

Luchyk V.Ye.,
*dr.sc.(econ.), assoc. prof., head of department
of mathematical disciplines and modeling*
Luchyk M.V.,
graduate student
Podolskyi State Agrarian-Technical University

ESTIMATE OF FINANCIAL COMPONENTS OF ECONOMIC SECURITY FOR BUSINESS ENTITIES OF AGRICULTURAL SECTOR

Problem statement. Experience has shown that in agricultural economics there are potential risks and threats for the timely prevention of which it is desirable to organize systematic monitoring of indicators of economic and food security. Objective and comprehensive monitoring should be based on the analysis of specific quantitative and qualitative values of indicators that include evaluation of resource potential and opportunities for development of the industry the level of resource efficiency, capital and labor, according to the level of its most developed and advanced countries, provide social stability and development areas and more. The financial component of economic security is the main economic guarantor of stability, providing industrial base by infrastructural institutions of the distribution of financial and investment resources. [1]

Analysis of recent research and publications In conditions of globalization economy, the problems of economic security are crucial in discussions regarding the selection of alternative directions of the national economy. Research of some structural elements of economic security focus on the problem of interaction between the factors that affect the qualitative state of element of economic security in the modern conditions of economic relations. A considerable contribution to the theory of economic security in general and of agrarian industry in particular made scientists and economists such as O. Vlasyuk [1], S. Ganja [2], A. Hryvkiivska [3], D. Zhydyak [4,] M.Kulagina [5]. I. Small [6], A. Tatarkin [7], N. Tretiak [8] and others. Despite of the considerable amount of work, the problem of providing economic security of the agricultural sector, which is based on complex estimation of of the financial components require further investigation.

Objective statement. The purpose of the study is to diagnose the financial components of economic security of economic entities of agrarian industry in Ukraine.

The main material of research. Financial relations in the agricultural sector are based on the possible social and economic benefits from the use of invested capital. the riskiness ncreasing of the industry and necessity of the formation of financial security's system of the agricultural enterprises is caused by negative dynamics of the processes of economic space, including disorders of public finance and commercial finance, the loss of their creditworthiness, and exacerbation of payments crisis, a crisis of the banking system and stock market .

According to N. Tretiak, bank loans are the main source of financial support for agricultural facilities, play directionsof fixed assets and expansion of production capacity of agriculture based on STP, enabling regulation for sustainable economic development, a significant increase of its efficiency. Therefore, the process of bank lending has both positive and negative effects on the financial security of agricultural enterprises [8].

On the agricultural enterprises there are problems of access to long-term credit because they have no Mortgage property sufficient to provide a refund. In Ukraine today there is a moratorium on trade in farmlands and, therefore, prohibited the introduction of the right to land as a share of the share capital of commercial companies, sale or other alienation of land and shares that are privately owned. Therefore, with limited own financial resources and weak mortgage base of many of agricultural enterprises mortgage loans secured by agricultural lands is one way of investment resources for the development of industrial and social infrastructure of rural economy.

In most European countries, there is a closed one-tier system of land mortgage that except banks can combine savings and loan associations, mutual credit cooperatives, insurance companies and other lending institutions. In a two-tier open model of lending which was established in the United States any banks can provide credit facilities on security of land. These funds are directed to refinance lenders in the banks that take part in the land mortgage program [2, c.262].

Agriculture is highly risky, and financial results of business entities of the sector is vulnerable. According to E. Zhydyak, financial security is the work of the state and societydirected on implementation of total national idea, on the protection of national values and national interests by supporting of financial stability due to balance of Finance sufficient liquidity and availability of the necessary financial resources. [4, c.123].

State financial support for agriculture in developed countries ranges from 35-40% (countries of the European Union and the United States) to 72% (in Japan and France), and indicators of Ukraine are at 8.3% of the value of output [6, p. 19], which does not satisfy the current needs.

Should be noted that with the reduction of the tax burden in agriculture has failed to increase the efficiency, level of financial security, competitiveness of agricultural enterprises, improve financial opportunities for rural development and solve social problems in rural areas [3, c. 214].

In Table. 1 there is an analysis of indicators of financial security of business entities of the agricultural sector of Ukraine for 2008-2012.

Table. 1

Indicators and threshold values of financial security of business entities of Agrarian sector of Ukraine

	Threshold values	2008	2009	2010	2011	2012
Current Ratio	>1,6-2,0	1,621	1,645	1,868	2,00	1,896
Quick Ratio	>0,5-0,6	0,813	0,878	1,045	1,028	1,051
Absolute liquidity ratio	>0,2-0,3	0,136	0,117	0,117	0,122	0,116
Coefficient of financial independence	>0,5	0,472	0,483	0,564	0,544	0,536
Coefficient of financial dependence	<0,5	0,759	0,874	0,806	0,759	0,752
Ratio of own current assets	>0,1	0,046	0,079	0,266	0,267	0,268
Financial stability ratio	>0,7	0,648	0,648	0,706	0,679	0,657
Mobility rate of equity	>0,5	0,053	0,090	0,278	0,301	0,313
Leverage ratio	≤1	1,606	1,809	1,430	1,395	1,404
Inventory turnover ratio	>20	6,626	8,188	9,350	8,132	8,870
Receivables turnover ratio	>15	2,029	2,044	2,001	2,003	1,905
Return on assets	>0,10	0,043	0,051	0,101	0,113	0,097
Return on equity	>0,15	0,091	0,105	0,179	0,209	0,182
Return on loan capital	>0,12	0,057	0,058	0,125	0,149	0,130

Source: Calculated by the author.

Liquidity ratios in Table. 1 are of interest not only for the management of agricultural enterprises, but also for external actors of the analysis: absolute liquidity ratio is of interest for suppliers of raw materials, quick ratio - for banks, current liquidity - to investors.

Thus, the excess of current assets over short-term financial liabilities provides a buffer to compensate the losses that may be incurred by enterprises of the industry while placing and elimination of all current assets except cash. The greater the value of the stock (the best result of 2011 - 2.0), the greater the confidence of creditors that the debts will be paid.

Quick Ratio calculated for the of business entities, rather significant - 0,8-1,1. Its value is due to the fact that part of the financial resources of the industry is dominated by loan capital, the majority of which is accounts receivable. Absolute liquidity ratio shows that there is a lack of equity in farmers, only 11-13% short-term debt can be repaid through the available cash.

Coefficients of financial independence of own current assets, financial dependence and financing indicate a high dependence on external sources of funding. This dependence can be considered a reasonable investment strategy in case of the return on equity increase permanently. Ukrainian agricultural enterprises had a return on equity for 2008-2012 at 0,152, which is in the limit. Recent years have seen a positive trend indicator, but it is insignificant and unstable. Low levels of mobility equity is because the agricultural enterprises using preferably loan capital. Low inventory turnover and receivables do not allow timely repay the debt, which entails the fines, penalties and more. Dynamics of the integral index of financial security of business entities of Agrarian sector of Ukraine is presented in Fig. 1.

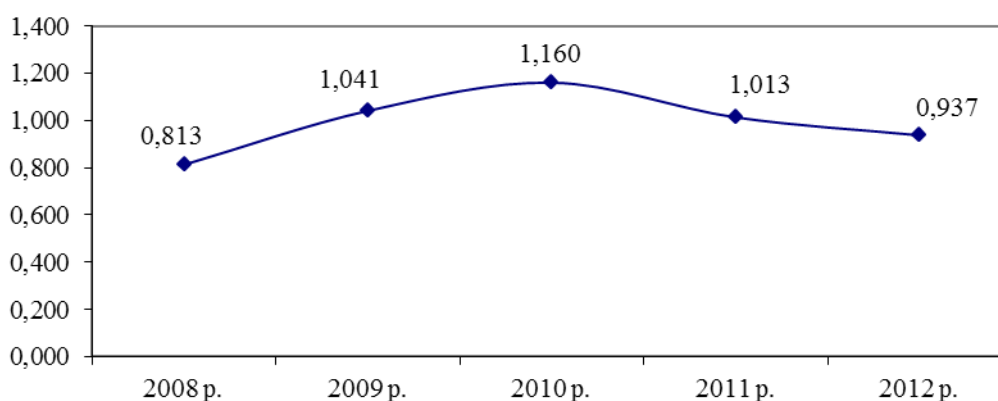


Figure. 1. Dynamics of the integral index of financial security of business entities of Agrarian sector of Ukraine

Source: Calculated by the author.

Computed integral index of evaluation of financial security of business entities of the agricultural sector for 2008-2012 indicates that the financial activities of these companies provides the conditions of simple reproduction, although seen some positive changes.

Summary and further research. To ensure the financial stability of the industry for a long period, it is necessary to constantly monitor the financial condition of its business entities to respond quickly to change, to learn their pattern and causes of a deviation from a critical limit of satisfactory evaluation on the grounds of financial stability, solvency, take measures to improve the financial and economic activities. The financial security of agrarian industry is a system of protecting the interests of the financial sector and reduction of threats to business entities, providing them financial stability and solvency, the minimum risk of probability of bankruptcy. On this basis, the need to forecast the criteria of the strategy of economic security, to develop agrarian industry, due to the importance of ensuring the economic security of Ukraine in the current conditions of globalization of the economy.

References

1. Vlasiuk, O. (2008), *Teoriia i praktyka ekonomichnoi bezpeky v systemi nauky pro ekonomiku* [Theory and practice of economic security in the sciences of economics], Nats. in-t probl. mizhnar. bezpeky pry Radi nats. bezpeky i oborony Ukrainy, Kyiv, Ukraine, 48 p.
2. Ganzha, S.V., Rogovskiy, Ye.I. and Ganzha, N.S. (2012), "The mechanism of mortgage lending on bail agricultural land: the classic approach and regional experience of modern Russia", *Izvestiya Altayskogo gosudarstvennogo universiteta*, no. 2-1 (74), pp. 261-269.
3. Hryvkivska, O. (2012), *Zabezpechennia finansovoi bezpeky silskoho hospodarstva* [Ensuring financial of security of agriculture], "Aston", Ternopil, Ukraine, 340 p.
4. Zhydiak, O. (2012), "Mechanism to ensure financial security of agriculture: theoretical aspect", *Naukovyi visnyk NLTU Ukrainy*, issue. 22.7, pp.122-126.
5. Kulagina, N. (2010), *Formirovaniye sistemy ekonomicheskoy bezopasnosti* [Formation of the system of economic safety], OOO "Ladomir", Bryansk, Russia, 215 p.
6. Malyi, I. (2008), "About romanticizing of private land ownership and the agricultural sector crisis", *Ekonomichna teoriya*, no.3, pp. 11-20.
7. Tatarkin, A. etc. (1997), *Ekonomicheskaya bezopasnost regiona: yedinstvo teorii, metodol. issled. i praktika* [Economic security of the region: the unity of theory, methodology, issled, and practice], Urals. gos. un-t, Yekaterinburg, Russia, 240 p.
8. Tretiak, N. (2010), "The financial security of agricultural enterprises in the circuit bank lending", *Visnyk Universytetu bankivskoi spravy Natsionalnoho banku Ukrainy*, no. 3(9), pp. 89-93.

Luchyk V., Luchyk M. ESTIMATE OF FINANCIAL COMPONENTS OF ECONOMIC SECURITY FOR BUSINESS ENTITIES OF AGRICULTURAL SECTOR

Purpose. The aim of the study is to diagnose the financial components of economic security entities agricultural sector in Ukraine.

Methodology of research. To achieve this goal in the following applied research techniques and methods: systematic, dialectical, logical, historical and synergistic. Calculate the integral index of the financial components of economic security of the agricultural sector by means of statistical analysis.

Findings.. The expediency of assessing the financial components of economic security entities agricultural sector in Ukraine on the basis of theoretical and methodological frameworks relevant teaching positions, which reveals its contribution to the dynamics of the complex index of economic security of the agricultural sector.

Originality. Scientific novelty is to improve the methodology for determining the parameters and thresholds financial security entities agricultural sector of Ukraine, on the basis of which should be formulated strategic priorities, build scenarios and forecasts for the agricultural sector.

Practical value. The obtained results allow to assess the solvency and competitiveness of the agricultural sector, financial stability, business activity and profitability, ensure expanded reproduction and ensuring economic security at all levels of government.

Key words: financial security, economic security of the agricultural sector, indicators and thresholds financial components.