

## METHODS OF EVALUATION AND CONCEPTUAL-STRATEGIC DIRECTIONS OF ECONOMIC SECURITY OF AGRICULTURAL ENTERPRISES

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**Abstract.** *The purpose* of the paper is to identify an effective method for assessing economic security and to formulate conceptual and strategic directions for raising the level of economic security of agricultural enterprises operating in conditions of instability and uncertainty. *Methodology.* In the process of research, general scientific and specific research methods were used. In particular, the method of statistical analysis was used in determining the dynamics of the number of agricultural enterprises. The methods of synthesis and analysis were used to identify the negative trends that affect the activities of agricultural enterprises. Using from abstract to specific methods, an algorithm for assessing the level of economic security of agricultural enterprises and the formation stages of the enterprise economic security concept were determined. *Results.* The article defines the main modern functioning tendencies of agricultural enterprises. It is suggested to use such means as financial, human resources, legal, informational, organizational to ensure the proper level of economic security of agricultural enterprises. The article states that the methodology for assessing the level of economic security consists of two approaches: qualitative and quantitative determination of the level of economic security. The authors systematize the indicators for assessing the level of economic security of the agricultural enterprise. The basic features of the economic security concept of agricultural enterprises are determined. The general strategies of the enterprise are described, which can be used both for agricultural enterprises and for other companies of different branches of the economy, in accordance with the level of economic security. *Practical meaning.* The article provides materials that give an understanding of the algorithm for assessing the level of economic security of an agricultural enterprise. The authors present the systematization of components and indicators for assessing the level of economic security, which in practice allows the most effective and reliable determination of the level of economic security. The detailed description of the company's general strategies allows us to identify and implement precisely the strategy that will maximize the level of economic security of the enterprise. Strategic directions improved by authors for the formation of economic security of agricultural enterprises provide the opportunity to identify the necessary tools, with the help of which it is possible to achieve the maximum level of economic security of the enterprise. *Value/originality.* The paper analyses the methodology of evaluation and conceptual-strategic directions of economic security of agricultural enterprises, which proves the urgency and necessity of the considered issues. The presented results of the research and the propositions on the strategic improvement of the economic security level of agricultural enterprises can improve the efficiency of the enterprises of the agrarian sector. Taking into account the significant contribution of agriculture to the country's economy, the research allows improving not only the performance of individual enterprises but also the effectiveness of the national economy as a whole.

**Key words:** economic security, agricultural enterprise, methodology of evaluation, concept, strategy.

**JEL Classification:** Q10, Q12

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## 1. Introduction

The risk character of entrepreneurial activity and increase of the level of competitive struggle determine the necessity of forming economic security of economic entities. This problem is especially relevant for agricultural enterprises, given the increased riskiness of their activities, which is due to the natural climatic factor and the use of land as the main means of production. The presence of a number of unresolved problems, in particular, lack of own funds to ensure expanded reproduction of production, inefficient use of resource potential, decrease the level of managerial personnel qualification, prevent most agricultural enterprises from maintaining a high level of economic security.

In Ukraine, agriculture is one of the most important sectors of the economy. One-third of the total gross value added to the state is provided by agriculture itself. However, today enterprises in this industry operate in conditions of instability and uncertainty. Such a situation negatively affects both the level of economic security of agricultural enterprises and the level of economic security of the country.

In the conditions of the formation of the market economy of post-socialist countries, to ensure the economic security of enterprises of the agro-industrial complex in each region of the country is of paramount importance. Insufficient scientific and methodological development of these issues, poorly legitimate provision of their decisions and problem solving, the absence of cardinal practical measures of active state regulation of economic security management processes create extreme conditions in Ukraine when statehood will be lost, the economy will collapse completely.

The use of a system for ensuring the economic security of agricultural enterprises and regions of the country will allow the rational management of enterprises, firms, farms in each region to take active management decisions for the withdrawal of the economy from the crisis, in which most of the regions of the country appeared. The business practices in the agrarian sector require profound scientific research in solving the issues of economic, food, financial, environmental, and other types of security of Ukraine, its regions, enterprises, firms and farms of the agrarian sector of the economy.

In order to increase the level of economic security of agricultural enterprises, it is necessary to conduct continuous monitoring of it, using the most effective

method of assessment, which should take into account all factors that affect the level of economic security. The correct method for assessing the level of economic security provides the opportunity to form the most effective strategy for the development of economic security of the enterprise.

The purpose of the paper is to identify an effective method for assessing economic security and to formulate conceptual and strategic directions for raising the level of economic security of agricultural enterprises operating in conditions of instability and uncertainty.

## 2. Trends in the agricultural sector

The agrarian sector is of great importance for the economy of many countries, including Ukraine. The level of economic development depends on the functioning efficiency of agrarian enterprises. Agrarian enterprises (agricultural enterprises) represent an open system, influenced both by internal and external factors. Negative trends in the economic and political spheres of the country also affected the activities of agricultural enterprises. This, first of all, has led to a negative trend in the change of the agricultural enterprises' number (Table 1 and Figure 1).

Analysis of the dynamics of the number of agricultural enterprises for the period of 2013-2017 showed that the number of agricultural enterprises in 2017 decreased by 3,488 units compared with 2013. Despite the increase in the number of agricultural enterprises in 2016, compared with 2014, and 2015, the number of these enterprises has not reached the level of 2013.

This tendency has developed under the influence of national conditions, namely:

- increase in the cost price of cultivating crops (devaluation of the hryvnia, unstable exchange rate provoke a rise in prices of fuel, fertilizers, raw materials, agricultural machinery, etc.);
- personnel problems (high qualified personnel insufficiency, despite that every fifth of Ukrainians works in the field of agriculture);
- difficulties with financing;
- degradation of agricultural lands (violation of scientifically substantiated systems of agriculture, monoculture of agriculture) (Problemy sil'skikh gospodarstva Ukrainy, 2016).

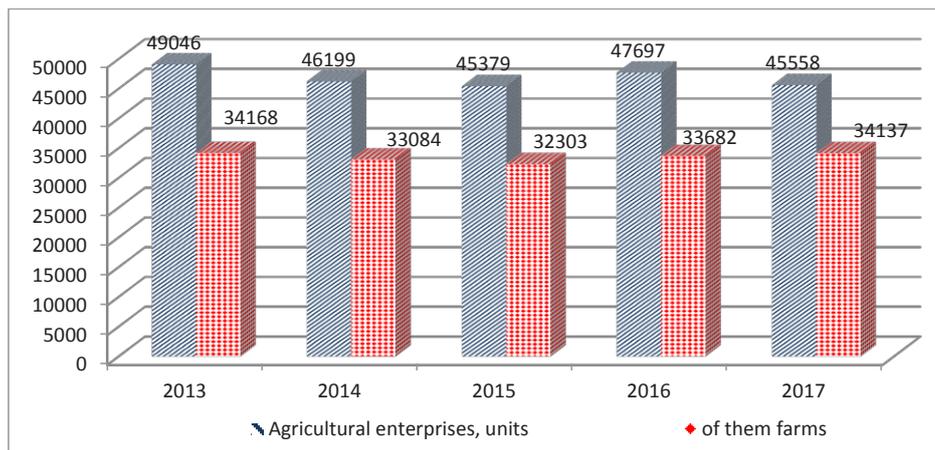
Thus, the negative tendencies that have developed in the field of agriculture make it possible to state that the level of economic security of agricultural enterprises has been reduced. However, in order to form an effective

Table 1

### The dynamics of the number of agricultural enterprises in Ukraine for 2013-2017

Indicator	Years					Deviation 2017/2013
	2013	2014	2015	2016	2017	
Agricultural enterprises, units	49046	46199	45379	47697	45558	-3488
of them farms	34168	33084	32303	33682	34137	-31

Source: compiled by the authors using the source (Ofitsiyni veb-sait Derzhavnoi sluzhby statystyky Ukrainy, 2018)



**Figure 1. Dynamics of agricultural enterprises in Ukraine for 2013-2017**

Source: *ofitsiyniy veb-sait Derzhavnoi sluzhby statystyky Ukrainy, 2018*

strategy to increase the level of economic security of agricultural enterprises, it is necessary to carry out a reliable diagnosis of the level of economic security of agricultural enterprises, using such an assessment methodology that will take into account all components of the economic security of agricultural enterprises.

### 3. Methodology for assessing the economic security of agricultural enterprises

The main objective of assessing the level of economic security is the timely identification of external and internal threats to the effective operation of enterprises and the definition of strategic directions for improving the level of economic security in order to ensure sustainable development of the enterprise in the future.

The objects of economic security of agricultural enterprises consist of two types:

1. The activity of the enterprise (production, sales, etc.).
2. Resources of the enterprise (financial, personnel, land, material and technical).

Economic security entities include individuals or entire units that, in their function, should ensure an adequate level of economic security of the enterprise.

In order to ensure an adequate level of economic security of agricultural enterprises, it is recommended to use the following means (Stepanov, 2017):

1. Financial (without which it is impossible to form economic security, functioning and development of the enterprise).
2. Personnel (personnel dealing with economic security, its experience and professionalism, the attraction of highly skilled workers).
3. Legal (development of legal acts on the creation, operation of the enterprise and maintenance of its economic security).
4. Information (computers, informational products, security networks).

5. Organizational (creation of specialized units, organizations that help to provide economic security, provide appropriate consultations).

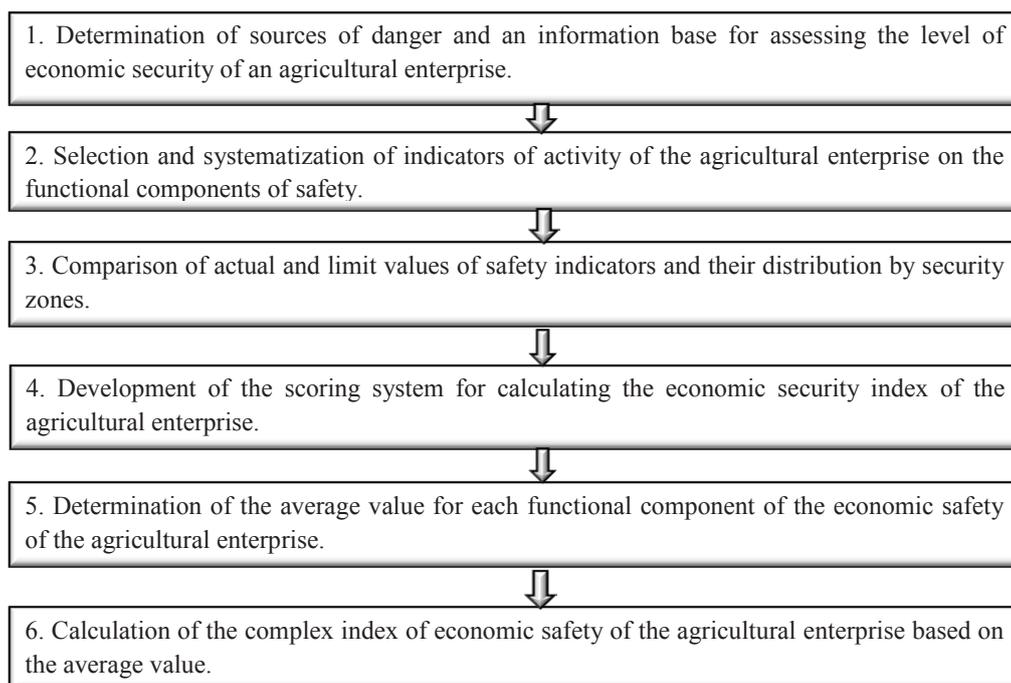
The abovementioned means of ensuring the proper level of economic security of agricultural enterprises are one of the components of economic security, therefore, the effectiveness of their use significantly influences the proper use and monitoring of the level of economic security, it is necessary to implement an algorithm for assessing the level of economic security. Many scientists are concerned with the formation of procedures and methods for assessing the level of economic security, in particular the agricultural enterprise: M. Bendikov, A. Baranovsky, L. Bekhter, V. Dukhov, D. Zadorozhny, S. Ilyashenko, D. Kovalev, T. Kornienko, V. Prokhorov, N. Reverchuk, D. Stepanov, and others.

In a scientific paper, Kornienko T. O. (Kornienko, 2013) provides an algorithm for assessing the level of economic security of agricultural enterprises, which consists of 6 stages (Figure 2).

The above-presented algorithm for assessing the level of economic security shows the necessity of a certain methodical approach, which will allow making the most reliable estimation of the level of economic security, taking into account both external and internal factors of influence on the economic security of the enterprise.

Despite a significant number of scientific papers on the assessment and diagnosis of economic security of the enterprise, today there is no single approach to assessing the level of economic security. These approaches can be divided into two groups:

- the first group – the following methods are used: STEP-analysis, SWOT-analysis, bankruptcy diagnostics;
- the second group – the complex criterion is determined according to the level of the basic indicators of the activity of enterprises, or methods of integrated assessment of the determination of specific components of economic security are used.



**Figure 2. Algorithm for assessing the level of economic security of agricultural enterprises**

Source: Kornienko, 2013

Thus, the first group includes methods of assessment that characterize the level of economic security of the enterprise, mainly through qualitative indicators. The second group includes quantitative assessment methods, which are based exclusively on the calculation of quantitative indicators. We propose, when conducting an assessment of the level of economic security of the agricultural enterprise to use an integrated approach, that is, it is necessary to apply both methods of quantitative assessment, and methods of qualitative assessment. This is due to the specifics of the activity of agricultural enterprises, which uses such main resource as land, whose efficiency is influenced not only by quantitative factors but also by qualitative (natural and climatic conditions, geographical location, etc.).

Considering that the enterprise's economic security is a multi-component category, it is necessary to evaluate first of its individual components and then to determine the overall level of economic security. However, in modern economic literature, there is no generalized definition of the components of the economic security of an enterprise; therefore, the assessment of the level of economic security is not always objective. Summarizing different approaches to determine the components of economic security of an enterprise, we propose to use the following components: financial, technical and technological, industrial, intellectual and personnel, investment-technological, informational, ecological, power, legal, market, sales.

The human resources component plays an important role when assessing the economic security of agricultural enterprises. For example, according to analysts 80% loss

of tangible assets puts our employees, companies and the average personnel security problems reduce profit by 6-9%. Therefore, agricultural enterprises, which have a high turnover because of the seasonality of production, as well as low salaries and difficult working conditions, it is important to take account of this component in the integrated assessment of economic security (Johansen S., 1991, Modeliuvannia ekonomichnoi bezpeky: derzhava, rehion, pidprijemstvo, 2006).

In Table 2, the authors systematized indicators of assessing the level of economic security of the agricultural enterprise.

The sum method is used to determine the level of components of economic security. Thus, the level of  $k$  component is determined by the formula (1):

$$L = \frac{1}{n} \sum_{i=1}^n f(x_i), \quad (1)$$

where  $L$  – the level of  $k$ -th components of economic security of the enterprise;

$f(x_i)$  – correlation between the actual value of the components of the index and the base;

$n$  – the number of indexes.

The correlation between the actual value of the components of the index and the base is determined by the formula (2):

$$f(x_i) = \left( \frac{x_{if}}{x_{ib}} \right), \quad (2)$$

where  $x_{if}$  is the actual value of the index component;

$x_{ib}$  – the base value of the index component;

$k - 1$ , if  $x_{ib} > x_{if}$  or  $k = 1$ , if  $x_{ib} < x_{if}$ .

Table 2

**Components and indicators for assessing the level of economic security of the agricultural enterprise**

Components of economic security of the enterprise	Indicators (Indices)
Financial component	<ul style="list-style-type: none"> <li>- equity to total assets ratio;</li> <li>- coefficient of long-term debt;</li> <li>- current assets manoeuvrability ratio;</li> <li>- leverage ratio coefficient of financial dependence;</li> <li>- coefficient of current liquidity;</li> <li>- reserve coverage ratio;</li> <li>- absolute liquidity ratio;</li> <li>- quick liquidity ratio;</li> <li>- accounts receivable turnover ratio;</li> <li>- accounts payable turnover ratio;</li> <li>- asset turnover ratio;</li> <li>- return on assets.</li> </ul>
Techno-technological component	<ul style="list-style-type: none"> <li>- intensity of technology update;</li> <li>- scientific and production novelty of applied technology and technology;</li> <li>- the competitiveness of products.</li> </ul>
Production component	<ul style="list-style-type: none"> <li>- index of the ratio of arrival and departure of funds;</li> <li>- capital intensity;</li> <li>- return on capital;</li> <li>- material capacity;</li> <li>- material return;</li> <li>- profitability index of fixed assets;</li> <li>- profitability index of production;</li> <li>- working capital turnover ratio;</li> <li>- inventory turnover ratio.</li> </ul>
Intellectual and human resources component	<ul style="list-style-type: none"> <li>- index of staff fluctuations;</li> <li>- index of correlation of hired/retired personnel;</li> <li>- index of percentage of production personnel in the total number;</li> <li>- index of innovative activity;</li> <li>- index of conservation of implemented rationalization proposals;</li> <li>- the ratio of labour productivity and equipment facilities;</li> <li>- the ratio of labour productivity and wages;</li> <li>- index of social responsibility.</li> </ul>
Investment and technological component	<ul style="list-style-type: none"> <li>- index of investments;</li> <li>- index of progressiveness of long-term biological assets;</li> <li>- index of progressive use of long-term biological assets;</li> </ul>
Information component	<ul style="list-style-type: none"> <li>- coefficient of completeness of information;</li> <li>- coefficient of accuracy of information;</li> <li>- coefficient of contradictory information.</li> </ul>
Ecological component	<ul style="list-style-type: none"> <li>- index of expenses for measures of natural protection;</li> <li>- index of ecological payments.</li> </ul>
Power component	<ul style="list-style-type: none"> <li>- the share of negative influences in the past and current periods of the enterprise;</li> <li>- definition by expert estimation method.</li> </ul>
Legal component	<ul style="list-style-type: none"> <li>- the ratio of losses incurred by the enterprise as a result of violation of legal norms and the overall size of losses, which avoidance is due to the activities of legal services.</li> </ul>
Market component	<ul style="list-style-type: none"> <li>- definition of the environment (opportunities and threats);</li> <li>- definition of the internal environment (strengths and weaknesses).</li> </ul>
Components for sale	<ul style="list-style-type: none"> <li>- index of agricultural goods supply in the foreign market;</li> <li>- index of agricultural goods supply on the domestic market;</li> <li>- index of timely payment for agricultural products;</li> <li>- profitability of sales.</li> </ul>

Source: summarized by the authors with (Kornienko, 2013; Bekhter, 2013)

It is necessary to determine the average component level (component) to form an integral indicator of the level of economic security.

Quantitative assessment of the level of economic enterprise requires qualitative characteristics of the results. The qualitative estimation approach of the economic safety level of the enterprise is offered on the desirability function basis. It characterizes the mathematical representation of the law of the transition of quantity to quality, as the quantitative index value is converted into an assessment of desirability, based on this condition of the evaluated object (in this case, economic security). The range of the desirability function lies on the segment  $[0, 1]$  (Allen Julia H., 2005).

Thus, the level of economic security of an enterprise is estimated by strategically important directions of enterprise activity, which influence the final result of the enterprise activity. Therefore, considering the importance and necessity of assessing the level of economic security of enterprises, they are included in the general concept of enterprise security.

#### 4. Conceptual-strategic directions of economic safety of agricultural enterprises

The concept of agricultural enterprise security is a system of views of enterprise management on security issues at various stages and levels and in various spheres of its economic activity, and also defines the main ways of their solution, principles, directions, and stages of security measures implementation.

Formation of the concept of economic security of the enterprise includes four main stages (Figure 3).

Thus, taking into account the peculiarities of the formation of the concept of economic security of an enterprise, it is important to determine not only the level of economic security but also on the basis of the results to develop strategic directions for increasing the level of economic security of the enterprise. Formation of strategy of any enterprise is one of the main factors of effective functioning. In accordance with the life cycle of the enterprise, the chosen strategy can be adjusted in accordance with the results of the enterprise, in particular, its economic security. The main strategic groups of the company are general (corporate) strategies, product and commodity strategies, competitive (business) strategies, functional strategies, resource strategies. Significant interest for many scholars is precisely the general strategies that make it possible to determine the directions of global enterprise development. So in the scientific work, Gholik V. V. (Gholik, 2014) describes general enterprise strategies that can be used also at agricultural enterprises (Table 3).

Thus, the information presented in Table 3 shows that all corporate strategies of the company are divided into three main groups: growth strategies, stabilization strategies, and exit strategies (reduction). According to the results of the assessment of the level of economic security of the enterprise, one of the strategic groups can be applied. Taking into account the potential of the enterprise, it is necessary to implement specific types of strategies from a particular strategic group.

In accordance with the above, the authors suggest (Figure 4) the improvement of strategic directions for the formation of the economic security of the agricultural

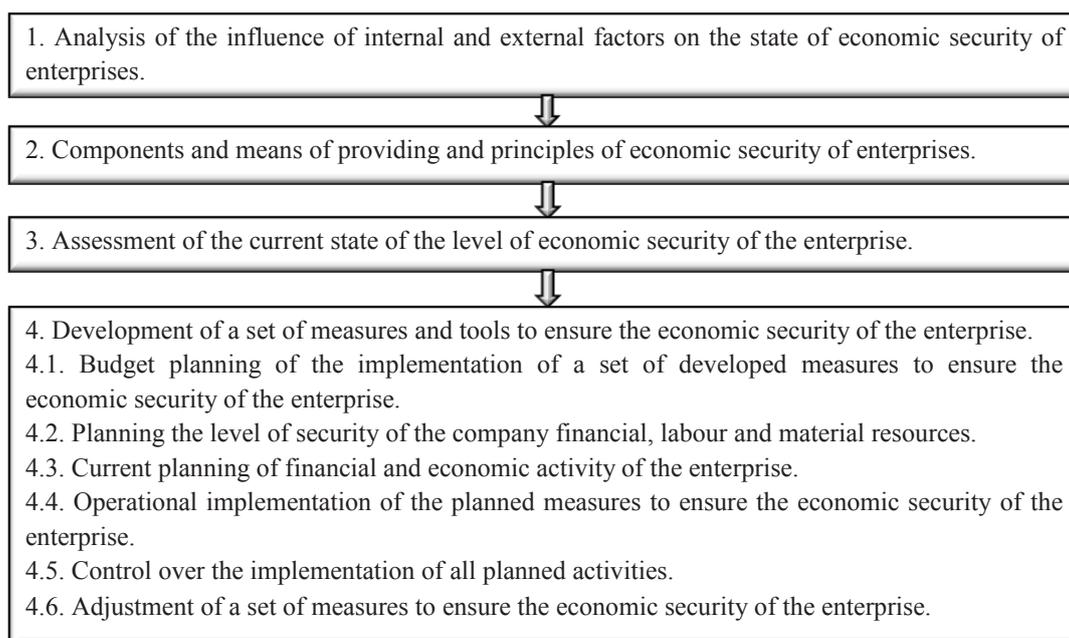


Figure 3. Formation stages of the enterprise economic security concept

Source: formed by authors with source (Kudelja, 2014)

Table 3

**Corporate (general) enterprise strategies (Gholik, 2014)**

Types of Strategies	The content of a particular type of strategy
	<p><b>Growth strategies</b> are options for developing existing business, creating a new business or entering new markets and increasing the rates of economic efficiency of production to improve the enterprise. Growth strategies are inherent in enterprises operating in dynamic industries with rapid technological change. An enterprise can grow as a result of increasing the scope of its current activities; introduction of a new direction of work or expansion of technological capabilities; expansion of the consumer group, which involves an increase in the quantitative indicators. The basis for growth is the internal development or acquisition of other enterprises (mergers, acquisitions, joint ventures) or a combination of these activities. Growth strategies for agricultural enterprises include increasing their size, filling the strategic portfolio with additional types of activities and products, as well as the transition to new management principles that ensure the qualitative development of the enterprise. It is the growth strategy that should become a priority for agricultural enterprises in order to ensure their competitiveness.</p>
Concentrated growth	In agriculture, mainly due to the expansion of production capacities, that is, the consolidation of agricultural enterprises that creates the preconditions for the formation of competitive advantages.
Intensification strategy	It envisages the intensification of agrarian enterprises, whose purpose is to increase the quality of production and increase the efficiency of production on the basis of sustainable development, reducing the material money and labour costs per unit of production due to the qualitative improvement of all parties of production. It is implemented through the introduction of chemicals, melioration, breeding and seed production, biotechnology, specialization, mechanization and automation, resource and energy saving technologies, investment growth and capital investments, improvement of forms and methods of labour organization and management, personnel training.
Vertical integration	Distribution of the scope of the organization in one industry (in the direction of suppliers, consumers or on the properties of the product itself). This strategy involves the unification of producers of interconnected and related industries operating in the next stages of the product vertical, focusing on "key competencies of the organization" and providing the organization with important strategic benefits: economies of scale in the production process, minimization of transaction costs, opportunities for accelerated technological development, creating incoming barriers to competitors.
Horizontal integration	It is an association or absorption of producers of one level of grocery vertical. It is characterized by combining the efforts of agricultural enterprises to jointly produce certain products or perform one specific purpose (road construction, land reclamation, etc.) on a single raw material or technological basis. It is carried out by creating local units such as a mill, a bakery, an oilseed, a sausage shop, etc.
Mixed integration	It turns out in the union of enterprises of various industries, between which there is no technical and technological connection with the production and sale of products (production of building materials in agricultural enterprises, the creation of subsidiary enterprises for the production of agricultural products in the composition of industrial enterprises or associations).
Diversification	It involves penetration into new spheres of activity that are not characteristic of the organization before or are intended to modify, supplement or replace existing products.
- concentric (centre) diversification	It consists in replenishing the range of products, similar to those produced by the company, based on available capacities and on the basis of opportunities embedded in the mastered market.
- horizontal diversification	It turns out to be an addition to the range of related goods, not similar to those produced by the company, but interesting for existing markets. For agricultural centres and/or enterprises, horizontal diversification means the inclusion in their product portfolio, in addition to high-yielding productions, of a limited list of highly liquid crop products from other sectors (horticulture, horticulture, livestock, seed production, breeding), as well as units serving the main production.
- conglomerate diversification	Characterized by the replenishment of the range of goods that are related neither to existing products or markets nor to the technology used in the enterprise. Applies to large corporations, for example in the form of bioelectric installations. An example of the diversification of agricultural enterprises is also the objects of social infrastructure in rural areas.
Globalization of activity	The essence lies in a twofold idea: targeting the conquest of markets and the ability to use all of the organization's global resources to compete in any chosen market. It envisages the organization's entry into international alliances and alliances that benefit from the scale of production. Characteristic for large agricultural holdings and corporations operating in the international market. Acquiring relevance in the context of the food crisis and high potential of the agricultural sector of Ukraine and the possibility of entering the international market.
	<p><b>Stabilization strategies</b> are developed when the enterprise cannot grow for various reasons or its growth will be ineffective when the company dominates the market or operates in the formed industry with a stable technology, and they focus on existing activities and their support. Stabilization of the organization's activities may be carried out by modifying its own products, supporting its own potential or protecting the market share. It can be chosen only for a certain period and only by financially sustainable agricultural enterprises working on modern production technologies. The possibility of using agricultural stability strategies is due to the slow pace of technological change compared to other industries, as well as the inability of most agricultural producers to innovate.</p>

Types of Strategies	The content of a particular type of strategy
Differentiation of products	Provides modification or improvement of traditional products produced by the organization due to the use of new technical principles in the production of products, the addition of such changes to products that may cause new needs or new areas of consumption in order to continuously improve products. Characteristic of organizations that are characterized by innovation and entrepreneurial activity.
The pause strategy	It involves the deliberate suspension of production or the growth rate of sales at a high level of capacity utilization (80-85%) in order to reduce the proportion of costs, improve the quality of consumer services and product quality.
Cautious promotion strategy	It is aimed at preparing the organization in various areas of auxiliary activities while maintaining the stable business of the business in order to create the appropriate potential in the face of increased demand.
Strategy "nothing changes"	It involves carrying out ordinary activities, but without involving promising investments, expansion of production facilities, penetration into new markets, lack of new development or product improvement, maintenance of traditional consumers by various incentive measures.
Strategy of concentration	Provides that an organization to protect the market allocates a specific market segment, using low prices or unique offers, controlling costs by concentrating on key products.
<b>Output strategies (reductions) are selected by enterprises that need to regroup after the growth period or in order to increase efficiency; is the gradual or accelerated suspension of activities to release resources for more efficient use or transfer to more attractive areas.</b>	
Cost reduction strategy	Focused on finding opportunities and reducing certain types of costs, has the nature of temporary, short-term measures and provides for the reduction of relatively small flow of expenditure. For agricultural enterprises, this is usually the omission of technological operations, the use of low-quality seeds, materials, low wages, etc.
Strategy of reduction of divisions	It involves the closure or sale of the enterprise branches (divisions). Characteristic for diversified enterprises, which poorly combine different production, aimed at obtaining funds for the development of promising activities. Widely used by agricultural enterprises that remove from the product portfolio capital-labour-intensive long-cost, unprofitable sub-sectors of plant growing and livestock farming.
Harvesting strategy	The aim is to maximize the receipt of financial income by reducing investment, with the exception of current expenditures in the minimum amount required. Precedes the liquidation of the enterprise.
Restructuring strategy	Provides organizational, economic, legal, technical measures aimed at changing the structure of the enterprise, its management, a form of ownership, organizational and legal forms that can lead the company to financial recovery, increase the volume of production of competitive products, increase production efficiency.
Reorganization strategy	Provides for restructuring, reformatting, aimed at suspending the activities of a specific legal entity without the liquidation of affairs and property with the subsequent state registration of a new legal entity. Includes the following options: merge, join, split, select, transform.
Rehabilitation strategy	Includes a system of financial and economic, industrial, technical, organizational, legal, and social measures aimed at achieving or restoring the solvency, liquidity, profitability, and competitiveness of the debtor company in the long run, that is, a set of all possible measures that can lead the company to financial healing.
Elimination strategy	Applies to the inability of an enterprise to carry out its activities; is a form of exit from the market, which is used for the withdrawal of resources and the transfer to another type of activity through sale or liquidation.

enterprise, proposed by Yareмова M. I. (Yareмова, 2013), which depends on the level of economic security of the enterprise.

The analysis of strategic directions for the formation of economic security of agricultural enterprises has shown that the choice of a particular group of strategies depends on the level of economic security that was obtained after its evaluation. So with a high level of economic security, it is proposed to use a development strategy aimed at maintaining the existing level of economic security, as well as raising its level in the future. The stabilization strategy is used in enterprises with medium and low levels of economic security. This strategy allows you to optimize the financial and operational resources of the enterprise for their more effective use in the future. The critical level of economic security requires management of the strategy

of survival, which is accompanied by the introduction of radical measures to increase the level of economic security of the enterprise (reformatting the production process, organizational structure of the enterprise, etc.).

## 5. Propositions

In the process of implementation of strategies for raising the level of economic security of agricultural enterprises, it is proposed to implement certain measures in accordance with the basic components of economic security, namely:

1. Financial component. In order to strengthen the financial component, it is proposed to attract financial resources by attracting external investments and lending.

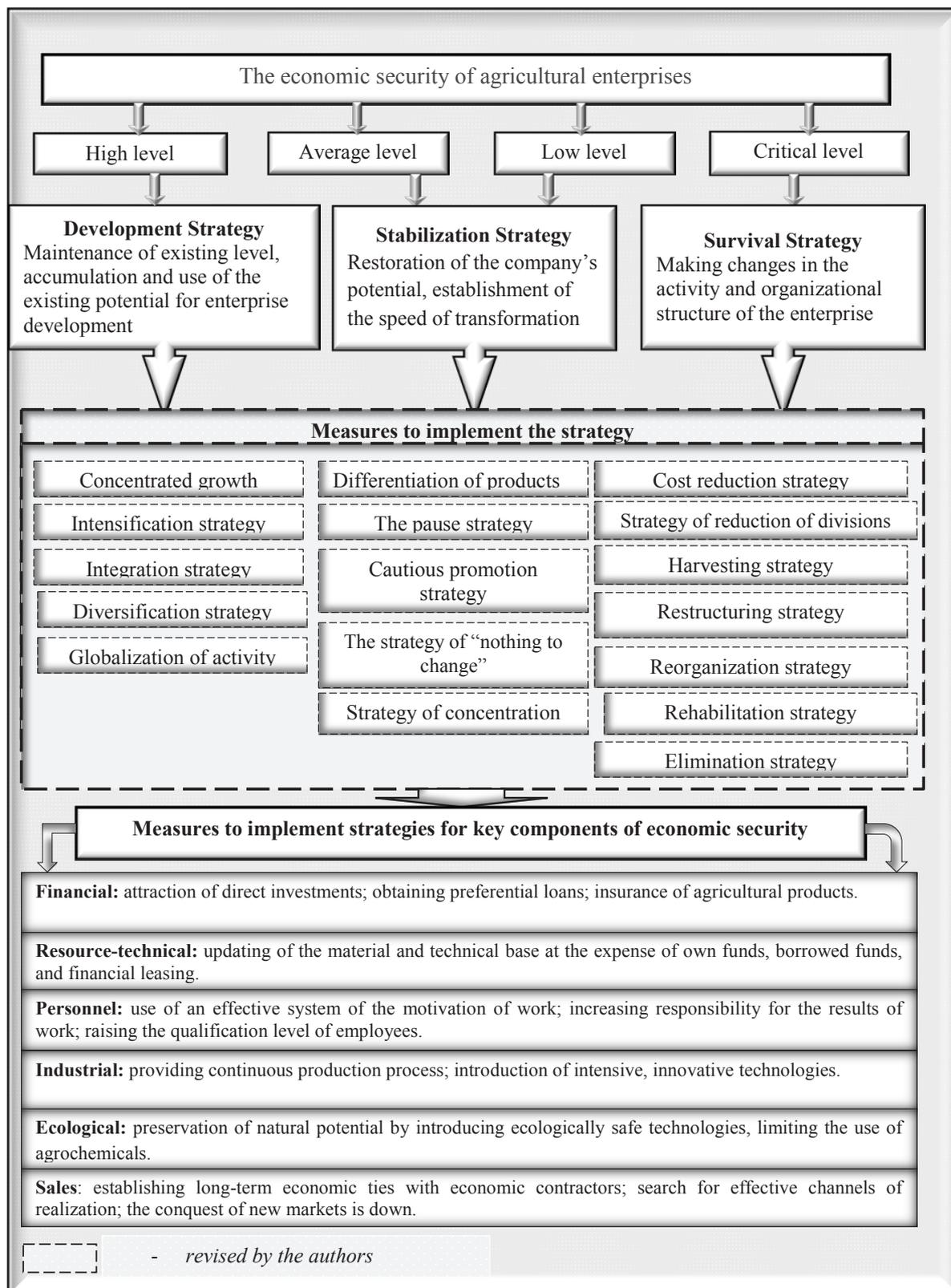


Figure 4. Strategic directions of the formation of economic safety of agricultural enterprises

Source: improved by the authors based on source (Yaremova, 2013)

2. Resource-technological component. Increasing the level of resource and technological security is possible due to financial leasing as one of the ways of long-term lending. This allows you to upgrade your company's core assets and avoid problems with borrowed funds.

3. Production component. The main directions in the increased level of industrial safety are: improving the production process and implementing resource-saving technologies.

4. Personnel component. Improvement of the system of personnel motivation, systematic development of professional skills, the favourable psychological climate in the team – the main factors in improving the personnel efficiency of the enterprise.

5. Ecological component. Ensuring an appropriate level of the environmental component of economic security involves the introduction of environmentally sound technologies, limited use of agrochemicals, and the use of organic fertilizers.

6. Sales component. To strengthen the marketing component of economic security, it is necessary to increase the production of finished products, and not raw materials. This requires the use of marketing measures that will allow them to enter new markets, increase the competitiveness of products and enterprises in general.

7. Constant monitoring of the external and internal environment of the enterprise will allow maintaining at the proper level such components of economic security as power, market, and legal.

## 6. Conclusions

Taking into account given above, we can conclude that ensuring an adequate level of economic security is one of the main functional tasks of the management of the enterprise. For the development and implementation of effective mechanisms for raising the level of economic security of enterprises, including agricultural ones, it is necessary to monitor systematically the state of economic security, using both quantitative and qualitative methods for assessing the level of economic security of an enterprise. The paper presents a methodology for assessing the level of economic security, which is based on certain components of economic security (financial component, technical and technological component, production component, intellectual and personnel component, investment and technology component, information component, environmental component, power component, legal component, components of sales, market component) by the sum method. To calculate the overall level of economic security, it is proposed to use an integral indicator, which is determined by the average level of components. Obtaining the results of the assessment of the level of economic security allows us to choose the most effective conceptual strategy for raising the level of economic security of the enterprise. The authors outline strategic directions for the formation of economic security of agricultural enterprises, the use of which depends on a certain level of economic security.

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