

■ МАТЕМАТИЧНІ МЕТОДИ, МОДЕЛІ ТА ІНФОРМАЦІЙНІ
ТЕХНОЛОГІЇ В ЕКОНОМІЦІ

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**INCREASING THE INVESTMENT
ATTRACTIVENESS OF AGRICULTURAL
ENTERPRISES: WORLD EXPERIENCE ©**

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Agriculture is one of the most important sectors of Ukraine. Insufficient financing of agricultural enterprises does not allow the development of the agricultural sector; therefore, it is advisable to begin work on reforming the agricultural sector of Ukraine by intensifying investment activities. Today for Ukraine there is an urgent task of developing mechanisms of the state agrarian policy to increase the efficiency of using the existing potential of the agricultural sector of the economy [1, p. 4].

The investment attractiveness of agricultural enterprises depends on their favorable geographical position, favorable environmental situation, progressive socio-demographic structure of the population with a sufficient proportion of people with secondary and higher education, and security of capital investment.

In the leading countries of the world, special institutions have developed that are engaged in the implementation of investments in the agricultural sector. The leading form of investment is lending, the main feature of which is a high level of state support and cooperative principles for its implementation.

This article is devoted to the study of investment activities of agricultural enterprises. The foreign experience in agricultural investment in developed countries is also summarized. The main forms of state support for the development of the agricultural sector of the economy are determined, agricultural subsidies in the developed countries of the world are investigated. The main directions of using the experience of foreign countries to support the domestic agricultural sector are identified.

Key words: investment, investment activity, agricultural sector, agricultural enterprise, lending, state support.

Tab.: 1. Fig.: 4. Lit.: 18.

**ПІДВИЩЕННЯ ІНВЕСТИЦІЙНОЇ ПРИВАБЛИВОСТІ СІЛЬСЬКОГОСПОДАРСЬКИХ
ПІДПРИЄМСТВ: СВІТОВИЙ ДОСВІД**

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Агропромисловий комплекс є один з найважливіших із секторів України. Недостатнє фінансування сільськогосподарських підприємств, не дає змогу розвитку аграрної сфери, тому є доцільним почати роботу щодо реформування аграрного сектора України, шляхом активізації інвестиційної діяльності. Сьогодні для України гостро стоїть завдання розроблення механізмів державної аграрної політики щодо підвищення ефективності використання наявного потенціалу аграрного сектору економіки [1, с. 4].

Інвестиційна привабливість агропідприємств залежить від вигідного географічного положення, сприятливої екологічної ситуації, прогресивної соціально-демографічної структури населення з достатньою часткою осіб із середньою і вищою освітою, безпеки вкладення капіталу.

У провідних країнах світу склалися спеціальні інститути, що займаються реалізацією інвестицій у аграрну сферу. Провідною формою інвестицій є кредитування, головною особливістю якого є високий рівень державної підтримки і кооперативні засади його реалізації.

Дана стаття присвячена дослідженню особливостей інвестиційної діяльності сільськогосподарських підприємств. Також узагальнено зарубіжний досвід інвестування сільського господарства в розвинених країнах світу. Визначені основні форми державної підтримки розвитку аграрного сектора економіки, досліджено субсидування сільського господарства в розвинених країнах світу. Окреслено основні напрями використання досвіду зарубіжних країн для підтримки вітчизняного аграрного сектора.

Ключові слова: інвестиції, інвестиційна діяльність, аграрний сектор, сільськогосподарське підприємство, кредитування, державна підтримка.

Табл. 1 Рис. 4 Літ. 18

ПОВЫШЕНИЕ ИНВЕСТИЦИОННОЙ ПРИВЛЕКАТЕЛЬНОСТИ СЕЛЬСКОХОЗЯЙСТВЕННЫХ ПРЕДПРИЯТИЙ: МИРОВОЙ ОПЫТ

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Агропромисловий комплекс являється одним из важнейших секторов Украины. Недостаточное финансирование сельскохозяйственных предприятий, не дает возможность развития аграрной сферы, поэтому целесообразно начать работу по реформированию аграрного сектора Украины путем активизации инвестиционной деятельности. Сегодня для Украины остро стоит задача разработки механизмов государственной аграрной политики по повышению эффективности использования имеющегося потенциала аграрного сектора экономики [1, с. 4].

Инвестиционная привлекательность агропредприятий зависит от выгодного географического положения, благоприятной экологической ситуации, прогрессивной социально-демографической структуры населения с достаточной долей лиц со средним и высшим образованием, безопасности вложения капитала. В ведущих странах мира сложились специальные институты, занимающиеся реализацией инвестиций в аграрную сферу. Ведущей формой инвестиций является кредитование, главной особенностью которого является высокий уровень государственной поддержки и кооперативные принципы его реализации.

Данная статья посвящена исследованию особенностей инвестиционной деятельности сельскохозяйственных предприятий. Также обобщен зарубежный опыт инвестирования сельского хозяйства в развитых странах мира. Определены основные формы государственной поддержки развития аграрного сектора экономики, исследованы субсидирования сельского хозяйства в развитых странах мира. Определены основные направления использования опыта зарубежных стран для поддержки отечественного аграрного сектора.

Ключевые слова: инвестиции, инвестиционная деятельность, аграрный сектор, сельскохозяйственное предприятие, кредитование, государственная поддержка.

Табл. 1 Рис. 4 Лит. 18

Problem statement. At the present stage of agricultural development, enterprises face a considerable number of problems of a financial nature. The development of the agricultural sector of the economy requires improving the efficiency of production, which is impossible without the introduction of new technologies on the basis of the latest achievements of scientific and technological progress, attracting investments and introduction of new directions of financing of agricultural producers [17, p. 450]. Investment activity, its intensity and effectiveness, as well as its organizational and economic mechanism, have their own specificity for different regions and industries, which requires in-depth study and study of relevant aspects. This is important for agro-industrial production, as it aims not only to achieve maximum efficiency, but also to the rational use of natural resources, logistical means and so on.

Analysis of recent research and publications. Problems of improvement of investment activity of agricultural enterprises of Ukraine were dealt with by such scientists as Kaletnik G.M. [1], Kozyar N.O. [3], Luchechko Yu.M. [7], Miskov G.V.[9], Nazarenko I.M. [10], Odnorog M.A. [11], Panchenko M.O. [13], Yurchuk N.P. [17] and others.

World-wide experience of attracting investment in the economy in general and agricultural production in particular was explored in their works by such national scientists as Klochan V.V. [2], Levandivsky O.T. [5,6], Matsibora T.V. [8] and others.

Goals setting. The purpose of the article is to study the tendencies of development of investment activity of agricultural enterprises and to improve their investment attractiveness, taking into account the experience of foreign countries.

Presentation of the main material of the research. The essence of investment activity of agrarian formations is to search for sources of investment , to organize targeted movement along the flows of investment resources (primarily financial ones) and to manage them in order to obtain economic benefits . The main function of investments is the expanded reproduction of production, because investment is the engine of economic growth [4, p. 1203 -1204].

The main features of the development of agricultural production are natural and climatic factors, territorial , personnel, technical, organizational and others, which affect the efficiency of production and shape the investment attractiveness of agricultural producers.

Another feature of agriculture, which is related to the first, is that in agriculture, the economic process of reproduction is closely intertwined with natural biological processes. As organisms of production in this field are living organisms - plants and animals that develop according to biological laws [3, p. 83].

Features of investment activity of agricultural enterprises are shown in fig. 1.

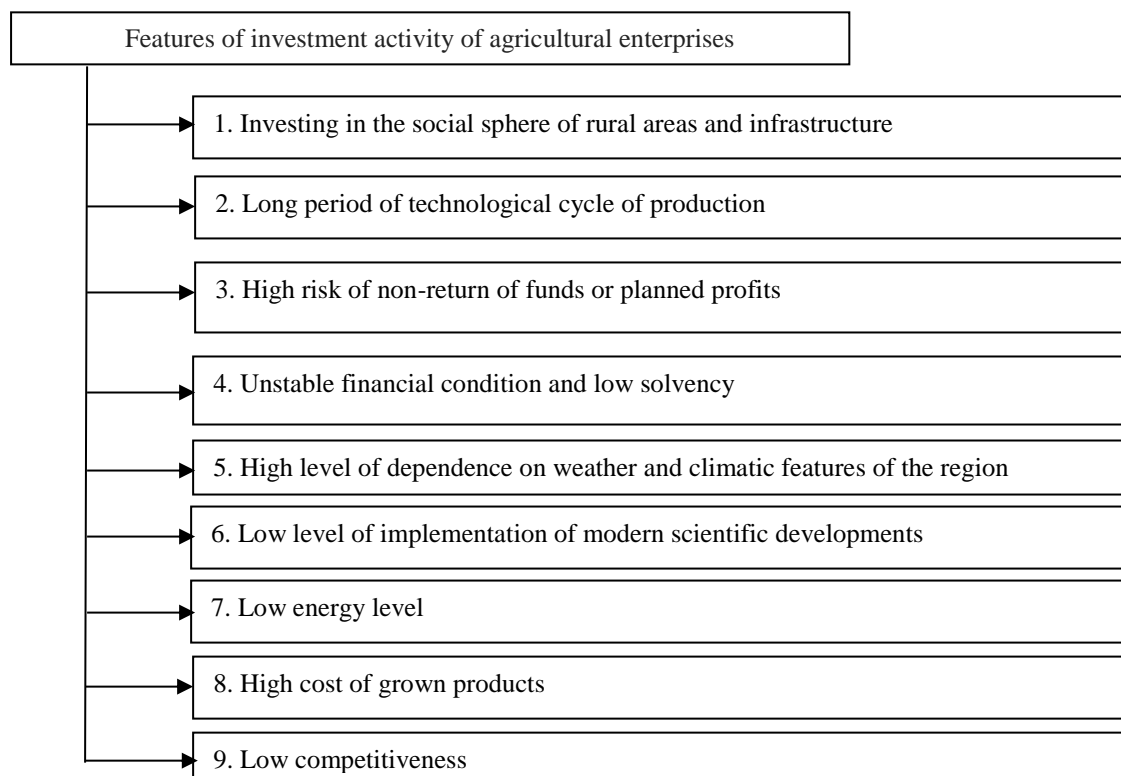


Fig. 1. Features of investment activity of agricultural enterprises

Source: Based on data [4, p. 1203].

In today's realities, the main growth point in Ukraine is agriculture, which can potentially provide widespread reproduction of the potential of related industries, first of all, in the food-processing industries, both in vertical and horizontal integration.

This will ultimately ensure a comprehensive development of the agrarian sector and reduce the dependence of the national economy on high volatility in grain prices - wheat and corn, which began to decline after a period of growth. In addition, the development of agro-industrial complex in the presence of high productivity of production of quality agro-food products will ensure the satisfaction of the population's needs for food in accordance with rational standards of nutrition [7, p. 45].

Only with a full investment process is it possible to achieve this goal of development of the agrarian sector. In order to create a competitive agricultural production in modern conditions requires technical and technological re-equipment, the latest equipment and machinery. This requires not just investment, but

large-scale capital investments with innovative focus. Given the current financial and logistical situation of most agricultural enterprises, creating a favorable investment climate requires a qualitative change in approaches to the economic regulation of the investment process [7, p. 45].

The favorable investment climate of Ukrainian agricultural enterprises is evidenced by the data of international ratings, which are based on the volume of attracting foreign investments in the economy of the country in general and agriculture in particular.

In the Doing Business 2019 rating, Ukraine climbed +5 points and ranked 71st in 190 countries of the world. The country has shown the highest growth in categories such as taxation (110 positions increase, 54th place), international trade (+70 positions, 78th place) and investor protection (+56 positions, 72nd place).

It should also be noted that the rating agency Moody's Investors Service upgraded Ukraine's sovereign rating. It has changed from Caa2 to Caa1, which means changing the forecast from "positive" to "stable".

We analyze the attraction of investments in agricultural production and their frequent in the total volume of capital investments in Ukraine (Fig. 2).

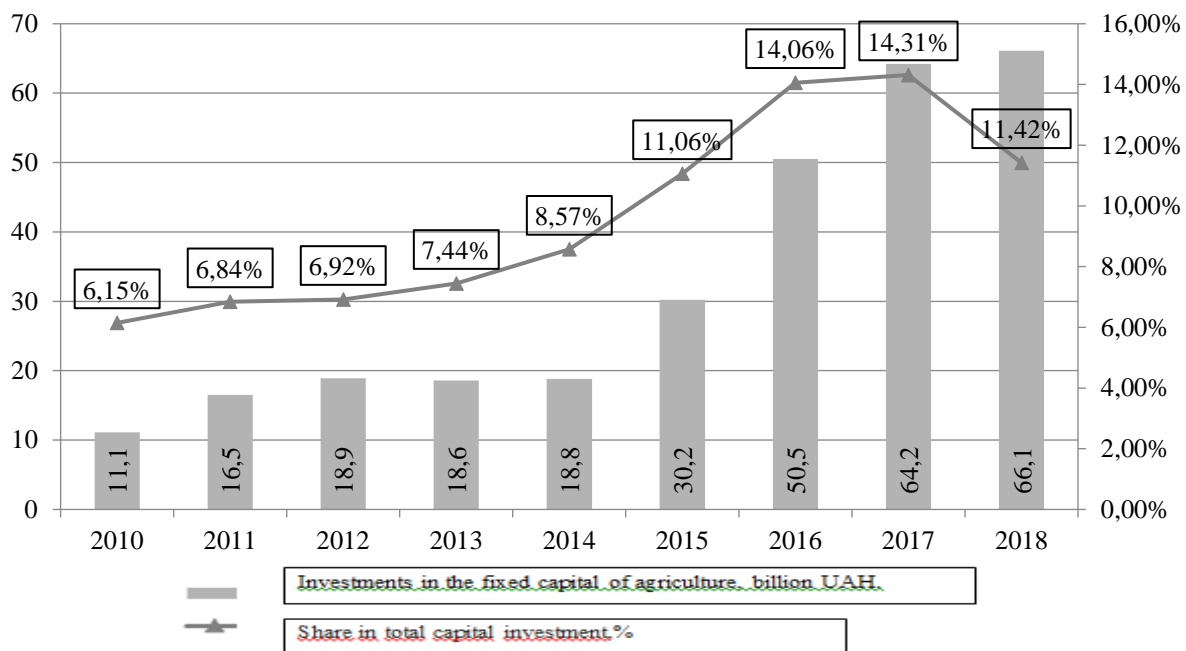


Fig. 2. Investment in agricultural fixed capital and their share in total capital investment in Ukraine as a whole

Source: Based on data [12].

Analyzing the data shown in Fig. 2 we can see that during the period under review, the volume of investments in agricultural production and, as a whole, their share in the total amount of capital investment increased. During 2010-2018, the volume of investments in agriculture increased by 55 thousand UAH, and their share increased almost twice.

The favorable conditions of the world markets of food and raw materials for biofuel production for Ukrainian agricultural producers became almost the main determinant of increase of investments in the fixed capital of agriculture [7, p. 47].

The development of the agricultural sector in Ukraine is mainly due to domestic resources, since foreign investors have invested in agriculture, hunting and forestry in the results of 2018 only 1.83% of the total foreign direct investment in the whole national economy (Fig. 3).

To date, the urgent issue of agricultural development in Ukraine is maintaining the attractiveness of rural areas. Rural areas are a place not only for production but also for the habitation and work of a large part of the population of Ukraine. Accordingly, great attention should be paid to the sustainable development of the agricultural sector, taking into account the social impact of social and economic reforms. In order to preserve long-term agricultural production potential and leave the countryside attractive for life, agricultural development should not be accompanied by damage to the environment and natural resources. Depletion and degeneration of natural (biological) resources, which are widely used in agricultural production, make it impossible to effectively manage natural resources, as well as the development of bioenergy [15, p. 452].

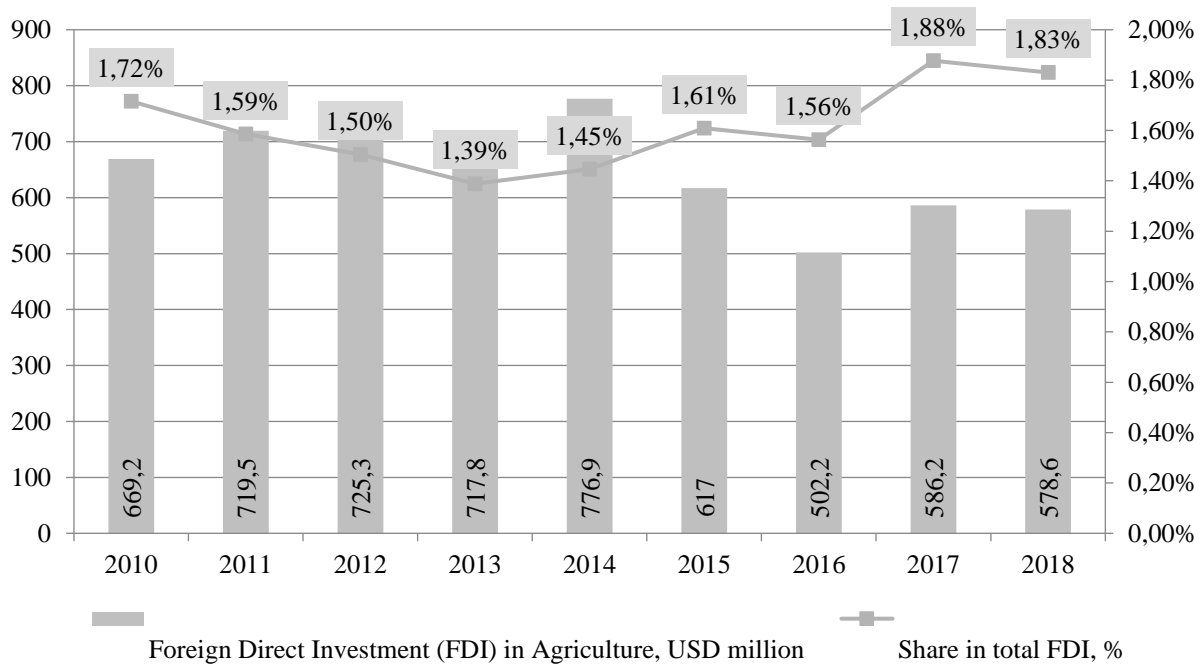


Fig. 3. Foreign direct investment (FDI) in agriculture, and their share in total FDI

Source: Based on data [12].

That is why the question is not about increasing the volume of investments, but about their efficient use and achievement of economic growth. Today, the priorities for the agricultural sector are qualitative composition, improvement of the structure and directions of distribution of investment resources, namely their direction in innovative technologies [15, p. 452].

Based on the Ordinance of the Cabinet of Ministers of Ukraine № 595-r, approved on July 5, 2019 «On approving the Strategy for promoting private investment in agriculture for the period until 2023» [16], the main obstacles to creating favorable conditions for attracting private investment in agriculture can be identified:

- 1) structural constraints, such as imperfect market infrastructure, anti-competitive market environment;
- 2) complicated procedure for distribution and receipt of state support funds;
- 3) the local monopoly on the nitrogen fertilizer market, which leads to market inefficiencies, increases fertilizer producers' costs and impedes innovation;
- 4) incomplete land reform;
- 5) difficult access of agricultural producers to financial instruments;
- 6) imperfect transport logistics, in particular as regards transportation of agricultural products;
- 7) availability of sanitary and phytosanitary barriers;
- 8) land and soil degradation, unbalanced use of natural resources, climate change and extreme weather events (droughts, etc.) [16].

In the leading countries of the world there are special institutes engaged in realization of investments in agrarian sphere. The leading form of investment is lending, the main feature of which is a high level of state support and cooperative principles of its realization.

In the UK, unlike other leading countries, credit is not subject to government regulation. The leading position in agricultural lending is owned by the four largest banks with branches in all parts of the country. There are many other private credit institutions with them, but their contribution to lending to agricultural enterprises is insignificant [5, p. 50].

Noteworthy is the experience of lending practice in France, where cooperative banks are mainly providing loans to the agricultural sector of the economy.

In France, an average of 40 million € is spent annually on supporting the agricultural sector. French farmers benefit from loans. They can attract funds for the purchase of agricultural machinery at 3-4% per annum, for the purchase of land - about 7% per annum.

For example, the leading institution of agricultural credit is «Credit Agricole», whose share in the total amount of borrowed funds in the industry is 75%.

National Agricultural Credit Fund is a state institution. The head of which is appointed by a joint decision of the Ministers of Finance and Agriculture. The activity of the Fund is controlled by a committee consisting of 30 representatives of the Parliament, state authorities and delegates from regional offices, chaired by the Minister of Agriculture. The Commission appoints the Board of Directors of the National Agricultural Credit Bureau, which includes representatives of the Treasury, the Ministry of Agriculture, the Bank of France and the Executive Director [8, p. 103].

Germany is an example of a country with a mixed type of agricultural lending, which involves operating in the credit market of commercial banks and specialized institutions. Nowadays, cooperative banks, specialized banks, mortgage banks, private commercial banks are engaged in agricultural lending.

The German cooperative banking sector has a three-tier organizational structure. Its base - the lower level - is formed by local cooperative banks (credit societies), consisting mainly of the so-called volksbanks and raiffeisenbanks.

The task of the six specialized audit unions is to carry out a statutory audit of cooperatives, which covers the assessment of the economic condition of cooperatives and the control of the correctness of accounting. In addition, statutory audit is an important tool for managing the cooperative's activity, since the report provided by audit unions contains recommendations for improving the effectiveness of the audited enterprise [5, p. 50].

In Poland, the state is trying in every possible way to support small agricultural producers. There are several banks specializing in lending to agricultural enterprises. On long-term loans (up to 10 years) the state can compensate for half of the interest rate. Preferential lending to the agrarian sector is also popular, where an entrepreneur can pay only 3% and the rest of the interest rate is repaid by the state [8, p. 104].

In Italy, agriculture is identified by the Government as a priority sector of the national economy. The main incentives are subsidies, tax and credit benefits. Enterprises set up for agricultural activities in the south of the country are exempt from income tax and local taxes for 10 years. Investors who purchase land in this region for the construction of agricultural production facilities are exempt from registration, mortgage and land taxes [2, p. 61].

The experience of state support to the agrarian sector of the US economy, where for almost 70 years in a row the state has been trying to regulate the processes of reproduction in agriculture, is noteworthy in domestic practice. An important component of such regulation is financial support. Funding is provided through the allocation from the state budget of appropriations, which are directed to the implementation of targeted programs of national importance. At the federal level, there are two targeted programs: income stabilization and scientific support [6, p. 13].

It should be noted that in the USA, the main group of credit institutions that form the agricultural credit system includes commercial banks, insurance companies, the farm credit system, the Farmers Administration, the Commodity Credit Corporation, etc., with more than 800 banks and associations [6, with. 14].

Of considerable interest is China's experience as a transition country, which has provided a dynamic agricultural development in recent years. The common features of the development and functioning of the economy of Ukraine and China make it possible to apply the positive experience of the PRC (People's Republic of China) on state regulation of investment processes in the agricultural sector of the economy. The successes of economic reform in the PRC confirm the great importance of state regulation of the economy. Appreciating agriculture as one of the most promising sectors of China's economy, the state attaches great importance to regulating reforms in the agricultural sector.

China maintains a system of state centralized planning for the production of basic agricultural raw materials by region and country as a whole. However, in contrast to the period of market reform, private producers have the ability to choose the structure of commodity production, technology and markets themselves.

In this country, funds for investments in agriculture come from four sources: from the state (financial means), in the form of loans (through state banks), in the form of funds from collective economic organizations in the countryside and from peasant courts [2, p. 63].

Subsidies to agriculture in developed countries, which are implemented through an economic support mechanism, range from 20 to 80% in the value of agricultural products (Tabl. 1).

Summarizing the experience gained in the organization of state financial support for agriculture in the leading countries of the world, changing the target parameters of this support depending on the state of agricultural production, as well as the state of national and world agro-food markets, in Ukraine and its regions, while improving the mechanism of investment of the agricultural sector at the present stage the following provisions of foreign experience:

Table 1

The amount of subsidies in the value of agricultural products

Countries	Grants, billion USD	Share in the value of agricultural products, %
USA	118,9	20
Canada	4,7	25
Sweden	1,8	50
Finland	3,1	65
Norway	2,6	75
Japan	49,3	80

Source: Based on data [14].

1) unequal exchange (not in favor of agriculture) and its negative effects are offset by the agricultural sector through the provision of, first of all, state financial support;

2) the volume of state financial support to the agrarian sector in comparison with the domestic practice;

3) differential approach to the distribution of state financial support among agricultural producers, including depending on the level of profitability of farms;

4) allocation of additional subsidies for the production of the most important agricultural products for the country.

In order to make the agricultural sector attractive to investors, active public participation is needed in the form of favorable market mechanisms that reduce investment risks, which increase the inflow of capital from other industries to the agricultural sector, which increase the efficiency of use of working capital and fixed assets that facilitate redistribution between consumers and producers of agricultural resources.

Summarizing the results of the study allows us to distinguish three main directions of increasing the attractiveness and activity of investment activity in domestic agricultural enterprises (Fig. 4) [6, p. 11].

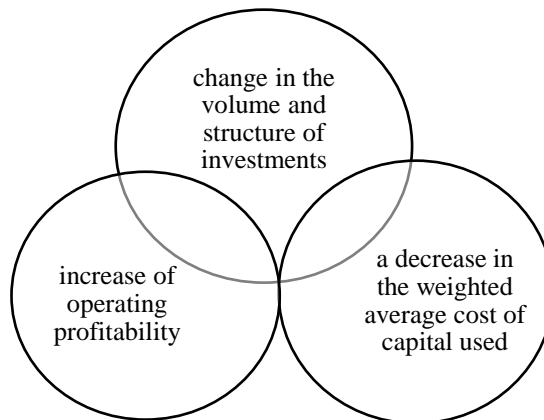


Fig. 4. Areas of increasing attractiveness and investment activity in agricultural enterprises

Source: Based on data [6, p. 11-12].

In order to further improve the investment climate of Ukraine, it is urgent to improve the legal and organizational framework to increase the capacity of mechanisms to ensure a favorable investment climate and to form the basis for preserving and improving the competitiveness of the domestic economy [17, p. 59].

Conclusions. Thus, the degree of investment attractiveness of agrarian enterprise is an indicator, which makes it possible to draw conclusions for potential domestic and especially foreign investors about the need and expediency of investing financial resources in this particular object [18, p. 115]. The investment attractiveness of agrarian enterprises depends on advantageous of favorable geographic position, favorable ecological situation, of the progressive social demographic structure of population with enough fraction of people with secondary and higher education, security of capital investment.

The revival of investment activity is an indispensable condition for agricultural enterprises to enter the stable trajectory of economic growth. Global experience and Ukrainian reality show that without the activation of the role of the state, local self-government bodies in the investment process of restoration and growth of economic potential of Ukraine and its regions are impossible.

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**FUNCTIONING AND DEVELOPMENT OF
PAYMENT SYSTEMS IN THE
CONDITIONS OF DIGITAL
TRANSFORMATIONS[©]**

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The article considers and analyzes the current state and main tendencies of development of payment systems in the conditions of digitalization.

The essence is disclosed of such definition as: "payment system". Approaches to defining the classification features of payment systems and the key elements of functioning payment systems are considered. It is indicated that the National Bank of Ukraine is the national regulator of payment and settlement systems in Ukraine. The National Bank of Ukraine is a payment organization and a settlement bank for two state payment systems: the electronic payment system and the National Payment System "Ukrainian Payment Space". To increase the reliability and efficiency of payment systems, the NBU distinguishes them by the level of importance.

Current payment systems in Ukraine are analyzed. It is determined that there are 46 Ukrainian and international payment systems in Ukraine, owned by banking and non-banking organizations, residents and non-residents of Ukraine, among them one systemically important payment system of the NBU SEP, six socially important payment systems, five important payment systems. Among the card payment systems, there are two Ukrainian and four international.

Positive dynamics of growth in the volume of non-cash transactions, including contactless payments, which corresponds to global trends, are revealed.