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METHOD OF SELECTING THE OPTIMAL STRATEGY FOR ENSURING FINANCIAL SECURITY OF TEXTILE ENTERPRISES

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Abstract. The article examines the author's methodology for choosing the optimal strategy for ensuring the financial security of textile enterprises. The key criteria and indicators that affect the sustainability of business in the context of market risks are described. The proposed approach is aimed at increasing financial stability, reducing vulnerability to external threats and ensuring the strategic stability of enterprises in the industry.

Key words: financial security, multivariate analysis, dispersion, depth of insecurity, relevant group, regression model.

1.Introduction

In the context of globalization and instability of the world economy, issues of assessing the financial security of enterprises are becoming the object of close attention of both the scientific community and international organizations. Modern research in this area focuses on the development of methods for analyzing the financial potential of assets, effective resource management and ensuring the sustainability of financial and economic activities.

Leading international institutions, including the World Bank, IMF, and the UN, focus on financial recovery strategies, risk management, and improving financial management performance in times of crisis, particularly the COVID-19 pandemic. The results of these studies highlight the importance of strategic management of financial flows and assets to improve the competitiveness and sustainability of enterprises.

Particular attention is paid to such aspects as investment risk assessment, analysis of the internal potential of the enterprise, strategic planning of financial security and application of organizational and economic mechanisms to maintain stability. The need to move from

fragmentary analysis to a comprehensive approach that takes into account the totality of internal and external factors influencing the financial stability of the enterprise is emphasized.

In Uzbekistan, ensuring the financial security of business entities is also a priority. State policy is aimed at creating an automated system for monitoring financial and economic activities, risk analysis and development of preventive measures to reduce the threat of bankruptcy. This allows not only to identify weak links in the financial structure of enterprises, but also to make informed investment decisions based on the value of assets, liquidity level, solvency and profitability of the business.

2. Literature review

The modern scientific paradigm in the field of enterprise management attaches particular importance to the issues of ensuring financial security as a key element of sustainable operation and strategic development of business. This is confirmed by active research initiatives implemented in a number of leading higher education institutions, research centers and international financial and credit institutions. Research in this area covers both fundamental and applied aspects of the formation of a sustainable financial model of an enterprise, risk management, as well as assessment and monitoring of financial stability in the context of increasing volatility of the external environment.

The issues of ensuring economic and financial security, their assessment and management at the macro and micro levels are reflected in the works of Russian scientists: A. Burkhanov, H. Abulkosimov, I. T. Abdukarimov, M. K. Pardayev, T. S. Malikov, N. G. Karimov, F. Khamidova, D. Ortikova, D. I. Istamov, M. M. Mukhammedov, E. N. Khodjaev, A. E. Ishmukhammedov, D. K. Narzullaeva, A. E. Parmonov, A. I. Igamberdiev, G. Dadaev, M. Kodirov, D. R. Rustamov and others. The works of the above-mentioned authors undoubtedly make a great contribution to the theory of ensuring the financial security of an enterprise. But due to the complexity and multifaceted nature of the problem of ensuring the financial security of an enterprise, not all of its aspects have been sufficiently studied in the above-mentioned studies.

3. Analysis of results

In the course of the study, this article proposes a methodology for a comprehensive assessment of the effectiveness of financial security management of enterprises based on qualitative and quantitative methods, a system of factors is formed, and a methodological approach to a comprehensive assessment is proposed. In the course of the study, an assessment of the weight of four groups of factors proposed for assessing the effectiveness of financial

security management of an enterprise on a five-point scale was proposed. The main indicators by which each factor is assessed are also ranked.

After determining the values of the corresponding parameters of quality and efficiency of financial security management at the enterprise, the integral indicator is calculated:

$$K_{MX} = \sqrt{K_{MX \text{ кач.}} \times K_{MX \text{ рез.}}} \quad (1)$$

here $K_{MX \text{ кач.}}$ is the quality coefficient of financial security management ;

$K_{MX \text{ рез.}}$ – coefficient of efficiency of financial security management .

The quality coefficient of financial security management is determined by the following formula:

$$K_{MX \text{ кач.}} = \frac{\sum_{i=1}^n K_{\pi \text{ кач.}}^{\phi} \cdot d_i}{K_{\text{кач. max}}} \quad (2)$$

here d_i is the importance of this parameter;

$K_{\pi \text{ кач.}}^{\phi}$ – the value of this parameter;

$K_{\text{кач. max}}$ – the maximum value of this parameter.

The efficiency coefficient of financial security management is determined by the following formula:

$$K_{\pi \text{ рез.}}^{\phi} = \frac{\sum_{i=1}^n K_{\pi \text{ рез.}}^{\phi} \cdot d_i}{K_{\text{рез. max}}} \quad (3)$$

here d_i – the importance of this parameter;

$K_{\pi \text{ рез.}}^{\phi}$ – the value of this parameter;

$K_{\text{рез. max}}$ – the maximum value of this parameter.

The obtained result is in the range from 0 to 1, the closer the results, the higher the efficiency of financial security management at the enterprise. After calculating the summary indicator, we will need an appropriate scale to analyze the degree of financial security management at textile enterprises. During the dissertation research, a scale was developed to assess the financial security of textile enterprises based on the assessment given by experts (Table 1).

During the dissertation research, a scale for assessing the financial security of textile enterprises was developed based on expert assessments.

Table 1

**Financial Security Management Assessment Scale
for Textile Enterprises**

Results of integral indicators	Contents of assessments
From 0 to 0.30	Badly
From 0.31 to 50	unsatisfactory
From 0.51 to 70	Satisfactorily
From 0.71 to 0.85	Fine
From 0.86 to 1	Great

The methodology for assessing the level of effectiveness of financial security management was tested at textile enterprises BETLIS TEKSTIL LLC in Tashkent, SIRDARYA BEST FASHION LLC in the Syrdarya region and Namangan Tukimachi LLC in the Namangan region based on calculation data and the accounting report for 2020, the results are presented in the following table (Table 6).

After determining the value of the corresponding parameters of quality and quantity of financial security management, we calculate the total efficiency coefficient of financial security management:

$$To_{Betlis.} = K_{MX} = \sqrt{K_{MX \text{ кач.}} \times K_{MX \text{ пез.}}} = \sqrt{0,925 \times 0,78} = 0.85$$

$$to_{us.} = K_{MX} = \sqrt{K_{MX \text{ кач.}} \times K_{MX \text{ пез.}}} = \sqrt{0,925 \times 0,51} = 0.68$$

$$To_{Sird} = K_{MX} = \sqrt{K_{MX \text{ кач.}} \times K_{MX \text{ пез.}}} = \sqrt{0,925 \times 0,51} = 0.68$$

The results of Table 9 show that the aggregate indicators of BETLIS TEKSTIL LLC, SIRDARYA BEST FASHION LLC in the Syrdarya region and Namangan Tukimachi LLC in the Namangan region are 0.53, 0.35 and 0.45, respectively. (Table 2)

Table 2

**Results of the assessment of the effectiveness of financial security management in 2020
in the textile enterprises under study**

Name of the company	Financial Security Management Quality Ratio	Financial Security Management Performance Ratio	Integral indicators	Contents of the assessment
Namangan Tukimachi LLC	0.60	0.75	0.45	Unsatisfactory
OOO "BETLIS TEKSTIL"	0.76	0.71	0.53	Udov
OOO "SIRDARYA BEST FASHION"	0.58	0.61	0.35	unsatisfactory

The study proposes scientific and practical recommendations for increasing the profitability of the research objects – textile enterprises as a way to increase their financial stability and, ultimately, to ensure their financial security.

The basis of the mechanism for managing the financial security of enterprises proposed by the author of the dissertation (Figure 6) is the formation of the financial strategy of the enterprise. This strategy is implemented through the method of hierarchy analysis.

The strategy for managing the financial security of enterprises is developed based on the result of coordinated actions to use the financial resources of the enterprise, combat internal and external threats, plan, organize and control measures to prevent risks. The above-described areas of activity are cyclical in nature, as a result of which the subject of management makes decisions on making appropriate changes. At the same time, the management of the achieved planned indicators, factors of the internal and external environment of the enterprise is scientifically substantiated.

Within the framework of this study, a group of experts was selected to work on the selection of alternative mechanisms for managing the financial security of the enterprise. In a number of cases, the concept of expert weight was introduced, due to the importance of taking into account the variation of expert opinions v_i , $i = 1, K, m$, m is the total number of experts. To facilitate further calculations, it is accepted that the weights of experts are numbered: $v_1 + v_2 + K + v_m = 1$.

To select the optimal solution, the following multi-stage mechanism for selecting the optimal solution in these systems is proposed. This mechanism is created based on a combination of survey methods, priority analysis, and hierarchy analysis.

Stage 1. Compilation of an initial extended list of alternatives and criteria and their rapid assessment.

Stage 2. Optimization of the number of alternatives based on their selection by the Pareto efficiency set.

Stage 3. Identifying the significance of criteria and optimizing their number by eliminating less significant ones.

Stage 4. Conducting a survey among stakeholders for pairwise comparison of alternatives by criteria. Identifying the final share of alternatives using the Saaty method and various stakeholder share coefficients obtained through conflict-free assessment.

During the study, the mechanism for managing financial security based on the hierarchy analysis method was implemented by the author in BETLIS TEKSTIL LLC, SIRDARYA BEST FASHION SP LLC and Namangan Tukimachi LLC, and the alternatives were calculated based on the following enterprise data. At the enterprises, the process of evaluating alternatives was carried out based on three criteria, the indicators were assessed in pairs, the obtained data are presented in the form of a matrix, a primary matrix of pairwise comparison was compiled, the tables are presented in the form of a fraction.

During the implementation of these stages, general priorities of alternatives were adopted:

$$A_1 = 0.2829, A_2 = 0.1018, A_3 = 0.4007, A_4 = 0.2146.$$

The hierarchy of alternatives for these conditions has the following formula:

$$A_3 = 0.4007 > A_1 = 0.2829 > A_4 = 0.2146 > A_2 = 0.1018.$$

Calculations have shown that the most optimal alternative for enterprises of the textile industry of the Republic of Uzbekistan, in particular, LLC "BETLIS TEKSTIL" is A3 - ensuring financial independence. However, it is necessary to conduct a comprehensive assessment of the impact of various factors on the process of ensuring financial security in LLC "BETLIS TEKSTIL", LLC "SIRDARYA BEST FASHION", therefore, each alternative is important for improving the efficiency of managing the financial security of the enterprise. The proposed method for forming a strategy for ensuring financial security based on hierarchy analysis is a universal method that can be used in other industries.

4. Conclusion.

As a result of the conducted research, key conclusions were formulated that reveal the theoretical and practical aspects of ensuring the financial security of textile enterprises.

First of all, it is emphasized that financial security is a multi-level system based on the interaction of a whole range of elements that ensure the sustainable functioning and development of an enterprise in the face of external and internal threats. This is not a static state, but a dynamic structure that includes monitoring, adaptation, risk management and strategic planning. At each level - from the state to an individual - financial security is interpreted as protection against economic risks and instability. At the same time, to effectively assess the current state of security, it is necessary to use a set of quantitative and qualitative indicators, as well as the appropriate organizational and methodological tools.

One of the most important results of the study was the identification of the main criteria that determine the level of financial security of the enterprise. These include: the volume and structure of financial resources, the ratio of income and expenses, sources of capital formation (internal and external), the current level of financial risks, the amount of profit sufficient for self-financing, as well as the flexibility of financial planning and the ability of the enterprise to quickly mobilize reserves. Of no small importance is the compliance of the current strategy of the enterprise with the goals of financial security. High-quality monitoring of these parameters allows not only to promptly identify deviations from the norm, but also to make informed management decisions.

The dissertation study pays special attention to the practical analysis of the state of financial security at the level of textile industry enterprises. Three textile companies were analyzed: BETLIS TEKSTIL LLC, SIRDARYA BEST FASHION LLC (Syrdarya region) and Namangan Textile LLC (Namangan region). Based on the proposed methodology, an assessment of the effectiveness of financial security management in these companies was carried out. The calculated performance indicators were 0.46, 0.68 and 0.37, respectively. Interpretation of the data allowed us to draw the following conclusion: only management in BETLIS TEKSTIL LLC was recognized as satisfactory, while in the other two organizations it was unsatisfactory.

Such differences in indicators indicate heterogeneity of approaches to financial risk management, differences in financial planning, strategic management, level of transparency of financial flows and ability of enterprises to adapt to the changing economic environment. In this regard, the need to adjust strategies at the level of individual organizations is substantiated,

which is supported in the study by the proposal of specific measures aimed at strengthening financial stability and improving management efficiency in Namangan Tukimachi LLC and SIRDARYA BEST FASHION LLC.

Thus, the study demonstrates that effective financial security management requires a systematic approach based on a combination of analytical, managerial and strategic tools. The application of the proposed management model allows not only to conduct a comprehensive diagnosis of the current state of the enterprise, but also to develop specific management measures aimed at reducing the vulnerability of the business to financial shocks, strengthening sustainability and increasing competitiveness.

In the context of increasing economic instability, global risks and increased competition in the textile industry, financial security issues come to the fore. Therefore, the importance of this kind of applied research, as well as the implementation of their results in real management practice, is difficult to overestimate. The result of the scientific work was not only an assessment of the current state of individual enterprises, but also the formation of a holistic approach to building an effective system for ensuring financial security at the industry level as a whole.

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