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Investment strategies for the development of agricultural formations in a crisis economy

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Abstract. The purpose of this study was to determine the clustering of enterprises in the agricultural industrial sector as the most effective investment strategy for the development of agriculture in crisis economic conditions. This study is a systematic review of papers based on the search for development strategies for the agricultural sector in critical economic conditions and determining the most effective ones for strengthening the action of agricultural formations. According to the results of this study, the cluster investment strategy was identified as the most effective for the development of agricultural enterprises, but in contrast to this, a number of its negative consequences were established. The need to build an effective strategy for attracting additional investment processes was identified. The negative and positive aspects of investments in agriculture were examined which helped to establish the manifestation of possible risks and profits from the agricultural and industrial sector of activity. Using additional theoretical materials, in the course of this study, the cluster investment strategy was evaluated as one that is more resistant to crisis conditions. A separate issue was considered regarding the importance of attracting external investment resources since this type of investment proved to be more reliable in crisis financial and economic periods. In addition, in the course of this study, the negative consequences of the impact of crisis conditions on enterprises and organisations in various sectors of activity were identified and a number of recommendations were given for potential investors in agricultural and industrial activities. It is determined that the crisis financial and economic spectra represent a number of gaps that should be considered when choosing an effective strategic policy, which should be aimed at strengthening the competitiveness of agricultural enterprises and based on

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innovative aspects of high activity. Notably, the cluster policy is chosen in this study as one that appropriately met the presented criteria for selecting an effective strategic action

Keywords: cluster; competition; innovation; industrialisation; regression model; material-resource structure

INTRODUCTION

During the period 2019-2023, the priority focus of attention of various countries of the world is primarily aimed at promoting their own economic development, increasing the level of financial security and stimulating the improvement of the life of the population, which makes it necessary to use the most effective measures and tools for managing the public sector, which has numerous negative impacts on the social and economic structure, at the international level, in particular, in countries with a transition economic period. However, according to the research of some scientists who consider the agro-industrial sphere of production, it was determined that agro-industrial enterprises show a reduced level of attractiveness for investment, in the event of a crisis period (Poltorak *et al.*, 2022). Thus, in accordance with the low level of attractiveness of enterprises, their financial security is threatened by massive economic shifts, which negatively affects the functioning of these firms. In this case, the question arises of creating and implementing an effective strategy for attracting additional financial resources.

Instead, according to E.K. Duramany-Lakkoh *et al*. (2022), it was determined that the strategy for attracting investment provides for the formation of the most flexible, innovative, and efficient agricultural and food complexes. Thus, considering modern research, it is determined that the weakest point of agricultural enterprises, as a rule, is the lack of innovative criteria that would be satisfactory in performing food tasks. Additionally, according to S. Zubair *et al*. (2020), the critical point that hinders the development of agricultural production is the inability to provide technological foundations to agricultural workers.

According to the definition of L.T. Thuong (2020), a particularly relevant and effective method aimed at overcoming many crises financial and economic difficulties for many countries of high economic development, is considered to be the cluster strategy. The clustering of enterprises is based on considering useful systems created to increase the sustainability and stability of the activities of organisations that become members of the cluster. According to A. Berxolli *et al*. (2023), who examined possible strategies for the development of agricultural and industrial production, cluster policy provides for a network of enterprises that are geographically connected, engaged in one type of activity, and also aimed at achieving a common goal. In accordance with this, a specific formulation of criteria for the agricultural sector was defined, which identify it as the most profitable and sustainable for attracting external investment resources. The general definition of agro-industrial production is defined as the most profitable, dynamic, and competitive sector, which provokes an increase in the value of agricultural products, even in crisis economic conditions.

According to K. Otsuka & M. Ali (2020), the cluster strategy most effectively defines the space for industrialisation. Therewith, gaps in numerous studies aimed at determining an effective strategy for agribusiness were determined by the omission of a number of shortcomings of clustering, which can contribute to the complication of the development of agricultural enterprises that are united in a cluster. According to the conclusions of the study by O. Odintsov (2019), it is identified that the clustering process is associated with economic and social criteria that substantially affect its development and stability. A gap in a number of these studies was the failure to consider certain features of competition, namely its dynamism and simultaneously, instability in crisis conditions. Thus, some enterprises, considering the criteria of crisis circumstances, can help strengthen their own competitiveness in the market and substantially mitigate the number of shortcomings that affect production losses. According to the study by Z. Titenko (2023), competition, which is a priority goal for agro-industrial enterprises, is based on substantially more productive resource costs. It follows that to increase the competitiveness of enterprises, it is necessary to use strategies focused on attracting the innovation spectrum to agricultural activities, and therefore, clustering can be considered the most appropriate strategy. Notably, the boundaries of clustering are determined by complementary and interrelated relationships between enterprises and organisations of the same production industry, as well as firms bound by common rules and attitudes, and are considered the most appropriate for creating competition in the economic market.

Clustering is also defined as a modern structured form of close relations between enterprises of the same industry category, a system based on the hierarchical aspect of relationships. According to this, a cluster is

considered an alternative method of creating a value chain of relationships between firms, in the middle of a clustering network. Compared to other strategic actions, the interconnection of cluster strategy participants, their proximity, and their focus on one goal guarantees a better level of trust for potential investors. Therefore, the cluster strategy helps to resolve many problematic situations caused by crisis phenomena, showing better flexibility, orientation, and adaptability in the economic market. Thus, the purpose of this study was to define the clustering strategy as the most effective and sustainable method that provokes the attraction of investment resources for the agricultural industry in crisis economic conditions.

LITERATURE REVIEW

Various researchers apply a number of different theories to justify the investment behaviour of enterprises. For example, Z. Titenko (2023) argues that when enterprises implement investments, in fact, they have favourable conditions for improving their efficiency and competitiveness. In turn, C. Emmanuel *et al.* (2024), argue that imperfect investment markets cause businesses to encounter certain levels of financial liability rigidity. Usually, such circumstances contribute to enterprises resorting to different amounts of financial investments. Given that the financial and economic crisis is associated with fewer available chances for development and large amounts of material opportunities, it can be said that each of these theoretical assumptions contributes to reducing the amount of capital investment in conditions of financial crisis danger. M. Andriamampiandra *et al.* (2021) note that the attraction of additional capital from banking institutions and various types of lending, shock states of demand in the market in the context of crisis economic shifts, lead to the fact that enterprises of different types of farms, forcibly reduce their own investments. That is, despite the fact that enterprises have the potential to increase profits, with the beginning of crisis periods in the market, firms tend to refrain from new investments due to increased risk and lack of additional capital.

According to the interpretation of S. Xiong (2019) and A. Berxolli *et al.* (2023), sources of financing can be both internal (operating profit, dividends) and external (additional investment resource or lending), and it is also possible to combine the two types simultaneously. Thus, enterprises should analyse and determine the optimal financial resource provision for them, considering the fact that each of the resource types of financing involves certain features and risks. However, W. Ruland (2013) determined that theoretical approaches to the choice of financing strategy and analysis of factors of predisposition to certain material losses, and various kinds of moral risks existing in the market, prove the feasibility of using internal sources over external ones for enterprises operating in conditions of instability and competition against the background of shortcomings in the functioning of market financing mechanisms.

According to S. Zubair *et al.* (2020), an increase in the degree of inequality in informative aspects leads to a complication in attracting resources from outside (in particular, by attracting additional borrowing or increasing the cost of share capital). As a result, enterprises are motivated to invest at the expense of resources attracted from internal financial channels. Only if the use of internal financial security is used, do enterprises have to apply to continue their investment activities following the requirements of external investors. According to this, the amount of financing of enterprises depends mainly on material resources obtained from their own sources, that is, using internal resources. According to the interpretation of O. Odintsov (2019), in the context of economic and financial difficulties, such companies face additional difficulties in attracting additional funds for investment activities. Thus, during the financial crisis, funds generated internally turn into independent resource support for the private sector of enterprises. However, from this standpoint, organisations of various types of activities that finance their investments will have a substantial need for their own funds and therefore will depend on their use.

Considering possible strategies to attract additional investment income, M. Fan & W. Phromphitakkul (2021), consider the need for enterprise clustering, as they believe that such a strategy is the most effective and consistently balanced. It is appropriate to compare the formation of entrepreneurship with the course of industrial transformation processes but the feedback between them was at least as active as direct. A large number of sources emphasise the presence of difficulties and constraints in the formation of industrial business entrepreneurship, as well as some of its limitations. Given the wide list of these problems – weak development of the innovation spectrum, limited access to cash receipts, reduced market sales of products, and unstable strategic policies that contribute to the effective passage through such shifts, without deterioration of profitability, the issue of enterprise development can be a difficult task. Instead, according to K. Otsuka & M. Ali (2020), and E.K. Duramany-Lakkoh *et al.* (2022), it is determined that entrepreneurial work within the framework of a clustering campaign becomes a source for effectively overcoming certain obstacles on the way to the development

of firms forming a cluster. In addition to this, K.O. Alabi (2019) noted specific methods according to which cluster policy becomes an effective and convenient tool for overcoming crisis circumstances. According to the first method, clustering performs the function of effective collectivisation of enterprises, which ensures their competitiveness in the market. The second method is to position enterprises for growth in small but stable steps. In the end, the third aspect is the positioning of clustering as one that can refute possible negative reactions of enterprises to crisis economic conditions.

However, D.L. Putri *et al.* (2015) and D. Gakhar (2019) introduced consideration of the shortcomings of the clustering position, noting that clustering of agricultural enterprises is not the only effective way out of crisis situations. Among the main disadvantages of clustering, researchers highlight the use of external assets for small and medium-sized businesses since they can be reasonably correlated only with the help of government support, which is not always evident. However, according to a study by L.T. Thuong (2020), the involvement of government officials in investing in clustering enterprises is possible if the activities of firms act as a profitable source for the economy of the country in which clustering took place. Thus, for the agricultural business of the economy, attracting additional investment resources, especially from government officials, is not an obstacle since agricultural activities have always been and remain in demand for economic growth.

MATERIALS AND METHODS

This study is based on the theoretical aspects of agricultural policy in a crisis economy and therefore is exclusively theoretical in nature. The materials for this study were papers by W. Ruland (2013), O. Odintsov (2019), L.T. Thuong (2020), S. Zubair *et al.* (2020), E.K. Duramany Lakkoh *et al.* (2022), and Z. Titenko (2023), as sources who have generally examined the issues of investment strategies. The criteria that served to search for relevant materials were: investment strategies, economic shifts in agricultural policy, and methods for the development of agricultural policy. All the materials used for this study only partially met the set criteria. The aspects that highlighted the main issues related to investment strategies were selected from the total results of each of the materials used. The main differences between the results of all the materials used were the examination of different directions of investment strategies in enterprises of various types of activities related to the investigation of aspects that determine an effective strategy and confirmation of the negative consequences of crisis conditions on business activities in general.

As the first material for this study, the study by O. Odintsov (2019) was used, which considered the key criteria for activating investment in agricultural policy, which is based on the creation of agro-industrial clusters to ensure the competitiveness of the agricultural spectrum. The study was based on the identified main aspects that provoke investment in the agricultural sector. The second material for this study is a paper of Z. Titenko (2023), which considered the need to form strategies for the development of agricultural enterprises in general, which is the key to creating their financial security. The study is based on a block diagram aimed at introducing the financial stability of agricultural enterprises. Instead, this material was used to investigate possible aspects to identify reliable strategies for the development of agricultural policy. In addition to these materials, the results obtained in the study by S. Zubair *et al.* (2020) were used in this paper, which examined the current consequences of crisis situations, using the example of private firms with a staff of 50 to 249 employees in the Netherlands. The total sample included 469 privatised firms, including wholesale and retail (26%), manufacturing (21%), construction (20%), light industry (16%), transport (11%), and agricultural industries (2%). The study was based on the use of a regression model that determined the impact of the crisis state on external and internal investment. In addition, the study used the Wald criterion to compare the differences in the statistical impact of two types (sources) of investment. The statistics in the material used were collected using statistics from Breusch and Pagan. This third material was used to demonstrate the impact of the crisis state of the economy on the investment of enterprises and identify an additional effective source of investment for privatised firms. In general, all the materials were used to identify the main aspects, which should include a strategy aimed at attracting investment for the development of agricultural and industrial enterprises in accordance with the crisis states of the economy.

In the course of this study, materials were used based on the examination of possible criteria for risks progressing in crisis conditions of the economy and to identify characteristic aspects of an effective strategy to summarise the theoretical aspects that related to the certainty of criteria for evaluating the best investment strategy (Ruland, 2013; Thuong, 2020; Duramany-Lakkoh *et al.*, 2022); as well as, other sources that correlated the issue of functionality of the agro-industrial sector (Putri *et al.*, 2015; Otsuka & Ali, 2020). Basically, additional materials helped to refute the definition of the most effective strategy that helps attract additional investments in the agro-industrial business.

RESULTS

Based on a systematic review of scientific sources that determined possible strategies for attracting investment, a substantial part of specialists in the field of agricultural development research mainly share the opinion that the main component of the problems of backwardness of the agricultural sector is the lack of proper technical potential. Notably, this concept of insufficient innovative development also considers problems with agricultural productivity and recommends choosing the best options for overcoming such obstacles. Thus, according to the results of the first material used, it was determined that the clustering of enterprises should be used as a strategy for stimulating financial investment. However, considering the clustering criteria, the cluster approach should be based on the introduction of an innovative aspect. Based on the results of the material used, it was determined that the introduction of an innovative basis in the cluster system plays a substantial impact on the creation of the company's competitiveness and ensures the stable development of corporate institutions included in the clustering grid.

It is worth noting that clustering in the agricultural economy is an association of organisations and enterprises, which in turn are interconnected by common interests, goals, and motivations, which allows rationally using their common potential to increase their competitiveness in the market. In addition, it was determined that the investment and innovation aspects of clustering have a close relationship. With the involvement of an innovative approach, the investment projection increases substantially, which is why these aspects form the core of the cluster approach. The basis of investing from this used material is the use of balanced, implemented principles and actions that allow enterprises to provide comfortable circumstances to rearm the sector and achieve an investment effect. Thus, the conditions for successful investment attraction, based on the expressed indicators from the first material used, form a balanced clustering foundation (Fig. 1).

Figure 1. *Key aspects that contribute to creating effective clustering of enterprises to attract additional investment*
Source: *compiled by the authors based on O. Odintsov (2019)*

Thus, the results of the first material used for this study allowed identifying key aspects that provoke investment in the agricultural sector. Considering the cluster strategy of development and attraction of investment processes, it is worth highlighting innovative and investment aspects, as well as support for state structures, as those that are the most effective and reliable. According to the first material, it is determined that clustering of agricultural enterprises most effectively contributes to the development of the agro-industrial sector, through the introduction of innovative projects, and creating a favourable working climate for agricultural sector workers. Thus, using the key aspects from Figure 1, it is determined that the creation of clusters provokes additional investment in the agro-industrial sector, due to an increase in market attractiveness.

Using additional theoretical materials for this study, it was also determined that the cluster approach for attracting investment has its drawbacks (Ruland, 2013). Since the core of enterprise clustering is innovation and investment aspects, it can be concluded that attracting larger investment processes is impossible without implementing these criteria. In other words, to ensure large investments for enterprises, they need to organise innovative implementations in their own technologies, which complicates the task in the case of a small or unstable budget. In this case, to create effective clustering of enterprises, the main condition will be considered stable budget revenues for the introduction of innovations, which is a difficult task in the crisis and post-crisis period of the economy. Therewith, there are additional negative aspects of combining agro-industrial enterprises into clusters, such as insecurity in the case of the need to change technologies, since small and medium-sized enterprises in clusters are closed in a certain way within the use of established equipment. In the event that economic activity is determined by substantial and accelerated shifts in the technologies used, possible clustering partners may be less adapted to such changes and rely on innovations that belong to other members of the clustering. Thus, in the event that the cluster member companies focus on a small number of consumers of products on the market or on the activity of only a single firm, they are overly inclined to imitate managerial influences from the management of this firm. In addition, clustering representatives are becoming less proactive in developing and implementing new developments and technologies because they believe that the strategy of following the leader works for them.

In turn, using other additional materials for this study can also highlight the additional benefits of enterprise clustering (Dovgal *et al.*, 2017; Thuong, 2020). Territorial industrial clusters are built based on the

criteria for the development of the material and resource structure and cover enterprises and organisations in various areas of the economy. An important task in attracting investment to the regions is played by the development and application of regional clusters since they are able to form various innovative methods of conducting economic activities. Cooperation and specialisation of the subjects included in the cluster gives them the ability to increase both competition in economic markets, on the one hand, and increase the level of their activities and overall stability in material terms, on the other. For the most part, the territorial cluster strategy provides for a number of direct, but mostly indirect measures aimed at reducing obstacles to the dissemination of experience between firms, due to the fact that various barriers make it difficult to establish effective contacts between different subjects of clustering activities. Thus, clustering of firms of various categories, including agricultural policy, can provide an increase in investment revenues due to clustering at the regional level. Businesses in clusters are managed more efficiently and, as a rule, respond more quickly to market challenges. In general, clustering allows for a more reliable flow of financial resources because previously separated suppliers are now defined as joint (collective), and the cost of failure of losses and profits becomes substantially lower.

For this study, the second material was used, which was based on a block diagram aimed at implementing the financial stability of agricultural enterprises to form a general judgment on whether the cluster strategy should be regarded as an incentive source for additional revenues to the agricultural sector. Thus, according to the indicators of the second material used, criteria for determining the most effective strategy for the development of agricultural and industrial enterprises are established for this study, which, instead, stimulate the financial security of organisations in this sector of activity. In this study, financial security includes ensuring investment for agricultural enterprises. Strategies for financial development should be based on a number of all possible potential threats (Fig. 2).

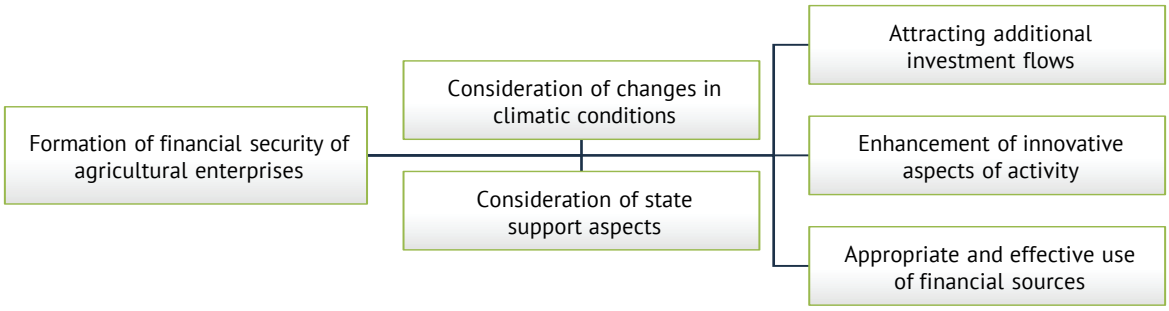

Figure 2. *Step-by-step provision of financial stability of agricultural enterprises, considering possible risks*
Source: *compiled by the authors based on Z. Titenko (2023)*

Based on the results of the second material used, for this study, it can be concluded that strategic planning and implementation of the development strategy at the enterprise involves the implementation of a number of tasks aimed at the implementation of all these stages, providing for the need to consider the existing potential hazards, as well as operational control over their implementation throughout the entire period of implementation. The implementation of a certain strategic action within each individual enterprise should be conducted according to the personal requirements of organisations, considering the actual state of their economic activity and the existing level of opportunities for further growth. A serious issue in establishing a specific strategy, as a rule, concerns the state programme of assistance to enterprises operating in the agricultural sector. On the other hand, the strategy implemented in the activities of enterprises will help to raise the financial stability rating and activate their own long-term economic and financial development. Therefore, the formation of an effective strategy, considering all possible threats of an economic nature, will ensure the financial security of the enterprise and encourage attracting investment. Comparing the results of the first and second materials used in this study it can be stated that the clustering strategy considered in the first source can be considered appropriate and effective for attracting additional investment since it involves considering the possible risks that were determined using the second scientific source. It distinguishes the cluster strategy of enterprise development among other models of attracting investment, in particular, territorial and production planned combinations, the presence of internal competition, and strong competitive foundations for development in the global currency space. In other words, the cluster is a combination of cooperation and compe-

tition, which are complementary links that contribute to building specific prerequisites for improving and developing innovative aspects of the agricultural sector.

Thereby, not all types of investments are equivalent. The negative effects of investing, in particular, large-scale direct foreign and private investments, often overlap the possible profits from it. Among the possible manifestations of the negative impact of direct foreign investment are restrictions on property freedoms, environmental destruction, and deterioration of the situation with food supply at the local level (Andrusiv *et al.*, 2020; Duramany-Lakkoh *et al.*, 2022). Insufficiently thought out and implemented investment projects often lead to substantial material losses both for investors themselves and countries accepting investments. It is necessary not only to increase the number of investments but also improve their effectiveness to ensure sustainable benefits for all stakeholders. On the other hand, investments that are able to prioritise local agricultural security, promote decent support for the labour force, organise the provision of land rights, guarantee equal access to the use of natural resources and the benefits of their economic growth are defined as those that are most effective in the agro-industrial sector. Such investments are supported by processes that are comprehensive and open to all participants in the agro-industrial business, making decisions that ensure access to the market and help protect the interests of the most vulnerable categories of society. Despite the fact that attracting direct foreign investments is considered a very substantial factor in ensuring the long-term functioning of the enterprise, it is worth developing and implementing strategies that would meet the specifics of a particular period of the economic cycle. Based on this, in times of crisis, it is necessary to consider all possible consequences of its impact on enterprises of various types of activity.

Material based on a regression model was used to identify the impact of the crisis state of the economy on two aspects of investment of enterprises, namely external and internal, which appropriately showed the correlates of this impact to identify the impact of the crisis state of the economy on two aspects of investment of enterprises, namely external and internal. Notably, the regression model is an equation, or system of equations that demonstrates which factors, from the point of view of scientists from this material, should have been guided when conducting the analysis, considering the interdependence of correlations projected in the equation (Zubair *et al.*, 2020). Paying attention to the formulation of investment aspects in this material, it was determined that external financing, for the most part, is the use of funds by enterprises from banking institutions, while internal financing is the attraction by organisations of their financial assets within the framework of investment programmes aimed both at improving the efficiency of the enterprise in which the investment action takes place and profits outside of it:

$$\begin{aligned} Investmen\ t_{it} = \alpha + \beta_1\ \text{Crisis}(Post\text{-}crisis) + \\ + \beta_2\ Internal\ Finance_{it} + \beta_3\ External\ Finance_{it} + \\ + \beta_4\ Internal\ Finance_{it} \cdot Crisis(Post\text{-}crisis) + \\ + \beta_5\ External\ Finance_{it} \cdot Crisis(Post\text{-}crisis) + \\ + \beta_6 Size_{it} + \beta_7\ Growth_{it} + Firm_i + \varepsilon_{it}, \end{aligned} \quad (1)$$

where t_{it} – years of crisis, post-crisis, and pre-crisis states, according to investments; *Size* – the size of the total assets of the enterprise; *Crisis* – a fictitious variable, the indicator of which is equal to 1, for the crisis periods of 2008-2009 (for others – 0); *Post-crisis* – a fictitious variable, the indicator of which is equal to 1, for 2010-2012 (for others – 0); *Growth* – the annual growth rate; $\beta_1, \beta_2, \beta_3, \beta_6, \beta_7$ – regression coefficients, for comparing firms' investments in crisis and post-crisis periods; β_4, β_5 – changing the impact of external and internal investments.

Thus, the results from the third material used showed that with the consequences of the crisis, the external supply of finances decreased quite substantially (Table 1). However, the most effective fund receipts for private firms in the Netherlands were investments made by banking institutions.

Table 1. *Indicators of investments and financial conditions of private firms in crisis, pre-crisis and post-crisis periods of different years in accordance with a certain model*

	Pre-crisis state (2004-2007)		Crisis state (2008-2009)		Post-crisis period (2010-2012)		Difference between pre-crisis and crisis status indicators		Difference between indicators of crisis state and post-crisis state	
	AV	M	AV	M	AV	M	AV	M	AV	M
I_1	0.055	0.031	0.042	0.019	0.035	0.016	-0.013	-0.012	-0.007	-0.003
I_2	0.086	0.05	0.076	0.041	0.065	0.033	-0.01	-0.009	-0.011	-0.008
I_3	0.053	0.029	0.042	0.019	0.033	0.015	-0.011	-0.01	-0.009	-0.004
I_4	0.073	0.043	0.067	0.034	0.057	0.03	-0.006	-0.009	-0.01	-0.004
CF	0.149	0.135	0.115	0.1	0.1	0.085	-0.034	-0.035	-0.015	-0.004
IF	0.114	0.102	0.092	0.079	0.082	0.069	-0.022	-0.023	-0.01	-0.01

Table 1, Continued

	Pre-crisis state (2004-2007)		Crisis state (2008-2009)		Post-crisis period (2010-2012)		Difference between pre-crisis and crisis status indicators		Difference between indicators of crisis state and post-crisis state	
	AV	M	AV	M	AV	M	AV	M	AV	M
EF	0.041	0.018	-0.007	-0.026	0.01	-0.003	-0.048	-0.044	0.017	0.023
TA	9.479	9.513	9.598	9.614	9.592	9.63	0.119	0.101	-0.006	0.016
FG	0.013	0	-0.004	0	-0.008	-0.006	-0.017	0	-0.004	-0.006

Notes: *AV – average value; M – median; I_1 – first investment; I_2 – second investment; I_3 – third investment; I_4 – fourth investment; CF – cash flow; IF – internal financing; EF – external financing; TA – total asset of enterprises; FG – financial growth*

Source: *compiled by the authors based on S. Zubair et al. (2020)*

Based on the performance indicators from the third material, it can be said that the crisis state substantially affected the investment of private firms, worsening their financial situation (Table 2). Notably, firms mostly relied on financing from banking institutions since this type of investment was considered more reliable in crisis and post-crisis periods.

Table 2. *Correlation data on the financial situation of privatised organisations in crisis, pre-crisis, and post-crisis states (calculated in Euro)*

	Pre-crisis state (2004-2007)		Crisis state (2008-2009)		Post-crisis state (2010-2012)		Difference between pre-crisis and crisis status indicators		Difference between indicators of crisis state and post-crisis state	
	AV	M	AV	M	AV	M	AV	M	AV	AV
I_1	821.92	349	661.9	251	601.61	200	-160	-98	-60.26	-51.5
I_2	1,260.9	575.5	1,227.17	534.5	1,095.3	505	-33.7	-41	131.9	-29.5
I_3	768.3	332	695	258	553	203	-73.6	-74	-141.8	-55
I_4	1,070.02	492.5	1,102.5	480.5	940.3	380	34.5	-12	-162.18	-101.5
CF	2,010.3	1,567.5	1,789.12	1,468	1,644.05	1,223	-221.14	-99.5	-145.06	-245
IF	1,547.28	1,191	1,409.13	1,090	1,318.4	953.5	-138.15	-102	-90.8	-135.5
EF	344.52	208	-241.86	-353	67	-56.5	-585.4	-561	308.9	296.5
TA	15,585.15	13,535	17,460	14,970	17,517.81	15,216	1,870.5	1,431	62.18	249.5

Notes: *AV – average value; M – median; I_1 – first investment; I_2 – second investment; I_3 – third investment; I_4 – fourth investment; CF – cash flow; IF – internal financing; EF – external financing; TA – total asset of enterprises*

Source: *compiled by the authors based on S. Zubair et al. (2020)*

Thus, from the indicators of the third material used for this study, it was established that the choice of investment type for firms was a determining factor in corporate financing. In particular, investments made by private sector enterprises during the economic crisis are more due to the availability of free fundraising from banks than to the use of financing from the domestic sector. In the case of private enterprises, bank receipts accounted for a stable strategic impact, considering all losses of organisations, which were especially observed in the post-crisis period. Thus, the amount of funds generated by enterprises (internal financing) cannot be interpreted as a determining factor for the investment of small and medium-sized enterprises in times of crisis but the availability of bank financing continues to be a crucial criterion for investment of enterprises in crisis financial and economic conditions. This proves that attracting external financing is more effective and reliable for ensuring the financial stability of enterprises in crisis periods. Therefore, to form effective and sustainable financial security, for representatives of the clustering of agricultural and industrial activities, it is most appropriate to attract external financing, namely, from banking institutions, state support, etc.

Summarising, in the first two materials used for this study, the role of investment strategy in the development of agricultural formations was crucial. Considering all the materials used in this study, it is worth highlighting that in most cases, an effective investment strategy for the development of enterprises, as well as for ensuring their financial stability and attracting

additional investments, should be considered as one that is built considering all possible risks (crisis economic and natural conditions), focuses on providing support to state institutions, and operates using innovative aspects of the enterprise. Thus, an effective investment strategy is based on the clustering of agricultural enterprises. Based on the results of the second material used, it was determined that the cluster strategy includes considering all possible threats in crisis states, which, based on the third material used, cause substantial negative consequences on the financial policy of firms, including the agricultural sector.

All the general views from the materials used agreed that an effective investment strategy should ensure the involvement of external finances and be based on innovative aspects since they are more reliable and balanced for the development of enterprises and their financial security. Considering all the criteria that determine the most effective strategic action aimed at attracting investment processes, it is determined that clustering of agricultural enterprises is able to properly create the necessary conditions for strengthening investment in agricultural business. The differences in the consensus of opinions from the sources used were the determination of the advantages of the agricultural sector of activity, which shows the interest of investors in investing in this business. According to the first and second materials, it is determined that state support for the agricultural sector and the constant need for innovative technologies serve as an incentive to invest in agricultural activities. The lack of sufficient arable land in the global economy encourages the agricultural market to introduce and improve technological innovations. These may also include vertical farming or other innovations aimed both at improving land fertility and increasing the level of agricultural crop yields. However, according to the third material used, it was established that the agricultural sector is in demand, mainly due to providing the population with basic needs, such as food. Considering additional theoretical sources that examined the advantages of investing in agricultural enterprises, a number of main criteria for the benefits of financing in the agro-industrial business can be distinguished (Table 3).

Table 3. *Advantages of the agricultural and industrial sector to attract additional investors*

Advantage	Explanation
The constant demand for goods	Agricultural products have a constant market demand, considering the fact that with the growth of the population, the need for food will increase in the same way
Increasing the cost of an agricultural business product	Price growth is linked to higher returns for investors
Favourable effect for economic development	By investing in the agricultural business, it is possible to develop and strengthen the economy of the country where this plan is being implemented
Rather low competitiveness	As a rule, the agricultural sector is the least likely to be selected to start doing business in comparison with any branches of other types of economic activity

Source: *compiled by the authors based on D.L. Putri et al. (2015)*

In this way, agricultural investments are much more effective in improving the well-being of low-income categories of the population, compared to investments in the non-agricultural sector of the economy. However, like every individual industry, the agricultural business has its drawbacks, which should also be considered by investors when investing in this sector. Among them, to a large extent, one can distinguish the dependence of production volumes on weather conditions and seasonal features. The criterion of sales of products is also noteworthy because excessive volumes of yield often lead to a decline in pricing policy and a substantial decrease in profitability. The disadvantages of investing in agriculture include the lack of insurance reserves necessary for the sale of products. Thus, the competitiveness of goods in the sales market may be negatively affected by certain unexpected circumstances, such as a decrease in labour productivity, an increase in depreciation charges and expenses for updating equipment necessary for production. In addition, the examination of investments in agribusiness takes a lot of work, which includes the analytical aspect of the action as assessing the cost links for investment, due to the lack of proper information resources and proper tools, to attract additional investments in the agricultural complex, will require substantial efforts on the part of possible investors. Ultimately, investing in the agricultural business involves both potential income opportunities and certain types of dangers that all future investors should be prepared for. Notably, it is impossible to create a single list of rules and actions that would properly guarantee the maximum result and the mandatory achievement of a large level of profitability because many areas and tools can be used in this field. However, in the course of this study, a number of generalised recommendation criteria were formed that can refute the risks of investing in the agricultural sector (Table 4).

Table 4. *Recommendations for possible investors who are focused on investing in the agricultural business*

Recommendation aspect	Characteristics
Financial condition analysis	Before making financial investments, calculating profits and losses and anticipating future prospects is necessary. An ordinary depositor with a small fortune usually needs only a notebook and a calculator to do this, while representatives of large businesses are advised to use the services of accountants.
Creating a fund reserve amount	It is not recommended to make investments using loans and borrowings, but it is advisable to create an insurance reserve for any period of time. Additional financial resources should be provided for all expenses, for a period of three to six months.
Setting investment goals	The purpose of monetary investments can be to preserve monetary resources, increase the value of assets, and ensure additional profit. Therewith, it is necessary that the set goals have specific deadlines for achieving them.
Identification of possible threats that provoke capital losses	Any investment plan and a separate financial resource have certain disadvantages, which is why it is very important for potential investors of agricultural production to approach the choice of candidates (enterprises and organisations) with whom they want to cooperate, especially, if necessary, with the involvement of professional investment experts.
Defining a future investment strategy	Choose a strategic investment action in advance, which will preferably include considering all possible risks and meeting the goals set.
Definition of the financing object	This point is usually performed by analysts using the ratio of profitability indicators of individual investment projects, with the calculation of possible income and selecting from them those that are most acceptable to the investor.

Source: *compiled by the authors based on K. Otsuka & M. Ali (2020)*

On the basis of a systematic review of all the materials used, this study identified the main aspects that identify effective strategic practices aimed at attracting additional investment. It is determined that the clustering investment strategy meets most of the identified criteria, and therefore, it is expediently considered effective for attracting additional financial investments in agricultural activities. Against the background of the obtained aspects of determining an effective strategy, for this study, the positive and negative aspects of the agro-industrial business were identified to attract additional investments and potential investors. A number of recommendation criteria and reservations were provided to help in forming a potential plan that will provide possible investors of agro-industrial activities to choose projects for financial investments, considering possible risks, especially in crisis economic conditions.

DISCUSSION

The study of the search for possible investment strategies that would appropriately ensure the financial security of agro-industrial businesses has so far been determined as necessary, due to the growth of economic and financial crises around the world. Considering the number of studies of specialists in the agro-industrial business and the economic sphere in general, it was determined that most analysts are focused on examining the clustering of enterprises, considering this strategy to be the most effective and reliable in crisis periods (Alabi, 2019; Xiong, 2019). Thereby, some studies investigate the impact of various crisis periods on the economy to consider possible risks to the financial activity of enterprises in general. W. Huang (2019) and Y. Huang (2019), focused on the financial crisis, in which there was a narrowing of the volume of loans in the financial sector of South Korean enterprises. The negative effects of reduced lending were also reviewed by L. Qian & F. Chen (2023), where researchers determined that in financial crises, small and medium-sized enterprises experienced more substantial losses in output compared to large companies and firms operating in the market. As part of the financial crisis analysis, D.L. Putri *et al.* (2015) examined the results of a survey of small and medium-sized industrial firms in China and identified certain categories of economic shocks, such as shock changes in the demand market, supply, and credit problems that businesses had to contend with. From the standpoint of consequences for investment activity, W. Ruland (2013), noted how negatively the financial disaster affected American joint-stock companies.

G. Gagné (2019) points to similar results for individual private corporations in Canada, China, Turkey, and Jordan. However, a large number of researchers agree that the construction and implementation of an investment strategy for agriculture is quite necessary. According to F. Karaev (2023), it is determined that a high-quality investment strategy can help increase the level of organisation funds security in accordance with various dangers caused by crisis states of the economy. In turn, it is the cluster investment policy that most harmoniously and expediently contributes to attracting additional financial revenues to the agricultural and industrial business, providing it with a foundation for efficient and rapid development (Otsuka & Ali, 2020). Notably, some shortcomings of this strategy are identified to counteract the effectiveness of clustering of enterprises in the agro-industrial sector according to other studies. For example, the findings of L. Zhang (2019)

demonstrate that cluster policies can only be effective if they attract external fund receipts, while domestic investments do not bring much stability to business activities. Such nuances are also identified by researchers who have focused on other investment plans, such as energy, production, and technology strategies (Ntamwiza & Masengesho, 2022). Contrary to this, the results of the study by D. Krummel (2022) refute the use of other strategies, arguing that cluster policies are based on a technological and production Key, and therefore, are no less efficient than other investment plans.

Examining the clustering strategy, researchers determine that the interdependence of internal needs of consumers of the clustering investment category is associated with competition, while external needs directly depend on cooperation. In addition, within the framework of the implementation of relationships, certain communication connections arise in the cluster, also aimed at the formation of personal, internal-cluster official and unofficial connections, which usually occur between its participants, which ensures the proper functioning of this strategy and contributes to the effective adaptation of clustering enterprises to external positive and negative phenomena. A number of studies conducted by other authors explain that it is on the basis of innovative aspects that the development of marketing and information security relationships between clustering participants takes place. A substantial role in the formation of effective marketing actions is played by general standards of production activities, building the effective cost of products on the part of firms included in the cluster and ensuring the development of relevant brands (Andriamampiandra *et al.*, 2021).

Based on a number of reasoned studies on the effectiveness of the clustering strategy, it can be concluded that the cost activity of clusters is also based on the establishment of network interaction, cooperation, coordination of joint work activity, and the development of competitiveness of organisations. In addition, the relevant authorities, which are focused on the area where clustering occurs, can also ensure the functioning of such a clustering grid. Clustering can take place depending on the initiative of characteristic government figures and enterprises of privatised links. Considering the first case, it can be stated that investment in clustering will take place with the participation of the government, in the second case, such a prospect may not happen. The government can take the initiative only if the merger of enterprises causes substantial development of the territory where clustering is developing. Clustering requires attracting investments from the state since this provides a certain foundation for the financial security of enterprises. According to an opinion expressed by Z. Cai *et al.* (2023), the introduction of production technology and the implementation of credit security policies for agricultural enterprises is a very important element in the process of developing a strategy that will contribute to improving the efficiency of their activities. Some studies also show that the presence of organisations with very low coefficients of production capacity and profitability, due only to poor indicators of the operating part of these enterprises' economy (Anh *et al.*, 2019; Zogbassè *et al.*, 2023). Thus, entrepreneurs should pay special attention to the introduction of modern production strategies to increase the volume of output and ensure a reduction in the unit cost. Considering the substantial level of danger of conducting agricultural business operations caused by the consequences of natural and climatic factors and seasonal phenomena, it is necessary to conduct further modernisation and expansion of the range of production procedures.

According to some studies, it has been established that with the presence of a statistically substantial level of easy availability of food resources in states, compliance with the principles of agricultural production development is also the most substantial link in the issue of economic criteria for the production and development of the food sector (Andriushchenko *et al.*, 2021; Poltorak *et al.*, 2022). However, in countries with medium and low economic availability of food, this relationship does not gain sufficient statistical significance. In addition, according to another separate study by A. Poltorak *et al.* (2023), there is a substantial relationship between the level of technological development and the financial security of agricultural enterprises. This proves that the use of an appropriate strategy that includes the aspect of innovation support provokes investors to introduce monetary resources into the agro-industrial business. A. Berxolli *et al.* (2023) determined that with the introduction of innovative aspects in the investment strategy, it is possible to ensure the sustainable development and functioning of the agricultural sector even in martial law. However, according to some papers, it is determined that not all investment strategic actions are useful for the agro-industrial business and for other activities in general. O. AitElMekki (2020), establish that with the attraction of foreign direct investment, there may be some difficulties with the land ownership of the agricultural sector. Similar conclusions were drawn in the study on the importance of building an investment strategy for small and medium-sized businesses (Emmanuel *et al.*, 2024).

The above-mentioned researchers raise issues related to the fundamental principles of implementing financial activity, and in particular: the basics of implementing an investment strategy, creating favourable

innovative and profitable integration, and legislative norms that contribute to the development and strengthening of the investment mechanism. However, a study by A. Kliuchnyk *et al*. (2023) shows that the level of well-being of the population of rural areas can increase by attracting tourists to the territory of agricultural production, farms, etc. It is determined that an important role in the formation of financial security of agro-industrial production, an important role is played by attracting state support, which ensures the sustainable and sustainable development of agricultural activities (Abba & Demarso, 2020).

Thus, with the application of a legal framework that regulates investment sectors, there is an incentive to attract additional financial resources to facilitate economic development. However, agro-industrial associations can be used as an alternative for investing funds. Land plots of agriculture are focused on profitability due to rental income, in accordance with the growth of production costs. Thus, investing in an agro-industrial business can function as promotional dividends, or as ordinary leased property with a profitable income. Unlike how volatile stock campaigns can be, demand for food products among consumers is always present, regardless of the period in which the business environment unfolds. Therefore, if investments are made in agricultural plots, they are defined as stable and resistant to crisis states and will never fall into disrepair, although the monetary fund is subject to repression.

CONCLUSIONS

In this study, a systematic review of scientific materials was conducted, searching for effective strategies for attracting investment in the agro-industrial sector of production. With the analysis and comparison of indicators from the sources used, this study determined that effective strategic action, first of all, should include all possible risks that may arise in crisis conditions of the economy. Such risks should also include the shortcomings of the agro-industrial business: dependence on weather conditions and seasonal phenomena, high time spent on production and a substantial need for energy costs on the part of the labour force. In crisis conditions of the economy, representatives of the agro-industrial business should give preference to effective strategies that provoke additional attraction of investments. The cluster strategic framework, which is based on innovative shifts for clustering participants, was identified to be the most effective for this purpose. Attention was focused on the possible shortcomings of the cluster strategy, namely: the dependence of numerous clustering participants on one firm, which may provoke their tendency to imitate managerial influences from the management of this firm, there may not be flexibility in changing innovative technologies, that is, participating firms may be less proactive in developing and implementing new developments and technologies, because they believe that the strategy of following the leader works for them. However, the cluster strategy identified more advantages than disadvantages. The positive aspects of clustering for agro-industrial business were the focus of the strategy on increasing the competitiveness of firms, using external investment resources, and building strong relationships and organisation between potential clustering participants, which increases their ability to ensure their own financial stability. Identifying aspects that provoke attracting additional investment, this study focused on the following criteria: ensuring the competitiveness of enterprises in the market, constant demand for products, innovation, and flexibility to crisis conditions. Thus, in determining the most effective strategic plan for agro-industrial production, it is necessary to consider the cluster strategy since it is advisable to review all aspects that contribute to attracting investment in agriculture.

This study formed a number of recommendations for future investors in the agro-industrial sector and identified the positive and negative aspects of investing in the agricultural sector. Among the main negative aspects of agricultural production, it is determined that there may be insufficient insurance reserves necessary for the sale of products. In other words, certain unexpected circumstances may negatively affect the competitiveness of goods in the sales market. Such circumstances usually include such criteria as: a decrease in labour productivity, an increase in depreciation charges and expenses for updating equipment necessary for production. In turn, among the advantages of the agro-industrial sector, this study observed: constant demand for goods, an increase in the cost of the product of agricultural business, a favourable effect for the development of the economy, and rather low competitiveness in comparison with other areas of activity.

The limitations of this study were the uncertainty of a sufficient number of reasons that would explain the aspect of reducing the impact of domestic investment in crisis periods of the economy, given that the attraction of external investment resources often becomes unavailable with the growth of complicated economic and financial shifts. The results and conclusions of this study can serve to further explore aspects of clustering in its broader manifestation. Based on the aspects on which the cluster approach is founded, for further research, it is possible to investigate the subject of possible cooperation of enterprises in clustering and identify the boundaries that clustering can cover.

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CONFLICT OF INTEREST

None.

REFERENCES

[1] Abba, B.A., & Demarso, Y.K. (2020). The legal framework governing investment areas and incentives in Ethiopia: A critical appraisal. *Beijing Law Review*, 11(3), 740-758. doi: 10.4236/blr.2020.113045.

[2] AitElMekki, O. (2020). Is socially responsible investment outperforming conventional investment or not? A meta-analysis. *American Journal of Industrial and Business Management*, 10(11), 1760-1784. doi: 10.4236/ajibm.2020.1011110.

[3] Alabi, K.O. (2019). The impact of foreign direct investment on economic growth: Nigeria experience. *Open Journal of Applied Sciences*, 9(5), 372-385. doi: 10.4236/ojapps.2019.95031.

[4] Andriamampiandra, M., Andriamitsiriony, M.H.J., & Razaranaina, J.C. (2021). The strong presence of Chinese investment in Madagascar: Threat or opportunity? *Modern Economy*, 12(5), 919-928. doi: 10.4236/me.2021.125046.

[5] Andriushchenko, I., Ivanenko, T., Burak, V., Kovalenko, G., & Zamferesko, O. (2021). Technologies for training specialists in the hotel and catering industry in Ukraine in the context of lifelong learning. *GeoJournal of Tourism and Geosites*, 37(3), 838-843. doi: 10.30892/gtg.37314-716.

[6] Simkiva, L., Olena Dovgal, O., Demchuk, N., Potryvaieva, N., Cherchata, A., Popadynets, I., Tkachenko, G., Serhieieva, O., & Sydor, H. (2020). Analysis of economic development of Ukraine regions based on taxonomy method. *Management Science Letters*, 10(3), 515-522. doi: 10.5267/j.msl.2019.9.029.

[7] Anh, B.K., Thai, N.Q., & Trinh, B. (2019). Foreign direct investment (FDI) in Vietnam economy. *Theoretical Economics Letters*, 9(4), 986-998. doi: 10.4236/tel.2019.94064.

[8] Berxolli, A., Potryvaieva, N., Dovgal, O., Kuzoma, V., & Pavliuk, S. (2023). Innovation in Ukrainian agriculture to mitigate the impact of invasion. *International Journal of Environmental Studies*, 80(2), 307-313. doi: 10.1080/00207233.2022.2160080.

[9] Cai, Z., Wang, L., & Qian, M. (2023). Optimization of asset allocation strategies in major categories – theories, indicators, assets and timing. *Open Journal of Social Sciences*, 11(1), 94-107. doi: 10.4236/jss.2023.111009.

[10] Dovgal, O., *et al.* (2017). Methods of competitiveness assessment of agricultural enterprise in Eastern Europe. *Regional Science Inquiry*, 9(2), 231-242.

[11] Duramany-Lakkoh, E.K., Jalloh, A., & Jalloh, M.S. (2022). Linking foreign direct investment and economic development in Sierra Leone. *Journal of Mathematical Finance*, 12(1), 105-125. doi: 10.4236/jmf.2022.121007.

[12] Emmanuel, C., Angus, E.A., Emmanuel, A.E., & Emmanuel, N.E. (2024). Internet banking and domestic investment nexus: The Nigeria experience. *Open Journal of Social Sciences*, 12(7), 379-394. doi: 10.4236/jss.2024.127027.

[13] Fan, M., & Phromphitakkul, W. (2021). Impact of female executive on investment efficiency of listed companies in shanghai stock market: A case of over-investment. *Modern Economy*, 12(6), 1119-1136. doi: 10.4236/me.2021.126059.

[14] Gagné, G. (2019). The Canadian policy on the protection of foreign investment and the Canada-China bilateral investment treaty. *Beijing Law Review*, 10(3), 361-377. doi: 10.4236/blr.2019.103021.

[15] Gakhar, D. (2019). Role of optimism bias and risk attitude on investment behaviour. *Theoretical Economics Letters*, 9(4), 852-871. doi: 10.4236/tel.2019.94056.

[16] Huang, W. (2019). Value creation of strategic investors under convertible bond investment – a case study of wharf (holdings) limited. *Open Journal of Business and Management*, 7(1), 275-291. doi: 10.4236/ojbm.2019.71019.

[17] Huang, Y. (2019). Government intervention and corporate investment efficiency: Evidence from China. *Journal of Service Science and Management*, 12(3), 267-276. doi: 10.4236/jssm.2019.123018.

[18] Karaev, F. (2023). The impact of competitive strategies on firm performance: The mediating role of market orientation and innovation: An empirical study of the Georgian beverage sector. *Technology and Investment*, 14(2), 119-135. doi: 10.4236/ti.2023.142007.

[19] Kliuchnyk, A., Oliinyk, T., Galunets, N., Borysova-Yaryh, A., & Fedorenko, T. (2023). The impact of tourism on local community development. *Economic Affairs*, 68, 649-655. doi: 10.46852/0424-2513.2s.2023.4.

[20] Krummel, D. (2022). Expansion in the retail sector – market entry strategies in consideration of formal and informal institutions: A Tesco case study. *Open Access Library Journal*, 9, article number e8377. doi: 10.4236/oalib.1108377.

[21] Ntamwiza, J.M.V., & Masengesho, F. (2022). Impact of gross capital formation and foreign direct investment on economic growth in Rwanda (1990-2017). *Current Urban Studies*, 10(1), 1-13. doi: 10.4236/cus.2022.101001.
[22] Odintsov, O. (2019). Activation of investment activity of the agrarian sector of the economy through the formation of regional agro-industrial clusters. *Economic Bulletin of Cherkasy State Technological University*, 20(4), 41-50.
[23] Otsuka, K., & Ali, M. (2020). Strategy for the development of agro-based clusters. *World Development Perspectives*, 20, article number 100257. doi: 10.1016/j.wdp.2020.100257.
[24] Poltorak, A., Khrystenko, O., Sukhorukova, A., Moroz, T., & Sharin, O. (2022). Development of an intergraten approach to assessing the impact innovative development on the level of financial security of households. *Eastern-European Journal of Enterprise Technologies*, 1(13(115)), 103-112. doi: 10.15587/1729-4061.2022.253062.
[25] Poltorak, A., Volosyuk, Yu., Tyshchenko, S., Khrystenko, O., & Rybachuk, V. (2023). Development of directions for improving the monitoring of the state economic security under conditions of global instability. *Eastern-European Journal of Enterprise Technologies*, 2(13(122)), 17-27. doi: 10.15587/1729-4061.2023.275834.
[26] Putri, D.L., Annisa, M., Ningrum, L.P., Mursid, M., Amiadji, & Murdjito. (2015). Agro industrial cluster development strategy coastal region district Banyuwangi. *Procedia Earth and Planetary Science*, 14, 136-143. doi: 10.1016/j.proeps.2015.07.094.
[27] Qian, L., & Chen, F. (2023). An empirical study on the coupling and coordination of health investment, resident health and economic growth in Sichuan province – based on a modified coupling model. *Open Journal of Applied Sciences*, 13(3), 355-365. doi: 10.4236/ojapps.2023.133029.
[28] Ruland, W. (2013). Does cluster membership enhance financial performance? *iBusiness*, 5(1), 1-11. doi: 10.4236/ib.2013.51001.
[29] Thuong, L.T. (2020). Development of industry linking cluster in Vietnam. *American Journal of Industrial and Business Management*, 10(8), 1368-1373. doi: 10.4236/ajibm.2020.108091.
[30] Titenko, Z. (2023). Formation of a strategy for the development of agrarian enterprises in order to increase the level of their financial security. *Digital Economy and Economic Security*, 4(4), 46-51. doi: 10.32782/dees.4-8.
[31] Xiong, S. (2019). Executive equity incentives, overconfidence and corporate inefficient investment. *Open Journal of Business and Management*, 7(1), 209-228. doi: 10.4236/ojbm.2019.71015.
[32] Zhang, L. (2019). A general framework of optimal investment. *Journal of Mathematical Finance*, 9(3), 535-560. doi: 10.4236/jmf.2019.93028.
[33] Zogbassè, S., Agbokpanzo, A.T., Houssou, K.P., Agbidinoukoun, T.A., & Alinsato, A.S. (2023). The effect of foreign direct investment on air pollution in the economic community of west African states region: What influence does tax expenditure have? *Journal of Environmental Protection*, 14(11), 903-918. doi: 10.4236/jep.2023.1411050.
[34] Zubair, S., Kabir, R., & Huang, X. (2020). Does the financial crisis change the effect of financing on investment? Evidence from private SMEs. *Journal of Business Research*, 110, 456-463. doi: 10.1016/j.jbusres.2020.01.063.

Інвестиційні стратегії розвитку аграрних формувань в умовах кризової економіки

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Анотація. Метою цього дослідження було визначення кластеризації підприємств агропромислового сектора як найбільш результативної інвестиційної стратегії розвитку сільського господарства у кризових економічних умовах. Це дослідження являє собою систематичний огляд наукових робіт, основою яких є питання пошуку стратегій розвитку для аграрної сфери діяльності у критичних умовах економіки, а також визначення найбільш ефективних з них для посилення дії аграрних формувань. Згідно з результатами цього дослідження, найбільш ефективною для розвитку аграрних підприємств визначено саме кластерну інвестиційну стратегію, однак на противагу цьому було встановлено ряд її негативних наслідків Було визначено необхідність побудови ефективної стратегії для залучення додаткових інвестиційних процесів. Досліджено негативні та позитивні сторони вкладень у сільське господарство, що допомогли встановити прояв можливих ризиків та прибутків від аграрно промислового сектору діяльності. Із використанням додаткових теоретичних матеріалів, у ході цього дослідження було оцінено кластерну інвестиційну стратегію, як таку, що виявляється більшою мірою стійкою до кризових умов. Було розглянуто окреме питання щодо важливості залучення зовнішніх інвестиційних ресурсів, оскільки саме такий вид вкладень виявився надійнішим у кризові фінансові та економічні періоди. Також було окреслено негативні наслідки впливу кризових умов на підприємства та організації різних секторів діяльності, надано ряд рекомендацій для потенційних інвесторів аграрно-промислової діяльності. Визначено, що кризові фінансові та економічні спектри являють собою ряд прогалин, які варто враховувати при виборі ефективної стратегічної політики, що має бути спрямована на посилення конкурентоспроможності аграрних підприємств та побудована на інноваційних аспектах високої активності. Варто зазначити, що саме кластерну політику було обрано як таку, що доцільно відповідала поданим критеріям відбору ефективної стратегічної дії

Ключові слова: кластер; конкуренція; інновації; індустріалізація; регресійна модель; матеріально-ресурсна структура