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THEORETICAL AND METHODOLOGICAL APPROACHES TO THE DEFINITION AND IDENTIFICATION OF FINANCIAL CRISIS

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Kev words:

crisis, financial crisis, external environment, internal environment, financial condition, bankruptcy, express analysis, /fundamental analysis, strategy, financial and economic security

The article determines that the financial crisis, depending on the stage it is in, is the main indicator that signals to the management of the enterprise about the troubles (problems) in the activity, the consequence of which is the deterioration of the financial and economic performance of the enterprise, namely indicators: revenue from sales of products (services), profit, reduced sales, increased costs, reduced innovation, partial or complete cessation of financing of costs in the information system, etc. The influence of the war on the efficiency of activity or the possibility of the very existence of enterprises, namely labor, material, intangible resources, fixed assets, partially or completely their suppliers and consumers, natural resources, that is, the deterioration of almost all factors of the exogenous and endogenous environment in the financial and economic system of the enterprise, is substantiated. It is established that in the conditions of military aggression against Ukraine, a big problem arose in the full or partial loss of economic ties; markets; resource markets; qualified personnel who were forced to leave Ukraine; the growth of currency risk, which led to an increase in costs, which resulted from the inability of some enterprises to continue their activities under such conditions. The scientific approaches to defining the essence of the crisis were further studied in the article and the author's definition of the essence of this process was provided. The methodical approaches to crisis identification are investigated taking into account fundamental analysis and use of factor methods and forecasting. The main methodological approaches to the analysis of the main indicators accompanying the process of the financial crisis are presented. For identification of financial crisis the structural scheme of stages of its diagnostics and prevention is developed.

ТЕОРЕТИКО-МЕТОДОЛОГІЧНІ ПІДХОДИ ДО ВИЗНАЧЕННЯ ТА ІДЕНТИФІКАЦІЇ ФІНАНСОВОЇ КРИЗИ

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Ключові слова:

криза, фінансова криза, зовнішнє середовище, внутрішнє середовище, фінансовий стан, банкрутство, експрес-аналіз, фундаментальний аналіз, стратегія, фінансово-економічна безпека

В статті визначено, що фінансова криза в залежності в якій стадії вона знаходиться є головним індикатором, що сигналізує менеджменту підприємства про негаразди (проблеми) в діяльності, наслідком якої є погіршення фінансово-економічних показників діяльності суб'єкта господарювання, а саме показників: виручки від реалізації продукції (послуг), прибутку, зменшення обсягів продажів, зростання витрат, зменшення обсягів інноваційної діяльності, часткове або повне припинення фінансування витрат в інформаційну систему та ін. Обґ рунтовано вплив війни на ефективність діяльності чи можливості самого існування підприємств, а саме трудових, матеріальних, нематеріальних ресурсів, основних фондів, частково або повністю своїх постачальників та споживачів, природних ресурсів, тобто погіршення одночасно майже всіх чинників екзогенного та ендогенного середовища в фінансово-економічній системі підприємства. Встановлено, що в умовах військової агресії проти України, виникла велика проблема в повній або частковій втраті господарських зв'язків; ринків збуту; ринків ресурсів; кваліфікованих кадрів, що вимушені

були покинути Україну; зростання валютного ризику, що призвів до зростання витрат, які стали наслідком неможливості частині підприємств продовжувати за таких умовах свою діяльність. В статті набули подальшого дослідження наукові підходи до визначення сутності кризи та надано авторське визначення сутності даного процесу. Досліджено методичні підходи до ідентифікації кризи з урахуванням фундаментального аналізу та використання факторних методів та прогнозування. Представлено основні методичні підходи до аналізу основних індикаторів, що супроводжують процес настання фінансової кризи. Для ідентифікації фінансової кризи розроблено структурну схему етапів її діагностики та попередження.

Statement of the problem

Military aggression, the growth of crisis phenomena, uncontrolled inflationary processes, the growth of currency risk, the decline in business activity, the deterioration of the financial results of business entities worsen the conditions for the functioning of business activity. Therefore, it is important to develop a unified approach to the interpretation of the concept of crisis, to systematize methodological approaches, measures to prevent, identify and overcome the financial crisis in modern conditions.

Analysis of recent studies and publications

The problems of studying the essence of the crisis, methodological approaches to the identification and prevention, elimination of financial crises are considered in the works: I.O. Akhnovska [1, p. 27–35]; A.I. Gizun [5, p. 99–108]; O.V. Guk [2, p. 193–198]; N.I. Demchuk [3, p. 36–41]; O.O. Drobysheva [4, p. 87–92]; Kalinichenko Z. [7, p. 90–100]; R.P. Kirilyuk [2, p. 104–128]; I.L. Lozova [5, p. 99–108]; V.M. Melnyk [3, p. 178–182].

Objectives of the article

The purpose of the article is to study the theoretical aspects of the formation of approaches to the definition of the concept of crisis in different historical epochs, to substantiate methodological approaches to the development of a system of indicators, methods, measures that make it possible to prevent and overcome the crisis in the early stages of its manifestation.

The main material of the research

The global financial crisis that began in February 2020, triggered by COVID-19, has turned into the beginning of the next stage of this crisis, deeper and more impressive in its scale, with Russia's attack on Ukraine in February 2022. According to international experts, the world economy may face the biggest test since the Second World War, forecasts for global GDP growth have been revised from 4.1% to 2.9%, according to official data, the decline in GDP in Ukraine for the first 9 months of 2022 is estimated at 30%, according to the Ministry of Economy of Ukraine.

In the conditions of war, most enterprises have lost important prerequisites for effective operation or the possibility of their very existence, namely labor, material, intangible resources, fixed assets, partially or fully their suppliers and consumers, natural resources, increased currency risk, that is, the deterioration of almost all factors of the exogenous and endogenous environment in the financial

and economic system of the enterprise. The war has affected the entire economic system of our country, some enterprises were destroyed, a significant number of enterprises have to adjust to new conditions or close. Some enterprises have lost economic ties, partners, logistics capabilities, all this leads to crisis phenomena and situations, which in the future, if not timely eliminated, become the root cause of a deeper crisis, transition to crisis and bankruptcy.

Crisis, crisis situation, their causes and consequences have been studied and researched all the time in different historical epochs, during this time there were changes in all spheres of human activity due to the development of scientific and technological progress, from production methods, provision of services, to consumption, consumption products, lifestyle, values, so the approaches, tools for identification, prevention of financial crises, crisis management have been changing all the time.

The very concept of crisis has its historical roots in medicine and theater art, where it was first used. For medicine, this term was used to describe the deterioration of the patient's condition, which could lead to recovery or death, while in theatrical art it was a decisive moment, the culmination of a theatrical performance. Until the XIX century, the crisis was characterized by underproduction of agricultural products, and after that, on the contrary, as «underconsumption», which was associated with the development of science and technology and which led to a violation between supply and demand, the emergence of surplus in the market. The very concept of crisis began to be used in economics only in the XIX century and meant an undesirable, dramatic phase in the capitalist economic system, characterized by fluctuations and negative phenomena, obstacles [4].

Many economists associate the emergence of crises with scientific and technological progress (STP), according to which the active part of the fixed capital becomes obsolete over time (this time varies depending on the period of renewal of the fixed capital under the influence of STP), which leads to the need for its renewal, and therefore becomes an incentive for economic recovery.

Thus, having studied neoclassical and liberal doctrines, the theory of market freedom and modern approaches to the definition of the crisis, we can make our own interpretation of the essence of the crisis. Crisis is a kind of «crashtest», «stress-test» for firmness, steadfastness, search for vulnerabilities, problems, shortcomings, the ability to continue activities, the ability to exist, as a rule, it challenges the development of the enterprise at each stage of the life cycle, the result is the introduction and implementation of

timely response measures to internal and external threats, the formation of own practically acquired and effective tools to overcome possible crisis phenomena (situations), the formation of immunity to such situations (states).

Crisis is an opportunity to exist in new realities, the possibility of rapid change, the development of rapid response measures in the event of threats, the development of measures and indicators of continuous monitoring of crisis phenomena to prevent their transition to crisis situations and crisis. It makes it possible to assess the viability of the development strategy, to analyze its effectiveness, to assess the market position and sales policy of the enterprise by analyzing the competitiveness of prices for products (services), quality and innovation of products sold, to optimize costs, to develop a system for identifying crisis phenomena, to select effective personnel who will guide and adjust the development of the enterprise along the specified route (strategy) at a specific planned time.

A crisis is the development of a crisis phenomenon or phenomena into a crisis state in case of untimely response to these challenges, accompanied by a deterioration in the main key performance indicators of the enterprise, namely a decrease in the dynamics of profits, the emergence of losses, a decrease in the volume of sales of products (services), a decrease in the solvency of the enterprise, liquidity, etc.

Overcoming the crisis enables the company to improve its position in the market, become more competitive, more efficient and innovative.

Various methodological approaches are used to identify the financial crisis, determine the financial condition of the enterprise (Fig. 1). These methodological approaches for identifying the financial crisis and determining the financial condition of the enterprise are divided into those that are used from public, scientific to private, the latter are closed and are usually more accurate, because to determine the crisis, the original parameters are selected that correspond to the scope of the enterprise and the time in which such an enterprise operates, because over time, the methods become outdated, take into account the factors that are key in the period of their development, are developed for certain countries and markets. Depending on the methodology for analyzing indicators, diagnostic directions, methods of forming evaluating indicators, a scheme of classification of approaches to crisis identification is proposed (Fig. 1) [7].

When analyzing indicators by each methodological approach, it is important to evaluate on the basis of a combined approach that will assess both qualitative and quantitative parameters of the state of the object, including factors that affect the negative change in the indicator in dynamics. In the process of crisis diagnostics, vertical, horizontal analysis of absolute and relative values, factor and trend analysis, modeling or discounting in the process of cash flow analysis, and forecasting the future financial condition of the enterprise are carried out. Methods of diagnosing the financial crisis or financial condition of the object of study are divided into methods of economic analysis, strategic analysis, economic and mathematical methods, SWOT analysis, expert assessments, scenario method in the process of retrospective, operational or prospective analysis to identify bottlenecks that affect the financial, economic and technical and economic position of the entity.

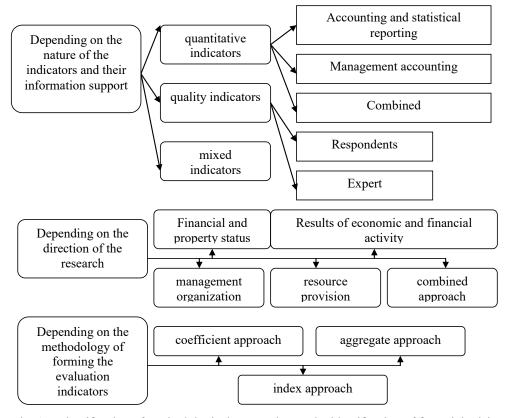


Fig. 1 – Classification of methodological approaches to the identification of financial crisis

To prevent, identify and overcome the financial crisis, it is necessary and obligatory to constantly monitor the main key parameters of the enterprise, by conducting, depending on the goals and state of the object of valuation, express analysis, fundamental (in-depth) analysis, modeling or forecasting the probability of bankruptcy in the structure of a comprehensive diagnosis of the financial condition of the subject of valuation.

To identify the financial crisis at the enterprise, it is recommended to carry out monthly express diagnostics and in case of detection of negative trends, deterioration of key indicators in the dynamics to carry out a fundamental analysis of the financial condition of the enterprise, the main key indicators and areas of activity, such frequency will allow not to miss the onset of crisis phenomena with the subsequent transition to a crisis state. For diagnostics, it is recommended to use software packages, and based on the results of the analysis, draw appropriate conclusions and implement the necessary response measures.

Express diagnostics is a regular diagnostic system for instant analysis of the main key informative indicators for the early detection of problem areas (signs) of enterprise development, for understanding and assessing the current financial condition and economic development of the enterprise in dynamics.

A deeper methodological approach to the identification of the crisis is a fundamental analysis using factor methods and forecasting, using enterprise reporting forms, operational and management accounting data, based on the analysis of qualitative and quantitative indicators, their relationship and mutual influence by a combined method, the diagnosis of the crisis should be based on financial and economic indicators, analysis of strategy, marketing environment, market position, competitors, innovation component, management style, loyalty.

To identify the financial crisis, we have developed and proposed a structural diagram of the stages of its diagnosis and prevention (Fig. 2).

At the first stage, a system of indicators is developed that are subject to systematic analysis and adjustment in accordance with the market and economic situation in the country, factors of the external and internal environment of the enterprise. These indicators include, first of all, the volume of products sold, fixed and variable costs, indicators of accounts receivable and accounts payable, indicators of solvency and liquidity, turnover indicators, profit and profitability, forecast of bankruptcy probability. At the stage of enterprise growth, the dynamics of growth in sales volumes and proportional growth in the amount of net profit of the enterprise is analyzed. This stage also includes the development of a system of anti-crisis measures, which will make it possible to respond quickly to negative changes in the financial condition of the enterprise.

The second stage includes the allocation of responsible persons who will constantly monitor the implementation of the set operational and strategic goals and performance indicators in accordance with the developed strategy, timely respond in accordance with the developed crisis management measures.

The third stage is characterized by regular rapid diagnostics of the financial condition and key parameters of the enterprise, and in case of deterioration, the transition to the next stage of crisis identification.

The fourth stage includes an in-depth, i. e. fundamental analysis of the crisis in the following areas: search for causes and factors that influenced the deterioration of key indicators; search for explicit and implicit reserves for the growth of activity (profit); forecasting the probability of bankruptcy; analysis of the market position

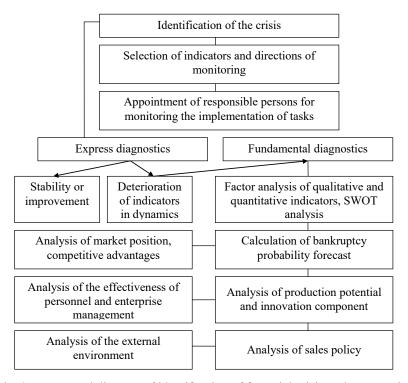


Fig. 2 – Structural diagram of identification of financial crisis at the enterprise

of the enterprise, sales policy; analysis of management and personnel: analysis of staff loyalty, productivity, digitalization of business processes where possible and impossible (including electronic document management).

We consider the creation and functioning of the following areas (divisions) in the financial and economic system of the enterprise necessary and obligatory in the current conditions of market economy development.

Creation of an information system, including automation and digitalization of business processes, functioning of electronic document management at the enterprise, which allows minimizing costs and speeding up decision-making processes at the enterprise, quickly responding to the challenges that arise in the process of implementing the enterprise strategy.

The intellectual fund of the enterprise will allow to improve the work of the enterprise in all areas where there are shortcomings that can lead to crisis phenomena, due to the material motivation of employees to develop and propose for consideration ideas that will be aimed at optimizing costs, improving the quality of service, product quality, finding vulnerabilities of the enterprise, finding areas where the enterprise can reduce costs, increase profits through the implemented measures, that is, the intellectual fund will be the center of generation, analysis and implementation of the

The direction of fraud is a necessary element in the structure of the enterprise, which makes it possible to prevent or neutralize fraud processes in the enterprise that negatively affect its activities. Any employee of the enterprise can report the facts of fraud, for which he receives a reward in case of such confirmation by the security service.

Thus, the crisis is inevitable in the life cycle of the enterprise, the enterprise is constantly developing, financing its production potential, buying innovative technologies, hiring the best employees, buying raw materials at the lowest prices, but over time, even the most modern technologies become obsolete, the best employees are less effective over time, old knowledge without updating becomes less effective, old technologies consume more resources (human, natural, etc.) and give more defects in the production process. Therefore, in the process of enterprise development, it is necessary to analyze all the time what the latest technologies are; the latest staff training programs aimed at improving their efficiency, skills, abilities; to explore the resource market, what raw materials or materials we can use in production, to reduce costs, improve product quality; great attention should be paid to the digitalization of business processes at all levels of the enterprise (production, marketing, management, financial), etc.

Conclusions

According to the results of the study, scientific approaches to the interpretation of the concept of crisis have been further developed; the interpretation of the concept of crisis as a constant process that accompanies, as a rule, each stage of the life cycle of an enterprise, is a stress test based on rapid response measures aimed at improving the efficiency and competitiveness of the enterprise, is updated; the methodological basis for identifying the crisis state is systematized; the structural scheme of the stages of diagnostics of financial and economic crisis is proposed and improved.

References

- 1. Ahnovska I.O. (2014). Metoduchnuy pidhid do analizy finansovo-ekonomichnogo stany velukuh, serednih, maluh ta mikropidpruemstv za danumu statustuchnoi zvitnosti [A methodical approach to the analysis of the financial and economic condition of large, medium, small and micro enterprises based on statistical reporting data]. *Economics and management organization*. Vol. 1 (17). P. 27–35. [in Ukrainian]
- 2. Drobisheva O.O. (2017). Ponyattya, stadii ta osobluvosti kruz y procesi ypravlinnya promuslovumu pidpruemstvamu [Concepts, stages and features of crises in the process of managing industrial enterprises]. *Econ. Promisl.* Vol. 2 (78). P. 87–92. URL: http://dspace.nbuv.gov.ua/bitstream/handle/123456789/10341/st_47_24.pdf?se quence=1 [in Ukrainian]
- 3. Demchuk N.I., Evladenko A.Y. (2010). Teoretuko-metoduchni zasadu diagnostuku finansovo-ekonomachnogo stany sybektiv gospodaryuvannya [Theoretical and methodological principles of diagnosing the financial and economic condition of economic entities]. *Investments: practice and experience*. Vol. 11. P. 36–41. URL: http://www.investplan.com.ua/pdf/11 2010/11.pdf [in Ukrainian]
- 4. Gizun A., Lozova I. (2016). Analiz definciy kruzova sutyaciya ta osnovnuh aspektiv koncepcii ypravlinnya bezperervnistyu biznesy [Analysis of «crisis» definition and basic aspects of business continuing]. *Ukrainian Scientific Journal of Information Security*. Vol. 22. Issue 1. P. 99–108. URL: https://jrnl.nau.edu.ua/index.php/Infosecurity/article/view/10461 [in Ukrainian]
- 5. Gyk O.V. (2015) Antukruzove ypravlinnya jak sposib zapobigannya bankrutstvy pidpruemstva [Anti-crisis management as a way to prevent bankruptcy of the enterprise]. *Economy: realities of time*. Vol. 6 (22). P. 193–198. URL: http://economics.opu.ua/files/archive/2015/No6/193.pdf [in Ukrainian]
- 6. Kiriljuk R.P. (2013). Finansova kruza na pidpruemstvi: faktoru vunuknennya ta mehanizm poperedzennya [Financial crisis at the enterprise: factors of occurrence and mechanism of prevention]. *Economy. Management. Innovations. Series: Economic sciences.* Vol. 1. P. 104–128 [in Ukrainian]
- 7. Kalinichenko Z. (2022). Rozrobka metoduku rannyogo poperedzennya ta reagyvannya na kruzu pidpruemstva [Development of a methodology for early warning and response to enterprise crises]. *Economic Analysis*. Vol. 32. P. 90–100 [in Ukrainian]
- 8. Melnik V.M. (2012). Finansova kruza pidpruemstva: vuznachennya z pozucii cuklichnoi dunamiku jogo rozvutky [Financial crisis of the enterprise: definition from the standpoint of cyclical dynamics of its development]. *Business Inform*. Vol. 11. P. 178–182. URL: http://nbuv.gov.ua/UJRN/binf_2012_11_45 [in Ukrainian]