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# DIAGNOSTICS OF THE STRATEGIC MANAGEMENT OF THE FINANCIAL AND ECONOMIC DEVELOPMENT OF THE ENTERPRISE

## ABSTRACT

The global financial crisis showed that the old methods, tools and diagnostic models of strategic management of the financial and economic development of the enterprise do not work with the necessary efficiency. Therefore, the problem of developing such models, methods and forms of assessment of the financial and economic development of the enterprise, which would most fully meet the requirements of modern times, is acute.

The purpose of the article is to develop a comprehensive diagnostic methodology for strategic management of the financial and economic development of the enterprise. The paper examines the process of diagnosing the financial and economic development on the example of a textile production enterprise. It was determined that financial and economic development is systemically managed, therefore, the basis of its coordination should be a systematic approach and modern information technologies. For the diagnosis of strategic management of the financial and economic development of textile production enterprises, proposed to apply the "Cybernetic concept of management of marginal resources and states of the development object (CURSOR+)". This concept is based on an integral model of the result of system-situational financial and economic development and includes the calculation of a balanced system of indicators. It is noted that the cause-and-effect relationships that exist between all the indicators of the components of the balanced system of indicators are a reflection of the management business strategy adopted at the enterprise.

In the article, it was proposed to carry out the procedure of convolution of all correlation coefficients. The analysis of the necessary and sufficient conditions for the existence of the extremum of the development indicator as a function of many variables made it possible to determine the differential levels of strategic management of the financial and economic development of textile industry enterprises. The proposed methodology will be useful for market stakeholders who take care of the procedure of timely diagnosis of strategic management of the financial and economic development of the enterprise for effective management decision-making.

**Keywords:** diagnostics, financial and economic development, strategy, management, enterprises, textile production, business processes, forecast

**JEL Classification:** M21, O12, C43, C53

## INTRODUCTION

No enterprise can effectively exist without timely diagnosis and analysis of its financial and economic development. Analysis of the financial and economic development of the enterprise is of great importance in the period of crisis and bifurcation. Timely diagnostics of the state of the enterprise will give managers the opportunity to assess its current state, identify problems, determine prospects and develop strategies for improving the financial state and general development. At the beginning of the war, Ukrainian enterprises found themselves in a difficult situation. Disruption of logistic links, decrease in the purchasing power of the population, insufficient foreign investments, weakness of the institutional matrix, and emigration of highly qualified workforce endanger the further development of enterprises. The light industry, whose enterprises feel the powerful

negative influence of the external environment, has not escaped the mentioned problems. The above-mentioned causes the need to deepen the methodology of diagnostics of the financial and economic development of modern enterprises.

## LITERATURE REVIEW

The problem of assessing the financial and economic development of economic entities is sufficiently covered in the literature. The article (Zheng et al., 2023) analyzed the impact of national industry on China's development. The authors' proposal for modelling the distribution of investments in research and development among industries is interesting. In the article, a thorough simulation experiment was conducted to assess the dynamic impact of scientific research activities of enterprises on the regional economy in China. The authors (Zhyvko et al., 2022) proposed a model of financial accounting and evaluation in the conditions of digitalization and globalization. The proposed model will contribute to the financial and economic development of the country and support the competitiveness of innovative enterprises. A relevant study for the financial and economic development of any country is the issue of reducing CO<sub>2</sub> emissions. In particular, the article (Gu et al., 2023) proposed a study of the impact of various tax policies on carbon emissions on sustainable financial and economic development and considered the scenario of introducing a carbon tax in China. The authors (Voznyuk et al., 2021; Oseredchuk et al., 2022) propose a methodology for evaluating education using innovative techniques and methodology. Samoilikova, Herasymenko, Kuznyetsova, Tumpach, Ballova & Savga, (2023) investigate the impact of education on the ease of doing business in the context of innovative development. The combination of methods used in these articles is interesting, which will ultimately improve educational progress, and contribute to economic and social development. This article is of particular interest to us, because it contains a set of tools and methods of economic processing of information that should be used within the scope of our research.

Scientists (Agasty et al., 2023; Kuznyetsova et al., 2022) proposed an index of sustainable development of innovations and adapted it on the example of the activities of 160 enterprises. This made it possible to identify tools for increasing innovative attractiveness to support financial and economic development. Of particular interest is the modelling process described in the article (Wu et al., 2023). The authors thoroughly researched the influence of environmental loans on the efficiency of the enterprise and the mediating role of environmental innovations. Using a multivariate statistical analysis tool, the authors measured the variables and relationships that stimulate or inhibit financial and economic development. Approaches to modelling economic systems, enterprises or individual objects are depicted in other articles (Lv et al., 2022; Ovcharenko et al., 2022; Yang et al., 2023).

The authors (Gouvea et al., 2022) rightly emphasize that promoting sustainable financial and economic development and entrepreneurship is an important issue for all countries of the world today. Expanding business opportunities and fostering financial and economic development are critical to sustaining competition.

Panel studies on the evaluation of enterprise activity in the context of resource conservation and individual markets are presented in the works of the authors (Vasylchak et al., 2022; Zhang et al., 2022; Lin and Bai, 2020). The authors used non-standard methodical approaches to modelling socio-economic processes and their evaluation. Balanced Scorecard (BSC) was proposed by American scientists Kaplan and Norton in the 90s of last century (Kaplan and Norton, 1996).

A thorough assessment of the financial and economic efficiency of enterprises of the textile industry is presented in the work of the authors (Burkhanov & Bakhodirovna, 2021; Dudin et al., 2015; Zarova & Tursunov, 2019). Financial security and the level of their evaluation are thoroughly reflected in the scientific work (Burkhanov & Tursunov, 2020). A set of balanced workers for evaluating strategic management of financial and economic development is proposed in the works of many scientists (Boichenko et al., 2021; Baxromov, 2023; Azimovna, 2023).

Accordingly, this topic is poorly covered in the economic literature. It is also clear that the issue of diagnosis of strategic management of the financial and economic development of textile enterprises, as mentioned above, is one of the most urgent issues of the modern economy.

## AIMS AND OBJECTIVES

The purpose of the article is to model diagnostics of strategic management of financial and economic development of textile production enterprises. In accordance with the goal, the following tasks were set and solved:

- the essence of the efficiency of financial and economic development of the enterprise is determined;
- differentiation of strategic management of financial and economic development of enterprises is proposed;

- diagnosis of strategic management of financial and economic development of textile production enterprises is considered;
- the use of the "Cybernetic concept of management of marginal resources and states of the object of development" for diagnosis of the development of enterprises was tested;
- an integrated model of systemic situational development and a balanced system of indicators is proposed.

## METHODS

The global financial crisis has shown that the old economic models for diagnosing the financial and economic development of enterprises do not work with the necessary efficiency. They have lost their relevance due to changes in economic systems and economic relations between them. The task of today's scientists is to develop such models, methods and forms of assessing financial and economic development, which would best meet the contemporary requirements of today (Dakus and Simchenko, 2012).

In this regard, the formation of new paradigms for assessing the financial and economic development of textile enterprises should be carried out by combining the fundamental concepts of economics, systems and situational views.

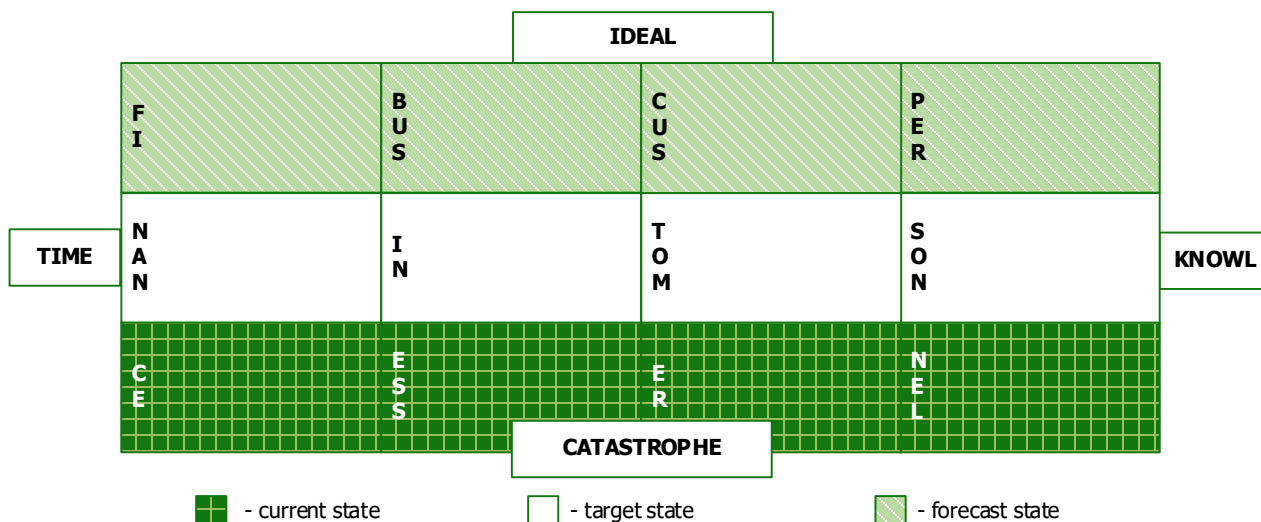
Diagnostics of the strategic management of the financial and economic development of the enterprise indicates the complexity and multifaceted nature of this process. Such diagnostics is a complex system that includes various methods and indicators designed to assess the financial and economic situation of the enterprise. The main components of this system include the methodological foundations of economic analysis. They determine the general approach to the analysis of the financial condition and economic development of the enterprise. Include theoretical foundations, approaches, techniques and tools used in the analysis. It is appropriate to use different concepts and approaches to analysis, such as horizontal, vertical, and comparative analysis, as well as different methods, including the analysis of indicators, graphs, charts, etc. Diagnostics should reveal the shortcomings and weaknesses of the financial and economic condition in order to identify areas that need improvement or correction. Modern enterprises use various tools and approaches to ensure their financial stability and economic development.

For the purpose of developing the diagnostic process of strategic management of the company's financial and economic development, we used a set of well-known and specific scientific methods. In particular, to obtain a single diagnostic indicator of the level of strategic management of the financial and economic development of the enterprise, it is proposed to use the method of correlation analysis, which made it possible to carry out the procedure of convolution of all correlation coefficients. Expert and analytical methods, as well as the method of simulation modelling, were used to determine the weighting coefficients. The values of the balanced system of indicators of the target state were obtained by the extrapolation method of planning. The values of the balanced system of indicators of the forecast state were determined using adaptive forecasting models - the method of exponential smoothing.

The study provided an opportunity to conclude that the financial and economic development of the enterprise is considered effective when the ratio of costs and results in the transition from extensive to intensive rate of expanded reproduction improves (increases). Management of the financial and economic development of the enterprise contains two stages: determining the trajectory of effective financial and economic development of the enterprise with the formation of goals and ways to achieve them; and keeping it on this trajectory.

The first stage of assessing the financial and economic development of textile enterprises is related to the diagnostic analysis of its financial and economic development, which involves determining such an indicator that allows to determine whether the company is under control and signals extraordinary events that require immediate action.

Thus, the diagnosis of the financial and economic development of textile enterprises is based on an integrated model of system-situational development and BSC (Figure 1).



**Figure 1. An integrated model of system-situational development and BSC.**

The system-situational model of development is an integral part of the "Cybernetic concept of management of boundary resources and states of the object of development (CURSOR +)".

Since the '90s of the last centuries, the "cybernetic concept of management of boundary resources and states of the object of development" has become widespread in numerous functional and applied research and development. It has the following components: system-situational model of development; problem-diagnostic model of the object; object state universe model; and model of the universe of knowledge about the state of the object (Cherkasov et al., 2021).

We adopt the main provisions of this concept to the new object of modelling - modern textile enterprises.

The vertical of the shell corresponds to the system-situational space of functioning and development of the enterprise, and the horizontal - the space of marginal resources that ensure the viability and implementation of functional purposes. Both the vertical of development states and the horizontal of resources are limited by the corresponding poles.

The horizontal of resources is limited by the pole of time as an extremely non-reproducible resource and the pole of knowledge as an extremely inexhaustible resource that grows progressively as it is used. The financial and material-energy resources located between these poles are situational and temporal.

The system-forming factors of financial and economic development are the limit of perfection and the limit of danger of this development.

The limit of perfection (ideal) of financial and economic development can be set by the limit values of financial and economic indicators, corporate culture, value system, mission, vision, and other qualitative indicators. The limit of perfection, like any ideal, is unattainable, but it can be approached indefinitely. This property of the ideal creates the potential of virtually unlimited in the development of the textile enterprise.

The danger limit (catastrophe) corresponds to the state of premature termination of the enterprise, such as its bankruptcy and liquidation.

Located between the poles, the target, current and forecast states characterize the situation of financial and economic development of textile enterprises.

BSC considers four equivalent market factors: financial component, internal business processes, customer base and personnel, i.e. in this system the key is not individual indicators, but the results of their interaction and balance, which allows assessing the dynamics, identifying possible deviations from the trajectory of effective financial and economic development and meets the requirements of enterprise management modelling.

The causal links that exist between all four indicators of the BSC are an expression of the company's business strategy. Such correlations are estimated using a correlation coefficient  $r$ .

## RESULTS

Indeed, the diagnosis of strategic management of the financial and economic development of an enterprise is one of the most important components of the success of enterprises and the country as a whole.

Conducting an analysis of the financial and economic condition of the enterprise is critically important for assessing its ability to survive. This includes an assessment of the balance sheet, earnings and cash flows, as well as profitability and liquidity indicators. Diagnostics of the strategic management of the financial and economic development of the enterprise allows timely identification of risks that may affect the enterprise and helps to develop risk management strategies. Diagnostics of the financial and economic state of the enterprise, which involves the use of analytical tools, is key to making the right management decisions and ensuring economic security. Creditors, investors and other interested parties rely on such analysis to make decisions about financial relations with the enterprise. It is important to emphasize that strategic management is not limited to financial and economic aspects, and its achievement requires a comprehensive approach that covers economic, legal, social and technical aspects of the enterprise's activities. Diagnostics of the financial and economic condition helps enterprises to rationally manage their resources, ensure timely repayment of obligations, and operate profitably. Also, it plays an important role in identifying possible problems and changes in the financial state of the enterprise, helping to respond to them in a timely manner. Another important function of diagnostics is the formation of the company's financial policy, strategy and tactics, which contributes to planning and making sound decisions regarding financial management.

In general, in the conditions of modern business, where financial stability and efficiency play an important role, a systematic diagnosis of the strategic management of the financial and economic condition becomes necessary to ensure the successful operation of the enterprise and its competitiveness in the market.

To obtain a single diagnostic indicator of development, it is proposed to carry out the procedure of convolution of all correlation coefficients  $W = F(r_{12}; r_{13}; \dots)$ .

This convolution can be specified as a sum with some weights:  $W = \gamma_1|r_{12}| + \gamma_2|r_{13}| + \dots$

Due to the property of correlation coefficients, the value of the development indicator will be in the interval between zero and one, so the limit of perfection (ideal) is defined as 1, and the limit of danger (catastrophe) as 0. Such diagnostics are carried out periodically (the period is defined depending on the state of the system, its direction of activity and other factors). Therefore, in practice, we will have a set of values that can be displayed graphically.

Analysis of necessary and sufficient conditions for the existence of the extremum of the development indicator  $W = F(r_{12}; r_{13}; \dots)$  as functions of many variables allowed determining the differential levels of financial and economic development of textile enterprises:

- Level I - textile enterprises, which have the highest probability of bankruptcy;
- Level II - textile enterprises, which are threatened with bankruptcy, need to develop anti-crisis measures;
- Level III - textile enterprises, bankruptcy is not threatened, in the dynamics they are characterized by the stable dynamics of financial and economic development;
- Level IV - textile enterprises, characterized by stable dynamics of financial and economic development;
- Level V - high-tech, competitive textile enterprises that meet the needs of shareholders, consumers and employees (Table 1).

**Table 1. Levels of financial and economic development of textile enterprises.**

	Level I	Level II	Level III	Level IV	Level V
Textile enterprises	$0 < W \leq 0,1$	$0,1 < W \leq 0,2$	$0,2 < W \leq 0,8$	$0,8 < W \leq 0,9$	$0,9 < W < 1$

According to the results of the assessment of financial and economic development management at the textile enterprises of level I and level II, it is necessary to develop and implement the program of anti-crisis measures.

At textile enterprises of level III and level IV, essential attention should be paid to organizational and economic measures of risk reduction in the activity of the enterprise.

Textile enterprises of financial and economic development level V must maintain economic balance in their activities. To further ensure the stable operation and development of enterprises at this level, it is necessary to rationally use existing experience and knowledge, maintain and improve key success factors, and support innovation and change.

Diagnostics of the financial and economic development of textile enterprises of Ukraine was carried out on the basis of "VESNA" Ltd. Limited Liability Company "VESNA" Ltd. was registered on April 25, 1994. The Rozdil city is located in the Lviv region. The amount of the authorized capital is UAH 1,150,500. Main activity 14.39 - manufacture of other knitted and crocheted apparel. Other activities:

- 13.92-manufacture of finished textile articles, except apparel;
- 13.99-manufacture of other textile products, not included in other categories;
- 47.82 Retail sale of clothing, footwear and textile goods in stalls and in the market.

The results of diagnostics of financial and economic development of textile enterprises: "VESNA" Ltd., include reasonable strategic goals and indicators of BSC (Table 2).

BSC component	Strategic aim	Indicator
Finance	<ul style="list-style-type: none"> <li>▪ Obtaining a steadily growing profit.</li> <li>▪ Increasing the volume of orders.</li> <li>▪ Maintaining stability.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Sales volume.</li> <li>▪ Income from new types of products and activities.</li> <li>▪ Other types of income.</li> <li>▪ Total costs.</li> </ul>
Customers	<ul style="list-style-type: none"> <li>▪ Precise performance of customers' orders.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Income from new customers.</li> <li>▪ Loss of customers.</li> <li>▪ Advertising costs.</li> </ul>
Business processes	<ul style="list-style-type: none"> <li>▪ Expanding the range of products.</li> <li>▪ Performance of non-standard orders.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Cost of finished products.</li> <li>▪ Costs for creating new types of products.</li> <li>▪ Total costs for production and technical development.</li> <li>▪ Income from additional services.</li> </ul>
Training and development of personnel	<ul style="list-style-type: none"> <li>▪ Increasing the professionalism of employees.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Total costs of education.</li> <li>▪ Wage fund.</li> </ul>

The formula for determining the integrated development indicator for the company "VESNA" Ltd.:

$$W = \sum_{i=5}^{13} 0,02(|r_{1,i}| + |r_{2,i}| + |r_{3,i}| + |r_{4,i}|) + \sum_{i=9}^{13} 0,01(|r_{5,i}| + |r_{6,i}| + |r_{7,i}| + |r_{8,i}|) + \sum_{i=12}^{13} 0,01(|r_{9,i}| + |r_{10,i}| + |r_{11,i}|)$$

$$r_{ij} = \frac{n \sum_{i=1}^n x_i y_i - (\sum_{i=1}^n x_i)(\sum_{i=1}^n y_i)}{\sqrt{n \sum_{i=1}^n x_i^2 - (\sum_{i=1}^n x_i)^2} \sqrt{n \sum_{i=1}^n y_i^2 - (\sum_{i=1}^n y_i)^2}} - \text{correlation coefficients}$$

$\gamma_i$  –weights, which were determined by expert and analytical methods.

Based on the financial report of the small business entity, the report on financial results and the report on the main indicators of the enterprise for 2017-2021, the numerical values of the selected indicators of the current state of the enterprise are determined.

The values of the target state of BSC indicators were obtained by the extrapolation planning method: the reporting year was taken as the basis for calculations and, assuming that the trends of the previous year will continue in the future, the planned indicators were determined.

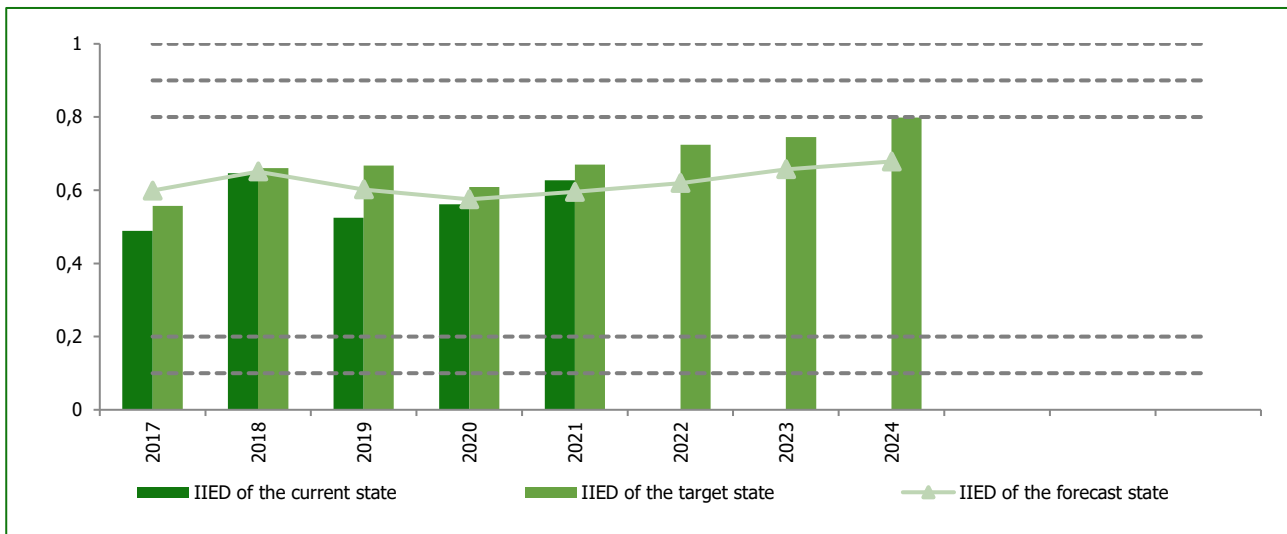
The values of the BSC indicators of the forecast state were determined using adaptive forecasting models - the method of exponential smoothing.

The generalization of calculations provided the receipt of the *integrated indicator of financial and economic development (IIED)* of the current, target and forecast states of the enterprise "VESNA" Ltd (Table 3).

**Table 3. Integrated indicator of financial and economic development (IIED) of the enterprise "VESNA" Ltd.**

IIED	2017	2018	2019	2020	2021	2022	2023	2024
IIED of the current state	0.4893	0.6463	0.5248	0.5612	0.6268			
IIED of the target state	0.5573	0.6604	0.6671	0.6086	0.6701	0.7239	0.7456	0.7986
IIED of the forecast state	0.5989	0.65117	0.6019	0.5751	0.5955	0.6194	0.6569	0.6785

The obtained results show that "VESNA" Ltd. has the third level of financial and economic development, it is not threatened with bankruptcy, but there is no uniform growth of financial and economic development (Figure 2).



**Figure 2. Integral indicator of financial and economic development of "VESNA" Ltd.**

Thus, based on the results of the diagnostics of the strategic management of the financial and economic development of the enterprise "VESNA" LLC - LTD, the following can be determined. Starting in 2017, the enterprise chosen by us for research had a dynamic trend of financial and economic development, which indicates a different level of strategic management. The worst indicator of strategic management according to the integrated indicator of economic development (current state) was recorded in 2017, and the best in 2018. The worst indicator of strategic management according to the integral indicator of economic development (target state) was also in 2017, and the best in 2019. Analyzing the forecast of strategic management of the financial and economic development of the enterprise "VESNA" LLC - LTD, it should be noted that its integral indicator will increase for the period of 2022-2024. Such a trend of increasing the strategic management of the financial and economic development of the enterprise "VESNA" LLP - LTD has been observed since 2020 and is quite stable. Such a stable position of financial and economic development indicates that the company will not go bankrupt in the future, has stable liquidity and does not depend on financial borrowing in the short or medium term.

To ensure the uniform growth of the financial and economic development of "VESNA" Ltd. and the transition to a new level IV, which is characterized by stable dynamics of financial and economic development, VESNA Ltd. must invest in technology and innovation. We have determined that the fourth level includes high-tech, competitive textile enterprises that satisfy the needs of shareholders, consumers and employees. That is why the company needs it invest in the development and optimization of new products, the purchase of new machines for coating technical textiles, as well as equipment for digital printing. It is also necessary to invest in personnel training. For this, it is necessary to cooperate with science, educational investment and technological clusters and higher educational institutions.

## DISCUSSION

The authors use a system of indicators to assess the financial condition of enterprises (Burkhanov & Bakhodirovna, 2021; Boichenko et al., 2021). However, we do not agree with their opinion. We believe that such an accumulation of a system

of various indicators will complicate the practical application of the strategic management diagnostic procedure financial and economic development of the enterprise. Considering that time is the most valuable resource, as well as human, there is a need to implement a simplified system for evaluating the strategic management of the financial and economic development of the enterprise.

Scientists do not rank the strategic management of the company's financial and economic development (Baxromov, 2023; Gouvea et al., 2022). However, in our research, we propose to carry it out. In particular, we divided the levels of financial and economic development of enterprises of the textile industry:

Level I - textile production enterprises, which have the highest probability of bankruptcy; II level - textile production enterprises, which are threatened with bankruptcy, they need the development of anti-crisis measures; III level - textile production enterprises, bankruptcy is not threatened, they are dynamically characterized by the acquisition (maintenance) of the uniformity of the growth of economic development; IV level - textile production enterprises, characterized by stable dynamics of economic development; Level V - high-tech, competitive enterprises of textile production, satisfying the needs of shareholders, consumers and employees. The ranking we specified will allow us to make the necessary management decisions to improve the strategic management of the financial and economic development of the enterprise, taking into account the current situation. Such separation at the level of financial and economic development of enterprises of the textile industry will make it possible to have a localized influence on the processes within the enterprise and minimize the negative impact of the external environment on the financial and economic development of the enterprise.

The authors' works are outdated and do not meet modern requirements (Dudin et al., 2015; Zarova & Tursunov, 2019). In particular, scientists used old tools, methods, indicators and procedures for assessing the financial and economic status of business entities. However, the rapidity of the external environment, institutional changes, crises and bifurcations, and changes within the enterprise require a systematic, continuous and operational review of all methods of diagnosing the financial and economic condition. They require the expansion of goals, functions, and stages of both medium-term and long-term forecasting. This is especially important given the fact that planning and forecasting are the main components of operational and strategic management of business entities, including large, medium and small enterprises that seek to develop on an innovative basis and increase the financial and economic development of the enterprise. In our research, all tools, methods and their combined use are innovative and have a synergistic effect, which allows timely and effective diagnosis of strategic management of the financial and economic development of the enterprise, taking into account modern conditions. In addition, our methodology is simple, accessible and easy to use by any market participants.

In our opinion, the economic literature in general focuses on traditional financial-oriented concepts of diagnosing the financial and economic development of enterprises (Zheng et al., 2023; Zhyvko et al., 2022; Gu et al., 2023). However, at the present stage, these concepts have begun to lose their relevance to real processes. This is due to the following factors: lack of non-financial indicators; insufficient connection with strategic planning; significant focus on past results; short-term; focusing only on a certain part of the external and internal environment of the enterprise and more.

In the conditions of transformational conversion, the need for highly efficient textile enterprises and means of continuous assessment of their financial and economic development is growing significantly. This need can be met by developing methods for diagnosing the problem of financial and economic development of textile enterprises based on the system-situational model of development, which is part of the "Cybernetic concept of management of boundary resources and conditions of the object of development".

We do not fully agree with individual authors that the essence and content of managing the financial and economic development of textile enterprises as a management category consists in determining the trajectory of the enterprise's development (formation of goals and ways to achieve them) and maintaining it on this trajectory, which ensures a system-situational approach (Agasty et al., 2023; Vasylychak et al., 2022; Zhang et al., 2022).

We believe that management of the financial and economic development of enterprises using the system-situational model of development allows assessing the functioning and development of the enterprise in the space of its activities taking into account the limits of development: lower - the limit of danger (catastrophe) and upper - the limit of perfection (ideal). Approaching the edge of danger means increasing the likelihood of bankruptcy and liquidation of the enterprise and characterizes the regression of development. Approaching the financial and economic development of a textile enterprise to the limit of perfection is approaching the desired results: strengthening the financial situation, the chosen mission, corporate culture etc.

The space of business activity in the system-situational model of development should be determined using the components of a balanced scorecard (finance, customers, business processes, training and development of personnel), which combines financial indicators and indicators of intangible assets.



The methodological approach to the selection of indicators of a balanced scorecard for textile enterprises includes mission, strategy, strategic goals of the enterprise, the experience of the manager and the potential of each individual employee, etc.

## CONCLUSIONS

The conducted research made it possible to come to the conclusion that such financial and economic development of the enterprise is considered effective, in which the ratio of costs and results improves (increases) during the transition from extensive to the intensive pace of extended reproduction. Management of the economic development of the enterprise includes two stages: determination of the trajectory of effective economic development of the enterprise with the formation of goals and ways to achieve them; keeping it on that trajectory.

The result of the diagnostic analysis of the financial and economic development of textile enterprises is the calculation and analytical determination of the development indicator as an integral convolution of the correlation coefficients between the indicators of a balanced scorecard, which allows for determining the synergy effect at the enterprise. Approaching the development indicator to the unit indicates the achievement of the adequacy of the chosen strategy and progressive development in the direction of the ideal; approaching zero indicates a regressive movement in the direction of the catastrophe.

Assessment of the integrated indicator of financial and economic development, as a function of many variables, allows us to determine five levels of financial and economic development of enterprises: level I - textile enterprises, which have the highest probability of bankruptcy; level II - textile enterprises, which are threatened with bankruptcy, they need to develop anti-crisis measures; level III - textile enterprises, bankruptcy is not threatened, in the dynamics they are characterized by the stable dynamics of financial and economic development; level IV - textile enterprises, characterized by stable dynamics of financial and economic development; level V - high-tech, competitive textile enterprises that meet the needs of shareholders, consumers and employees.

The use of the algorithm for implementing the mechanism of problem diagnosis of financial and economic development allows identifying the problems of textile enterprises "VESNA" Ltd. and ways to solve them: enterprises of level III financial and economic development should pay attention to organizational and economic measures to reduce risk.

The developed algorithm for implementing the mechanism of problem diagnosis of financial and economic development allows for control and management in real time; records and takes into account external trends and local changes in a timely manner; to help strengthen the team's cohesion by increasing the responsibility of each individual employee for the company's image.

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## ADDITIONAL INFORMATION

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### AUTHOR CONTRIBUTIONS

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### REFERENCES

1. Agasty, S., Tarannum, F., & Narula, S. A. (2023). Sustainability innovation index for micro, small and medium enterprises and their support ecosystems based on an empirical study in India. *Journal of Cleaner Production*, 137793. <https://doi.org/10.1016/j.jclepro.2023.137793>
2. Azimovna, M. S. (2023). Improvement of organization of marketing service in textile enterprises. *European Journal of Contemporary Business Law & Technology: Cyber Law, Blockchain, and Legal Innovations*, 1(2), 70-75. <https://e-science.net/index.php/EJCBLT/article/download/163/134>
3. Baxromov, A. A. O. G. L. (2023). Financial security in the textile industry to increase the economic efficiency of industrial enterprises. *Nazariy va amaliy tadqiqotlar xalqaro jurnali*, 3(2), 27-37. <https://cyberleninka.ru/article/n/financial-security-in-the-textile-industry-to-increase-the-economic-efficiency-of-industrial-enterprises>
4. Boichenko, K., Mata, M. N., Mata, P. N., & Martins, J. N. (2021). Impact of financial support on textile enterprises' development. *Journal of Risk and*

- Financial Management, 14(3), 135.  
<https://doi.org/10.3390/jrfm14030135>
5. Burkhanov, A., & Bakhodirovna, B. D. (2021). Evaluation of economic potential of textile industry enterprises. *Vlakna a Textil*, 28(2), 9-21.  
[http://vat.ft.tul.cz/2021/2/VaT\\_2021\\_2\\_2.pdf](http://vat.ft.tul.cz/2021/2/VaT_2021_2_2.pdf)
  6. Burkhanov, A., & Tursunov, B. O. (2020). Main indicators of textile enterprises' financial security assessment. *Vlakna a Textil*, 27(3), 35-40.  
[http://vat.ft.tul.cz/2020/3/VaT\\_2020\\_3\\_7.pdf](http://vat.ft.tul.cz/2020/3/VaT_2020_3_7.pdf)
  7. Cherkasov, A., Kolesnyk, I., Fokas, L., Ovsak, O., Pestovska, Z., Stoica, M., ... & Hrinevych, V. (2021). *Economics, management and administration in the coordinates of sustainable development: Scientific monograph*. Riga, Latvia: Baltija Publishing, 716 p.  
<http://baltijapublishing.lv/omp/index.php/bp/catalog/book/185/5799/12127-1>
  8. Dakus, A. V., & Simchenko, N. O. (2012). Financial and economic development of an enterprise: essence and definition. *Actual problems of economy and management: a collection of scientific papers of young scientists*, (6).  
<https://ela.kpi.ua/handle/123456789/12350>
  9. Dudin, M. N., Lyasnikov, N. V. E., Kahramanovna, D. G., & Kuznecov, A. V. E. (2015). Chinese textile industry: Sustainable development challenges and competitiveness issues in economic environment dynamics. *Fibres & Textiles in Eastern Europe*, 4 (112), 14-18.  
<http://dx.doi.org/10.5604/12303666.1152704>
  10. Gouvea, R., Lehneman, L., & Terra, B. (2022). Tribal financial and economic development & entrepreneurship: A latin american perspective. *World Development Perspectives*, 26, 100403.  
<https://doi.org/10.1016/j.wdp.2022.100403>
  11. Gu, R., Guo, J., Huang, Y., & Wu, X. (2023). Impact of the EU carbon border adjustment mechanism on economic growth and resources supply in the BASIC countries. *Resources Policy*, 85, 104034.  
<https://doi.org/10.1016/j.resourpol.2023.104034>
  12. Kaplan, R., & Norton, D. (1996). *The balanced scorecard: translating strategy into action*. Boston: Harvard Business School Press, 329.
  13. Kuznyetsova, A., Tiutiunyk, I., Panimash, Y., Zsolt, Z., & Zsolt, P. (2022). Management of Innovations in Public Administration: Strategies to Prevent the Participation of Financial Intermediaries in Shadow Operations. *Marketing and Management of Innovations*, 3, 125-138.  
<https://doi.org/10.21272/mmi.2022.3-11>
  14. Lin, B., & Bai, R. (2020). Dynamic energy performance evaluation of Chinese textile industry. *Energy*, 199, 117388.  
<https://doi.org/10.1016/j.energy.2020.117388>
  15. Lv, C., Song, J., & Lee, C. C. (2022). Can digital finance narrow the regional disparities in the quality of economic growth? Evidence from China. *Economic Analysis and Policy*, 76, 502-521.  
<https://doi.org/10.1016/j.eap.2022.08.022>
  16. Oseredchuk, O., Drachuk, I., Teslenko, V., Ushnevych, S., Dushechkina, N., Kubitskyi, S., & Chychuk, A. (2022). New Approaches to Quality Monitoring of Higher Education in the Process of Distance Learning. *IJCSNS International Journal of Computer Science and Network Security*, 22(7), 35-42. <https://doi.org/10.22937/IJCSNS.2022.22.7.5>
  17. Ovcharenko, I., Khodakivska, O., Sukhomlyn, L., Shevchenko, O., Lemeshenko, I., Martynov, A., Zos-Kior, M., Hnatenko, I., Michkivskyy, S., & Bilyavska, L. (2022). Spatial organization management: Modeling the functioning of ecoclusters in the context of globalization. *Journal of Hygienic Engineering and Design*, 40, 351-356.  
<https://keypublishing.org/jhed/wp-content/uploads/2022/11/32-Full-paper-Ievgen-Ovcharenko.pdf>
  18. Samoilkova, A., Herasymenko, V., Kuznyetsova, A., Tumpach, M., Ballova, M., & Savga, L. (2023). Factor Analysis and Multiple Regression. *Marketing and Management of Innovations*, 14(2), 208-217.  
<https://doi.org/10.21272/mmi.2023.2-19>
  19. State Statistics Service of Ukraine (2022).  
<http://www.ukrstat.gov.ua/>
  20. Voznyuk, A., Gorobets, S., Kubitskyi, S., Domina, V., Gutareva, N., Roganov, M., & Bloschynskiy, I. (2021). Interdisciplinary Educational Technology based on the Concept of Human Brain Functional Asymmetry. *Postmodern Openings*, 12(2), 433-449.  
<https://doi.org/10.18662/po/12.2/316>
  21. Vasylichak, S., Petrynyak, U., Loiak, L., Zagnybida, R., Khomiv, O., & Hnatenko, I. (2022). State regulation of employment in the labor market of territorial communities in the conditions of innovative development of entrepreneurship: Aspects of management. *Journal of Hygienic Engineering & Design*, 40, 304-311.  
<https://keypublishing.org/jhed/jhed-volumes/jhed-volume-40-fpp-27-svitlana-vasylchak-uliana-petrynyak-liliia-loiak-raisa-zagnybida-olena-khomiv-iryna-hnatenko-2022-state-regulation-of-employment-in-the-labor-market-of-territori/>

22. Wu, S., Zhou, X., & Zhu, Q. (2023). Green credit and enterprise environmental and economic performance: The mediating role of eco-innovation. *Journal of Cleaner Production*, 382, 135248. <https://doi.org/10.1016/j.jclepro.2022.135248>
23. Yang, Z., Lu, M., Shao, S., Fan, M., & Yang, L. (2023). Carbon regulation and economic growth: City-level evidence from China. *Environmental Impact Assessment Review*, 99, 107020. <https://doi.org/10.1016/j.eiar.2022.107020>
24. Zarova, E. V., & Tursunov, B. O. (2019). Regional features of industrial production dynamics in the research of textile enterprises financial security in Uzbekistan. *Vlakna a textil*, 28(1), 108-115. [http://vat.ft.tul.cz/2021/1/VaT\\_2021\\_1\\_14.pdf](http://vat.ft.tul.cz/2021/1/VaT_2021_1_14.pdf)
25. Zhang, F., Li, Y., Li, Y., Xu, Y., & Chen, J. (2022). Nexus among air pollution, enterprise development and regional industrial structure upgrading: A China's country panel analysis based on satellite retrieved data. *Journal of Cleaner Production*, 335, 130328. <https://doi.org/10.1016/j.jclepro.2021.130328>
26. Zheng, Q., Wang, X., & Bao, C. (2023). Enterprise R&D, Manufacturing Innovation and Macroeconomic Impact: An evaluation of China's Policy. *Journal of Policy Modeling*. <https://doi.org/10.1016/j.jpolmod.2023.09.002>
27. Zhyvko, Z., Nikolashyn, A., Semenets, I., Karpenko, Y., Zos-Kior, M., Hnatenko, I., Klymenchukova, N., & Krakhmalova, N. (2022). Secure aspects of digitalization in management accounting and finances of the subject of the national economy in the context of globalization. *Journal of Hygienic Engineering and Design*, 39, 259-269. <https://keypublishing.org/jhed/wp-content/uploads/2022/09/25.-JHED-Volume-39-Full-paper-Zinaida-Zhyvko.pdf>

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## ДІАГНОСТИКА СТРАТЕГІЧНОГО УПРАВЛІННЯ ФІНАНСОВО-ЕКОНОМІЧНИМ РОЗВИТКОМ ПІДПРИЄМСТВА

Світова фінансова криза показала, що старі методи, інструменти та моделі діагностики стратегічного управління фінансово-економічним розвитком підприємства не діють із необхідною ефективністю. Тому постає проблема розробки таких моделей, методик і форм оцінки фінансово-економічного розвитку підприємства, які б найповніше відповідали вимогам сучасності.

Метою дослідження є розробка комплексної методики діагностики стратегічного управління фінансово-економічним розвитком підприємства. У роботі розглянуто процес діагностування фінансово-економічного розвитку на прикладі підприємства текстильного виробництва. Визначено, що фінансово-економічний розвиток є системно керованим, отже, основою його координації повинен бути системний підхід та сучасні інформаційні технології. Для діагностики стратегічного управління фінансово-економічним розвитком підприємств текстильного виробництва запропоновано застосувати «Кібернетичну концепцію управління граничними ресурсами і станами об'єкта розвитку (КУРСОР+)». Ця концепція заснована на інтегральній моделі результату системно-ситуаційного фінансово-економічного розвитку та включає розрахунок збалансованої системи показників. Зауважено, що причинно-наслідкові зв'язки, що існують між усіма показниками складових збалансованої системи показників, є відображенням прийнятої на підприємстві управлінської бізнес-стратегії.

У статті запропоновано проводити процедуру згортки всіх коефіцієнтів кореляції. Аналіз необхідних і достатніх умов існування екстремуму показника розвитку як функції багатьох змінних дозволив визначити диференційні рівні стратегічного управління фінансово-економічним розвитком підприємства текстильної промисловості. Запропонована методика буде корисною для стейкхолдерів ринку, які опікуються процедурою вчасної діагностики стратегічного управління фінансового-економічним розвитком підприємства для ефективного ухвалення управлінських рішень.

**Ключові слова:** діагностика, фінансово-економічний розвиток, стратегія, управління, підприємства, текстильне виробництво, бізнес-процеси, прогноз

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