# Anti-Crisis Management In The System Of Economic Security Of International Business

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### Summary

Economy of Ukraine is characterized by the rapidly increased level of financial failures at a corporate level. Conditions of doing business in Ukraine become tighter year after year and it should motivate the business owners not only to watch more accurately the state in which their business is but also to introduce new, more precise, more tight systems of crisis management and economic security. The experience shows that in order to stay afloat and not to suffer losses companies should pay more attention to different areas of economic security, such as production potential, financial indicators, logistics, staff, etc. For this purpose companies should use a system of valuation of the most important for their activity indicators and transform their values in an integral one in order to use this assessment in making managerial decisions. Such a valuation is one of the components which the article presents. The article also reveals the key points which characterize crisis management as an integral part of enterprise development and economic security. There are specified the essence and problems of crisis management and proposed the ways of raising the level of economic security of a company based on the example of an industrial and commercial enterprise. The key focus of the enterprise's economic security management is defined as constructive responses to threats from the external environment and, as a result, ensuring stable functioning and effective realization of untapped potential in the future. The current assumption is to explain the scheme of strategic management of an industrial and commercial enterprise and to calculate the methodology of an express assessment of the level of enterprise economic security, taking into account the components of crisis management. To assess the level of economic security of the enterprise, it is proposed to use the method of point assessment,

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which is based on a multi-level system of indicators, which covers the main areas of the enterprise's activity.

Keywords:

economic security of the enterprise, crisis management, the level of economic security, indicators of economic security, the potential of the enterprise.

# 1. Introduction

Modern conditions of economic activity are characterized by a high degree of uncertainty and instability of the external environment and high probability of a crisis state. According to statistical studies of N.V. Myshenyna [1], most of our country's enterprises are in a crisis state. According to studies of I.J. Plikus [2], after a subprime crisis which took place several years ago, and during the last fifteen years the share of companies which suffer losses and are on the verge of bankruptcy is not less than one third and it leads to a slowdown of effectiveness of the whole economy. The next crucial period in economy, citing the same author, was the year 2014 when we could observe the largest share of failed enterprises - nearly 44%. Moreover, having such results, one can state that it damages the security of both enterprises and national economy. Those facts make the authors of the article think about the necessity of investigating a merger of two directions in applied economy, namely economic security and its achievement and crisis management as the first stage the companies should deal with to maintain solvency,

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liquidity, competitive advantages, increase profits and enhance their operating activity. Therefore, current conditions make us develop managerial approaches which ensure timely response to unfavourable conditions and, at the same time, contribute to the development of an enterprise potential and consistency between its goals and possibilities. In such conditions, more and more attention is paid to the study of the main factors of influence and the ways to ensure economic security of an enterprise. Conditions for effective development of an enterprise result from security of its economic activity and its crisis management.

### 2. Literature Review And Problem Statement

Many works of modern researchers are devoted to the study of anti-crisis management at the enterprise. Thus, A. Boin analyzes the problem of crisis development and the main components of anti-crisis management, offers a classification of types of anti-crisis strategies [3]. J. Bundy, M. Pfarrer, C. Short proposed a mechanism of complex anti-crisis diagnostics and provided recommendations for further management of the development of the enterprise based on the results of this diagnostics [4]. The analysis and classification of existing methods of diagnosing the level of economic security of an enterprise, a methodical approach to assessing the economic security of a business entity, which allows you to objectively determine its economic stability and identify the main directions of development and the necessary anti-crisis measures, is proposed by S.B. Dovbnya [5]. The analysis of indicators and criteria for assessing the financial and economic security of the enterprise, the disclosure of the content and the main factors of the formation of crisis phenomena was carried out in the work [6]. Kryvovyaziuk I.V. devoted her work to the relationship between the life cycle and the development of the anti-crisis process of the enterprise, by increasing the efficiency of the anti-crisis management of the enterprise [7]. A. Wysokińska-Senkus, K. Raczkowski are investigating the main strategic directions of economic security management [8].

The scientists in the field of corporate crisis management such as I.O. Blank [9], O.O. Khandiy [10], Skryenkovskiy [11] enabled us to determine two main directions of the research: (1) to determine measures, stages and to make a system of an expert valuation as to economic security of an enterprise; (2) to reveal the definition of crisis management, its approaches and its role in maintaining the economic security predominantly based on the indicators which can be evaluated taking a single company as a sample. Among the problems of ensuring economic security of enterprises there is the lack of commonly assumed methods for assessing the level of economic security of an enterprise. In particular, there is no clear interaction between the indicators of crisis management and the indicators of determining the level of economic security of the enterprise.

## 2.1 Purpose Of The Study

The purpose of this study is to substantiate the necessity to use a system of indicators for express assessment of the level of economic security of an industrial and commercial enterprise based on a combination of methods for assessing the level of economic security and indicators of crisis management.

#### 2.2 Methodology Of The Study

The theoretical and methodological basis of the research is the scientific works of domestic and foreign scientists in the field of economic security, anti-crisis management; methods of system and process analysis (to determine the structure and content of the main stages of strategic decision-making); the expert evaluation method (to assess the significance of each indicator in the process of assessing the level of economic security), the abstract-logical method to carry out logical generalization of theoretical foundations and make research con-clusions), and other methods of scientific research.

# 3. Research Results

The most consistent and complete essence of crisis management is described by Blank I.A. [9, p. 585-602]. But the essence of this term is defined in relation to financial crisis management, that is, with the emphasis on the use of financial resources and tools for the implementation of this process. In his view, it is more correct to understand crisis management as the ongoing process of identifying the signs of crisis phenomena and implementation of the plan to prevent expansion of crisis phenomena in an enterprise development.

One should note that identification of the level of economic security at an enterprise in accordance with the methods of the number of authors (Skrynkovskiy [11] and T.L. Zubko [12]) involves the division of value indicators according to the directions of performance of an enterprise: operating, financial and investment. Considering the revisions of the number of researchers of the problems of crisis management, such as V.I. Fuchedghi [13] and V.O. Shamrykova [14], internal factors of the crisis are also determined by those trends in the formation of cash flows. Taking into account the opinion of the vast majority of scholars, such as V.I. Fuchedghi [13], V.O. Shamrykova [14], A.D. Chernyavskiy [15], we understand crisis management as the one which is able to prevent or mitigate crisis situations in production and economic activity, as well as to maintain enterprise performance on a

survival level during crisis and to overcome crisis state with minimum losses.

The mechanism of economic security management is considered as managerial actions aimed at exploiting the possibilities and resources of an enterprise that would provide system and synergistic effects which protect its financial and economic interests from the identified real and potential external and internal threats.

The basis of the mechanism for ensuring economic security is the scheme which involves three basic components: (1) interests, (2) threats as factors that create a threat to realization of those interests, (3) and a system of measures aimed at elimination of threats, their forecasting, timely warning and prevention.

Citing the authors (Skrynkovskiy R.M. [11] T.L. Zubko [12]), we believe that when developing an enterprise management system and developing a system of indicators for assessing the level of its economic security, it is necessary to include a subsystem of crisis management. In fact, crisis management is carried out not only during the period of exacerbation of crisis, but also in the period of its emergence and deployment. That is, methods of crisis management form the basis of the system of measures to neutralize threats.

There are different approaches to the definition of crisis management, but they all relate the above concept to the emergence and overcoming of crises. The crisis (as a phenomenon in the economy) is a process that endangers the existence of the enterprise. At the same time, the crisis can be regarded as the phenomenon that causes breakdown of the old condition and transition to the new condition of the enterprise.

The system of crisis management in crisis situations envisages A.D. Chernyavskiy [15, p. 16]:

permanent monitoring of external and internal situations;
development of measures to reduce external vulnerability of the system (enterprises, organizations);

- increase of internal flexibility of management;

- development of forward-looking plans for crisis management methods;

- immediate implementation of the planned practical measures in case of a crisis situation emergence.

Crises accompany the entire life cycle of an enterprise. Each of the five stages of enterprise development has its own specific crises. Contributing to the opinion of S.K. Ramazanov [16, p.21], we note that the stages of the life cycle have their own terms and peculiarities. The terms are determined by the nature and quantitative effects of crises. Peculiarities are determined by effectiveness of management, that is, by the system of crisis management. Making a list of indicators for valuation of enterprise performance, one can determine the stage of its development. Accordingly, within the framework of crisis management, there are made changes in managed and unmanaged processes, there are separating changes in crisis development from changes during normal functioning.

In the system of strategic management, there can be distinguished the following blocks, which are the stages of making strategic decisions. It should be noted that the second, fourth and fifth stages are those which are making the above-mentioned system of crisis management of an enterprise (Figure 1).



Fig. 1 Stages of making strategic decisions (developed and improved by the authors according to the sources [12, 17]).

Sharing the thought of I.V. Kryvovyaziuk [7] and P. G. Pererva [18], we agree that the system of economic security management of the enterprise can be considered as a set of two components - preventive and crisis management. Preventive management involves the planning of enterprise development strategies, while crisis management is aimed at fast reduction of losses and immediate measures taking.

In our opinion, the system of crisis management is "builtin" into the system of economic security management. The key direction of managing economic security of an enterprise is the formation of constructive responses to the effects of threats of the external environment and, as a consequence, ensuring steady functioning, effective implementation of potential in the future.

As to the overcoming crises, such scientists as P.G. Pererva [18], O.O. Khandiy [10] distinguish the following types of problems: financial, production, marketing, economic and personnel. Accordingly, four types of policies are defined as crisis instruments: innovative, investment, marketing and personnel.

Considering that enterprises operate in conditions of instability and unpredictability, the scheme of strategic management for a production and commercial enterprise is the following (Table 1).

Table 1: The sequence of crisis and security strategic management combination\*

Stage	Stage explanation					
1	Determination of an enterprise mission					
2	Diagnosis of an enterprise state (marketing forecast, analysis of logistics connections, research of financial and property status, determination of the level of an enterprise economic security)					
3	Revealing of a crisis state	Revealing of possible risks and enterprise development trends				
4	Application of crisis management models	Formation of directions to solve problems and search for new ways of development				
5	Elaboration of a crisis programme	Elaboration of a program of measures concerning enterprise development				
6	Determination of tactical objectives					
7	Determination of operative objectives					
8	Operative activity					

\*Improved by the authors according to the source [19].

In this scheme, one can clearly see the block of crisis management of the enterprise in case it needs it.

In the system of crisis management, while valuating a crisis situation and a bankruptcy risk, there is used a system of indicators, which includes the following groups: liquidity and solvency indicators, capital structure indicators, turnover indicators and profitability indices. Currently, there are several methods for assessing the level of economic security of the enterprise:

1. Valuation of the level of economic security of the enterprise is determined on the basis of calculation of an aggregate criterion (or integral indicator) by choosing and summing up the individual functional criteria which are calculated by comparing the probable damage (loss) to the enterprise and the total costs for implementation of the counter measures as to this damage (loss).

2. Calculation of functional dependence.

3. Application of the indicator method.

4. For the express analysis of an enterprise security level, an approach using rating scores (a rating approach) is applied.

5. Method of determining the hierarchical levels of economic security (current, tactical, strategic and general level).

6. Graphical method.

In our opinion, the assessment of an economic security level should take into account the specific features of the object of evaluation in the definite industry.

Performance of any enterprise can be considered as a "black box", where there is an "input" (resources and demand) and "output" (products that meet demand and make a profit).

Cash flow at an enterprise is provided by the following activities: operating, financial and investment. For the research, it was selected an enterprise of the production and commercial sphere, the public joint-stock company "Obolon". In line with this and the model of the enterprise performance, we distinguish the following structures in the activity of the enterprise (Figure 2).



Fig. 2 Valuation of an enterprise performance in production and commercial sphere (generalized by the authors according to the source [16]).

But, unlike the works of S.K. Ramazanov [16], we are to select the following indicators into the system of indicators which valuate the level of economic security as an integral indicator, which, in our opinion, should characterize the performance of enterprises of the production and commercial sphere in the best way.

Marketing activity of enterprise is characterized by such indicators as:

- the company share at the market,

- indicator of products' competitiveness,
- indicator of market return on assets,
- the ratio of commodity supply and consumer demand,
- turnover indicators (the turnover change rate),

- indicators of economic and commercial stocks ((share of stocks),

- indicators of the use of advertising in commercial activity of an enterprise (advertising yield index).

Enterprise production is characterized by such indicators as:

- production capacity index,
- depreciation index,
- yield on capital investment,
- production range stability index,

- index of using progressive methods of quality control.

Logistic activity of an enterprise is characterized by such indicators as:

- overstocking ratio,

- indicators of commodity costs (the share of commodity spending in COGS),

- cargo turnover of warehouses,

- indicators of the product range creation,
- indicators of commodity supply stability.

Finances are described by the following indicators:

- equity ratio,

- debt-to-assets ratio,
- current ratio,
- accounts receivable turnover,

- accounts payable turnover,

- return on sales.

- Staff is characterized by the following indicators:
- personnel turnover ratio,
- labor productivity,
- capital-labor ratio,
- innovative activity index,

- comparison ratio of highly skilled and skilled workers to the total number of employees.

Organizational structure of an enterprise is characterized by such indicators as:

- level of controllability,

- index of centralization of functions (index of efficiency). Innovative activity of an enterprise can be described by such indicators as:

- share of internal R&D expenses and acquisition of technologies in total production costs,

- index of new technology introduction,

- indicators of new products development (share of new products in the range of products).

Competitiveness of the enterprise in its essence itself is an indicator and a structural value. To valuate it we use the method based on the theory of effective competition. According to this theory, the most competitive ones are the enterprises where the work of all divisions and services is best organized. At the core of the method there is the assessment of four group indicators - the criteria of competitiveness.

This list is compiled for an express assessment, the number of indicators will be significantly increased for a more detailed study.

In order to assess the level of economic security as an integral indicator for an express analysis, we are to use the score assessment method, taking into account the significance (weight) of each indicator. For the express analysis, we selected two to four main indicators (the selection was based on our opinion). The calculations are based on the data of the PJSC "Obolon" and are shown in the Table 2.

Table 2: Expert express valuation of the level of economic security of the
Public Joint-Stock Company "Obolon" (data for 2019)*

Spheres of activity	Indicators	Conventional sign	Score (0 to 4)	Weight (significance)	Weighted score
Marketing	company share at the market	К1	2	0,06	0,12
	indicator of products' competitiveness	К2	3	0,08	0,24
	market return on assets	К3	2	0,07	0,14
	advertising yield index	К4	0	0,03	0
Production	production capacity index	К5	3,5	0,02	0,07
	depreciation index	К6	2	0,05	0,1

	yield on capital	К7	3	0,03	0,09
-	investment	K/	5	0,05	0,07
	production range stability index	К8	4	0,06	0,24
Logistics	overstocking ratio	К9	2	0,02	0,04
	share of commodity spending in COGS	К10	1	0,02	0,02
	commodity supply stability	К11	1	0,01	0,01
Financial	equity ratio	K12	3	0,07	0,21
	debt-to-assets ratio	К13	2	0,08	0,16
	current ratio	К14	2	0,07	0,14
	accounts receivable turnover	K15	2	0,05	0,1
	accounts payable turnover	K16	3	0,05	0,15
Personnel	personnel turnover ratio	К17	0,5	0,02	0,01
	labor productivity	K18	3	0,03	0,09
	innovative activity index	К19	1	0,04	0,04
	comparison ratio of highly skilled and skilled workers to the total number of employees	K20	4	0,01	0,04
Organizatio nal	level of controllability	К21	3	0,02	0,06
structure	index of efficiency	К22	2	0,01	0,02
Innovations	share of internal R&D expenses and acquisition of technologies in total production costs	K23	1	0,01	0,01
	index of new technology introduction	К24	1	0,01	0,01
	indicator of new products development	К25	1	0,08	0,08
	culated by the author a		Total	1	2,19

\* Source: calculated by the author according to the method.

The assessment of the level of economic security of the enterprise according to the proposed method is carried out by the following scale of I.V. Rodyonova [20]: 0 to 4.0 - low level, 4.1 to 8.0 - the average level, 8,1 to 11,55 - high level.

Thus, at present, the level of economic security of the public joint-stock company "Obolon" is low. This occurs due to the following factors: a decrease in the company's activity at the market of alcoholic and non-alcoholic beverages, which is the result of insufficient implementation of innovative measures. Also, in the logistics sector, there is a market glut, which, in turn, is the result of insufficient advertising and disadvantages of assortment policy. Correspondingly, financial state of the enterprise has been deteriorated. It is also necessary for this enterprise to increase the level of personnel qualification, which in its turn will increase both the level of controllability and the level of innovation activity of the enterprise and, accordingly, the level of its economic security.

# 4. Conclusions

Note that the crisis at the enterprise is both a negative and a positive phenomenon. It results into going out of business, or the company finds ways to overcome that crisis. In order to increase economic security of the enterprise it is necessary to provide as much as possible protection of the functional components involved in its performance and directly involved in the achievement of the goals and objectives of the enterprise. For this purpose, there should be made a profound investigation of the indicators of different spheres at an enterprise, such as: marketing, production, logistics, finances, organizational structure, innovations, etc. Only the combination of values of different indicators and their appropriate managerial analysis may reveal troubles or directions in which an enterprise should act.

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