



Отримано: 14 лютого 2023 р.

Прорецензовано: 09 березня 2023 р.

Прийнято до друку: 14 березня 2023 р.

e-mail: Iryna.i.topii@lpnu.ua

ORCID-ідентифікатор: <https://orcid.org/0000-0001-5912-4276>

DOI: 10.25264/2311-5149-2023-28(56)-31-37

Lashchuk I. I. Financial rehabilitation of the enterprise: theoretical and practical aspects. *Наукові записки Національного університету «Острозька академія». Серія «Економіка»* : науковий журнал. Острог : Вид-во НаУОА, березень 2023. № 28(56). С. 31–37.

УДК: 658.16

JEL-класифікація: G32

**Iryna Lashchuk,**

*Doctor of Economics, Associate Professor of the Department of Finance of the National University «Lviv Polytechnic»*

## FINANCIAL REHABILITATION OF THE ENTERPRISE: THEORETICAL AND PRACTICAL ASPECTS

*An article is devoted to theoretical and practical aspects of financial rehabilitation of enterprises. Different approaches of economists to the essence and meaning of the concept of “financial rehabilitation of the enterprise” are analyzed. In the form of a graphic interpretation, the main tasks included in the financial rehabilitation of the enterprise, as well as the algorithm of methods for its implementation, are presented. A number of problems that may arise in the process of financial rehabilitation of enterprises are identified and substantiated. Among them, the most important is the cost of this process, as well as the lack of effective methods and specialists for diagnosing the financial state of the enterprise. Considering the importance of diagnosing the state of the enterprise development in the process of financial rehabilitation, it is recommended to use the economic and mathematical model of O. A. Vinnytska. The model has been tested on “InterTrade” LLC, which is engaged in wholesale and retail trade of auto parts. According to the results of economic and mathematical modeling, a tendency of the general financial condition deterioration of “InterTrade” LLC is revealed, as well as the presence of a “profitability” crisis at the enterprise. Among the advantages inherent in the proposed economic and mathematical model, it is worth highlighting the following: ease of use; availability of data necessary for calculations; compliance with the conditions of domestic enterprises management; the ability not only to assess, but also to determine a specific type of financial condition (crisis, satisfactory, stable, excellent, courageous). The general algorithm for choosing the method of financial rehabilitation of the enterprise has been improved, which consists of three interrelated stages (identification and elimination of external factors of bankruptcy of the enterprise; development and implementation of measures for financial rehabilitation of local enterprises; stabilization of the financial condition of the enterprise). For each separate stage, a goal and specific implementation measures are defined. Practical application of the algorithm will allow to solve the existing problems of enterprises quickly and qualitatively and, thus, to avoid the procedure of bankruptcy or liquidation in the future.*

**Keywords:** enterprise, financial rehabilitation, forms, methods, implementation algorithm.

**Лашчик Ірина Ігорівна,**

*кандидат економічних наук, доцент, доцент кафедри фінансів  
Національного університету «Львівська політехніка»*

## ФІНАНСОВЕ ОЗДОРОВЛЕННЯ ПІДПРИЄМСТВА: ТЕОРЕТИЧНІ ТА ПРАКТИЧНІ АСПЕКТИ

*У науковій статті досліджено теоретичні та практичні аспекти фінансового оздоровлення підприємств. Проаналізовано підходи науковців до визначення сутності фінансового оздоровлення підприємства, а також заходи його здійснення. Запропоновано загальний алгоритм методів фінансового оздоровлення підприємства. Оскільки у процесі фінансового оздоровлення підприємства важлива роль відводиться діагностиці кризового стану, запропоновано у її якості застосовувати економіко-математичну модель О. А. Вінницької. Запропоновану модель було апробовано на діяльності ТзОВ «ІнтерТрейд». Розроблено загальний алгоритм вибору методу фінансового оздоровлення підприємства, застосування якого дозволить вирішити наявні у підприємства проблеми та уникнути процедури банкрутства у перспективі.*

**Ключові слова:** підприємство, фінансове оздоровлення, форми, методи, алгоритм.

**Statement of the problem:** Financial, economic and political instability in the country is often the cause of unstable activity of domestic enterprises. Especially dangerous in today's conditions is the influence of a political factor – military operations on the territory of Ukraine. Today, a large number of enterprises are characterized by unbalanced activity, its suspension or termination in general. If appropriate forms and methods of financial rehabilitation of enterprises are not applied in a timely manner, the final result of their activity may be bankruptcy and liquidation. Accordingly, the problem of financial rehabilitation of domestic enterprises and maintenance of economic stability of the country in general is extremely urgent in today's conditions.

**Analysis of recent research and publications.** Many scientific studies and publications by both domestic and foreign scientists and economists, including: I. N. Karpun, V. P. Martynenko, O. E. Kuzmin, V. O. Neghaichuk, are devoted to the issue of financial rehabilitation of business entities [1-6]. The works of most of them are of a theoretical nature and are mostly devoted to the study of the essence, factors and subjects of the financial recovery of enterprises.

In our opinion, it is more expedient to study issues related to the forms and methods of financial rehabilitation of enterprises, which have much greater practical value.

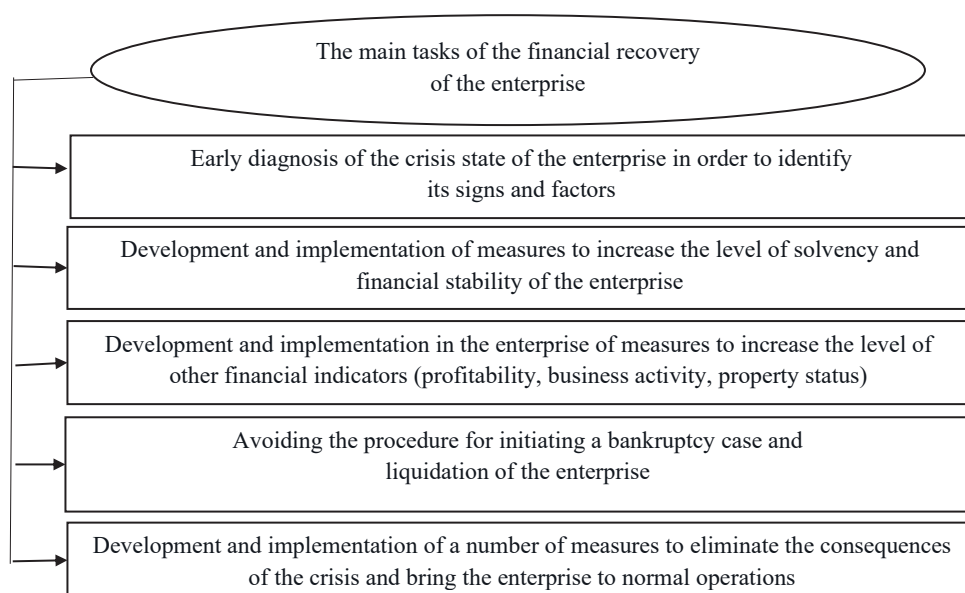
**The purpose and tasks of the research.** The purpose of the article is to study the essence and features of the financial improvement of the enterprise and to build an algorithm for choosing methods for its implementation.

**Presentation of the main material.** As shown by the data of domestic researchers, in recent years the trends of Ukrainian enterprises have significantly worsened. Such trends are characterized by unsatisfactory values of basic financial indicators such as profitability, liquidity, solvency, financial stability, etc.

The main reason for these trends is the inability of business entities to respond to macroeconomic and microeconomic factors in a timely manner and take them into account in the process of activity. One of the ways to correct such a situation is to introduce adequate forms and methods of financial rehabilitation into the activities of enterprises.

Among domestic scientists, it is customary to consider the financial recovery of an enterprise from two points of view. In the first case, the financial recovery of the enterprise is considered from the standpoint of anti-crisis management, which involves the implementation of a number of measures to overcome the crisis situation. In the second case, financial improvement is considered from the point of view of financial management, as a set of crisis prevention measures [2, p. 135]. As a rule, the consequences of financial improvement are overcoming the crisis situation and further development of the enterprise or its liquidation.

Among scientists, it is clearly defined that financial recovery can be carried out by methods of rehabilitation; reorganization and restructuring. Having analyzed the scientific works of domestic and foreign scientists devoted to the financial recovery of economic entities, we singled out a number of tasks inherent in it, which are shown in Figure 1 [1-5].

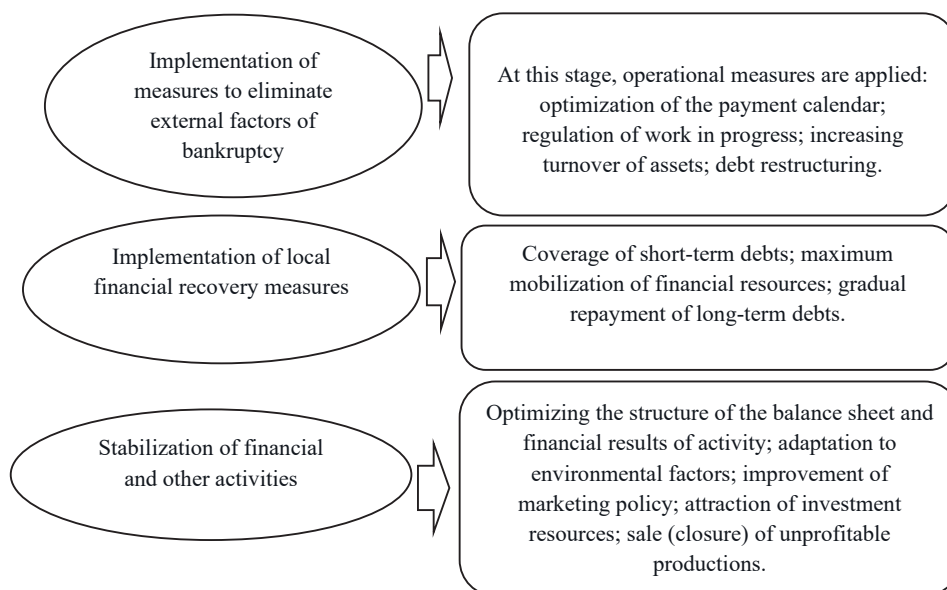


**Fig. 1. The task of financial rehabilitation of the enterprise**

\* Improved by the author based on analysis [1-5]

It is worth noting that the financial recovery of a business entity can be carried out not only after the initiation of a bankruptcy case, but also before that. This is reflected in the close relationship between financial rehabilitation and the institution of bankruptcy and financial rehabilitation. Under the latter, at the legislative level, it is customary to consider a set of measures to restore the solvency and financial stability of the business entity.

The choice of methods of financial rehabilitation of the enterprise involves a certain sequence of stages, which is shown in Figure 2.



**Fig. 2. Graphical interpretation of the general algorithm of methods of financial rehabilitation of the enterprise**

\* Improved by the author based on analysis [1–5]

Therefore, financial recovery should be considered successful if the enterprise managed to preserve the value of the economic unit, restore lost opportunities and achievements, enter new sales markets, and also maintain (increase) the level of profitability and competitiveness. In turn, the achievement of the above should be based on the adoption of adequate management decisions and maximum consideration of the factors of the surrounding environment.

Timely diagnosis of the state of the financial and economic activity of the latter plays an important role in the process of financial improvement of the enterprise [3, p. 85].

As research results show, economic and mathematical modeling is one of the most appropriate and effective diagnostic methods. One of such models, which allows for the most complete and objective assessment of the current state of financial and economic activity, is the economic-mathematical model of O. A. Vinnytska, which is based on the calculation of the integral indicator of the assessment of the financial state of the enterprise [5, p. 683].

A graphic interpretation of the stages of an integral assessment of the company's financial condition is shown in Figure 4 [5, p. 683].

It should be noted that since the indicators that characterize the financial state of the enterprise are of different weights, the author Vinnytska O. A. suggests using the weighted arithmetic mean formula to construct the rating. The advantage of the specified formula is that it allows each indicator to be assigned an appropriate level of significance.

The formula of the weighted arithmetic mean is reduced to the following form [5, p. 684]:

$$I = \sum_i^m S_i \times W_i, \quad (1)$$

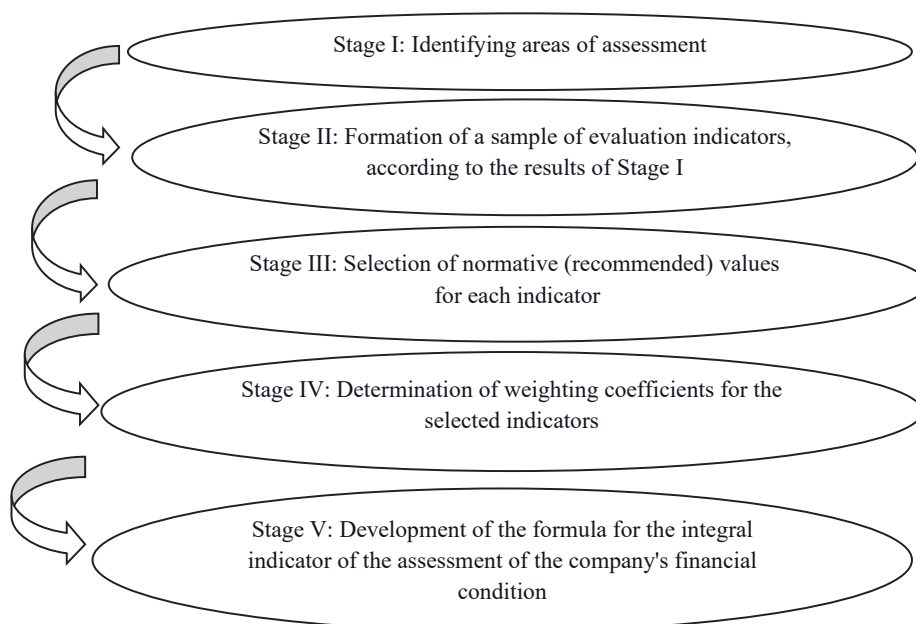
where,  $S_i$  is the standardized value of the  $i$ th indicator;  $W_i$  is the weight value of the  $i$ th coefficient;  $m$  is the number of coefficients, including the integral indicator.

In other words, the integral assessment represents the total value of the indicators that have the greatest impact on the financial condition of the enterprise. In most cases, such indicators are indicators of financial stability, profitability, liquidity and solvency.

The calculation formula for the standardization of indicators is reduced to the following form [5, p. 684]:

$$S_i = \frac{X_i}{A_i}, \quad (2)$$

where,  $X_i$  is the actual value of the financial indicator;  $A_i$  is the standard value of the financial indicator.



**Fig. 4. Graphical interpretation of the sequence of integral assessment of the company's financial condition**

According to the above, the standardization formula will take the following form [5, p. 685]:

$$I = \sum_i^m \frac{X_i}{A_i} \times W_i \quad (3)$$

The economic-mathematical model of assessing the financial state of the enterprise, proposed by Prof. Vinnytska O. A. involves the calculation of such groups of indicators as: indicators of the efficiency of capital use (Z), indicators of solvency and liquidity (Y), indicators of financial stability (X) [5, p. 685]. The system of indicators of the integrated assessment of the financial state of the enterprise and their weighting factors, proposed by Prof. Vinnytska O. A. are given in table 1.

*Table 1*

**System of indicators of integrated assessment of financial condition enterprises and their weighting factors**

Indexes	$W_i$	$A_i$
<i>Indicators of capital utilization efficiency, Z</i>		
Rate of return on current assets	6	0.1
Efficiency of use of own capital	2	0.06
Product profitability	10	0.1
Profitability of sales	4	0.05
The turnover ratio of working capital	3	2.4
Accounts Payable Turnover Ratio	3	5
<i>Solvency and liquidity indicators, Y</i>		
Absolute liquidity ratio	2	0.2
Coverage ratio	2	0.7
<i>Indicators of financial stability, X</i>		
Equity maneuvering ratio	2	0.1
Coefficient of financial independence	2	0.5

In addition, the author offers a scale for identifying types of financial status, which is shown in Table 2 [5, p. 685].

*Table 2*

**Classification of types of financial status of the enterprise**

The value of parameter I	Type of financial status of the enterprise
Less than 0	Crisis financial situation
0-38	Satisfactory financial condition
39-60	Stable financial condition
61-99	Excellent financial condition
More than 90	Courageous financial condition

The classification of the types of financial state of the enterprise, proposed by Vinnytska O. A. presented in table 3 [5, p. 685].

Table 3

### Classification of types of financial status of the enterprise

Z value	Y value	The value of X	Type of financial condition	Characteristics of the type of financial condition
$Z < 0$	$Y < 2$	$X < 0$	1 type	Close to bankruptcy
$Z < 0$	$2 < Y < 4$	$X < 0$	2 type	Low level of use of funds, as well as solvency and liquidity
$Z < 0$	$Y < 4$	$0 < X < 4$	3 type	Inefficient use of capital
$Z < 0$	$Y > 4$	$X > 4$	4 type	Loss of financial independence due to inefficient use of capital
$0 < Z < 75$	$2 < Y < 4$	$X < 0$	5 type	Loss of financial independence with property (capital) disproportions
$0 < Z < 75$	$Y < 4$	$0 < X < 4$	6 type	Profitable with a low level of solvency and liquidity
$0 < Z < 75$	$2 < Y < 4$	$X > 4$	7 type	With impaired financial stability
$0 < Z < 75$	$Y > 4$	$X > 4$	8 type	Satisfactory work of the enterprise
$Z > 75$	$Y < 4$	$X < 0$	9 type	Ambitious enterprises aimed at increasing the level of profitability
$Z > 75$	$Y < 4$	$0 < X < 4$	10 type	Enterprises with a high level of capital utilization, but an insufficient level of liquidity and solvency
$Z > 75$	$Y < 4$	$X > 4$	11 type	Financially stable enterprise due to effective use of funds and their structure
$Z > 75$	$Y > 4$	$X > 4$	12 type	Ideal type of financial condition.

We will apply an economic-mathematical model, based on the calculation of the integral indicator of the assessment of the financial condition of the studied LLP «InterTrade». We summarize the results in Table 4.

Table 4

### The results of the calculation of the integral indicator of the assessment of the financial condition of «InterTrade» LLC for 2019-2021

Indexes	$W_i$	$A_i$	Actual values, units			I		
			2019	2020	2021	2019	2020	2021
Rate of return on current assets	6	0.1	0.08	-0.041	-0.048	4.8	-0.05	0.09
Efficiency of use of own capital	2	0.06	0.08	-0.04	-0.05	2.6	-0.03	0.1
Product profitability	10	0.1	1.3	-0.85	-0.78	130	-0.06	1.19
Profitability of sales	4	0.05	0.07	-0.03	-0.04	5.6	-0.02	0.09
The turnover ratio of working capital	3	2.4	1.27	1.26	1.1	1.5	2.3	1.1
Accounts Payable Turnover Ratio	3	5	59.6	89.3	18.4	35.7	7.49	12.2
Absolute liquidity ratio	2	0.2	0.95	1.3	0.77	9.5	0.27	0.56
Coverage ratio	2	0.7	4.3	4.6	3.6	12.2	0.74	3.3
Equity maneuvering coefficient	2	0.1	0.7	0.74	0.79	14	14.8	15.8
Coefficient of financial independence	2	0.5	0.83	0.78	0.77	3.32	0.46	0.8

Let's calculate the overall value of the integral indicator of the financial condition of «InterTrade» LLC, identifying its type and type. We summarize the results in Table 5.

Table 5

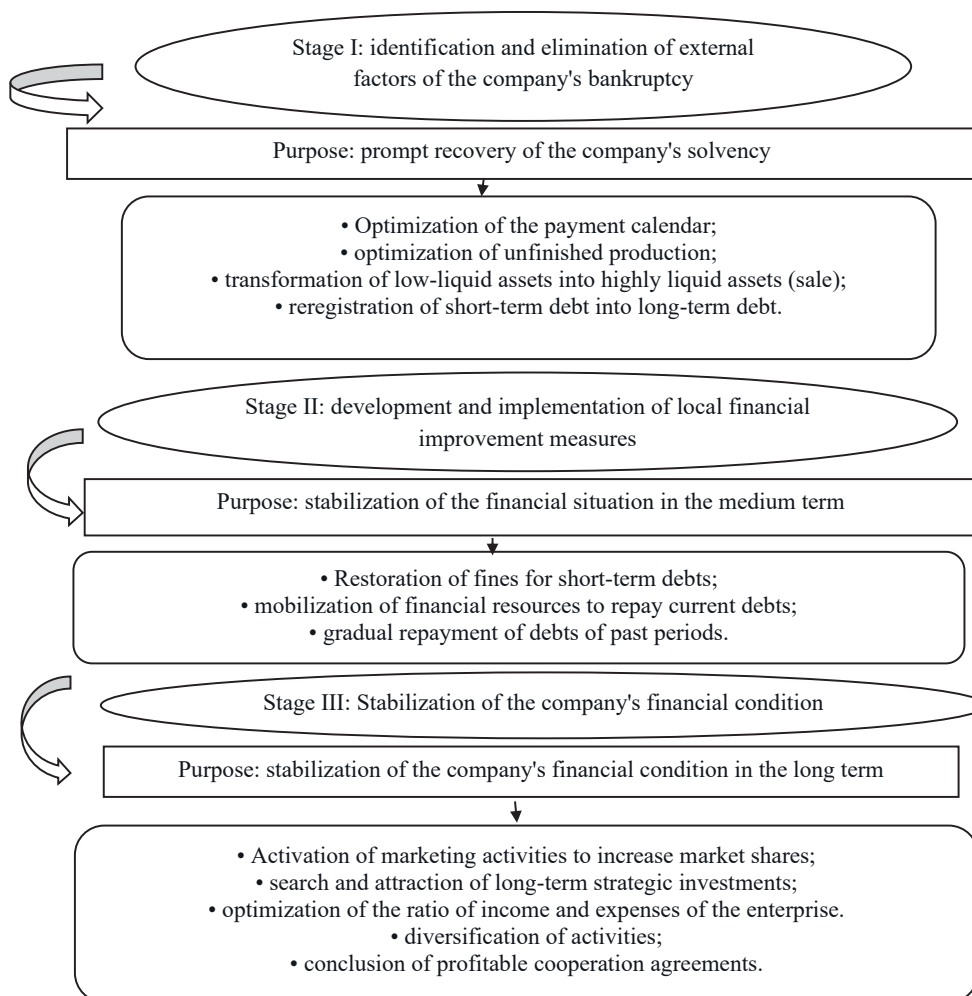
### Results of the assessment of the financial condition of «InterTrade» LLC for 2019-2021

Years	And (Z)	And (Y)	And (X)	Type of financial condition	AND	Type of financial status
2019 year	174.6	21.7	17.3	Ideal	213.6	Courageous
2020 is the year	9.63	1.01	15.2	Between type 5 and 6	25.8	Satisfactory
2021 year	14.7	3.8	16.6	Violated financial stability	35.1	Satisfactory

The results of the calculations showed that with each analyzed year the financial condition of «InterTrade» LLP worsened, which confirms the need to use an effective financial recovery mechanism.

It is worth noting that the process of financial rehabilitation can cause a number of problems, the main ones of which are as follows: the process of financial rehabilitation through the implementation of appropriate measures usually leads to the occurrence of a significant amount of company costs, especially if such measures are related to diversification or reorganization; lack of skills and imperfect assessment of the factors of the external and internal environment that provoked the crisis situation can lead to ineffective management decisions.

The algorithm for choosing appropriate methods of financial recovery consists of three main stages, the graphic interpretation of which is shown in Figure 3.



**Fig. 3. Algorithm for choosing a method of financial rehabilitation of the enterprise**

\* Suggested by the author

When developing a financial rehabilitation plan, the following rules should be taken into account: in-depth research by specialists of the situation at the enterprise and the factors of its occurrence; correct determination of the terms of implementation of the plan of financial improvement measures, as the crisis can proceed quite quickly; formation of a team of specialists for the financial recovery of the enterprise, and in the case of its absence, the involvement of external assistance; ensuring prompt implementation of decisions and measures; maintaining an appropriate level of corporate culture; application of motivation schemes in the work of the anti-crisis team; maximum use of the company's potential.

Adherence to the proposed algorithm is extremely important because it will contribute to the prompt overcoming of crisis phenomena and bringing domestic enterprises to a higher level of development.

**Conclusions from the conducted research.** Due to the unstable financial, economic, political and social situation in the country, most business entities are in a state of crisis, which for many of them ends in bankruptcy and liquidation. The primary sign of a crisis at an enterprise is unprofitable activity, as well as unsatisfactory indicators of the financial condition. In such a case, it is necessary to use an effective financial recovery mechanism. The article defines the essence, necessity, forms and methods of financial rehabilitation of the enterprise. The method of diagnosing the financial condition, which occupies one of the main places in the mechanism of financial recovery, is considered and practically applied. Timely and objective diagnosis of the state of development of the enterprise allows to identify the problems inherent in the enterprise, the factors that caused them and on this basis to choose and apply an effective method of financial recovery.

**References:**

1. Мартиненко В. П. Особливості антикризового управління підприємством. *Економіка, фінанси, право*. 2020. № 7. С. 25–36.
2. Martynenko, V. P. (2020). Osoblyvosti antykrizovoho upravlinnya pidpryyemstvom [Features of crisis management of the enterprise]. *Ekonomika, finansy, pravo*. [Economy, finance, law], № 7, 25-36. [in Ukrainian].
3. Карпунь І. Н. Антикризові заходи на підприємстві: управління, стратегія, цілі та завдання : монографія. Львів : «Магнолія-2006», 2008. 440 с.
4. Karpun, I. N. (2008). Antykrizovi zakhody na pidpryyemstvi: upravlinnya, stratehiya, tsili ta zavdannya [Anti-crisis measures at the enterprise: management, strategy, goals and objectives]. *Monohrafiya. Lviv: «Mahnoliya-2006»*. [Monograph. Lviv: «Magnolia-2006»], 440. [in Ukrainian].
3. Пономаренко В. С. Механізм санаційного управління підприємством: засади формування та моделі реалізації : монографія. Харків : «ІНЖЕК», 2009. 304 с.
4. Ponomarenko, V. S. (2009). Mekhanizm sanatsiynoho upravlinnya pidpryyemstvom: zasady formuvannya ta modeli realizatsiyi [Mechanism of rehabilitation management of the enterprise: principles of formation and implementation models]. *Monohrafiya. Kharkiv: «INZHEK»*. [Monograph. Kharkiv: «INZHEK»], 304. [in Ukrainian].
4. Негайчук В. О. Методи та інструменти фінансового оздоровлення підприємства. *Науковий Вісник Херсонського державного університету*. 2021. Вип. 11 (5). С. 25–33.
5. Nehauchuk, V. O. (2022). Metody ta instrumenty finansovoho ozdovlennya pidpryyemstva [Methods and tools of financial recovery of the enterprise]. *Naukovyy Visnykh Khersons'koho derzhavnoho universytetu*. [Scientific Bulletin of Kherson State University], Vyp. 11(5), 25-33. [in Ukrainian].
5. Вінницька О. А. Інтегральна оцінка фінансового стану підприємства. *Молодий вчений*. 2021. № 2 (54). С. 682–686.
6. Vinnytska, O. A. (2021). Intehral'na otsinka finansovoho stanu pidpryyemstva [Integral assessment of the financial condition of the enterprise]. *Molodyy vchenyy*. [A young scientist], 2(54), 682-686. [in Ukrainian].
6. Фінансова звітність ТзОВ «ІнтерТрейд». URL: <https://cabinet.smida.gov.ua/> (дата звернення: 11.01.2023).
7. Finansova zvitnist' TzOV «InterTreyd» [Financial statements of «InterTrade» LLC]. < <https://cabinet.smida.gov.ua/>. (2023, January, 11). [in Ukrainian].