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### STRATEGIC PRIORITIES FOR THE DEVELOPMENT OF THE AGRICULTURAL SECTOR OF UKRAINE'S ECONOMY TO IMPROVE ECONOMIC SECURITY

#### **Summary**

The article is devoted to issues of foreign investment in Ukraine, since the effective implementation of investment activity is important for the development of the Ukrainian economy at the present stage and increasing the competitiveness of enterprises, necessary for its integration into the European socio-economic space The development trends in foreign investment to agriculture have been analysed. Gradual deterioration of the prerequisites for the development of agricultural foreign investments has been found by studying the trends of foreign investment to agriculture on the basis of statistical analysis of the dynamics of indicators of the amount of attracted foreign direct investment, their share in gross value added, gross agricultural income, labour productivity in agricultural production, and others. The investment attractive factors contributing to the expansion of investment ties of Ukraine, namely, the presence of rich natural resources and production capacities are analysed; developed infrastructure; relatively cheap and skilled labour; large capacious and almost competitive unlimited domestic market for most commodity items; scientific potential, etc. The threats of foreign investment for the host country are identified. It is proposed to identify and neutralize threats to the economic security of the agricultural sector within the framework of a program-target approach, which includes: identification of the source of threats, assessment and development of program-target measures aimed at neutralizing possible threats to economic security, analysis of the degree of importance of threats, economic evaluation of planned measures, development of a strategy economic security of agroregions. The work determined that ensuring sustainable development and economic security of the agricultural sector as sections of target programs should include measures to deepen interregional and intraregional integration using the latest management methods, rational use of land resources, transfer of agricultural technologies, etc.

#### Introduction

In the conditions of constant transformational changes that take place in the market economy, the agro-industrial complex remains one of the most important spheres of the economy of Ukraine, and its stable dynamic development will continue to ensure the growth of well-being, standard of living and employment of the population living in rural areas, thereby contributing to the preservation of territorial integrity and reliable infrastructure regions as a whole.

Forming economic security system in the digital economy involves the study of all situations, units and categories, as well as causal relations with other processes of business entities. The perception of techniques, technologies, digitalization processes, understanding and identification of threats to entrepreneurial thinking has a key role in the management decision-making processes of agricultural organizations of the agro-industrial complex. New areas in the study of the nature of electronic digital language units, their features, functional and system status are being discovered.

The modern period of the restructuring of the world socio-political and economic structure is characterized by an unprecedented growth of new trends and processes. Among them, one of the leading places belongs to such a phenomenon as integration or the creation of fundamentally new socio-political and socio-economic structures from the micro, mezzo and macro levels of organization and management from existing ones. Therefore, their study is relevant and timely in the context of agro-industrial complex, because it is the integration factors and processes that allow acquiring new competitive advantages for agribusiness entities, occupying more efficient market niches and positions and strengthening economic security.

# Part 1. Assessment of economic security of enterprises: theoretical and methodological aspects

However, ensuring economic security is complicated by the need to integrate agricultural organizations into the digital communications field as the need to

unlock potential in the context of rapidly developing technologies in all sectors of the economy.

A large number of economists work in the direction of assessing the level of economic security of the enterprise, among which: Pushak Ya. (2021), Entringer T., Nascimento D. (2019), Ker A. (2020), Plastun (2017), Lagodiienko N. (2018), Reznikova O. (2022) and others. Parfitt C., Barnes T. (2020) note that the principles of ensuring economic security have changed somewhat in the context of the existence of unstable conditions for the life of economic systems [4].

The specifics of managing the agro-industrial complex and the basis of the risks that could adversely affect its development and become a security risk were investigated by Ker A. (2020) [8].

It is very difficult to assess the level of economic security of the agroindustrial enterprise. Parfitt C., Barnes, T. (2020) formed the definition of a strategy for assessing the level of economic security of the agroindustrial enterprise through the formation of a structural-logical scheme for agricultural enterprises [10]. Entringer T. (2019) considered strategic directions for assessing the level of economic security of the agroindustrial enterprise for processing enterprises through the dynamics of the opportunities and threats of this type of enterprises [3]. Lagodiienko N. et al. (2021) assessed the impact of threats on security of enterprise, and also assessed the level of this impact on enterprises [15]. Shynkar S., et al. (2020) in their work studied the main strategies for determining the level of economic security at enterprises, including assessing the number of threats and factors of the internal and external environment [15]. However, as part of our study, we focus on agroindustrial enterprise that have not been investigated so far. If we talk exclusively about agroindustrial enterprise, Schmink M. (2020), has proposed several strategic directions for assessing the level of economic security of the agroindustrial enterprise: a reduction strategy, a limited growth strategy [13]. To date, there is no holistic and practically confirmed method for assessing the level of economic security of the agroindustrial enterprise, the calculation of which would provide information on the need for choosing right management at agroindustrial enterprise, taking into account the specifics of their activities.

Strategic analysis is an important method for the formation of substantiated, necessary and timely information necessary for building an effective development strategy of enterprises. The article analyses the necessity of strategic analysis of agricultural enterprises as an important tool for determining the prospects of development in the modern market environment.

Ukraine's agriculture sector is an important source of livelihoods for the roughly 13 million Ukrainians living in rural areas. It is also a major provider of food for both domestic and international markets. Prior to Russia's full-scale invasion in February 2022, Ukraine's agriculture sector accounted for

11 percent of the country's GDP, nearly 20 percent of its labour force, and nearly 40 percent of total exports, with Ukraine being the world's fifth-largest exporter of wheat, fourth-largest exporter of corn, and third-largest exporter of rapeseed. A strong and stable agriculture sector in Ukraine is thus critical for global food security. According to a report by the UN Food and Agriculture Organization (FAO), global food prices increased by 12,6 percent during roughly the first month of the war, a clear indicator of Ukraine's status as a global breadbasket [9].

In recent years, the main adverse factors that caused the crisis in the economic system of Ukraine were as follows:

- diminution in external demand;
- business loss:
- diminution in consumer and investment demand;
- deterioration of financial performance of enterprise;
- reduction in purchasing power of the population;
- high rate of inflation.

The full-scale Russian invasion of Ukraine caused damages to the agricultural sector of the country for the total amount of \$4.29 billion. It is stated in the analysis "Agricultural War Damages Review Ukraine", prepared by the team of the Centre for Food Research and Land Use KSE Institute in cooperation with the Ministry of Agrarian Policy and Food of Ukraine. Damage assessment is the first element in assessing the need for restoration [9].

Ukraine is one of the world's top agricultural producers and exporters and plays a critical role in supplying oilseeds and grains to the global market. More than 55 percent of Ukraine's land area is arable land. Agriculture provides employment for 14 percent of Ukraine's population. Agricultural products are Ukraine's most important exports. In 2021 they totalled \$27,8 billion, accounting for 41 percent of the country's \$68 billion in overall exports (Table 1).

Ukraine is under martial law and will forward domestic products to consumers within the country, so we believe that the decline in exports of food products will be more significant than the percentage of inaccessible arable lands.

The deliberate actions of russia to reduce Ukraine's agricultural potential is primarily a hit to Europe, which exports more than 32% of all Ukrainian agricultural products. And this could be most devastating for poor countries and populations that will not afford the new food price [5].

The large-scale hostilities now taking place in Ukraine are setting a precedent in the modern history of civilization. Whether in the social, cultural, economic and educational dimensions or in the balance of agrarian economy and nature.

Table 1

Ukraine agricultural production and exports (2021/22 marketing year)

	Production			Exports		
Product	Volume (1,000 MT)	Rank Among Global Producers	% of Global Production	Volume (1,000 MT)	Rank Among Global Exporters	% of Global Exports
Corn	41,900	#6	3.5%	23,000	#4	12%
Wheat	33,000	#7	4.3%	19,000	#5	9%
Sunflower	17,500	#1	30.6%	75	#9	3%
Barley	9,900	#4	6.8%	5,800	#3	17%
Sunflower Oil	5,676	#2	30.6%	4,950	#1	46%
Sunflower Meal	5,452	#2	27.5%	4,100	#1	54%
Rapeseed	3,015	#6	4.2%	2,700	#3	20%

*Source:* [3]

New conditions of doing business impose new requirements on the composition of tasks and concepts and methods of internal strategic analysis of agricultural enterprises:

- 1) strengthen the dynamic component of strategic analysis, which will allow for more accurate accounting of the relationships between existing (local and global) industry markets and the dynamics of changes in the external environment as a whole;
- 2) carry out an assessment and analysis of all strategic assets of enterprises (including adaptive capabilities and strategic assets that allow entering new industry and geographic markets) from the perspective of future markets and determine the scarce resources and capabilities of companies to preserve the stability of competitive advantage and overcome crisis situations [8].

The change in requirements for strategic analysis makes it necessary to improve existing and develop new elements and methods of analysis that are not taken into account in traditional concepts, and methods of internal strategic analysis of enterprises [3].

In modern conditions, the level of security is an important factor affecting the activity of all business entities, as well as the state and dynamics of development competitiveness of agricultural enterprises, therefore the basic principles of construction models of integrated qualitative assessment of the level of economic security of enterprises should consist of the following:

- ensuring integrity and independence - so that the enterprise as the economic system progressively evolved and achieved positive goals, it is necessary that it does not cease to exist as a unique integrity of certain elements

with its characteristic set of interrelationships at a given time segment and territorial localization;

- ensuring sustainable development specifically in the field of agroindustry activities create the necessary material prerequisites for dynamic purposeful development of other industries and social systems;
- rational land use related issue the use of land resources is a distinctive feature of the provision problem economic security of agro-industrial enterprises.

It must commit to a comprehensive vision of agricultural and rural development. They need to design, implement and constantly review a series of priority and carefully timed measures necessary to boost investment in agriculture:

- 1. Maintaining sound and stable macroeconomic and trade policies that encourage investment in agriculture.
- 2. Establishing a strong institutional environment that improves access to markets, ensures dissemination of information, sets standards and provides an adequate legal and regulatory framework.
- 3. Strengthening human capital in rural areas through health and education services and access to productive resources.
- 4. Enabling research and extension services to develop productive and robust technologies under farm conditions.
- 5. Upgrading the marketing, transport and communication infrastructure to support farmers' access to seasonal and longer-term capital and inputs and providing them with strong price incentives.
  - 6. Safeguarding natural resource and environment capacity [2].

# Part 2. Strategic analysis in agricultural enterprise in order to ensure its economic security

Strategy development should be based on the use of various tools of strategic analysis: ETOP-analysis (analysis of threats to the external environment and profile capabilities), SWOT-analysis (strengths, weaknesses, opportunities and threats), SPACE-analysis (evaluation of the strategic position and actions) matrix GE / McKinsey (matrix «attractive industry / position in the competition»), the matrix Shell / DPM (directional policy matrix), PIMS-analysis (analysis of the impact of market strategy for profit), etc.

An alternative approach to assessing the effectiveness of economic security is the use of SWOT analysis. This analysis makes it possible to comprehensively assess the impact of internal and external threats on an agricultural enterprise, as well as to formulate a plan of measures to neutralize them.

But along with the advantages of this method, there are also disadvantages. The main disadvantage of SWOT analysis is that it belongs to the group of socalled instrumental and descriptive models of strategic analysis, which characterize only general goals, and specific measures to achieve them are studied separately [6]. The main factors taken into account in the SWOT analysis are presented in Table 2.

Table 2 **SWOT-analysis in agricultural enterprise**in order to ensure its economic security

	Positive influence	Negative influence		
	Strengths	Weaknesses		
Internal environment	1) highly qualified staff;	1) seasonality of production;		
	2) provision of financial resources;	2) deterioration of competitiveness;		
	3) savings from increasing produc-	3) narrow product line;		
	tion volumes;	4) production problems;		
	4) updated production technology;	5) lag in the field of research and		
	5) updated material and technical	development;		
	base;	6) high wear and tear of the material		
	6) cost advantages	and technical		
Environment	Opportunities	Threats		
	1) access to new segments and	1) appearance of new competitors;		
	markets;	2) maintaining market growth;		
	2) expansion of own production;	3) increase in the share of imported		
	3) release of new own products;	products;		
	4) reduction of entry barriers to	4) growing influence of suppliers;		
	attractive markets;	5) change in customer needs and tastes		
	5) the possibility of moving to a group	for goods and services;		
	with a better market position;	6) possibility of absorption by a large		
	6) acceleration of market growth	enterprise;		
	-	7) unfavourable government policy		

Source: author's development

SWOT analysis gives a clear picture of the current situation in business. The main advantages of the SWOT analysis method are:

- this method can be used in various areas of economy and management;
- SWOT analysis can be adapted to the research object of any level;
- free choice of analysed elements depending on the set goal;
- can be used both for operational control of the enterprise and for strategic planning for a long period [1].

The prediction is performed to:

- 1) assess the social, economic, scientific, technical and environmental effects of each of the options of the company;
- 2) determine the content of measures to implement the existing business opportunities and reducing possible threats;
- 3) assess of required resources: labour, financial, material and time required for implementation of the chosen strategy.

It is worth noting that there are weaknesses in the implementation of the strategy of greening agricultural production sufficiently low level of state support for the industry, this especially applies to the regulatory and legal framework, systematic and comprehensive actions of the state, economic levers for stimulating the production of ecologically clean products.

In this regard, the state should be formed measures capable of changing the format of relations between production and the surrounding natural environment rational use, reproduction of agricultural systems, and exactly:

- it is necessary at the state and regional levels implement measures of environmental policy, the basis of which there is a process of introduction and development of ecologically clean production, rational use of opportunities the economy of the state, especially its financial resources, production and scientific and technical potential;
- a normative and legal framework must be formed, which regulates the functioning of the ecologically safe market products;
- a system of national standards was developed in the field of environmentalization of agricultural production, as well as their relationship with the system of international standards;
- strict compliance control is established agricultural enterprises of modern environmental standards;
- an economic incentive mechanism has been developed manufacturers of environmentally safe products;
- the state must guarantee the safety of food products and defend the interests of consumers;
- public declaration by the state is necessary priorities in view of the specific situation in the regions, according to which it is planned to eliminate negative phenomena of nature use and transition to ecologically clean production;
- combination of state influence with market forms of management, stimulation of qualitative changes through priority financing, lending, material and technical, information support, implementation and development of environmentally friendly production;
- economic and environmental monitoring of the process of transition to ecologically clean production with taking into account the internal strengths and weaknesses of agricultural enterprises;
- constant monitoring of changes in the composition of external factors and their impact on product competitiveness and enterprises of the agrarian sector of the economy.

It is also worth noting that agrarian business in Ukraine has its own specificity, and therefore an attempt to directly transfer foreign strategic management methods, in particular, SWOT analysis, on domestic economic realities causes additional difficulties.

Absence slows down the development of agrarian business on an innovative basis venture financing. Active venture capital funds direct their resources mainly for financial support of traditional innovative projects and avoid financing promising technologies. In developed countries the world plays a decisive role in the activation of innovative activity extensive and quite dynamic network of private investment and venture firms funds.

In Ukraine, since 2007, the creation of a network of Regional innovation centers. However, they perform mainly information-consulting functions and do not ensure the implementation of venture investments.

Based on the results of the research, we have identified the main obstacles in the development of venture financing of innovations in the agricultural sector of the economy of Ukraine:

- 1) low level of innovative activity of agricultural enterprises, activity which are mostly traditional;
- 2) proposal of uninteresting investment projects from the point of view of investors, which often associated with insufficient support of the venture industry and, as a result, low level of awareness of product manufacturers regarding modern scientific achievements;
- 3) a high level of investment risk in the agricultural sector of the economy, connected, on the one hand, with an unsatisfactory financial condition agricultural enterprises, due to their lack of long-term ones development strategies, and on the other hand, with the imperfection of legislation provision of venture capital investment and economic instability in the country;
- 4) deterioration of the situation in the research sector, loss of connections with product manufacturers;
- 5) underdeveloped infrastructure to ensure the symbiosis of venture capital with enterprises;
- 6) insufficient economic incentives for the participation of venture capital in implementation of science-intensive projects in the agricultural sector;
  - 7) lack of qualified managers of innovative and system projects analysts;
- 8) low level of activity of banks, non-state pension funds, insurance companies in venture investing in the agricultural sector;
  - 9) almost complete absence of venture capital funds in the regions.

War requires quick response actions, accompanied by the goals of repelling armed aggression and supporting the economy. The rules for regulating land relations in peacetime, when the procedures for granting land plots last for months, in the conditions of martial law prove their inability and unadaptability to new realities. Therefore, the solution of many tasks of the functioning of the economy of Ukraine during the war period, including the management of agriculture, directly depend on the speed of making administrative decisions regarding the provision of land plots for the appropriate purpose, carrying out land management and registration of land rights.

Ukrainian farmers would be greatly helped by the abolition of current restrictions on the export and import of goods. Within the framework of the Association Agreement with the EU, as well as free trade agreements for Ukraine, tariff quotas were established for some product items, which allowed domestic producers to export products to the EU countries at a preferential or zero duty rate. In the event that all quotas were used, Ukraine could still supply products, but paying the duty in full. The introduction of a number of trade privileges for Ukraine by other countries will simplify the conditions of exportimport operations and ensure bilateral trade in the most necessary goods.

To support agribusiness, the government was a number of measures were implemented: minimization of bureaucratic procedures for agribusiness, permission use of agricultural machinery without registration, simplification of import of seeds materials, the introduction of a zero rate of excise tax and a reduction in the amount of VAT to 7% on fuel. The government has also introduced separate state programs: available loans of 5–7–9%, grant support for processing enterprises, for the development of horticulture, as well as for the creation of greenhouses.

In order to minimize the manifestations of the global food crisis, it is necessary to protect and support the production of agricultural products in Ukraine as soon as possible in the conditions of martial law, taking advantage of the opportunities of Ukraine's influence on global food policy, which it gained thanks to achieving leading positions on the world markets of certain types of agricultural products, as well as intensifying cooperation with international and intergovernmental organizations, in particular FAO, regarding the transformation of food systems.

# Part 3. Effective implementation of investment activity as important for the development of the agrarian economy

Investment is a key factor in ensuring economic growth and innovation, increasing productivity, increasing incomes, sustainable development. Investment in agriculture, is important because it contributes to economic growth and poverty reduction, food security and sustainable use of nature. Volumes of investments, their structure depends on many factors. After the global financial crisis in the period, experts note the weakness of investment activity in the world economy, and argue that the lion's share of declining productivity growth in this period as in developed both emerging and developing economies account for the slowdown in investment. With the development of the pandemic, expectations of investment activity of most experts are pessimistic. But against the background of global trends there are differences in the dynamics of investment in different countries and different industries.

Agriculture occupies a special place in the sectoral structure of the Ukrainian economy. Investment in agriculture in Ukraine should ensure its technical and technological renewal, increase factor productivity, competitiveness of the industry in domestic and foreign markets, sustainable development of the agricultural sector as a whole. Investment activity in agriculture is very sensitive to many factors: macroeconomic conditions, political stability, the state of institutions, infrastructure development, innovation potential, profitability of individual industries and financial instruments. The study of trends, factors of influence, interdependence of investment in agriculture and land reform creates the necessary scientific foundation for sound management decisions at both micro and macro levels, forecasting possible changes in the development of the industry.

The issue of increasing innovation and investment activity were considered in the works of Burlaka N., Ilchuk V., Shpomer T., Shubravska Y. and others. Domestic and foreign scientists, in particular Onegina V., Vitkovskyi Y., Chernyshev V., Okara D., Kovaleva I. and others, discussed the problems and prospects of increasing the investment attractiveness of agrarian enterprises in their scientific works. In recent years, there has been a decrease in the level of investment and innovation activity of agrarian enterprises, which led to destructive processes in the productive forces of the industry, deterioration of the state of land resources, decrease in efficiency of agricultural production, decrease in the level and deterioration of the quality of life of the rural population. Therefore, it is expedient to substantiate the theoretical principles of increasing innovation and investment activity and attractiveness of subjects of agrarian entrepreneurship.

Research shows that much more agricultural investment, including foreign direct investment, is needed to eradicate hunger and poverty and promote rural development. Agricultural investment by domestic and foreign investors can generate a wide range of benefits such as higher productivity, increased food availability, employment creation, poverty reduction, technology transfer and access to capital and markets (Impacts, challenges and opportunities).

The purpose of the article is to identify trends and factors of investment in agriculture in Ukraine and the impact of land reform measures to liberalize the circulation of agricultural land on the volume of investment in agriculture. The research hypothesis is based on the identification of the peculiarities of the dynamics of investment in agriculture in Ukraine, the factors influencing the volume of investment and testing the expectations for their increase due to the deepening of land reform. The study used such methods as logical operations (analysis, synthesis, generalization, induction, deduction) to determine the characteristics of investment trends, index to identify quantitative changes in nominal and real investment, impact factors; trend analysis to determine trends in the construction and construction of the functions of the investment trend in different periods, factor and correlation analysis to identify

factors of density and dependence of investment (profits, prices, interest rates, government support); graphic for visual presentation of investment dynamics. The research was performed on the basis of statistical data of the State Statistics Service of Ukraine, the National Bank of Ukraine, reports of agricultural enterprises and data from own observations.

Ukraine is frequently referred to as being a potential global agricultural superpower. Over 70% of the country's total area is agricultural land. This amounts to just over 42 million hectares of which 32 million is arable land suitable for grain and vegetable farming. Approximately 25% of Ukraine's population is employed in the agricultural sector [13].

The agricultural sector is one of the promising sectors of Ukraine's economy, accounting for over 20% of GDP. Ukraine is among the five largest grain exporters globally and takes first place in the world in terms of export of sunflower oil (58%).

The largest part of Ukraine's current agricultural output consists of a diverse combination of cereal and forage crops including wheat, maize, barley, sunflowers, sugar beets, tobacco, legumes, fruits and vegetables [2].

Ukraine takes a leading position as a large producer of cereal grains, particularly wheat. The entire annual cereal crop can reach as high as 90–100 million tons.

Agribusiness retains its highest priority for the Ukrainian government, especially in connection with the Association Agreement between the EU and Ukraine and the implementation of the Deep and Comprehensive Free Trade Agreement (DCFTA). Since the signing of the Association Agreement, the export of agricultural products from Ukraine to the EU has increased by 37% (from 4.5 billion in 2013 to 6.1 billion in 2018, and 6.6 billion by December 2019) (Figure 1).

What is more, according the monthly monitoring of agricultural trade performed by the European Commission, for the period from November 2018 through October 2019, Ukraine, having exported agricultural goods for the total amount of 7.3 billion EUR, was ranked 3rd among the largest suppliers of agricultural products to the EU.

Since the establishment of the free trade zone in 2017, Ukraine managed to receive preferential quotas for duty-free export of honey, grape juice, processed tomatoes, pearl barley, oats, wheat, barley and corn.

The huge potential of the Ukrainian agro-industrial complex makes it a key economy sector in terms of investment, both domestic and foreign. According to the data by the State Statistic Service of Ukraine, during the period from 2014 to 2018, the amount of investment into the Ukrainian agribusiness has grown trifold, amounting to 300 billion UAH (about 11.2 billion USD), with 100 billion UAH (about 3.7 billion USD) having been invested in food

production. In 2019, agriculture, forestry and fisheries have received 55.25 billion UAH (about 1.95 billion USD) of investment.

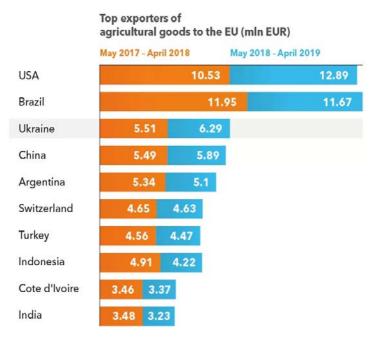


Figure 1. Top exporters of agricultural goods

Source: according to the State Statistics Service of Ukraine and the National Bank of Ukraine [16]

Foreign investors often opt for agribusiness in Ukraine since it allows for relatively fast return on investment and stable conditions, despite unforeseeable factors such as poor weather conditions.

It is commonly established that Ukraine possesses many advantages when it comes to agriculture development, including the fertile soils and favourable location. Yet currently, Ukrainian agribusiness is getting noticed by the foreign investors due to the high level of hi-tech innovations as well. Ukrainian agritech companies develop innovative solutions, aimed to improve the traditional agricultural methods and boost organic production.

In accordance with the Law of Ukraine "On the Regime of Foreign Investment" foreign investments understand all the values invested by foreign investors in objects of investment activity in accordance with the legislation of Ukraine in order to earn profit or achieve a social effect.

Investors can be:

- foreign countries;
- international organizations;
- legal entities;
- individuals, including Ukrainian citizens living abroad.

The legislation of Ukraine defines the following forms of foreign investment:

- creation of enterprises that are wholly-owned by foreign investors, branches and other separate units of foreign legal entities, or the acquisition of fully-owned enterprises;
- partial participation in enterprises that are created jointly with Ukrainian legal entities and individuals, or acquisition of a share of operating enterprises;
- acquisition of rights to use land and use of natural resources on the territory of Ukraine independently or with the participation of Ukrainian legal entities or individuals;
- the acquisition of immovable or movable property not forbidden by the laws of Ukraine through direct obtaining of property and property complexes or in the form of shares, bonds and other securities;
- economic (entrepreneurial) activity on the basis of production-sharing agreements;
  - acquisition of other property rights;
- without establishing a legal entity on the basis of agreements with economic entities of Ukraine.

The given list is not exhaustive and, taking into account the constant development of business sphere, existing forms of investment activity in Ukraine can be changed or supplemented.

Digital technologies and innovations are already greatly changing the way agribusiness is done, bringing its efficiency to a new level (NGA, 2020). The use of drones or unmanned aerial vehicles (UAV) in farming is seen as one of the most promising innovations in the field due to its high economic feasibility. Use of UAVs has diverse applications, including for efficient planning of farming, increased control at each stage of agricultural production, as well as chemical treatment of crops, etc. UAVs are able to provide crucial information in real-time, such data, collected long-term, can also be used for better dynamic understanding of every process. UAVs are equipped with special sensors providing for the detection of contaminated crops areas, targeted fertilization, spot spraying and irrigation. In as little as 3 hours a UAV is able to sow an area of 10 square kilometres. Other applications of UAVs include monitoring the workers, agricultural machinery and live-stock, guarding fields, etc. UAVs equipped with thermal imaging cameras allow for guarding and monitoring at night (WB, 2020).

Recently, the field of land legislation of Ukraine has undergone significant changes. On March 31, 2020, the Verkhovna Rada of Ukraine passed a law on the circulation of agricultural land, which provides for the right to purchase land only to Ukrainians. The law also sets limits on the maximum area that can be owned by one person and preferential conditions for Ukrainian farmers.

In accordance with Presidential Decree № 449/2020 agricultural lands from state to communal ownership, all newly created communities have received

lands in communal ownership and will be able to use funds from land use for their development.

These and other innovations require study and analysis in order to properly implement them in practice. To achieve this goal, Ukraine has launched the Program «Acceleration of Private Investment in Agriculture», which in 2019 concluded an agreement between the International Bank for Reconstruction and the Ministry of Finance of Ukraine to raise \$ 200 million. The purpose of the Program is to alleviate certain restrictions on the way to increasing the participation of the private sector, in particular small and medium enterprises, in the agricultural market of factors of production and the market of goods of Ukraine.

The transfer of annual investments in US dollars proves that the growth of investments was not as impressive as estimated on the basis of their volumes in Ukrainian currency (Figure 2).

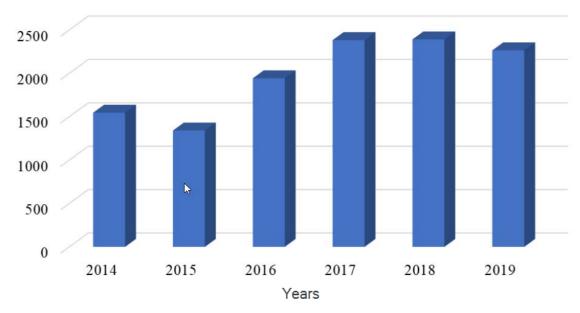


Figure 2. Investments in agriculture in Ukraine, million dollars USA

Source: according to the State Statistics Service of Ukraine and the National Bank of Ukraine [16]

Private land users face many problems in practice. Most often, people ask legal questions about *land lease agreements* (conclusion, amendment, termination and renewal), *land ownership* (registration, acquisition of rights, joint ownership. Many questions about the right to use someone else's land for agricultural purposes or for construction [14].

It is of great importance to prevent violations of registered rights of use or property rights, better knowledge of land legislation and procedural rules among landowners and professionals who carry out their activities [7]. In the regions of Ukraine, the work of remote access points to free legal aid is

organized, including in village, settlement councils and united territorial communities. all issues, including in the field of land relations.

The analysis of statistical data confirmed that during 2018–2021 the volume of investments in agriculture in Ukraine increased annually (Table 3).

Table 3

Capital investment in agriculture in Ukraine

Indicators	2018	2019	2020	2021	2021 to 2018, %
Capital investment in agriculture and hunting, UAH million	29310	63401	65059	58555	199,8
Index of capital investment, %	159	128	103	90	-69
Net profit, UAH million	101912	68277	70462	90167	88,5
Fixed assets, UAH million	205575	335303	399526	365456	177,8

Source: data of the State Statistics Service of Ukraine [16] and the calculations of the authors

The exception to the growing trend of investment in agriculture was 2021, when the annual volume of investment decreased compared to the previous year by 10%.

This decrease in investment took place under conditions when agricultural enterprises received UAH 70,5 million in net profit in the previous year, which was even 3,2% higher than the previous year's profit.

At a fairly stable economic situation in the country, agrarian enterprises use the following methods of financing innovation [1]:

- 1. *Direct foreign investment*. Foreign capital is invested in those countries where the economic crisis has practically not affected the real or financial sectors of the economy.
- 2. Credit provision obtaining credits either from banking institutions, either by issuing bonded loans, or through financial leasing. However, under crisis conditions, agrarian enterprises can only rely on leasing operations relative to the durable means of production.
- 3. Sharing attracting investment resources through issuance of securities, in particular shares. This method is considered as one of the most effective for business entities in industry, trade, financial sector of the economy. The number of joint stock companies in the agricultural sector is very small, and therefore only individual enterprises can rely on obtaining necessary financial resources for investment activity subject to issue of new shares.
- 4. Shared financing is carried out by private investors or owners of cooperatives, limited liability companies. Such financing of investment activity can take place under any conditions, including in the period of financial crisis,

because some private investors have the necessary financial resources, and in order to increase the efficiency of their own agrarian production, they can invest in their investment activities.

5. Selffinancing owing to own funds created on the basis of such sources as depreciation and profit. Due to the crisis phenomena in the economy, the profit of most agrarian enterprises is low, so investment is possible only if there is a necessary amount of depreciation. At most agrarian enterprises, fixed assets have significantly decreased in recent years, so the amount of depreciation cannot be significant [4].

Thus, among the main reasons for the decline in investment activity in the country, in particular in agriculture, are the following:

- low level of investment protection and weak development of the stock market;
  - certain inconsistencies and imperfections of legislation;
  - difficulty in obtaining credit and high interest rates;
  - low solvency of the population and state enterprises;
  - high level of bureaucracy in deciding on investment activities;
  - high tax rates;
  - low level of state support for agricultural producers.

The slowdown in investment can be explained primarily by the presence of high investment risks in the country, which investors seek to avoid under any circumstances [6]. This can have negative consequences for the development of the agricultural sector, which can manifest itself in lower productivity, reduced production, higher cost of manufactured products, deteriorating quality and, consequently, reduced competitiveness.

#### **Conclusions**

One of the main problems hampering the development of agriculture in Ukraine and expansion of its innovation and investment activity is, first of all, low investment attractiveness of enterprises in the agrarian sector. Increasing the innovation and investment activity and the attractiveness of agrarian enterprises will contribute to formation of a powerful production potential that will provide a comprehensive solution to the problems of agricultural development.

The introduction of a comprehensive investment program in the agrarian sector of the economy will stimulate its transition to a qualitatively new innovative type of development and will promote the growth of competitive agrarian enterprises. The timely assessment of the investment attractiveness of a company with a view to forecasting the prospects for further effective development of the agrarian sector will facilitate opening of new diversification opportunities for domestic and foreign investors, and increase the investment guarantees for foreign investors in investment projects.

All of the above points to the need to implement a complex of effective measures to activate innovative activities, including in the agricultural sector of the country. In particular:

- contribute to the formation of an appropriate legal environment for development innovative and scientific and technical activities, increasing motivation entrepreneurs to high-performance and high-quality activities by introducing changes to tax and customs legislation (to ensure the system appropriate economic stimulation);
- determination of the scope and provision of sufficient funding for innovative projects processes. In addition, it is advisable to creation of an additional financial resource for the revival of the material and technical base of the industry by creating a special fund at the expense of deductions from revenue from the sale of food products, export and import agricultural products;
- it is necessary to develop a system of measures to activate investment activities of commercial banks, their interest in the long-term lending, as there is a risk of not returning funds spent on scientific and research causes low activity of banks and other financial institutions in financing innovative activity and, as a result, lack of funds at enterprises for implementation of innovative projects;
- in the future, it is necessary to clearly define the legal status of the subjects of venture entrepreneurship in the agricultural sector, to approve provisions regarding the possibility use of venture capital to finance innovative projects.

Conditions for the formation of the agricultural market in Ukraine is quite specific and determined primarily a difficult situation in the economic, political and social spheres: the low competitiveness of Ukrainian manufacturers, the presence of corrupt regulators market at all levels of management, a high level of monopoly in certain industries, low purchasing power of the population, etc. A significant imprint on Ukrainian producers also imposes a contradictory character socio-economic reforms and imperfect legislation.

The scientific and practical approach that we have formed can create the basis for managing economic security of agroenterprise and will allow us to identify the signs of crisis development as quickly as possible in order to respond in a timely manner. Not without the help of leading experts and scientists, it was determined which financial indicators should be used in assessing the level of economic security of agroenterprise.

#### **References:**

- 1. Burlaka, N.I. (2019). Development of investment activities of enterprises of Ukraine. *Investments: practice and experience*, 8, pp. 37–44.
- 2. Chernyshev, V.G., Okara, D.V., Kovaleva, I.L. (2019). The current state of foreign investment in agriculture, forestry and fisheries in the regions of Ukraine. *Agro-world*, vol. 21, pp. 36–46.

- 3. Entringer, T., Nascimento, D., Ferreira, A., Siqueira, P., Boechat, A., Cerchiaro, I., Mendonça S., Ramos, R. (2019). Comparative analysis main methods business process modeling: literature review, applications and examples. IJAERS, vol. 6(5), pp. 100–116.
- 4. Gaidutsky, P.I. (2014). Structural warp and crisis crises in the agro-industrial complex. *Economy AIK*, vol. 7, pp. 38–46.
- 5. Global productivity. Trend, drivers, and policies / ed. A. Dieppe. *World Bank Publications, The World Bank Group, Washington, DC: World Bank*, [online] 2020. 460 p. Available at: https://www.worldbank.org/en/research/publication/globalpro ductivity?cid= ECR\_E\_NewsletterWeekly\_EN\_EXT&deliveryName=DM71770 (accessed 8 September 2022).
- 6. Hudzynskyi, O.D. (2013). Formation of system investment support strategic development of agricultural enterprises. *Collection of scientific works of Tavriya National University*, vol. 4, pp. 5–8.
- 7. Ilchuk, V., Shpomer, T. (2017). Innovation and investment activity of AIC: current state and problems of development. *Agricultural and Resource Economics: International Scientific*, [online], vol. 3(1), pp. 108–118. Available at: https://www.are-journal.com (accessed 10 Oktober 2022).
- 8. Ker A. (2020). Risk management in Canada's agricultural sector in light of COVID-19. *Canadian Journal of Agricultural Economics-Revue Canadienne D Agroeconomie*. DOI: https://doi.org/10.1111/cjag.12232
- 9. Onegina, V., Vitkovskyi, Y. (2020). Investments and land reform in agriculture of Ukraine. *Agricultural and Resource Economics: International Scientific*, [online], 6(4), pp. 187–210. DOI: https://doi.org/10.51599/are.2020.06.04.10
- 10. Parfitt, C., Barnes, T. (2020). Rethinking economic security in a precarious world. Critical Sociology. Article number 089692051985026. DOI: https://doi.org/10.1177/0896920519850266.
- 11. Pushak, Ya., Lagodiienko, V., Basiurkina, N., Nemchenko, V., Lagodiienko, N. (2021). Formation the system for assessing the economic security of enterprise in the agricultural sector. *Business: Theory and Practice*, vol. 22, pp. 80–90.
- 12. Reznikova, O. (2022). Strategic analysis of Ukraine's security environment. Available at: https://niss.gov.ua/news/statti/stratehichnyy-analiz-bezpekovoho-seredovy-shcha-ukrayiny (accessed 13 February 2023).
- 13. Schmink, M. (2020). Feeding the world: Brazils transformation into a modern agricultural economy. Journal of Interdisciplinary History, vol. 50(3), pp. 475–477.
- 14. Shubravska O. (2012). Innovative development of the agricultural sector of Ukraine: Theoretical and methodological aspects. *Ekonomika Ukrainy*, no. 1, pp. 27–35.
- 15. Shynkar S., Gontar Z., Dubyna M., Nasypaiko D., & Fleychuk M. (2020). Assessment of economic security of enterprises: theoretical and methodological aspects. *Business: Theory and Practice*, vol. 21(1), pp. 261–271.
- 16. State Statistics Service of Ukraine, 2019. *Statistical information on investment activities of agriculture, forestry and fisheries*. Available at: http://www.ukrstat.gov.ua (accessed 20 Oktober 2022).
- 17. The total war damages in Ukraine's agriculture reached \$4.3 billion KSE Agrocenter. 2022. Available at: https://kse.ua/about-the-school/news/the-total-war-damages-in-ukraine-s-agriculture-reached-4-3-billion-kse-agrocenter (accessed 15 February 2023).
- 18. Thompson, A. A. Jr., Strickland, A. J. 2002. Strategic Management: Concepts and Cases. Published by McGraw-Hill Education, United Kingdom.
- 19. Transforming our world: the 2030 agenda for sustainable development. *Document of the United Nations General Assembly*, [online]. Available at: http://www.un.org/ga/search/view\_doc.asp.symbol=A/70/L.1&Lang=E (accessed 17 September 2022).