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FEATURES OF THE USE OF FINANCIAL INDICATORS WHEN CONDUCTING THE DIAGNOSTICS OF THE ECONOMIC SECURITY OF THE ENTERPRISE

Diagnostics of the economic security of enterprises is proposed in the article using indicators of liquidity, capital structure and the efficiency of using cash flows. In order to generalize the results of diagnostics of the economic security of enterprises, it is proposed to determine indices of the financial condition and efficiency of the use of cash flows of the enterprise. It is proposed to interpret the results of diagnostics of the economic security of enterprises using the matrix «financial condition, efficiency of activity», which is a tool for justifying management decisions on financial management.

To carry out financial diagnostics, it is proposed to combine ratio analysis and the method of calculating the company's cash flows. The article provides formulas for determining indicators that reflect the financial condition of the enterprise and the effectiveness of the use of cash flows from operational and financial activities in its activities. Alternatives of the enterprise in the process of strengthening the financial condition and increasing efficiency are described.

In order to generalize the results of the diagnosis of the financial condition, it is proposed to define indices that reflect the financial condition and efficiency of the enterprise. It is proposed to interpret the results of diagnostics of the financial state of the enterprise using the «financial state-efficiency of activity» matrix, the practical application of which allows to ensure the gradual development of the enterprise without deterioration of its financial state.

Keywords: economic security of enterprises, financial condition, diagnostics, integral indicators, efficiency of activity.

Formulation of the problem. The modern development and functioning of socio-economic systems requires the introduction of new management methods aimed at preventing, preventing and overcoming crisis phenomena. This is the reason for the necessity and intensification of scientific research aimed at improving the methodology of diagnosing the economic security of enterprises, which involves the application of a systemic approach to enterprise management in crisis conditions.

Ukrainian enterprises are forced to adapt to conditions of political and socio-economic instability and seek adequate solutions to complex problems and ways of reducing threats to their functioning in the conditions of military aggression and other challenges of recent years.

Therefore, the problem of diagnosing the economic security of the enterprise and substantiating the quantitative values of its level, which contributes to the unambiguity of the economic interpretation of the obtained results, becomes especially relevant and important.

Analysis of recent research and publications. The problems of diagnosing the economic security of enterprises, the theoretical and applied principles of diagnosis have been widely considered in the works of many foreign and domestic scientists, including: Kotler F., O'Guinn T., Randall G., Hetman O., Frolova L., Zasanskyi V.

However, despite the large number of scientific works devoted to the theoretical and practical aspects of diagnosing the economic security of socio-economic systems, some important aspects remain unresolved, namely: the definition of the concept of «diagnosis» remains controversial, the modern definitions of economic diagnostics and the development of diagnostic methods are debatable economic security of the enterprise.

In conditions of economic instability and increased risk of economic activity due to negative manifestations of internal and external factors, enterprises are faced with the need to justify management decisions regarding the receipt, distribution and use of financial resources. One of the effective tools for accomplishing this task is the application of the tools for diagnosing the economic security of enterprises based on a comprehensive analysis and summarization of current information about the enterprise's activities.

However, the practical application of diagnostic methods is complicated by the lack of clear ideas about the essence of the economic security of enterprises and about the criteria for its diagnosis, which leads to problems related to the interpretation of the obtained results. In addition, the vast majority of enterprises do not assess their financial condition at all, which significantly reduces the quality of management and the efficiency of their activities. Scientific substantiation of recommendations in the field of diagnostics of economic security of enterprises will allow to increase the level of information support of financial management at domestic enterprises, which determines the relevance of the topic of this article.

Despite a significant number of scientific works containing recommendations for diagnosing the economic security of enterprises and improving the financial condition of enterprises, the problems arising in this area require more detailed research. Taking into account the above, the purpose of the study is to substantiate the author's approach to determining the essence and carrying out diagnostics of the economic security of enterprises.

The purpose of the article. The main goal of the scientific article is the development and justification of methods for diagnosing the level of economic security of enterprises.

Presentation of the main research material. Diagnostics is not something new in the development of the economy of domestic enterprises. the development of a complex of preventive measures, recommendations and procedures aimed at improving this state or preventing unfavorable situations and events in an uncertain market environment depends on the definition and assessment of the state of functioning of the subjects of the economic process.

That is, economic diagnostics should act as a well-founded and reliable procedure, which depends on the further course of action of the business entity. any incorrectly made diagnostic conclusion can nullify all the efforts and hopes of the enterprise in the market in search of stability or better development prospects [1, c. 53].

The term «diagnostics» comes from the Greek diagn□stik□s - able to recognize, and it is considered as a teaching about the methods and principles of recognizing problematic situations (diseases in medicine, breakdowns in devices, unsatisfactory results of the functioning of economic objects) and making a diagnosis. In other words, the diagnosis of the economic security of enterprises involves the recognition of the state of the object by secondary signs; research of the state of the object; formation of an idea about the object. As for economic objects, today in the scientific literature you can find different approaches to the definition of diagnostics. a single concept has not yet been developed, its content and functions have not been defined, diversity reigns in the methodological apparatus.

The goals of fundamental diagnostics should include, in addition to those specified in the work, the development, based on its results, of a set of measures aimed at overcoming «bottlenecks», financial rehabilitation of the enterprise, anti-crisis program, financial strategy or others, depending on the state of the enterprise and the depth of the crisis (light financial crisis; deep financial crisis; financial catastrophe).

Diagnostics, as a process of scientific research and a field of practical activity, has its own tools and methods that are used to achieve the set goals and substantiate effective management decisions.

Diagnostics of the economic security of the enterprise is an assessment of the economic performance of the enterprise based on the study of individual results, incomplete information in order to identify possible prospects for its development and the consequences of the adoption of current management decisions.

Thus, summarizing the given definitions, it can be stated that diagnostics is a comprehensive analysis of the current state and development prospects of the enterprise with the aim of solving problems and using the advantages that arise and are created in the course of its activity. Without diagnostics of the economic security of the enterprise, planning, forecasting, budget allocations, and effective allocation of financial resources are impossible.

The existing foreign and domestic experience shows that diagnostics in the practice of its application is understood not only as a descriptive description of the values of the key indicators of the enterprise and the reasons for their change for the purpose of further generalization and calculation of the integral characteristic, but also to obtain detailed information about those indicators and factors that are most important in the assessment of crisis (pre-crisis) phenomena and conditions, since the results of diagnostics are the basis for the formation of an anti-crisis program and the corresponding strategy of the enterprise.

The quality of the results of diagnostics of the economic security of the enterprise largely depends on the analytical tools used in the diagnostic process, in particular, on the perfection of the system of indicators. To assess the scale of crisis phenomena, various indicator systems known to financiers around the world are used, in particular: the Altman model (1968, USA), the Weibel analysis system (1973, Switzerland), the Beerman model (1976) and the Krause model (1993, Germany), indicator systems Beaver (1966, USA), Kerling-Poddig financial analysis system (1994, France), discriminant analysis methodology of the German Bundesbank (1999, Deutsche Bundesbank).

These models are devoted to the diagnosis of bankruptcy and the assessment of the creditworthiness of the enterprise. The economic security of the enterprise is considered as the protection of the potential of the enterprise (production, organizational-technical, financial-economic, social) from the negative effects of external and internal factors, direct or indirect economic threats, as well as the ability of the subject to reproduce [2, c. 121].

Classification of the enterprise into the category of «sick» or «healthy» is carried out in terms of individual indicators in accordance with the empirically constructed scale of critical (normative) values of the studied indicator. A general conclusion about the quality of the company's financial condition is made based on the analysis of compliance of each of the indicators included in the specially selected system with their limit value. The most famous models of univariate discriminant analysis are Beaver and Weibel indicator systems.

However, the proposed indicator systems mostly reflect crisis phenomena at the enterprise in retrospect and are not sufficiently objective, which is a consequence of enterprises' double bookkeeping. That is, the issues of improving methodological principles, developing methodological provisions and appropriate tools remain relevant for enterprises in Ukraine.

Scientists include the following to the problems faced by enterprises on the way to achieving an acceptable level of economic security:

– the advantage of using a reactive approach (expecting the negative impact of the threat and taking further measures to eliminate the consequences instead of premature analysis of possible ways to avoid this impact);

– the need to improve the quality of information collection not only about competitors, but also about the state of one's own activity, which includes the priority of determining the company's goals and strategy;

– insufficient application of enterprise cost analysis for economic security;

– neglecting the available capabilities of the enterprise and directing the entire system of economic security to work with threats [3].

The basis of their development is discriminant analysis, which is understood as a set of methods and techniques of mathematical statistics, which are used to classify the analyzed elements depending on the values of the selected set of indicators in accordance with the built interpretation scale. In theory and practice, one-factor and multi-factor discriminant analysis are mostly distinguished.

One-factor (one-dimensional) discriminant analysis is based on a separate study of individual indicators (which are a component of a certain system of indicators) and classification of enterprises according to the principle of dichotomy.

As the authors note in their work [4], there are three components of economic security of an enterprise to combat internal threats. Technical and technological - analyzes the degree of effective and rational use of resources and fixed assets.

The financial component is responsible for the most effective use of capital, rights and information of the enterprise. The personnel component ensures the creation of appropriate conditions for work and effective personnel management.

In a number of works, diagnosis is considered as part of the assessment of crisis situations at the enterprise or the stage of anti-crisis management along with marketing, anti-crisis forecasting and planning, adoption and organization of the implementation of anti-crisis procedures, control of their implementation and motivation and regulation of the implementation of decisions.

Diagnostics of the state of the enterprise is proposed to be carried out from two sides: 1) financial and technical and economic diagnostics from an economic point of view, which involves periodic research of relevant aspects of the state of the enterprise with the aim of clarifying the development trends of all types of activities, the position in the trajectory of the life cycle and then adopting economically and socially justified solutions for correction; 2) organizational diagnostics as a system of methods, techniques and methods of conducting research to determine the goals of the business entity's functioning, the way to achieve them, identify problems and choose an option to solve them.

Adequacy of building a model of the indicator or the process under investigation is of great importance. Diagnostics of the economic security of the enterprise, based on the results of observation, provides the necessary information for making reasonable management decisions, which requires the organization of the appropriate service at the enterprise. Prevention of threats in the financial chain is possible by increasing the number of liquid assets, which will make it possible to pay debts on time and avoid bankruptcy.

It is proposed to increase the efficiency of capital management by: multiplying the amount of equity due to an increase in the received net profit; increasing the amount of net profit due to an effective tax policy aimed at increasing the share of net profit in the total amount of gross profit. Optimization of liabilities should be carried out in the following directions: refinancing of receivables and optimization of investment of working capital in receivables [5].

In modern conditions, a system of indicators is used to carry out diagnostics of the economic security of the enterprise, which characterizes the financial diagnostics of enterprises in detail and comprehensively and provides an objective assessment. The indicators of enterprises should be such that those who are to some extent connected by economic relations with a trading enterprise can get all the necessary information and find answers to all questions, for example, by determining the reliability of enterprises, partners and suppliers can decide whether it is appropriate further cooperation with this business entity».

A special place among the indicators that characterize the diagnosis of the economic security of the enterprise belongs to indicators of solvency and liquidity. «Solvency means the ability to cover all liabilities of enterprises with all assets. Solvency assessment is based on the liquidity characteristics of current assets. The liquidity of trading enterprises should be understood as its ability to cover liabilities with assets whose term of conversion into monetary form corresponds to the term of repayment of liabilities» [1, p.82].

The algorithm for calculating indicators for the analysis of liquidity and solvency of the enterprise is presented in Table 1. A sign of liquidity is the excess of current assets over short-term liabilities, that is, the presence of own working capital.

The study of the methodological foundations of the diagnosis of the economic security of the enterprise indicates the presence of different methodological approaches to its implementation, which are presented in domestic and foreign studies. Any method of predicting bankruptcy, assessing the creditworthiness of the borrower, analyzing the investment attractiveness of the enterprise can be considered from the standpoint of financial diagnostics.

Table 1

System of indicators of liquidity and solvency enterprises

Indicator	Calculation formula	Normative value
Coefficient coating	Current assets / Current liabilities	> 1
Coefficient quick liquidity	Current assets-Inventories / Current liabilities	0,6-0,8
Coefficient absolute liquidity	Cash and cash equivalents + Current financial investments / Current liabilities	> 0,25 magnification
Clean reversible capital	Current assets - Current liabilities	> 0, magnification
Share of own working capital in inventory coverage	Own working capital / Cost of stocks	> 1

Systematized by the author based on [1-4].

When diagnosing the financial condition and stability of the enterprise's functioning, it is necessary to use quantitative and qualitative assessment methods. Quantitative methods of diagnosis involve establishing indicators of the state of financial stability in numerical form. Qualitative methods are the final stage of diagnosing the financial state and stability of the enterprise's functioning, when using quantitative methods with the help of scales or matrices, a theoretical description of the diagnosis of crisis phenomena of the enterprise and their causes is obtained. Formulas for calculating financial stability indicators are given in Table 2.

An analysis of the financial stability of an enterprise is the most important characteristic of its activity and financial and economic well-being, which characterizes the result of its current, investment and financial development, contains the necessary information for investors, and also reflects the ability of a trading enterprise to meet its debts and obligations and increase its economic potential .

Profitability indicators are used to measure the efficiency of economic activity. The profitability of the enterprise reflects the degree of profitability of its activity. Thus, it is worth noting that the steady state of the enterprise is formed in the process of all its production and economic activities. Therefore, the assessment of financial diagnostics can be objectively carried out not through one, even the most important, indicator, but only with the help of a complex, system of indicators that characterize the economic situation of the enterprise in detail and comprehensively.

Table 2

System of indicators for assessment financial stability of the enterprise

Indicator	Calculation formula	Normative value
Coefficient autonomy	Equity / Sum of equity and debt capital	> 0,5
Coefficient financing	Позиковий капітал / Власний капітал	< 1, reduction
Financial ratio stability	Loan capital / Equity capital	>1, magnification
Security ratio own negotiable instruments means	Equity / Debt capital Current assets - Current liabilities / Current assets	> 0,1
Equity maneuverability ratio	Working capital - Current liabilities / Equity	> 0, magnification
Financial ratio dependencies	Loan capital / The value of the company's property	< 0,5, reduction

• Systematized by the author based on [3-7].

A special place among indicators characterizing the financial condition of enterprises belongs to indicators of solvency and liquidity. The solvency of enterprises is understood as the ability to cover all liabilities of a trading enterprise with all assets. Solvency assessment is based on the liquidity characteristics of current assets. The liquidity of trading enterprises should be understood as its ability to cover liabilities with assets whose term of conversion into monetary form corresponds to the term of repayment of liabilities.

Analysis of the financial stability of enterprises is the most important characteristic of its activity and financial and economic well-being, which characterizes the result of its current, investment and financial development, contains the necessary information for investors, and also reflects the ability of the enterprise to meet its debts and obligations and increase its economic potential.

The economic security of the enterprise is ensured with the help of its components, among which a significant role belongs to personnel security (component), thanks to which prerequisites are created for the productive work of personnel [6]. Ensuring the economic security of the enterprise can be carried out thanks to its resource potential and motivation for its growth.

Ignoring the nature of the enterprise in the study of the phenomenon of economic security of the enterprise also narrows the possibilities in explaining this phenomenon. Today, domestic researchers are already aware of this shortcoming. Yes, E.I. Ovcharenko noted that the concept of «economic security of the enterprise» is studied mainly in isolation from the concept itself and the purpose of the enterprise. If we do not specify the attribute of the object of security (enterprise), which is the basis for understanding the essence of the economic security of the enterprise, then the process of generic expansion of this concept will be endless and unmanageable [9, p. 43].

Most often there are attempts to explain the concept of «enterprise» within the framework of systems theory. They proceed from the recognition of the enterprise as an open system, the existence of a significant influence on its activity by factors of the external environment and, accordingly, the need to protect the enterprise's activity from the influence of those factors that constitute threats.

Thus, diagnostics of the economic security of the enterprise covers the following main areas:

– assessment of financial needs of the enterprise;

- determination of additional amounts of financial resources and sources of their receipt - loans, search for internal reserves, additional issuance of shares, bonds;
- identification of reserves for improving the financial condition;
- timely use of measures aimed at increasing the company's solvency;
- provision of well-founded planning for the financial recovery of the enterprise.

Diagnostics should inform decision-making, which is significantly influenced by actual or forecast data about the financial state of the enterprise. The tasks of diagnosing the financial condition should be subordinated to the tasks of enterprise management in three spheres of activity: operational (production), investment and financial, combining the movement of financial resources.

Most scientists suggest quantifying the impact of environmental risks and uncertainties on the performance of business entities using dispersion and variation coefficients, which in their essence reflect the sum of deviations in the performance of the enterprise.

It should be noted that diagnosing the economic security of the enterprise should be based on the following aspects:

1. Taking into account general methodological principles and a systemic approach, according to which the enterprise is considered as a complex system consisting of a number of subsystems and is in constant interaction with the external environment.
2. Use of a comprehensive approach, according to which diagnostics should cover all subsystems and components of the economic security of the enterprise.
3. Taking into account the sectoral and regional specifics of enterprises, which is reflected in the formation of a comprehensive system of evaluation indicators.
4. Formalization of assessments, which involves the algorithmization of the process of diagnosing economic security, the clear definition of assessments, the sequence of their implementation.
5. At the same time, the best state of economic security has the enterprise in which the overall value of the economic security diagnosis coefficient of the j-th enterprise under conditions of uncertainty Dj has the highest value. That is, the positive dynamics of the change in the general coefficient of diagnosing economic security is growth.
6. It should also be noted that the minimum level of the diagnostic coefficient, which indicates the acceptable state of economic security of the enterprise, is one. At the same time, all indicators that are included in diagnosing the economic security of the enterprise are closely interdependent, which makes it impossible to significantly increase one indicator at the expense of another.

It should be emphasized that all indicators for diagnosing the economic security of the enterprise are interconnected and interdependent. Therefore, it is possible to assess the real state of a trading enterprise only on the basis of the use of a certain set of indicators, taking into account the influence of various factors on the relevant indicators. Economic security is a complex multifactorial category aimed at effective use of available resources and market opportunities, guaranteeing stability and protection from negative factors, realization of interests under conditions of sustainable social and economic development.

Conclusions. The purpose of diagnosing the economic security of the enterprise is to provide the necessary knowledge for the decision of the management subject to use a variety of methodological apparatus and tools to determine the state of the management object in an uncertain operating environment and to develop a set of measures aimed at improving this state. Diagnostics of the economic security of the enterprise performs three functions: evaluation (determining the state of operation of the management object); diagnostic (detection of possible changes in the state of the object); exploratory (determination of possible measures to improve or restore the state of the subject of management).

In our opinion, the main tasks of diagnosing the economic security of an enterprise are as follows: 1) assessing the peculiarities of the functioning of economic entities in an uncertain external environment, identifying key influencing factors, identifying problem areas and «bottlenecks», assessing the threat of bankruptcy; 2) substantiation of the prerequisites and factors that have a significant impact on the internal economic mechanism of the functioning of economic entities; 3) generalization and systematization of knowledge in the field of mastering the skills of performing diagnostics in various areas of the enterprise to ensure effective management; 4) preparation and substantiation of specific practical measures to increase the efficiency of the business entity's activity in competitive conditions through improvement (restoration) of the state of functioning aimed at stable development.

Therefore, the study of economic security is quite important, because without it, the normal functioning of the enterprise as a whole is impossible. however, like any other field, it has a number of problems and risks, the solution of which will significantly improve the situation at the enterprise. Thanks to the adoption of the right strategies and decisions, it is possible to reduce the impact of both external and internal threats on the enterprise, which in turn will ensure the strengthening of the level of economic security both in general and in terms of individual technical-technological, financial and personnel components.

Solving these tasks enables managers to timely identify possible threats and complications in the company's activities in an unstable market environment and, on this basis, take timely preventive measures to prevent them. This is what plays an important role when choosing a method of enterprise evaluation and gives priority to economic diagnostics compared to other approaches to the analysis and processing of economic information.

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