources, which in a number of European Union countries are subject to preferential tax regulation.

Investors in mortgage letters are both private and large institutional investors, among which are credit institutions (43%), investment funds (22.8%), central banks (13.2%), pension funds (6.6%) and insurance companies (5.2%) [8]. It should be noted that, despite the general scheme, in this country, this system has specific features depending on who is the issuer of mortgages, what is the basis of the issue, what is the ratio between the cost of credit and collateral, etc. Considering the modern one-tier system in the EU countries, based on the criterion of the issuer of the chain paper, different elements of the system such as universal banks, universal banks with a special license,

specialized banks and other specialized financial institutions can be used in different countries. It has been established that the issue of securities, in particular mortgage letters, may be made on the basis of a single legal basis for all banks or on the basis of individual contracts. The ratio of collateral in the form of a mortgaged area and issued loan in various cases ranges from 60-80%.

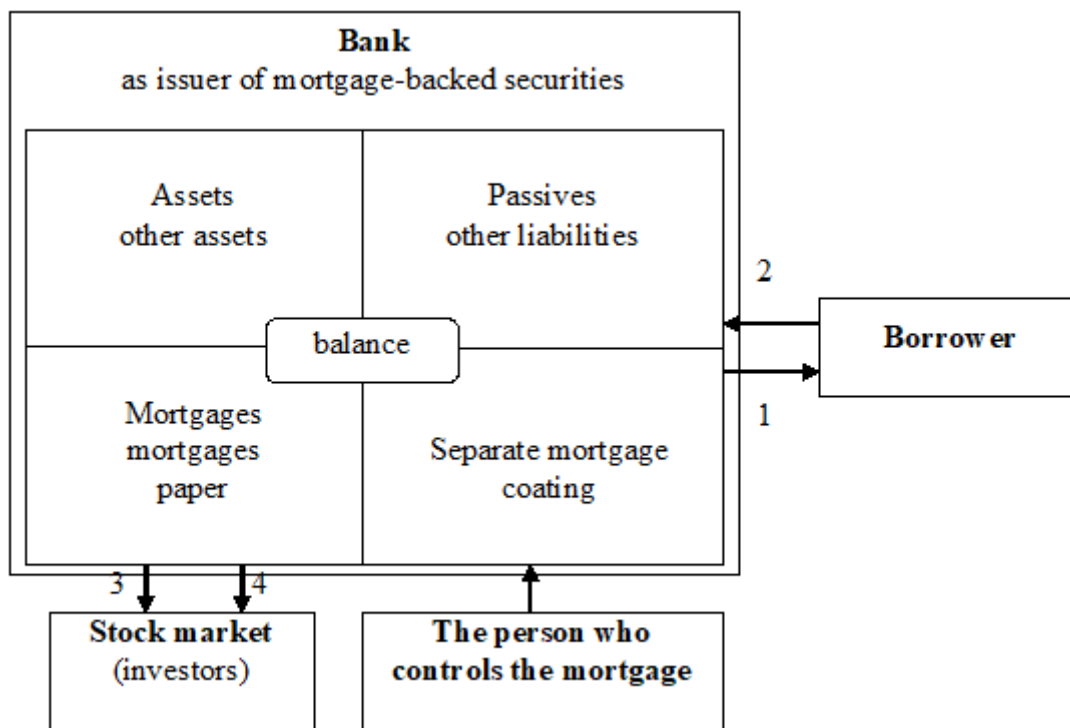


Fig. 1. The one-level system of mortgage lending:

1. Issuance of a mortgage loan. 2. Repayment of a mortgage loan (interest, principal debt).
3. Issue and sale of mortgage securities on the stock market. 4. Revenues (dividends) on securities.

Different countries use different methods of separating mortgaged property. Thus, in some countries, a mortgaged property is transferred from the balance sheet of the mortgagor to the balance of the mortgagee, in others, the deposit is registered as an encumbrance, and the guarantees of the mortgagee are secured by his priority right to receive compensation from the value of the mortgaged property in the event of the insolvency of the debtor [3].

In order to support and regulate the European system of mortgage lending, there is also a Guarantee Fund in order to redeem bonds issued by participating banks in the event that banks are unable to maintain their rate, taking into account a decline in the stock market.

It is worth noting that the evolution of mortgages led to the formation of a two-tier mortgage system, in which the lender and issuer of mortgage securities are separated. This leads to the support of the liquidity of universal commercial banks involved in long-term mortgage lending.

For the first time, this system has been implemented and has become popular in the United States and has been around for about 70 years. The scheme of functioning of the mortgage lending market is presented in *Figure 2*.

The system of reinvestment of loans of a two-tier model is as follows: issuance and servicing of mortgage loans (primary market), refinancing (replenishment of resources through the issuance of securities (stocks, bonds), sale of claims for mortgage loans) and issuance of mortgage securities under the bullet rights claims for mortgage loans (securitization). From the balance sheet of the bank loans are withdrawn, the bank continues to serve them only, without taking over the risks of issued loans.

On the stock exchange there is a continuous resale of mortgage securities. A key factor for success in this direction was the measures for the formation of the secondary mortgage market, which solved the main problem of long-term financing - the problem of credit resources.

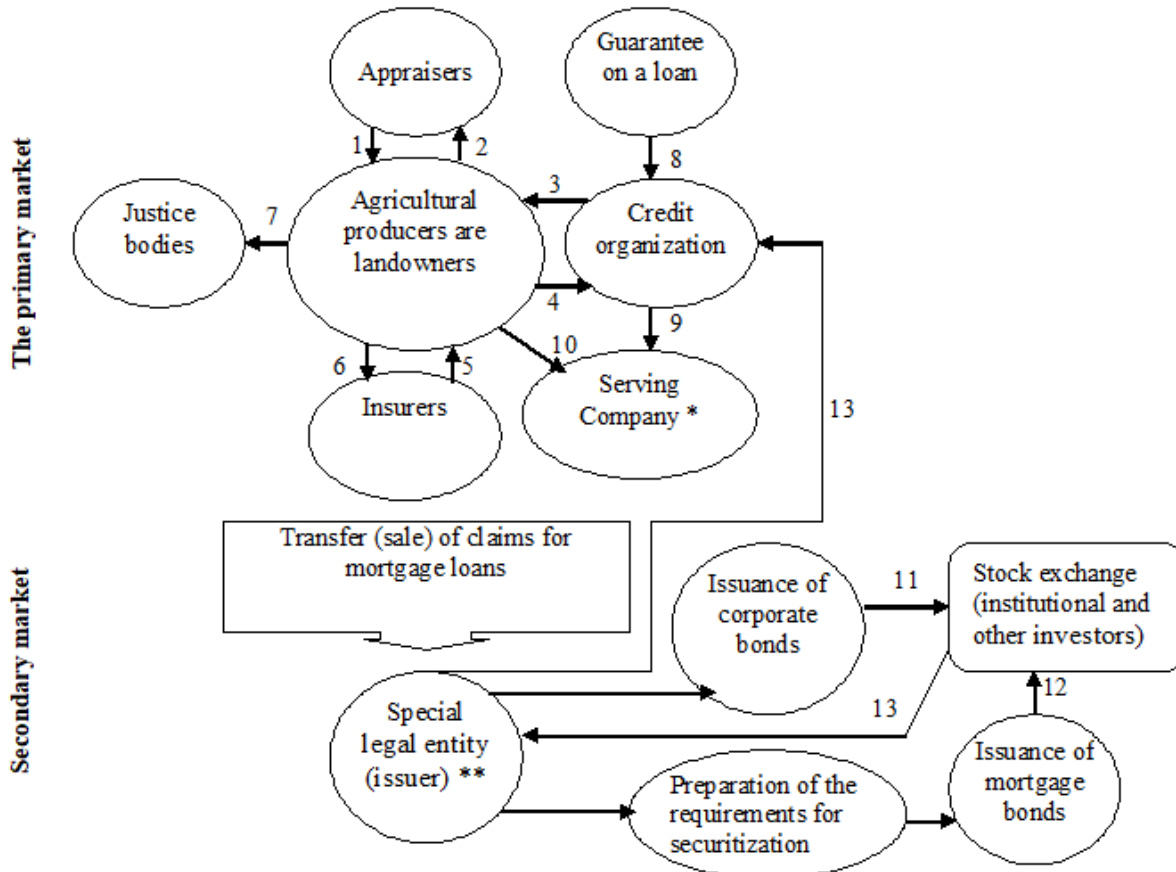


Fig. 2. Two-level model of mortgage lending market:

* A credit institution that issued a loan may act as a service company.

** A special legal entity (issuer) may act as a bank that issued a loan, as well as other banks or mortgage agencies

1. Evaluation of the mortgage value of the subject of mortgage. 2. Payment of the services of the appraiser. 3. Granting a mortgage. 4. Issuance of mortgage collateral. 5. Mortgage risk insurance. 6. Payment of insurance services. 7. Registration of mortgages. 8. Guarantee of the bank on the borrower's loan. 9. Receives payments from borrowers to repay the loan and distributes them among the parties to the transaction. 10. Repayment of the principal and interest on the loan. 11. Placement in the stock market of corporate bonds. 12. Placement in the stock market of mortgage securities (mortgage bonds). 13. Replenishment of long-term liabilities, due to realization on the stock exchange of securities, with the purpose of issuing new mortgage loans.

One should pay attention to the interesting fact: in the countries of Eastern Europe and the USA directly or through the World Bank, where the main "donor" is the United States, spent tens of millions of dollars under the programs of assistance in the creation of mortgage lending and financing systems according to the American model, but in the end these Countries have adopted laws based on German (European continental) law as more appropriate to the historical traditions and economic realities of these countries. At the same time, in recent years in continental European countries, for example, in Germany, increasingly are beginning to address American and English systems

securitization of assets. It should be noted that the considerations of the two-tiered system of mortgage lending are not antagonistic and can operate in parallel [5].

It was found out that in the USA the basis of the agricultural banking system are agricultural loan banks, or land mortgage institutes that are part of the federal system of farmers' loans. The infrastructure of the agricultural banking system includes the Farmers' Housing Administration of the US Department of Agriculture, which is engaged in the provision of guaranteed residential mortgage loans and other purposes and the Farmer Mac Mortgage Lending Facility. Loans are granted to farmers, farmers' associations, and various agricultural cooperatives. The source of financing loans for agricultural producers is government funds and securities issue. Farmer Mac operates similarly to Freddie Mac's residential mortgage corporation, which guarantees farmers' mortgage loans to \$ 2.5 million. and the acquisition of loans, as well as the issuance of securities based on mortgages purchased from land banks in order to address the issue of liquidation of agricultural banks and regulation of the financial market. Farmer Mac's mortgage and mortgage "land" securities are traded on the secondary securities market. The farm loan infrastructure also includes a specially created insurance organization and an organization for the issue of farmer mortgage bonds [5]. A significant role in mortgage development in the United States is played by state regulation, which purposefully and systematically supports this type of financing. The main methods are: state insurance of loans, privileges in obtaining loans, provision of secondary market of mortgage securities, etc. The secondary market for mortgages facilitates the flow of capital into more cost-effective industries, as well as reducing the difference between interest rates in different regions. Its task is to provide a steady inflow of resources for lending and surplus funds from regions that show an excess of credit resources in those regions where there is a deficit.

The two-level system of the United States has become the reference point for the development of mortgage lending in Ukraine. Compared with the US securities market, the Ukrainian market is extremely undeveloped. This increases the risk for the functioning of such a system of mortgage lending in Ukraine.

The global financial crisis has shown that a one-tier mortgage model provides for a more reliable and secured system of mortgage reinvestment. In connection with this increased interest in it in the United States, where they began to consider the one-level model of mortgage lending as an alternative to a two-tier system. The analysis of the causes and consequences of the US mortgage and financial crisis shows that in order to support domestic mortgage lending, it is necessary to use different mechanisms for financing loans and the creation of an alternative to external borrowing, that is, the intensification of the attraction of domestic sources of long money, such as funds of pension funds, stabilization fund and others. . For the development of the mass market and available to most agricultural commodity producers in the mortgage market, along with the underdeveloped civilized turnover of agricultural land, equally important problem is the establishment of a mechanism for the creation of resources for the issuance and refinancing of mortgage loans. It is clear that without levers of state support mortgages at the stage of its formation and the development of models and mechanisms for its application in order to increase the efficiency of agricultural production can not be implemented. This requires the participation of the state in the formation of infrastructure, resource potential of mortgage lending, as well as in the form of subsidizing interest rates on mortgages. In addition, improvement of regulatory regulation of land relations in the part of accelerated registration of rights to land, which will strengthen the ability to provide collateral for loans.

As a result of the global financial crisis, the European mortgage bond market suffered less than a two-tier mortgage market in the United States. As the world experience shows, without the refinancing of loans, the volume of loans issued decreased sharply as compared to 2008, and in 2009 they decreased by 3-5 times [3]. For the resuscitation of the domestic mortgage market, these facts are aimed at introducing this instrument in domestic banking practice. Despite the many factors hampering the development of mortgage lending to agricultural producers, it can be argued that in the current situation in Ukraine, the mechanism of mortgage lending in agriculture has been launched. At the same time, taking into account the diversity and complexity of the problem, the dynamic development of the system of mortgage lending in agriculture, including on the ground of agricultural land, requires significant financial infusions of the state and the efforts of specialists: economists,

financiers and other experts associated with this institution financing of the agrarian sector of the economy. In our opinion, under a scientifically sound system of economic relations with the participation of the state, mortgages can become an effective financial instrument for regulation of investment activity in agriculture in Ukraine [6; 7]. It is clear that the global financial crisis has a very negative effect on the development of agriculture and agro-industrial complex of Ukraine as a whole. This is manifested, above all, in terms of financing agricultural development.

It should be emphasized that the need to improve the financing of investment activities in agriculture by the method of mortgage lending is due to the lack of sources of investment activity in agricultural producers. It was established that improvement of the system of mortgage lending is necessary not for the development of lending organizations and for the receipt of their profits, but for helping and supporting the development of the agrarian sector. Therefore, in the case of the creation of a domestic system of mortgage agricultural lending, it is necessary to use the general methodological foundations of the construction of such systems, taking into account national peculiarities of domestic law, while taking into account that agricultural production is a special category of production, where it is necessary to consider the long-term return on projects, seasonality, cyclicity and expenditure the nature of the work performed. The study of the peculiarities and problems of the development of mortgage lending in agriculture has allowed to allocate such initial principles of foreign and domestic systems of mortgage lending, which should be applied in the formation of the system of investment and mortgage agricultural lending in the modern country:

1. Creation of conditions for the availability of mortgage loans for a wide range of borrowers-agricultural producers (standard terms for issuing and repayment of mortgage loans, including taking into account the procedure for subsidizing the payment of interest).

2. Ensuring protection of interests of both the borrower and the creditor and the investor (insurance, state guarantees, detailed procedure of foreclosure on land plots, mortgage encumbrances, procedure for their implementation, etc.).

3. Direct participation of the state, especially at the initial stage of functioning of the mortgage lending system, in the form of control and regulation of the activities of credit institutions that provide mortgage lending to agricultural producers, granting preferences to credit organizations specializing in this category of borrowers and types of loans (in the form of state guarantees, tax privileges, etc.).

4. Creation of a clear mechanism for distribution and insurance of risks in the market of mortgage loans.

Conclusions

Based on the results of the study, it can be argued that Ukraine should create a mortgage mechanism that would fulfill the demand of agricultural producers for long-term sources of financing modernization of production, the needs of the banking system for mobilizing long-term credit resources, and at the same time would be clear, attractive and characterized by minimal risks for investors, when widely used financial risk insurance instruments. At the same time, it is also necessary to support investment-mortgage lending at the state level: the creation of infrastructure, regulatory and economic conditions for the development of securitization in the country. In addition, there is a need to make radical changes to the tax laws that protect the interests of investors, mortgage securities, tax holidays for investors at the initial stage of market development, and stimulate the development of regional programs.

Thus, the generalization of the theoretical provisions of financing investment activity in agriculture and analysis of the development of its implementation methods indicate the need to improve investment-mortgage lending as a possible tool for attracting long-term investments.

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