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ECONOMIC SECURITY ASSESSMENT OF THE COMMERCIAL SEAPORTS

The macroeconomic instability of the country affects the efficiency of the enterprises of the maritime complex of Ukraine. The issue of financial security is relevant not only at the macro level, but also raises the question of assessing the level of financial security at the sectoral level and the level of a separate transport enterprise.

Currently, researchers prefer integrated methods for evaluation of financial security. However, there is no consensus on the assessing criteria, determining of their weight parameters, grading the levels of financial security. Initially the financial potential is associated with financial resources and their availability at the enterprise. In this case the financial potential of sustainability, which is characterized by the possibility of current business conducting, is distinguished. Such potential is the foundation for the development potential.

The principles of assessing the potential maritime business enterprise are examined, including its financial component, based on the calculation system of indicators, taking into account possibilities of improvement of existing approaches to diagnosis of the financial capacity of enterprises. The financial potential assessment conducted in this research at the example of state enterprise "Ukrainian Sea Ports Authority" allowed determining the main financial ratios and on such basis, the conclusions about the financial potential of one of the most important economic entities of the maritime industry were drawn.

The financial potential of the state enterprise "Ukrainian Sea Ports Authority" is analyzed. Based on the study of the level of financial security of USPA for 2014-2018, it was determined that the level of financial security of the enterprise is much higher than the critical one. However, the value of the integral indicator characterizing the property status of the enterprise is lower than the critical one throughout the analyzed period. Further development and analysis of the financial security of port enterprises and the determination of the assessment methodology with the consideration of industry's specifics should be investigated.

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Keywords: *economic security, financial security, elements of financial security, state enterprise "Ukrainian Sea Ports Authority" (USPA).*

Statement of the problem. The interest of scientists in the issues of transport economic security, in particular in the field of maritime transport, is determined, on the one hand, by the importance of economic security in the system of national security, on the other hand, by the role of transport in ensuring of sustainable development of the national economics and the realization of its foreign economic interests.

Transport economic security can be determined on the meso-level, assessing the economic security of the transport complex in general, investigating the features of economic security provision on maritime enterprises and the system of economic security provision at the micro-level – as a separate entity of the maritime complex.

Ensuring economic security provision as an ability to withstand threats and to deliver on the potential for development is largely determined by a sufficient level of its financial component. Indeed, financial security should be considered as the main component of the company's economic security, based on the role of finance in ensuring of normal living and the development of an economic entity.

Analysis of recent research and publications. Despite the lively interest of scientists in the problem of provision of economic security at maritime enterprises, in particular port operators, the issue of evaluation and effective financial security management remains understudied. There is no consensus among the researchers regarding the definition of the category "financial security of the enterprise", which is considered as protection from negative influences - real and potential, internal and external threats; as effective resource usage; financial situation, which creates conditions for effective economic activity, etc. The list of elements of financial security of the enterprise remains accessible.

The question of determining the criteria and indicators for assessing the level of financial security and choosing the method for its evaluation remains debatable.

The scientific literature analyzes existing methods for assessing financial security, such as indicator, integral, resource-based, based on an analysis of the enterprises bankruptcy risk, risk analysis and market value of an enterprise, etc.[1-3, 6]. However, in most studies, indicators of the financial condition of the enterprise are used, justifying the choice of one or another indicator.

Thus, the analysis of the financial potential of Ukrainian Sea Ports Authorities (further USPA) was carried out, which is also based on the indicators of assessing the overall efficiency of economic activity, the efficiency of the formation, cycle and usage of the financial resources. It is noted that the financial potential of the enterprise is rather high but is not implemented to some extent in its development [14].

The purpose of the article is to determine approaches and to analyze the financial security of the maritime enterprises in Ukraine.

The main material of the research. Currently, there is no single valid methodology for determining the level of financial security of an enterprise. Such methods for assessing the level of financial potential of the enterprise as indicating, resourceful-functional, based on the usage of the of "minimum cumulative damage to safety "criterion, determination of the probability of bankruptcy, etc..

Among the presented variety of methods for assessing the level of financial security of the entity, the authors specially focus on to the possibility of using integral and indicating methods, analysis of their varieties, their advantages and disadvantages [4, 5, 7, 8, 12, 13].

The essence of integral methods is to study various aspects of financial and economic activity of the enterprise and to integrate the aggregate of indicators into a unified criterion.

Indicative methods include the correlation of financial security indicators with the normative / limiting values of these indicators.

Within each of the two approaches, there is no consensus on the number and nature of the evaluation criteria and normative / limiting values of the indicators, the determination of the ratio of the individual or integral indicator to a specific level of financial security, the methodology for determining the validity of the components in the overall integral indicator (if using the integral method).

Thus, for the assessment of financial security, a large number of indicators, their normative value and validity and the criteria of financial security levels are proposed.

In our view the mostly acceptable approach is the integral-functional one proposed by K.S. Horyacheva, who suggests to consider the financial security of the enterprise as a combination of budget, monetary, currency, insurance, banking security and allows to evaluate various components of financial security [3].

An analysis of economic and financial activity is the basic for financial security level assessing. An assessment of financial security level is an integrated process that should be in line with the adopted concept of financial security, financial objectives and financial management, based on available information. K. S. Horyacheva believes that the indicators of financial security of the enterprise should be:

1) a part of the general system of indicators, characterizing the conditional structure of financial security of the enterprise;

2) at the same time criterion of the system of indicators that characterize the overall state of financial activity of the enterprise, that is to become part of it;

3) based entirely on the indicators of financial activity;

4) also they should reflect a certain security state of the enterprise [3].

Furthermore, we consider it important to take into account the relative ease of indicators calculation.

The indicators accepted for the analysis should characterize the financial condition, production efficiency and the dynamics of the economic development of the enterprise, which, upon condition of the satisfactory level of each indicator, provide the basis for ensuring stable economic and financial development, and therefore, a satisfactory level of financial security.

Thus, the financial safety of USPA can be assessed using traditional criteria of economic and financial efficiency and supplemented by an assessment of budgetary and investment security based on the data of financial plans of enterprises.

Calculation of the level of financial security of USPA on the level of profitability.

1. Management efficiency (profitability) of USPA are presented in Table 1.

2. The financial security assessment on the criterion of assessing the property status of the enterprise is presented in table 2.

3. Assessment of financial security by the criterion of financial stability and solvency (Table 3).

4. Indicators of business activity are presented in the table 4.

Table 1. **Evaluation of the efficiency of USPA**

Indicators, %	Normative value [1]	Actual 2014	Actual 2015	Actual 2016	Plan 2017	Plan 2018
Gross profitability, %	20,0 %	65,1	71,4	63,9	64,0	52,4
Return on assets, %	2,5 %	10,0	18,6	18,6	16,8	13,8
Return on equity, %	5,0%	10,0	20,6	20,0	18,1	14,8
Profitability of activity, %	5,0 %	40,0	56,5	52,8	47,2	36,6

Resource: calculated on the basis of [9-11]

Table 2. **The financial security assessment on the criterion of assessing the property status of USPA, 2014-2018**

Indicators	Normative value [1]	Actual 2014	Actual 2015	Actual 2016	Plan 2017	Plan 2018
Depreciation to fixed assets ratio, unit	0,5	0,9	0,9	0,9	0,9	0,9
Asset turnover ratio, unit	1	0,08	0,27	0,26	0,28	0,28
Financial stability ratio, unit	0,5	1,0	0,87	0,85	0,87	0,89

Resource: calculated on the basis of [9-11]

Table 3. **The financial security assessment of commercial seaport on criteria of financial stability and solvency**

Indicators	Normative value [1, 15]	Actual 2014	Actual 2015	Actual 2016	Plan 2017	Plan 2018
Financial independence ratio, unit	0,5	0,92	0,91	0,93	0,89	0,88
Financial stability ratio, unit	1	11,9	9,6	13,8	8,6	7,5
Long-term financial independence ratio, unit	0,85	0,98	0,96	0,94	0,94	0,89
Liquidity measurement Ratio (coverage) , unit	1	4,7	5,8	3,4	3,6	4,1
Absolute liquidity ratio, unit	0,275	1,5	4,4	2,2	0,078	0,53
Working capital financed by equity to total assets ratio, unit	0,1	-0,02	0,55	0,66	0,52	0,445

Resource: calculated on the basis of [9-11]

For the integral index assessment it is important to determine the weights and graduation levels of financial security.

Table 4. **Indicators of business activity of of USPA, 2014 – 2018**

Indicators	Normative value [1]	Actual 2014	Actual 2015	Actual 2016	Plan 2017	Plan 2018
Equity turnover, unit	1,5	0,24	0,36	0,37	0,43	0,38
Current asset turnover, unit	1,5	3,02	2,8	1,71	1,70	2,06
Turnover of total capital, unit	1	0,23	0,35	0,35	0,37	0,36

In the framework of this study, we will define the minimum level of financial security proposed in [1].

Indicators for each enterprise's assessment direction are compared with the normative values of the coefficients and the coefficient of deviation of the actual indicator from the normative basis is determined by the ratio of the actual indicator to the normative one. The integral indicator of the limiting value of financial security is calculated as the sum of deviations for each indicator. In this case, the limit value is equal to the number of indicators in the group, which is logical, as if the normative value coincides with the actual - the deviation coefficient is equal to 1, since both components will be equal to the standards of a particular indicator.

Since 16 indicators are used to assess the level of financial security, the threshold value, that is, the minimum required level of financial security, is 16.

The value of the integral index of financial security is presented in table 5.

Table 5. **Calculation of integral assessment of USPA financial security for 2014 – 2018**

Indicators	Normative value [1]	Actual 2014	Actual 2015	Actual 2016	Plan 2017	Actual 2014
1	2	3	4	5	6	7
Indicators of property status						
Depreciation to fixed assets ratio, unit	1	0,6	0,6	0,6	0,6	0,6
Asset turnover ratio, unit	1	0,1	0,3	0,3	0,3	0,3
Financial stability ratio, unit	0,5	2,0	1,7	1,7	1,7	1,8
Integral indicator, unit		2,6	2,6	2,6	2,6	2,7
Profitability Indicators						
Gross profitability, %	20,0	3,3	3,6	3,2	3,2	2,6
Return on assets, %	2,5	4,0	7,4	7,4	6,7	5,5
Return on equity, %	5,0	2,0	4,1	4,0	3,6	2,9

Continuation of the tab. 5

1	2	3	4	5	6	7
Profitability of activity, %	5,0	8,0	11,3	10,6	9,4	7,3
Integral indicator, unit		17,3	26,4	25,2	23,0	18,3
Indicators of solvency						
Current liquidity ratio, unit	1	4,7	5,8	3,4	3,6	4,1
Absolute liquidity ratio, unit	0,275	5,4	16,0	8,0	0,3	1,9
Integral indicator, unit		10,1	21,8	11,4	3,9	6,0
Indicators of financial sustainability						
Financial independence ratio, unit	0,5	1,8	1,8	1,9	1,8	1,8
Financial stability ratio, unit	1,0	11,9	9,6	13,8	8,6	7,5
Long-term financial independence ratio, unit	0,85	1,2	1,1	1,1	1,1	1,0
Working capital financed by equity to total assets ratio, unit	0,1	-0,2	5,5	6,6	5,2	4,5
Integral indicator, unit		14,7	18,0	23,4	16,7	14,8
Indicators of business activity						
Equity turnover, unit	1,5	0,16	0,24	0,24	0,28	0,26
Current asset turnover, unit	1,5	2,01	1,86	1,14	1,13	1,37
Turnover of total capital, unit	1,0	0,23	0,35	0,35	0,37	0,36
Integral indicator, unit		2,43	2,45	1,73	1,78	1,98
The minimum value of financial security, unit		47,13	71,25	64,33	47,98	43,78

Resource: calculated on the basis of [1, 9-11]

As we see from the calculations, the integral indicator of financial safety of USPA is much higher than the critical level. However, there is a declining dynamics in the provision of financial security for 2017 -2018.

In addition, the negative point is the consistent value of the integral index of financial security by the property status below the critical for the entire investigated period.

Indicators of property status was below the required value, which is 3 (3 indicators in the group) during all investigation period. This is due to the high depreciation to fixed assets ratio which have been 0,9 since 2014 year.

Profitability indicators were being above the minimum value during 2014-2018 years.

Analysis of indicators of financial sustainability and solvency also gave a positive result in terms of financial security of USPA.

Analysis of the integral indicator of solvency shows a significant excess of the critical value of 2 (as the group includes 2 indicators). The negative point is to reduce the integral indicator of solvency almost 2 times.

In all periods, the integral indicator of financial sustainability, as a component of aggregate assessment of the level of financial security, significantly exceeds the regulatory level of 4 (since this group includes 4 indicators).

It should also be noted minor fluctuations in the integral indicator of business activity. It should be noted that the integral indicator of business activity was below the required value, which is 3 (3 indicators in the group). The worst value was obtained in 2016.

An analysis of USPA showed that in 2014 - 2018 the main integral indicator of the financial security was at a sufficient level, despite that value of two integral indicators from five were below the critical value. The negative point is the decrease in the value of the integral index during last three years.

Conclusions and future research. The level of financial security was being determined through the calculation of the main index, which includes five groups of indicators. According to the groups was the integral indicator of a specific group has been determined (integral indicator of property status, integral indicator of profitability indicators, integral indicator of solvency, integral indicator of business activity, integral indicator of financial sustainability). For the analysis, 16 indicators were selected. Thus, the threshold value of the level financial security is 16.

As the result of the research the levels of financial security and financial security of USPA in particular were analyzed. As a result of the analysis of the enterprise USPA in 2014 - 2018 it can be concluded that the company is in the zone of financial security. However, we have to take into account the negative tendency of indicators decrease in recent years and the importance of the level of financial security in assessing the property status of a company that is lower than the critical level. It would be further rational to investigate the level of financial security of individual port enterprises.

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ОЦІНКА ЕКОНОМІЧНОЇ БЕЗПЕКИ МОРСЬКИХ ТОРГОВИХ ПОРТІВ

Макроекономічна нестабільність країни впливає на результативність діяльності підприємств морегосподарського комплексу України. Питання забезпечення фінансової безпеки є актуальним не тільки на макрорівні але піднімає питання оцінки рівня фінансової безпеки на галузевому рівні та рівні окремого транспортного підприємства.

На даний час науковці віддають перевагу інтегральним методам оцінки фінансової безпеки. Проте не існує єдиної думки щодо критеріїв оцінки, визначення їх вагових значень, градації рівнів фінансової безпеки.

Виконана у роботі оцінка фінансової безпеки на прикладі ДП «Адміністрація морських портів України» дозволила визначити основні фінансові коефіцієнти та інтегральний показник фінансової безпеки, на підставі чого зроблені висновки про стан фінансової безпеки одного з важливих господарюючих суб'єктів морської галузі. На основі проведеного дослідження рівня фінансової безпеки Адміністрації морських портів України за 2014 -2018 рр. було визначено, що рівень фінансової безпеки підприємства набагато вищий за мінімальний протягом всього періоду, що аналізується. Проте значення інтегрального показника, що характеризує майновий стан підприємства є нижче критичного протягом всього періоду, що аналізується.

Потребує подальшої розробки та аналізу фінансової безпеки підприємств портової галузі та визначення методології оцінки з урахуванням особливостей галузі.

Ключові слова: *економічна безпека, фінансова безпека, елементи фінансової безпеки, ДП «Адміністрація морських портів України» (АМПУ).*

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ОЦЕНКА ЭКОНОМИЧЕСКОЙ БЕЗОПАСНОСТИ МОРСКИХ ТОРГОВЫХ ПОРТОВ

Макроэкономическая нестабильность в стране влияет на результативность деятельности предприятий морехозяйственного комплекса Украины. Вопросы обеспечения финансовой безопасности является актуальным не только на макроуровне но поднимает вопросы оценки уровня финансовой безопасности на отраслевом уровне и уровне отдельного транспортного предприятия.

В настоящее время ученые предпочитают интегральным методам оценки финансовой безопасности. Однако, не существует единого мнения относительно критериев оценки, определения их весовых значений, градации уровней финансовой безопасности.

Выполненная в работе оценка финансовой безопасности на примере ГП «Администрация морских портов Украины» позволила определить основные финансовые коэффициенты и определен интегральный коефициент финансовой безопасности, на основании чего сделаны выводы об уровне финансовой безопасности одного из важных субъектов морской отрасли. На основе проведенного исследования уровня финансовой безопасности ГП «Администрация морских портов Украины» за 2014 -2018 гг. было определено, что уровень финансовой безопасности предприятия намного выше минимального значения в течении всего анализируемого периода. Однако, значение интегрального показателя, характеризующего имущественное состояние предприятия является ниже критического в течение всего анализируемого периода.

Требует дальнейшей разработки и анализа финансовой безопасности предприятий портовой отрасли и определение методологии оценки с учетом особенностей отрасли.

Ключевые слова: *экономическая безопасность, финансовая безопасность, элементы финансовой безопасности, ГП «Администрация морских портов Украины» (АМПУ).*