

Галузева економіка

UDK 338.2:658.15

JEL classification: G32

Larysa Dokiienko

Candidate of Economic Sciences, Associate Professor

ORCID: 0000-0001-6528-6810

International University of Finance, Ukraine

DIAGNOSIS OF FINANCIAL SECURITY LEVEL AS THE MAIN TOOL OF FINANCIAL STRATEGY DEVELOPMENT OF OIL-EXTRACTION COMPANIES

ДІАГНОСТИКА РІВНЯ ФІНАНСОВОЇ БЕЗПЕКИ ЯК ОСНОВНИЙ ІНСТРУМЕНТ ФІНАНСОВОЇ СТРАТЕГІЇ

The article is devoted to the consideration of modern financial instruments for diagnosing the level of financial safety of companies in the oil-and-fat industry. A three-tiered system for assessing financial safety has been developed for the oil-extraction companies, based on a review of modern approaches to assessing financial safety. The system includes a classic financial analysis tool (coefficient model and discriminatory bankruptcy forecasting models), a financial stability assessment tool (definition of current financial stability and modified balance model), and a value-based management model toolkit «VBM–EVA–BSC»). It has been shown that the most popular approach to diagnosing the financial safety of a company in practice is the coefficient method, which includes estimation and analysis of key financial indicators: profitability, business activity, solvency, and financial stability. On the basis of the coefficient model, a diagnosis was made of the level of financial safety of the leading domestic vegetable oil-extraction companies. The consolidation of the results made it possible to develop a matrix of strategic financial position of the internal financial environment of oil-extraction companies. On the basis of the trends and prospects for further development of the oil-and-fat industry of Ukraine, a matrix of the strategic financial position of the external financial environment for the companies studied has been developed, which determines their development possibilities and potential threats. The combination of the two matrices of strategic financial position of oil-extractions companies has led to the development of a matrix of possible strategic directions for their financial development, with the identification of the desired financial strategy within the framework of the desired level of financial security.

Keywords: diagnostics, financial security, level of financial security, financial stability, profitability, business activity, strategic financial position, oil-and-fat industry, oil-extraction companies.

Стаття присвячена розгляду сучасного фінансового інструментарію діагностики рівня фінансової безпеки підприємств олійно-жирової галузі. На основі розгляду сучасних підходів до оцінки рівня фінансової безпеки сформовано трикомпонентну систему її оцінювання для підприємств олійно-жирової галузі. Дана система включає класичний інструментарій фінансового аналізу (коефіцієнтну модель та дискримінантні моделі прогнозування ймовірності

банкрутства), інструментарій оцінювання фінансової стійкості (визначення типу поточної фінансової стійкості та модель модифікованого балансу) та інструментарій вартісно-орієнтованого управління модель «VBM–EVA–BSC»).

Доведено, що найбільш популярним підходом до діагностики рівня фінансової безпеки підприємства в практичній діяльності є коефіцієнтний метод, який включає оцінку та аналіз ключових фінансових показників: рентабельності, ділової активності, платоспроможності, фінансової стійкості. На основі коефіцієнтної моделі здійснено діагностику рівня фінансової безпеки провідних вітчизняних олійноекстракційних підприємств. Узагальнення отриманих результатів дозволило розробити матрицю стратегічної фінансової позиції внутрішнього фінансового середовища олійноекстракційних підприємств. На основі тенденцій та перспектив подальшого розвитку олійно-жирової галузі України розроблено матрицю стратегічної фінансової позиції зовнішнього фінансового середовища для досліджуваних підприємств, яка визначає їх можливості розвитку та потенційні загрози. Поєднання двох матриць стратегічної фінансової позиції олійноекстракційних підприємств дозволило розробити матрицю можливих стратегічних напрямів їх фінансового розвитку з визначенням бажаної фінансової стратегії у рамках забезпечення бажаного рівня фінансової безпеки.

Ключові слова: діагностика, фінансова безпека, рівень фінансової безпеки, фінансова стійкість, рентабельність, ділова активність, стратегічна фінансова позиція, фінансова стратегія, олійно-жирова галузь, олійноекстракційні підприємства.

Introduction. Ukraine ranks first in the world in the production of sunflowers, covering one-third of the world market. The largest share is in the production of raw sunflower oil, 95% of which is exported. [3]

Oil-and-fat industry today its 64 processing plants, 48 oil extraction plants, exports to more than 120 countries of the world, and \$350 million investment. Ukraine produces an average of 6,400,000 tons of oil per year, of which 6 million are exported, which is 60% of world exports [7].

The oil-and-fat industry of Ukraine is one of the leading and mobile in the country's agro-industrial complex. Modernization of equipment, use of modern resource-saving technologies, a wide range of products, high level of competitiveness, the export orientation of the industry – features characterizing the contribution of this sector to the domestic economy.

There is no doubt that the problem of ensuring the financial security of oil-extraction companies has become a matter of extreme urgency in recent years. This is due not only to the financial crises and the unstable financial and economic situation in the country but also to the constant variation in energy prices and the high dependence on agriculture, which is seasonally based environmental, climatic and biological factors; high resource intensity of the industry; export-commodity orientation, which makes external market positions unstable, as demand for commodities is volatile and subject to high price volatility; increasing the cost of banking services, etc.

Consequently, the oil-extraction companies managers were faced with the search for the most convenient, quick, and easy-to-use approaches to diagnosing their financial safety level.

Setting objectives. The purpose of the article is to diagnose the level of financial safety of oil-extraction companies on the basis of the coefficient model and to develop the matrices of strategic financial position and possible strategic directions of their financial development.

Methodology. The methodology of the study is based on general scientific and empirical techniques based on a systematic approach. The methods used are comparison, analysis and synthesis, systematization, and generalization in the formulation and substantiation of research results. The information base of the research was made up of scientific works of domestic and foreign scientists, official financial statements of oil extracting enterprises under investigation, as well as other information sources on the subject of the article.

Research Results. It is common in the modern professional literature to single out different approaches to determining the nature of a companies' economic security. They can be roughly divided into five groups: as one of the components of the economic security of the company; as a separate subject of management; as a financial condition of the company, they are characterized by a corresponding resilience to external and internal threats; as a state of protection of financial interests of an company against various threats; as a risk management activity.

In the author's view, the best definition of I.O.Blank is that the financial security of an company is a quantitatively and qualitatively determined level of his financial status, which ensures stable protection of its priority balanced financial interests from identified real and potential threats of external and internal nature, the parameters of which are determined on the basis of its financial philosophy and create the necessary prerequisites for financial support for its sustainable development in the current and prospective period. [1]

One of the most problematic and debatable processes to date is the process of financial diagnosis and assessment of the financial safety of an company. In the various spheres of activity of companies, a comprehensive assessment of their financial safety is highly complex from the methodological point of view and almost always raises controversial questions among scientists and practitioners. The main approaches to assessing the financial safety of an company, which are now presented in the professional literature, can be presented as follows [2,5,6,8,9,11]:

- as part of the economic security of the company;
- based on the definition of an integral indicator or on the calculation of financial coefficients or on the determination of the level of safety of individual financial safety components;

– based on the overall financial performance of the company.

In the author's view, the third approach is the most appropriate one, and accordingly, it is advisable to use methodological approaches to diagnose the level of financial safety of domestic oil-extraction companies, which will make it possible to define the position of companies in the matrix of strategic financial position and to develop a matrix of possible strategic directions of financial development of companies in the oil-and-fat industry (fig.1).

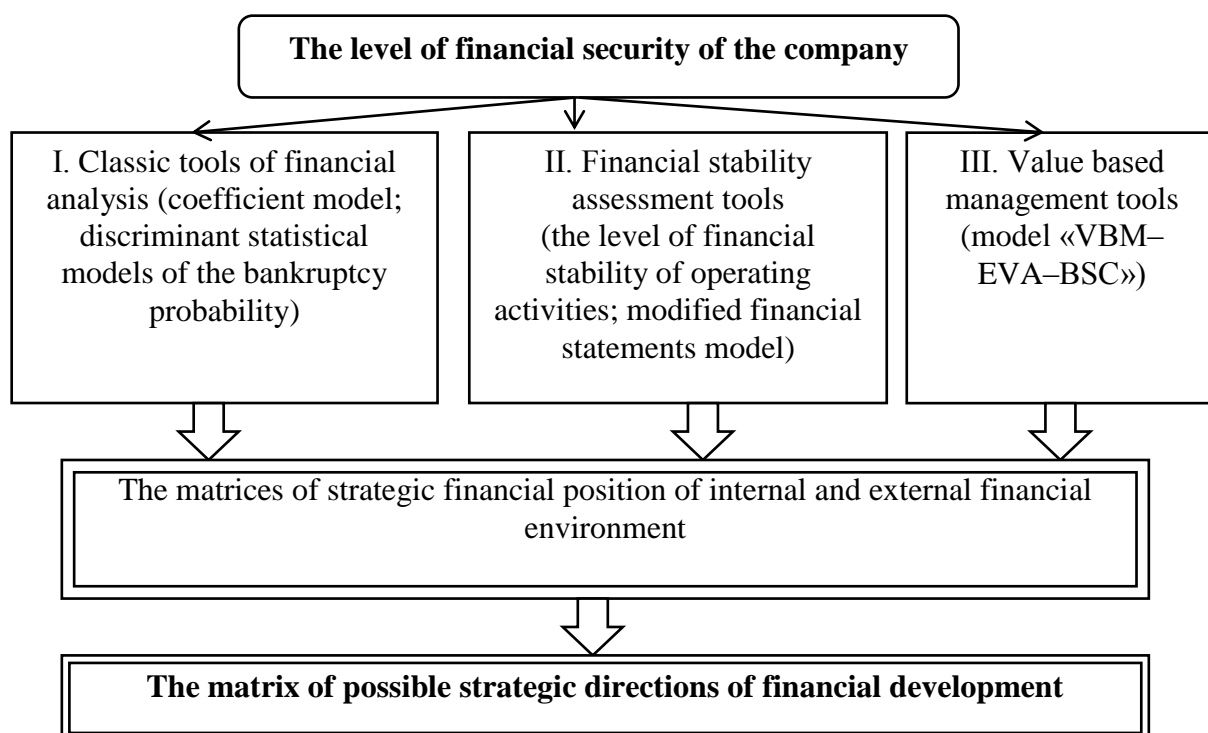


Figure 1 – System for assessing the level of financial security of oil-extraction companies

Source: developed by the author

The most popular approach to diagnosing the financial security level of a company in practical activities is the coefficient method, which includes estimation and analysis of key financial indicators: profitability, business activity, solvency, financial stability. It is on the basis of this model that it is proposed to diagnose the level of financial safety of the oil-and-fat industry of Ukraine. To this end, the author selected five oil-extraction companies for research, the reasons for which were the following:

1. Companies have been selected and grouped according to their specialization (production of sunflower oil and other vegetable oils), size of activity, type of activity, organizational and legal form of operation.

2. All selected companies are joint-stock companies. This is because the aim is to select companies that have been in the market for a long time and meet the needs of a large number of consumers and are important in the oil-and-fat industry.

3. Selected oil-extraction companies are located in different regions of Ukraine.

4. Two of the oil-extraction companies selected for analysis are included in the top 10 of the most powerful oil-extraction plants of Ukraine: PJSC "Vinnitsa Oil Seeds Crushing Factory" and PJSC «Pology Oil-Extraction Plant».

Accordingly, the calculation of key indicators of the profitability of the oil-extraction companies showed fairly negative trends in the field, since all the companies studied had suffered losses in the last six years, profitability was very low during periods of profitability (Table 1).

Table 1 – Profitability indicators of oil-extraction companies, %

Indicator	In fact, for the period					
	2014	2015	2016	2017	2018	2019
1. PJSC "VINNITSA OSCF"						
1. Profitability of operating costs	38,11	22,25	5,96	loss	loss	loss
2. Return on total assets (ROA)	7,51	20,18	8,50	0,25	loss	loss
3. Return on common equity (ROE)	0,01	0,03	0,02	loss	loss	loss
2. PJSC "ZAPORIZHZHA OEP"						
1. Profitability of operating costs	loss	loss	loss	loss	loss	loss
2. Return on total assets (ROA)	loss	loss	loss	loss	loss	loss
3. Return on common equity (ROE)	loss	loss	loss	loss	loss	loss
3. PJSC "ADM ILLICHIVSK"						
1. Profitability of operating costs	13,29	12,26	loss	5,54	18,45	36,72
2. Return on total assets (ROA)	8,80	4,74	loss	2,06	8,82	18,87
3. Return on common equity (ROE)	16,60	7,35	loss	loss	27,20	65,56
4. PJSC "KROPYVNYTSKY OEP"						
1. Profitability of operating costs	12,26	28,46	30,47	22,67	loss	0,42
2. Return on total assets (ROA)	loss	1,44	8,22	7,70	0,57	2,03
3. Return on common equity (ROE)	loss	loss	9,39	8,03	loss	2,56
5. PJSC "POLOGY OEP"						
1. Profitability of operating costs	13,93	5,58	1,93	2,52	loss	1,37
2. Return on total assets (ROA)	loss	16,09	2,0	3,61	0,09	3,41
3. Return on common equity (ROE)	loss	38,84	loss	4,32	loss	4,17

Source: calculated by the author on the basis of financial statements of companies [12-16]

The business activity of a company is reflected in the speed of turnover of its working assets. The dynamics of key business indicators, shown in the table 2, showed significant problems in three out of five oil-extraction companies under investigation: PJSC "Zaporizhzhya OEP", PJSC "Kropyvnytskyi OEP" and PJSC "Pologi OEP". The aging receivable turnover period was very high compared to the accounts payable turnover period, resulting in an increase in the quality of the operational and cash conversion cycle and a persistent cash deficit.

Table 2 - Indicators of business activity of oil-extraction companies, days

Indicator	In fact, for the period					
	2014	2015	2016	2017	2018	2019
1. PJSC "VINNITSA OSCF"						
1. Inventory turnover period	9,0	613,8	50,9	43,6	50,1	38,1
2. Receivables turnover period	24,6	290,7	57,9	69,2	68,5	64,3
3. Accounts payable turnover period	82,6	1382,9	149,1	151,3	167,1	199,9
4. Operating cycle	33,5	904,5	108,8	112,8	118,6	102,4
5. Cash conversion cycle	-49,0	-478,4	-40,3	-38,5	-48,5	-97,5
2. PJSC "ZAPORIZHZHA OEP"						
1. Inventory turnover period	x	x	293,7	57,5	15,7	4202,8
2. Receivables turnover period	x	x	553,7	1416,7	254,2	67683,2
3. Accounts payable turnover period	x	x	242,7	356,3	6,7	14555,4
4. Operating cycle	x	x	847,4	1474,3	270,0	71886,0
5. Cash conversion cycle	x	x	604,7	1117,9	263,3	57330,6
3. PJSC "ADM ILLICHIVSK"						
1. Inventory turnover period	12,7	196,8	20,7	59,5	71,5	63,7
2. Receivables turnover period	35,1	384,3	52,0	93,8	70,8	67,1
3. Accounts payable turnover period	55,3	684,8	94,0	377,7	291,3	234,1
4. Operating cycle	47,8	581,1	72,8	153,3	142,3	130,7
5. Cash conversion cycle	-7,5	-103,7	-21,2	-224,4	-149,0	-103,3
4. PJSC "KROPYVNYTSKY OEP"						
1. Inventory turnover period	7,5	16,0	19,7	21,1	15,9	19,1
2. Receivables turnover period	91,3	287,0	372,3	326,6	157,2	98,5
3. Accounts payable turnover period	6,4	12,3	20,9	31,2	79,6	207,9
4. Operating cycle	98,8	303,0	392,1	347,7	173,1	117,6
5. Cash conversion cycle	92,4	290,6	371,2	316,5	93,5	-90,2
5. PJSC "POLOGY OEP"						
1. Inventory turnover period	61,2	139,1	123,7	122,9	100,3	70,3
2. Receivables turnover period	26,2	50,6	40,8	43,8	43,1	35,8
3. Accounts payable turnover period	90,4	191,2	135,2	121,3	96,2	89,2
4. Operating cycle	87,4	189,6	164,5	166,6	143,4	106,1
5. Cash conversion cycle	-3,0	-1,5	29,4	45,3	47,2	16,9

Source: calculated by the author on the basis of financial statements of companies [12-16]

The dynamics of the key indicators of the financial sustainability of the oil-extraction companies under study has shown that most of them do not meet generally accepted standards and have a negative downward trend, that is to say, the level of financial stability was rather low, and therefore constitutes a direct threat to their financial security (fig.2-4).

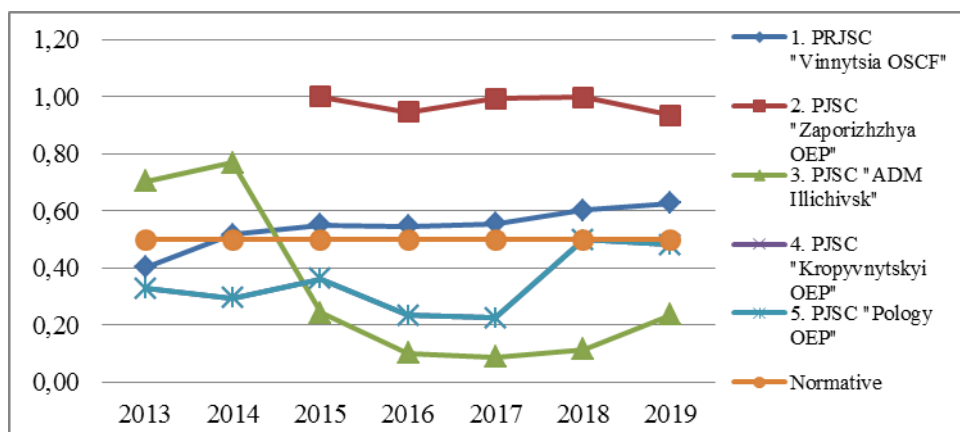


Figure 2 – Dynamics of the coefficient of financial autonomy of oil-extraction companies, at the end of the study periods

Source: compiled by the author on the basis of financial statements of companies [12-16]

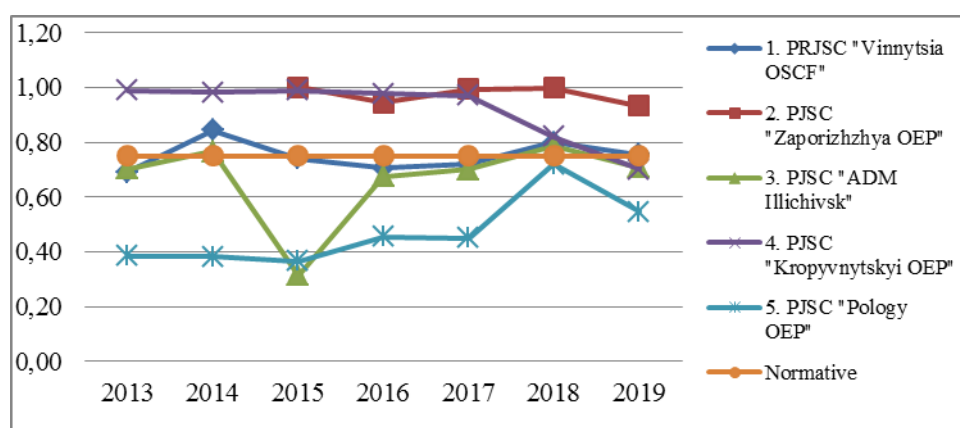


Figure 3 – Dynamics of the coefficient of financial stability of oil-extraction companies, at the end of the study periods

Source: compiled by the author on the basis of financial statements of companies [12-16]

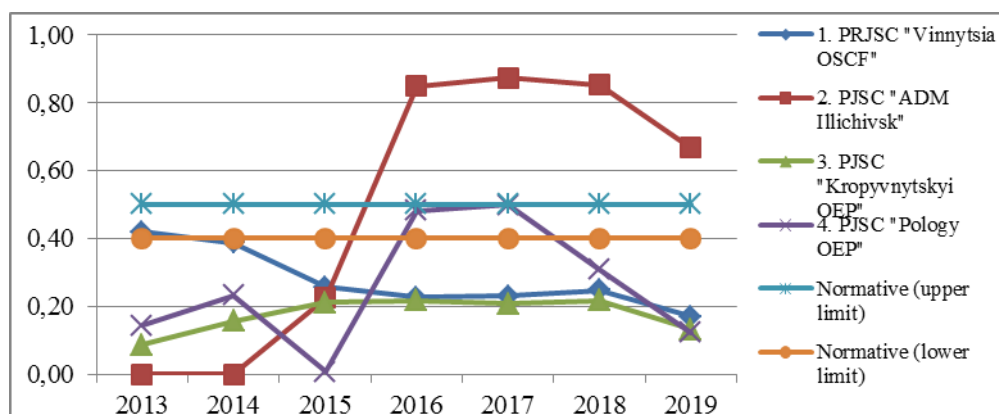


Figure 4 - Dynamics of the coefficient of long-term capital attraction of oil-extraction companies, at the end of the studied periods

Source: compiled by the author on the basis of financial statements of companies [12-16]

Accordingly, the type of current financial stability of the most from research oil-extraction companies was critical (Table 3).

Table 3 - Determining the type of current financial stability of oil-extraction companies

Companies	In fact, at the end of the year*						
	2013	2014	2015	2016	2017	2018	2019
1. PJSC "Vinnytsia OSCF"	CFS	CFS	CFS	CFS	CFS	CFS	CFS
2. PJSC "Zaporizhzhya OEP"	x	x	AFS	AFS	AFS	AFS	AFS
3. PJSC "ADM Illichivsk"	NFS	NFS	NFS	CFS	CFS	CFS	CFS
4. PJSC "Kropyvnytskyi OEP"	NFS	CFS	CFS	CFS	CFS	CFS	CFS
5. PJSC "Pology OEP"	NFS	CFS	CFS	CFS	CFS	CFS	CFS

* AFS - absolute financial stability, NFS - normal financial stability; CFS - critical financial state.

Source: determined by the author on the basis of financial statements of companies [12-16]

The level of solvency was sufficient only at PJSC "Zaporizhzhya OEP" throughout the research period and at PJSC "Kropyvnytskyi OEP" until the end of 2017. Other companies were insolvent at the time of the assessment, after all, all the coefficients did not meet the normative and for the most part, decreased (table 4).

Table 4 - Indicators of solvency of oil-extraction companies

Indicator	In fact, at the end of the year:						
	2013	2014	2015	2016	2017	2018	2019
1. PRJSC "VINNITSA OSCF"							
1. Current ratio	0,2	0,7	0,8	0,8	0,8	0,7	0,5
2. Quick ratio or «acid test»	0,2	0,6	0,3	0,6	0,4	0,5	0,3
3. Cash ratio	0,0	0,0	0,01	0,04	0,02	0,06	0,04
4. Capital manoeuvrability ratio	-0,6	-0,1	-0,1	-0,1	-0,1	-0,1	-0,2
2. PJSC "ZAPORIZHZHA OEP"							
1. Current ratio	x	x	x	2,7	25,9	101,3	2,9
2. Quick ratio or «acid test»	x	x	x	2,7	24,4	96,2	2,8
3. Cash ratio	x	x	x	0,00	0,14	0,01	0,00
4. Capital manoeuvrability ratio	x	x	0,1	0,1	0,2	0,2	0,1
3. PJSC "ADM ILLICHIVSK"							
1. Current ratio	0,9	1,1	1,1	0,5	0,45	0,8	0,5
2. Quick ratio or «acid test»	0,8	0,7	0,8	0,4	0,3	0,5	0,3
3. Cash ratio	0,004	0,01	0,04	0,01	0,001	0,004	0,002
4. Capital manoeuvrability ratio	-0,03	0,03	0,1	-1,7	-1,8	-0,3	-0,6
4. PJSC "KROPYVNYTSKY OEP"							
1. Current ratio	21,2	16,6	54,6	20,2	13,0	1,2	0,5
2. Quick ratio or «acid test»	19,8	15,5	52,9	20,2	12,3	1,1	0,4
3. Cash ratio	1,1	0,03	0,3	0,1	0,00	0,005	0,001
4. Capital manoeuvrability ratio	0,2	0,4	0,7	0,6	0,5	0,1	-0,3
5. PJSC "POLOGY OEP"							
1. Current ratio	1,1	1,1	1,2	1,5	1,5	1,8	1,1
2. Quick ratio or «acid test»	0,4	0,5	0,4	0,45	0,5	0,7	0,5
3. Cash ratio	0,1	0,01	0,1	0,1	0,04	0,06	0,1
4. Capital manoeuvrability ratio	0,2	0,3	0,3	1,1	1,2	0,5	0,1

Source: calculated by the author on the basis of financial statements of companies [12-16]

Thus, having analyzed the evolution of the main key indicators of the financial safety coefficient model, it is possible to summarize the results in a matrix of the strategic financial position of the domestic financial environment and to determine the generalized level of financial security of the companies under investigation for the entire diagnostic period (table 5).

Table 5 - Matrix of strategic financial position of the *internal* financial environment of oil-extraction companies

Financial security indicators	Strong position	Neutral position	Weak position
1. PJSC "VINNITSA OSCF"			
1. Profitability level			+
2. Dynamics of business activity	+		
3. Level of financial stability		+	
4. Level of solvency			+
<i>Level of financial security</i>	<i>Acceptable</i>		
2. PJSC "ZAPORIZHZHA OEP"			
1. Profitability level			+
2. Dynamics of business activity			+
3. Level of financial stability	+		
4. Level of solvency	+		
<i>Level of financial security</i>	<i>Normal</i>		
3. PJSC "ADM ILLICHIVSK"			
1. Profitability level	+		
2. Dynamics of business activity	+		
3. Level of financial stability			+
4. Level of solvency			+
<i>Level of financial security</i>	<i>Normal</i>		
4. PJSC "KROPYVNYTSKY OEP"			
1. Profitability level			+
2. Dynamics of business activity			+
3. Level of financial stability		+	
4. Level of solvency		+	
<i>Level of financial security</i>	<i>Acceptable</i>		
5. PJSC "POLOGY OEP"			
1. Profitability level		+	
2. Dynamics of business activity			+
3. Level of financial stability			+
4. Level of solvency		+	
<i>Level of financial security</i>	<i>Acceptable</i>		

Source: compiled by the author on the basis of [4].

On the other hand, the level of financial security of oil-extraction companies and their position in the matrix of strategic financial position is significantly influenced by external factors, which determine the trends in the functioning and development of the oil-and-fat industry in the country as a whole (Table 6).

Table 6 - Matrix of strategic financial position of the *external* financial environment of oil-extraction companies

Opportunities	Dangers
Changing the structure of food and a significant demand for vegetable oils	Uncertainty and uncertainty in the prospects of economic development
Growth of oilseeds yield, which is a consequence of the application of agricultural technologies and adaptation to climate change	<i>Falling growth rates of the global economy</i>
Significant increase in rapeseed exports to the EU	Reducing the growth rate of oil consumption
<i>Rising prices for sunflower and rapeseed oil in the world</i>	Political background and political decisions
Changing the modification and adjustment of oil production in the premium segment	Opening land market factor
Increasing exports of sunflower oil to China	The continuation trade war between the United States and China
Investing in recycling	Rising poverty in many countries, which will not increase the production of high-oil sunflower oil

Source: compiled by the author on the basis of [7, 10].

Thus, on the basis of the strategic financial position matrices of oil-extraction companies studied, taking into account their financial safety under the influence of internal and external factors, we can propose the following possible strategic directions for their financial development (Table 7).

In this context, it should be noted that possible strategic directions for the financial development of the oil-extraction companies under study have been proposed on the basis of the following conditions: that they will take full advantage of the industry's potential and will be able to minimize potential threats. In case the influence of external threats will be more significant and their negative influence cannot be avoided, the positions of all companies will be transferred to the plane «Stability and threats» and «Weakness and threats» with strategies of limited growth or reduction.

Table 7 - Matrix of possible strategic directions of financial development of oil-extraction companies

Companies	Quadrant	Description of the situation
1. PRJSC "Vinnytsia OSCF"	"Weaknesses and opportunities"	The need for a moderate (medium) financial strategy, in the process of which the weakness of the internal financial position will be eliminated due to favourable environmental factors. A strategy of "limited growth" is proposed.
2. PJSC "Zaporizhzhya OEP"		
3. PJSC "Kropyvnytskyi OEP"		
4. PJSC "ADM Illichivsk"	"Power and threats"	There is a choice between attacking and moderate financial strategies. External threats are neutralized due to strong internal financial potential. Strategies for "accelerated growth" or "limited growth" are proposed.
5. PJSC "Pology OEP"	"Stability and opportunities"	The ability of the company to implement an attacking aggressive financial strategy, aimed at strengthening the main financial positions due to environmental factors. Strategies for "accelerated growth" or "limited growth" are proposed.

Source: compiled by the author on the basis of [1,4].

Conclusions. The scientific novelty of the article consists in the formation of a scientific and methodological approach, which not only allows to assess the financial security level of companies according to the classical coefficient model, but also to develop, on this basis, strategic financial position matrices and to propose possible strategies for their further financial development.

The study made it possible to make a financial diagnosis of the level of financial safety of the leading domestic oil-extraction companies using a coefficient model. The consolidation of the results obtained on the level of profitability, business activity, solvency, and financial stability of oil-extraction companies has made it possible to develop matrices of their strategic financial position in the internal and external financial environment and form a matrix of possible strategic directions for their financial development.

This study will could provide a basis for further research aimed at diagnosing the financial safety of companies using other methodological

approaches: discriminant statistical models, modified balance model, and value-based management model.

References:

1. Blank I.A. (2003) Upravleniye finansovoy stabilizatsiyey predpriyatiya. [Enterprise financial stabilization management] (496p.) K.:Nika-Tsentr. El'ga, (Entsiklopediya finansovogo menedzhera"; Vol. 4). (in Russian).
2. Verhun A.M., Savchenko M.M., Tarasenko I.O. (2015). Diahnostyka rivnya finansovo-ekonomichnoyi bezpeky pidpryyemstva. [Diagnostics of the level of financial and economic security of the enterprise]. Mizhnarodnyy naukovyy zhurnal. Seriya «Ekonomichni nauky», 2, 23-26 (in Ukrainian).
3. Vlasenko I., Semko T. (2019) Oliyno-zhyrova haluz' Ukrayiny: Vyklyky ta potentsial rozvytku [Oil and fat industry of Ukraine: Challenges and development potential]. Tovary i rynky, 3, 50-59. Retrieved from: [http://tr.knute.edu.ua/files/2019/03\(31\)2019/07.pdf](http://tr.knute.edu.ua/files/2019/03(31)2019/07.pdf). (in Ukrainian).
4. Dokiienko L.M. (2007) Model'nyy instrumentariy otsinky typu finansovoyi stiykosti pidpryyemstva [Model tools for assessing the type of financial stability of the enterprise]. Finansova systema Ukrayiny. Zbirnyk naukovykh prats', 9, Ch.2, 173-184. (in Ukrainian).
5. Zachosova N.V., Bybyk A.M. (2017) Napryamy zabezpechennya finansovoyi bezpeky sub'yektiv hospodars'koyi diyal'nosti [Directions for ensuring the financial security of economic entities]. Naukovyy visnyk Uzhhorods'koho natsional'noho universytetu. Seriya: Mizhnarodni ekonomichni vidnosyny ta svitove hospodarstvo, 15, 25-28. (in Ukrainian).
6. T.V.Kharchuk, V.A.Kredisov, V.V.Melnik, O.A. Purdenko. (2020) Improved methods of evaluation of financial security for companies in Ukraine. Finansovo-kredytna diyal'nist': problemy teorii ta praktyky, 32, 213-222. (in English).
7. Oliyno-zhyrova haluz' 2020: tendentsiyi, prohnozy, perspektyvy. [Oil and fat industry 2020: trends, forecasts, prospects]. Retrieved from: <https://www.growthow.in.ua/oliyno-zhyrova-haluz-2020-tendentsii-prohnozy-perspektyvy>.
8. Reta M.B. (2013) Diahnostyka finansovoho stanu yak instrument upravlinnya finansovoyu bezpekoyu pidpryyemstva [Diagnosis of financial condition as a tool for managing the financial security of the enterprise]. Visnyk Natsional'noho tekhnichnoho universytetu "KHPI". Ser.: Tekhnichnyy prohres ta efektyvnist' vyrobnytstva, 67, 80-90. (in Ukrainian).
9. Upravlinnya finansovoyu bezpekoyu pidpryyemstv torhivli v umovakh nevyznachenosti: kolektivna monohrafiya (2017) [Management of financial security of trade enterprises in conditions of uncertainty: a collective monograph]. Za zah. red. A.S.Krutovoyi, (264 p.), Kharkiv: Vydavets' Ivanchenko I.S. (in Ukrainian).
10. Tsvayh H.I., Halayko N.V. (2016) Zahrozy finansoviy bezpetsi pidpryyemstva ta shlyakhy yikh usunennya [Threats to the financial security of the enterprise and ways to eliminate them]. Prychornomors'ki ekonomichni studiyi, Seriya: Ekonomika ta upravlinnya pidpryyemstvamy, 11, 181-185. (in Ukrainian).
11. Shvets' YU.O., Tsykalo K.S. (2017) Metodychnyy pidkhid do otsinky rivnya finansovoyi bezpeky promyslovykh pidpryyemstv [Methodical approach to assessing the level of financial security of industrial enterprises]. Naukovyy visnyk Mizhnarodnoho humanitarnoho universytetu, 162-168. (in Ukrainian).
12. Official website of PRJSC "Vinnitsa Oil Seeds Crushing Factory". URL: <http://vmzhk.vioil.com>
13. Official website of PJSC "Zaporizhzhya Oil-Extraction Plant". URL: <https://zmez.com.ua>
14. Official website of PJSC "Kropyvnytskyi Oil-Extraction Plant" URL: <http://kirovogradoliya.pat.ua>
15. Official website of PJSC "Pology Oil-Extraction Plant". URL: <https://mezpology.zp.ua>
16. Official website of the Agency for Infrastructure Development of the Stock Market of Ukraine. URL: www.smida.gov.ua

Література:

1. Бланк И.А. Управление финансовой стабилизацией предприятия. – К.: Ника-Центр, Эльга, 2003. – 496с. – (“Энциклопедия финансового менеджера”; Вып. 4).
2. Вергун А.М., Савченко М.М., Тарасенко І.О. Діагностика рівня фінансово-економічної безпеки підприємства /Вергун А.М., Савченко М.М., Тарасенко І.О. Міжнародний науковий журнал. Серія «Економічні науки». – 2015 - №2. – С.23-26.
3. Власенко І., Семко Т. Олійно-жирова галузь України: Виклики та потенціал розвитку / Власенко І., Семко Т. Товари і ринки. – 2019. – №3 – С.50-59 URL: [http://tr.knute.edu.ua/files/2019/03\(31\)2019/07.pdf](http://tr.knute.edu.ua/files/2019/03(31)2019/07.pdf). Дата звернення: 01.10.2020
4. Докієнко Л.М. Модельний інструментарій оцінки типу фінансової стійкості підприємства /Докієнко Л.М. Фінансова система України. Збірник наукових праць. – Острог: Видавництво НаУ “Острозька академія” – 2007. – Вип. 9. – Ч.2. – С. 173-184.
5. Зачосова Н.В., Бибик А.М. Напрями забезпечення фінансової безпеки суб’єктів господарської діяльності /Зачосова Н.В., Бибик А.М. Науковий вісник Ужгородського національного університету. Серія: Міжнародні економічні відносини та світове господарство. – 2017. – Випуск 15. – С. 25-28.
6. T.V.Kharchuk, V.A.Kredisov, V.V.Melnik, O.A. Purdenko. Improved methods of evaluation of financial security for companies in Ukraine. /Харчук Т.В, Кредісов В.А., Мельник В.В., Пурденко О.А. Фінансово-кредитна діяльність: проблеми теорії та практики. – 2020. – №1(32). – С.213-222.
7. Олійно-жирова галузь 2020: тенденції, прогнози, перспективи. [Електронний ресурс]. URL: <https://www.growth.in.ua/oliyno-zhyrova-haluz-2020-tendentsii-prohnozu-perspektyvu> Дата звернення: 01.10.2020
8. Рета М.В. Діагностика фінансового стану як інструмент управління фінансовою безпекою підприємства / Рета М.Н., Шимко Н.І. Вісник Національного технічного університету "ХПІ". Сер.: Технічний прогрес та ефективність виробництва – 2013. – №67. – С.80-90.
9. Управління фінансовою безпекою підприємств торгівлі в умовах невизначеності: колективна монографія [Текст] /За заг. ред. А.С.Крутової – Х.: Видавець Іванченко І. С., 2017. – 264 с.
10. Цвайг Х.І., Галайко Н.В. Загрози фінансовій безпеці підприємства та шляхи їх усунення /Цвайг Х.І., Галайко Н.В. Причорноморські економічні студії. Серія: Економіка та управління підприємствами. – 2016. – Випуск 11. – С.181-185.
11. Швець Ю.О., Цикало К.С. Методичний підхід до оцінки рівня фінансової безпеки промислових підприємств / Швець Ю.О., Цикало К.С. Науковий вісник Міжнародного гуманітарного університету. – 2017. – С.162-168.
12. Офіційний сайт ПрАТ "Вінницький олійножировий комбінат".URL: <http://vmzhk.vioil.com>
13. Офіційний сайт ПрАТ "Запорізький олійноекстракційний завод".URL: <https://zmez.com.ua>
14. Офіційний сайт ПрАТ "Кропивницький олійноекстракційний завод".URL: <http://kirovogradoliya.pat.ua>
15. Офіційний сайт ПрАТ "Пологівський олійноекстракційний завод".URL: <https://mezpology.zp.ua>
16. Офіційний сайт Агентства з розвитку інфраструктури фондового ринку України.URL: smida.gov.ua