

## THE EVALUATION OF THE RISK TOLERANCE IMPACT ON THE ENTERPRISE EFFICIENCY

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*Стаття отримана редакцією 9.09.2020 р.  
The article received by the reduction 9.09.2020.*

**The problem setting.** A characteristic indication of the modern economy is the constant growth of competition and high dynamics of changes. Therefore, a necessary condition for the competitiveness of enterprises is the effective management of economic activity and stable development, despite the various combinations of external and internal environmental factors that may be the causes of business risks.

The effective functioning of the enterprise and its stable development is continuously associated with the application of new theoretical and methodological principles that would allow to form and maintain the risk tolerance of the enterprise. With a low degree of risk tolerance, the emergence of incalculable negative factors can lead to catastrophic consequences in the enterprise activity. Instability and uncertainty of environments, strengthening of negative influence of their factors cause necessity of search and usage in practical enterprise activity of effective methods, models and management mechanisms of stability of the enterprises and their important component – management of risk tolerance.

Substantive practical interest is the general integrated assessment of such a fundamental component of risk theory as the risk tolerance of the enterprise, on the basis of which it would be possible to determine the position of the business unit in a competitive environment and directions of its development. The actualization of these issues is exacerbated by the impossibility of absolute avoidance of the risk situation, the lack of universal tools of preventing its prevention and minimizing the detriments it causes.

**Analysis of recent studies and publications.** Scientific works by native and foreign economists are devoted to the achievement of this problem: A.P. Alhina, I.T. Balabanova, B.B. Vitlynskyi, N.M. Vnukov, B.M. Hranaturova, M.V. Karpuntsov, T.S. Klebanov, G.B. Kleiner, O.M. Liashenko, A. Moore, K. Hlarden, D.A. Stefanich, O.I. Yastremskyi et al. However, the issue raised in this article is still not fully resolved and therefore requires additional research with specific examples and suggestions.

**The task setting** The purpose of the article is to develop a methodological approach to assessing the level of risk tolerance of the enterprise, assess the risk tolerance of enterprises bakery industry and providing proposals to increase risk tolerance at the studied enterprise, named Superadded liability company "Myrhorodskyi Khlibzavod".

**Presentation of the main research material.** Modern business conditions of the enterprise are characterized by increasing the level of risk of the internal and external environment, which is a significant threat to the formation of a risk-oriented strategy for stable development of the enterprise. Based on this, the question of assessing the nature of the risk of the enterprise on the basis of its risk tolerance is reasonable.

The presence of enterprise risk is due to the fact that there are always alternative opportunities to combine different parameters that characterize the state of the enterprise to ensure effective activity. Ability to achieve the planned results, despite the action of risk factors, determines the risk tolerance of the enterprise.

The risk tolerance of the enterprise is one of the components of its overall stability alongside financial, social, technological stability, which characterizes the ability of the business unit to resist risks. In a general meaning, risk tolerance is resilience to the effects of economic risks that is low susceptibility which is achieved through adequate and effective business decisions.

The analysis of the economic literature shows the absence of united definition of the category "risk tolerance", but considering the morphological structure, it can be admitted that it was formed from the words "risk" and "tolerance". Morphologically, this definition is formed by combining the two terms "risk" and "tolerance". Therefore, we consider it necessary to compare the categories – "risk", "risk tolerance" and "tolerance" (Table 1).

**Table 1**

**Comparative characteristics of the concepts "risk", "risk tolerance" and "tolerance"**

Comparative feature	Risk	Risk tolerance	Tolerance
1. Essential features	Deviation from the planned sequence of events under various factors	Ability to function purposefully under the conditions of possible economic risk	The ability of the enterprise to maintain its integrity, to achieve the mission and strategic goals, to function in a given regime under various internal and external influences, while maintaining its integrity and harmonious development
2. Functions	Determining possible deprivations in the process of implementing the activity	<ol style="list-style-type: none"> <li>1. Prognostication of the economic situation</li> <li>2. Identifying opportunities to improve the economic efficiency of the enterprise</li> <li>3. Determining the size of the required reserves and creating compensatory mechanisms</li> </ol>	<ol style="list-style-type: none"> <li>1. Planning the progression of capital of the enterprise in accordance with production needs.</li> <li>2. Motivation and inducement for staff (managers of financial services at all levels).</li> <li>3. Accounting for financial information related to the formation and use of the enterprise capital, incoming and outgoing cash flows.</li> </ol>
3. Evaluation indicator	Indicator of economic risk, in absolute and relative terms	The level of economic risk tolerance, in percentage	Percentage
4. The nature of the indicator	In relation to the analyzed economic measure, for the period of its implementation, in statics	Instantaneous, taking into account the specific economic situation in the enterprise, which characterizes the discrete dynamics of processes	Relative and dynamic category that requires constant monitoring
5. Information which is needed to determine the indicator	Information on expected (target) and actual (valid) results and costs connected with the implementation of economic measures	The system of external and internal factors that determine the parameters of the enterprise as an open system that characterizes the economic situation.	Defined as the ability of adequate response for the influence of the external business environment
6. Predicted potential	Low, connected with the study of the final results and the isolated evaluation of individual components of the system, requires a large number of observations	High, determined by the study of the system x processes and mechanisms in their correlation, interdependence and interrelationship inside the enterprise	The rate of realization of the potential of stability can be defined as a successful "+ PS" and, reciprocally, "-PS" unsuccessful, low.
7. Possibility of application for increase of efficiency of the enterprise functioning	Below average, as models for determining the risk indicator can not be the basis for creating an organizational and economic mechanism to change its level	High, as determining the level of economic risk tolerance of the enterprise is the basis of the management system of the enterprise or situation	Above average, as stability is a complex property of the enterprise, which together with other properties allows you to consider the activities of the enterprise systematically, which is important to ensure its development in a dynamic business environment.

The risk tolerance is a systemic characteristic of the enterprise, which quantifies its most important internal and external interactions in the hierarchical system and the possibility of functioning and development in an indecipherable environment. Its estimated indicator – the level of risk tolerance – is an instantaneous indicator that characterizes a specific economic situation that has developed at a certain point in time under the influence of objective and subjective factors. Management of enterprise development processes involves maintaining a certain level of risk, on which depends the choice of managerial influences.

The bilateral role of risk in the enterprise management system is manifested in the fact that risk tolerance, on the one hand, creates conditions for purposeful functioning and development, influencing the integrated performance, on the other – is determined by the complex of interactions with higher level systems, internal and external factors, which can become risk factors in times of crisis [22].

The importance of risk tolerance of the enterprise for the economy and society as a whole consists of its value for each individual element of this system:

- for owners – profitability, the amount of profit, is sent to pay dividends. For business owners, the importance of risk tolerance is appeared as a factor that determines its profitability and stability in the future;

- for employees of enterprises and other interested people – timely payment of wages, providing additional working places. In addition, the increase in income of the enterprise leads to an increase in consumption funds, and hence to the improvement of material well-being of employees of the enterprise;

- for suppliers and contractors – timely and complete fulfillment of the company's obligations. For them these points are extremely important, because their income from operating activities is formed from revenues from buyers and customers. Withdrawal of financial resources from circulation due to late payments weakens their financial condition, forces them to ensure normal functioning by attracting additional debts, which is associated with additional costs and deterioration of financial condition;

- for investors (including potential ones) – profitability and degree of risk of investments in the enterprise. The more financially stable it is, the less risky and profitable investments in it;

- for banks - timely and absolute fulfillment of obligations under the terms of the loan agreement. Failure to comply with its terms, non-payment of loans may lead to deprivations in the operation of banks. Bankruptcy of at least one bank due to the insolvency of many of its customers entails a chain reaction of defaults and bankruptcies;

- for the state - timely and full payment of taxes and fees to the budget of all levels. The state fulfills its functions, including social ones, as well as the payment of pensions, child care benefits, unemployment benefits, etc.

Determining the risk tolerance of the enterprise, which is the ability to function effectively and achieve its strategic development goals, despite the negative effects of various factors, is an important component of the enterprise management system, through which they must provide their viability and economic value for all stakeholders. During the analysis of economic literature on the characteristics of enterprise risk resistance, it is identified its three components, namely: financial stability, market stability and production stability.

The integrated indicator of risk tolerance, which determines the level of risk tolerance of the enterprise, is calculated by the formula (1):

$$I_{PC} = \sum_{i=1}^3 w_i \times I_{PCi} \quad (1)$$

where  $w_i$  is the specific gravity of the  $i$ -th risk factor indicator,

$I_{PCi}$  – the index score of the  $i$ -th level of risk resistibility.

We will calculate the risk indicators of SLC "Myrhorodskiy Khlibzavod" according to the author's method.

Quantitative assessment of indicators of risk tolerance of the enterprise and their dynamics characterizes the level achieved by the enterprise and tendencies in individual components of risk tolerance, but does not answer the question of whether the achieved level of risk tolerance of the enterprise is high or low. For this purpose, it is necessary to conduct an integrated assessment of these characteristics.

Therefore, after calculating the risk indicators and determining the dynamics of changes in their values, we assign each indicator a corresponding score. To do this, we use a scale for evaluating indicators from 0 to 3. According to the best value of the indicator is assigned 3 points, and the worst corresponds to a value close to 0. The results of this calculation are given in the table 2.

Table 2

## Calculation of the risk index of SLC "Myrhorodskiyi Khlivzavod" for 2015-2017

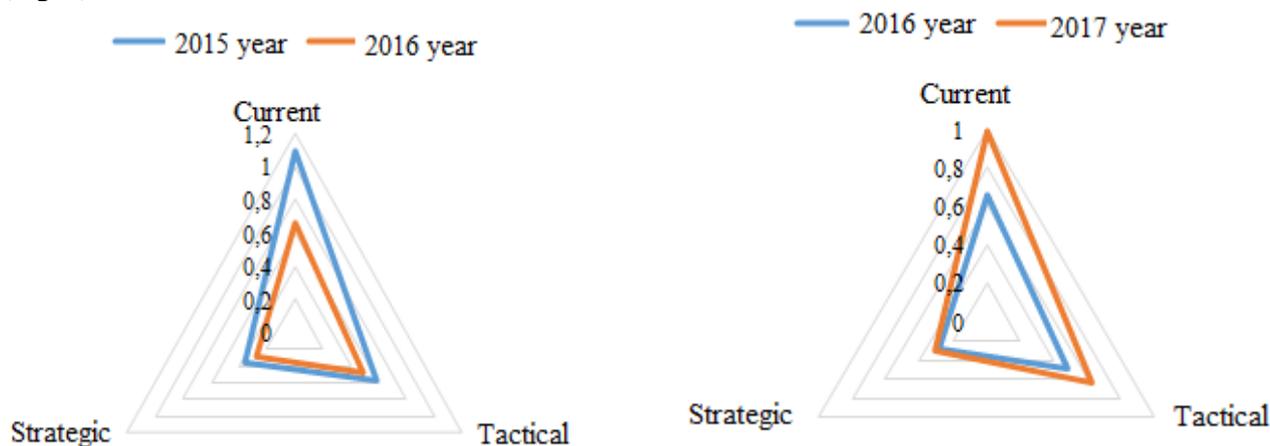
№	Characteristic	Specific weight	Point			Weighted value		
			2015 year	2016 year	2017 year	2015 year	2016 year	2017 year
1	Financing ratio	4,55 %	2,5	2	3	0,11	0,09 ↓	0,14 ↑
2	Financing ratio from stable sources	4,55 %	2,5	3	2	0,11	0,14 ↑	0,09 ↓
3	Absolute liquidity ratio	4,55 %	0,75	0	1,5	0,03	–	0,07 ↑
4	Interest coverage ratio	4,55 %	2,5	2	3	0,11	0,09 ↓	0,14 ↑
5	The growth rate of the share of inventories in the amount of current assets	4,55 %	3	2,5	2	0,14	0,11 ↓	0,09 ↓
6	Profitability of sales	4,55 %	2	0	1,5	0,09	–	0,07 ↓
7	Profitability of equity	4,55 %	2	0	1,5	0,09	–	0,07 ↓
8	The ratio of net cash flow from operating activities and the sum of total net cash flow	4,55 %	3	2	2,5	0,14	0,09 ↓	0,11 ↑
9	Solvency ratio	4,55 %	1	0	0,75	0,05	–	0,03 ↓
10	The ratio of the change rate of net income and the rate of assets change	4,55 %	2	1	1,5	0,09	0,05 ↓	0,07 ↑
11	Asset turnover ratio	4,55 %	3	2	2,5	0,14	0,09 ↓	0,11 ↑
<b>Total for the current level</b>		<b>50 %</b>	<b>23,25</b>	<b>14,5</b>	<b>22,75</b>	<b>1,10</b>	<b>0,66 ↓</b>	<b>0,99 ↑</b>
12	The level of production capacity	3,33 %	2	2,5	3	0,07	0,08 ↑	0,10 ↑
13	Return on assets	3,33 %	2,5	2	1,5	0,08	0,07 ↓	0,05 ↓
14	Material consumption	3,33 %	2,5	2	3	0,08	0,07 ↓	0,10 ↑
15	Productivity	3,33 %	2	2,5	3	0,07	0,08 ↑	0,10 ↑
16	Profitability of labor resources	3,33 %	2	0	1,5	0,07	–	0,05 ↓
17	The ratio of revenue growth and wage bill	3,33 %	1,5	1	0,5	0,05	0,03 ↓	0,02 ↓
18	The degree of the enterprise dependence on suppliers of raw and materials	1,66 %	2,5	2,5	2,5	0,04	0,04	0,04
19	Supplier reliability indicator	1,66 %	0,5	0,75	1	0,01	0,01	0,02 ↑
20	The degree of the enterprise dependence on consumers	1,66 %	2,5	2,5	2,5	0,04	0,04	0,04
21	The ratio of timeliness of calculations	1,66 %	0,5	0	0,75	0,01	–	0,01
22	The ratio of revenue growth and growth of receivables of the enterprise	1,66 %	1,5	1	3	0,03	0,02 ↓	0,05 ↑
23	Indicator of compliance with the quality of products	1,66 %	2	2,5	3	0,03	0,04 ↑	0,05 ↑
<b>Total for the tactical level</b>		<b>30 %</b>	<b>22</b>	<b>19,25</b>	<b>25,25</b>	<b>0,58</b>	<b>0,49 ↓</b>	<b>0,63 ↑</b>
24	The ratio of the rate of production change at the enterprise and the rate of production change in the industry	4 %	1,5	1	0,75	0,06	0,04 ↓	0,03 ↓
25	Percentage of employees with high education	1,33 %	2,5	2	3	0,03	0,03	0,04 ↑
26	Staff turnover	1,33 %	1	0,5	0,75	0,01	0,01	0,01
27	The ratio of average salary in the enterprise and in the industry	1,33 %	1	0,5	0,75	0,01	0,01	0,01
28	The degree of depreciation of fixed assets	2 %	1	0,5	0,75	0,02	0,01 ↓	0,02 ↑
29	The level of technological development of the enterprise	2 %	3	2	2,5	0,06	0,04 ↓	0,05 ↑
30	Provision of own resources	1,33 %	2	2,5	3	0,03	0,03	0,04 ↑
31	Energy security ratio	1,33 %	3	2,5	2	0,04	0,03 ↓	0,03 ↓
32	Raw material safety factor	1,33 %	3	2,5	2	0,04	0,03 ↓	0,03 ↓
33	The degree of environmental pollution	2 %	2,5	2,5	2,5	0,05	0,05	0,05
34	Indicator of environmental protection activity	2 %	0	0	0	–	–	–
<b>Total for the strategic level</b>		<b>20 %</b>	<b>18,5</b>	<b>16,5</b>	<b>20</b>	<b>0,33</b>	<b>0,28</b>	<b>0,33</b>

We summarize the results of the calculation of the risk index of SLC "Myrhorodskiy Khibzavod" for 2015-2017 in table 3.

**Table 3**  
**Results generalization of calculation of risk tolerance of SLC "Myrhorodskiy Khibzavod" for 2015-2017**

The level of risk tolerance	Years		
	2015	2016	2017
Current	1,1	0,66	0,99
Tactical	0,58	0,49	0,63
Strategic	0,36	0,28	0,3
General (integral) risk tolerance	2,04	1,43	1,92
Qualitative characteristics of risk tolerance	medium	low	satisfactory

According to the data of table 3, the following should be noted. The greatest impact on the risk index of SLC "Myrhorodskiy Khibzavod" for 2015-2017 in table 3 is exerted by indicators of the current level (Fig. 1).



**Fig. 1. Graph of the levels profile of risk tolerance of SLC "Myrhorodskiy Khibzavod" for 2015-2017**

\* Source: Developed by the author

The integrated risk index during the study period had an irregular dynamics (Fig. 1). In 2015, there is an average risk tolerance of the company, afore in 2016 there is a deterioration of the index, which indicates low risk tolerance of the company. However, it should be noted that in 2017 the performance of the mechanized bakery improved: this is indicated by a satisfactory level of risk tolerance.

Based on the table 2 it will be determined which indicators influenced the level of risk tolerance positively and negatively in 2017 (Fig. 2-4).

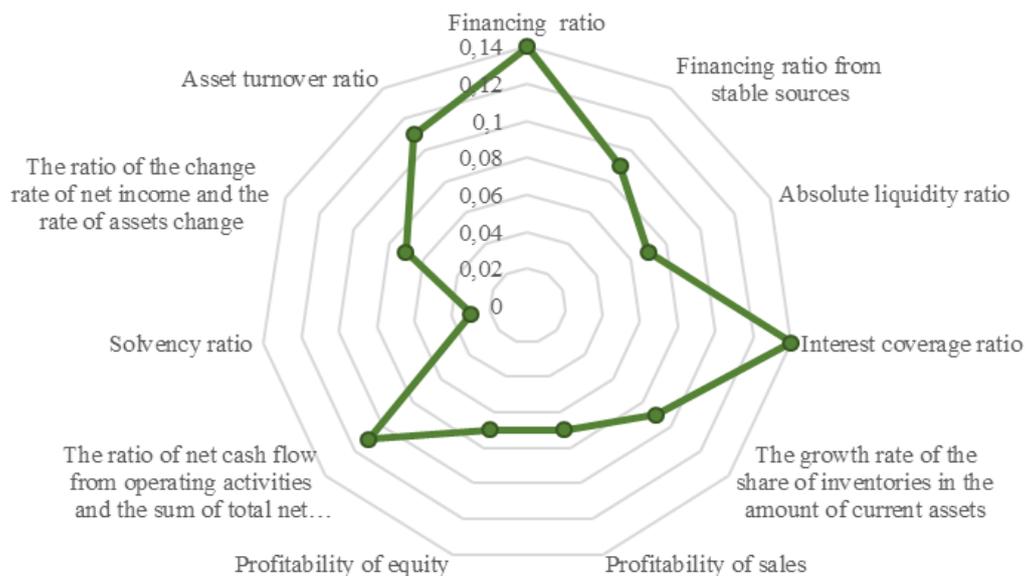
Consequently, the risk tolerance of the company in 2017 was positively affected by the financing ratio, coverage ratio, the ratio of net cash flow from operating activities and the amount of total net cash flow, asset turnover ratio, material intensity, productivity, capacity utilization, technological development, security of own resources, the degree of environmental pollution. The growth rate of the share of inventories in the amount of current assets had a negative impact; profitability of sales; return on assets; the ratio of growth rates of net income and wages; the ratio of the rate change of production at the enterprise and the change rate of production in the industry; staff turnover; the ratio of average wage in the enterprise and in the industry; energy security factor; raw material security factor. The strength of the impact of other indicators was insignificant.

Using trend analysis (Fig. 5) the projected value of the risk index tolerance for the planned year is determined.

$$I_{tolerance}^{plan} = 1,92 - 0,06 \times 4 = 1,68$$

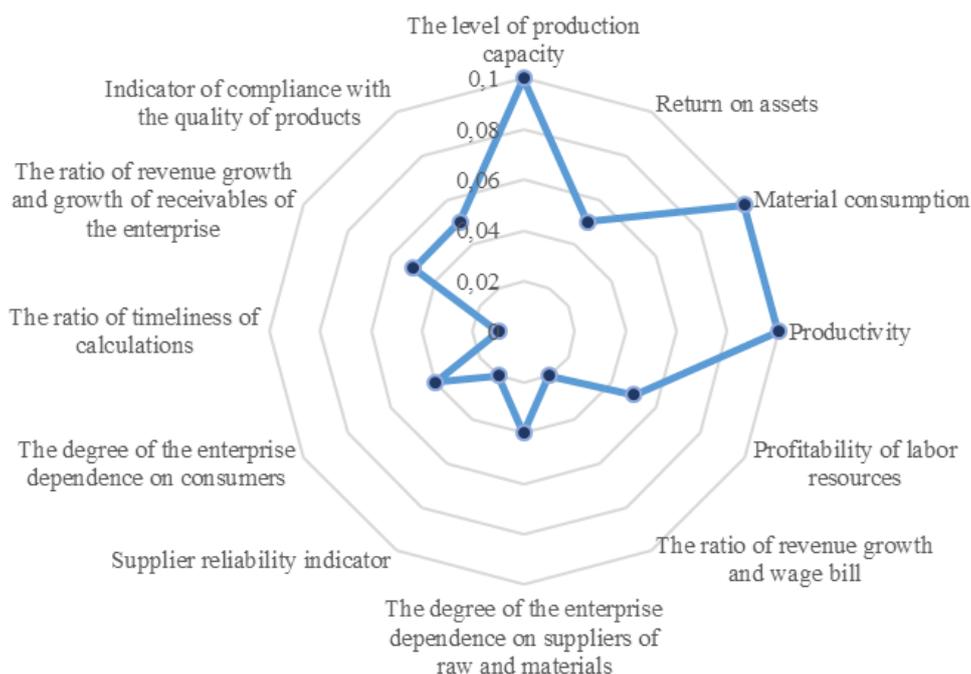
We will the dependence of net profit growth on the risk tolerance index and predict the value of this indicator using correlation analysis (Pic. 6):

$$\Delta NP_{plan} = -5463,7 + 3080,9 \times 1,68 = -292,84 \text{ (thousand UAH)}$$



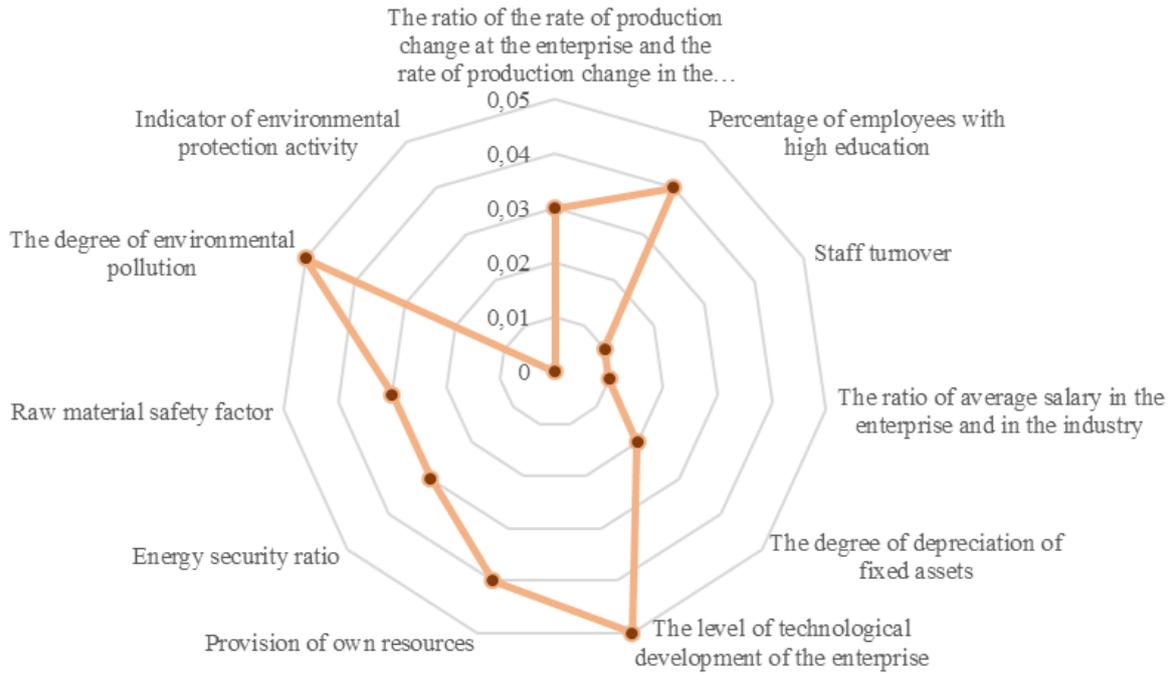
**Fig. 2. Profile graph of the current level of risk tolerance of SLC "Myrhorodskyi Khibzavod" for 2017\***

\* Source: Developed by the authors



**Fig. 3 Profile graph of the tactic level of risk tolerance of SLC "Myrhorodskyi Khibzavod" for 2017\***

\* Source: Developed by the authors



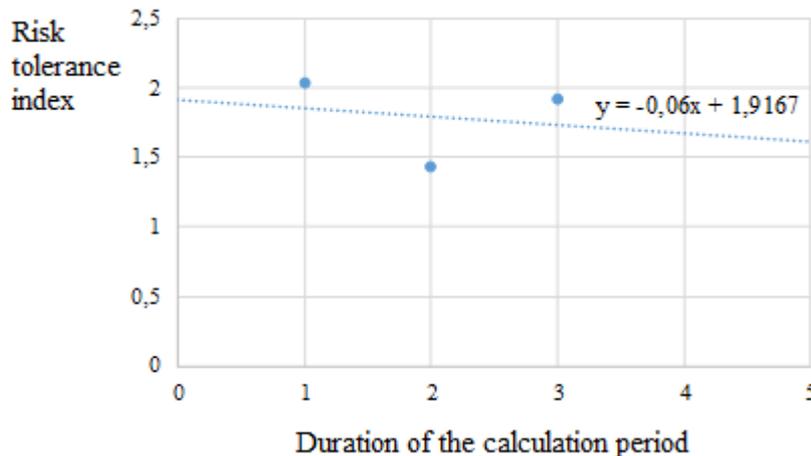
**Fig. 3. Profile graph of the strategic level of risk tolerance of SLC "Myrhorodskiy Khlizavod" for 2017\***

\* Source: Developed by the authors

Thus, at the planned value of risk resistance of 1.68 SLC "Myrhorodskiy Khlizavod" will have a decrease in net profit by 292.84 thousand UAH.

Therefore, the researched company needs to increase the risk tolerance index to increase the growth of net profit, which can be achieved through the implementation of appropriate measures (table 4).

The risk tolerance index was recalculated taking into account the proposed measures. Graphically, the strength of the impact on the integrated indicator of risk resilience is presented in Fig. 6. According to the results, the greatest impact on risk tolerance has the ratio of the change rate of production at the enterprise and the change rate of production in the industry, and the lowest – the level of technological development.



**Fig. 4. Correlation field of dependence of the risk tolerance index of SLC "Myrhorodskiy Khlizavod" on the duration of the settlement period \***

\* Source: Developed by the authors

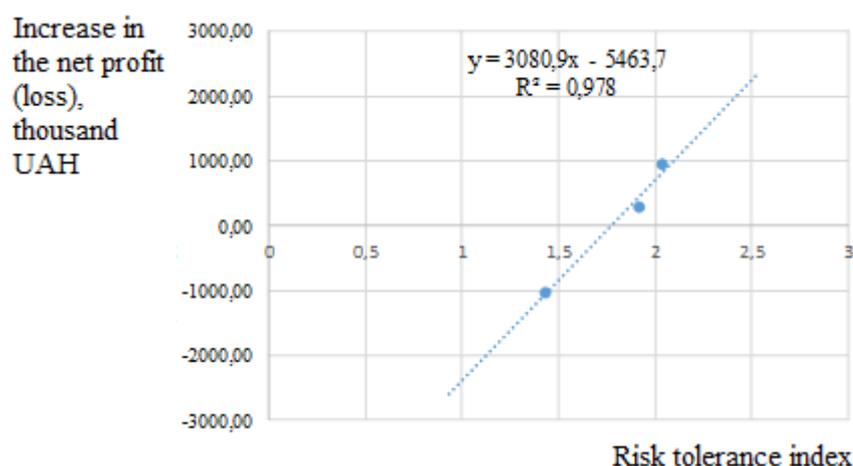


Fig. 5. Correlation field of dependence of the increase in net profit (loss) of SLC "Myrhorodskiy Khlizavod" on the risk index \*

\* Source: Developed by the authors

Table 4

Generalization of results of risk tolerance calculations of SLC "Myrhorodskiy Khlizavod" for 2015-2017

№	The key indicator	Proposed improvement to increase the rate	The expected increase in the key indicator
1	The growth rate of the share of inventories in the amount of current assets	Reduction in the share of receivables Residuals reduction of final products in the warehouse (overstocking of warehouses)	0,05
2	Profitability of sales	Increasing the efficiency of fixed assets Introduction of an effective marketing policy Improving product quality and competitiveness	0,07
3	Efficiency of capital	Application of new equipment instead of outdated models Sell equipment that is used very rarely in the process or not used at all Increasing the share of main equipment , which will change the structure of fixed capital	0,05
3	The ratio of growth rates of net income and wages	An increase in the wage fund by 1% should account for an increase in net income of the enterprise by 3%	0,08
4	The ratio of the change rate of production at the enterprise and the change rate of production in the industry	The increase in production at the enterprise is faster than the increase in production in the industry	0,09
5	Staff turnover	Improving working conditions, improving the system of material incentives and rationing of labor, increasing the degree of automation in work Improving recruitment procedures, career advancement systems, working with young people	003
6	The ratio of average wages in the enterprise and in the industry	Increasing in the level of wages to the level of the average level of wages in the industry in the region	0,03
7	The level of technological development of the enterprise	Replacement of the used equipment with a new one with higher technical level	0,01

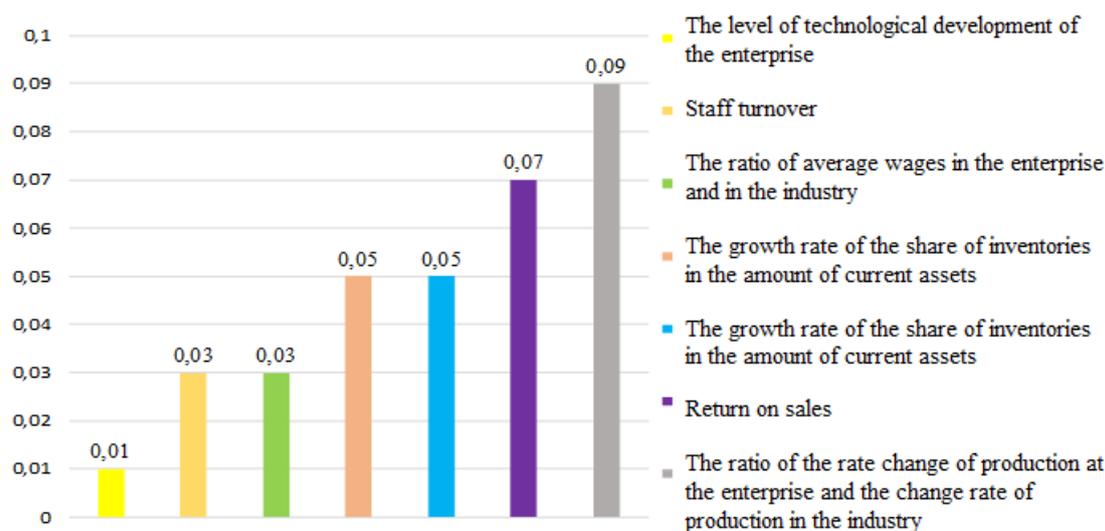


Fig. 6. The strength of the impact of changes in individual indicators of risk tolerance on its integrated indicator of the implementation of the proposed measures system. \*

\* Source: Developed by the authors

Table 5  
Results generalization of calculations of risk tolerance of SLC "Myrhorodskiy Khlizavod" taking into account the implemented measures

Level of the risk tolerance	Target year	
	Without implementation of measures	As a result of the measures implementation
Current	0,99	1,11
Tactical	0,63	0,76
Strategic	0,3	0,46
General (integral) risk tolerance	1,92	2,33
Qualitative characteristics of risk tolerance	satisfactory	average

Thus, after the calculations, it should be noted that during the target year the level of risk tolerance at the enterprise went from satisfactory to average due to the introduction of measures to improve the values of indicators.

According to the above model, we predict the growth of the net profit of the enterprise for the target year, taking into account the implemented measures:

$$\Delta NP_{\text{prognosis}} = -5463,7 + 3080,9 \times 2,33 = 1715,1 \text{ (thousand UAH)}$$

Therefore, after the calculations it is necessary to admit. In the planned year, with the projected value of the risk tolerance index of 1.68, the increase in net profit will decrease by UAH 292.84 thousand. Only after the implementation of measures to improve the economic activity of SLC "Myrhorodskiy Khlizavod" there will be an increase in the risk index. The predicted risk tolerance index with implemented measures will be 2.33, which indicates the possibility of increasing the growth in net profit by UAH 1715.1 thousand.

Accordingly, subject to the recommendations to increase the level of risk tolerance, the company will be able to increase net profit, increase the level of overall economic activity and carry out economic development.

**Conclusion.** A feature of entrepreneurial activity in modern conditions is the presence of a wide range of risks posed by the uncertainty of the business environment. The impossibility of risk-free business activity requires businesses to constant consideration of the possible consequences of decisions.

The risk component of management, which has become much more relevant recently, dictates new requirements for enterprise development management and necessitates timely identification, analysis of risk sources, determining the probability and timing of a particular type of risk to justify and take appropriate preventive and management measures. It is advisable to consider them not from the point of the risks themselves, but the risk tolerance of the enterprise, its ability to maintain a stable state in dynamics, taking

into account the influence of various external and internal factors, which under adverse conditions may move into the category of risks.

As follows, there is an objective need for further deepening of theoretical research and methodological developments to assess the risk tolerance of enterprises and improve the processes of its formation and improvement in modern conditions. All of the above determines the relevance of the chosen research topic

The theoretical bases of research of risk tolerance at the enterprise were considered in the article. In particular, based on the morphological analysis of the definition of "risk tolerance", a comparative description of the concepts of "risk", "risk tolerance" and "tolerance" is given.

To assess the risk of the enterprise was chosen three-dimensional method, which best reflects the theoretical essence of the risk tolerance of the enterprise as its ability to function effectively today and have successful development in the future, there was described its essential characteristics and structure, considered recommendations for practical application. The author of the work developed the provisions of the above methodological approach by substantiating the methodology of evaluation of individual components according to a certain list of indicators, the evaluation scale of their values and determining on their basis an integrated indicator of risk tolerance of the enterprise.

The practical benefit of using a three-dimensional model of diagnostics of the enterprise risk tolerance is established, in particular by using it in the analysis of economic stability of native enterprises, as well as in developing basic measures for their financial and economic recovery and technical and technological development. It should be emphasized that the objectivity of the diagnostic results largely depends on the adequacy of the recommended values of the evaluation indicators, which are accepted as a basis for comparison.

Therefore, further research can be aimed at determining the system of branch recommended values of financial and economic indicators and other indicators of risk tolerance.

#### **REFERENCES:**

1. Vitlynskyi V.V. Risk science in economics and entrepreneurship: a monograph / V.V. Vitlynskyi, H.I. Velikoivanenko. – K.: KNEU, 2004. – 480 p.
2. Vitlynskyi V.V., Verchenko P.I. Analysis, modeling and management of economic risk: Teaching method. manual for self. studied dist. – K.: KNEU, 2010. – 292 p.
3. Dykan V.L. Research of international standards of risk management / V.L. Dykan, I.M. Posokhov // Business Inform. – 2014. – No 1. – P. 314–319.
4. Diagnosis of the level of economic security of the enterprise / S.B. Dovbnya, N.Yu. Hichova // Finance of Ukraine. – 2008. – No 4. – P. 88–97.
5. Economic risk: methods of evaluation and management [Text]: textbook. manual / [T. A. Vasylieva, S.V. Lieonov, Ya. M. Kryvykh et al.]; under the general ed. Dr. Econ. Sciences, Prof. T.A Vasilieva, Ph.D. Econ. Sciences Ya.M. Kryvykh. – Sumy: UABS NBU, 2015. – 208 p
6. Zhovnirenko H.O Economic risks: textbook for stud. economic special all forms of education / H.O. Zhovnirenko. – Donetsk: DonIZT, 2011. – 142 p.
7. Zasanska E.V. Classification of risk factors of the enterprise / E.V. Zasanska, Yu.H. Tkachuk // Bulletin of the National University of Water Management and Environmental Sciences. Series: Economics. – 2010. – Ed. 1 (49). – P. 50–57.
8. Zakharkin O.O. Estimation of risk resistance of the enterprise at management of its innovative development / Zakharkin O.O // Economic space. – 2015. – No 98. – P. 165–176.
9. Zubova L.V. Determination of risk sustainability of business decisions // Fundamental research. – 2015. – No. 11-1. – P. 157–160.
10. Kail V.N. Risk management of industrial enterprises / V.N. Kail – Saratov: Saratov State Socio-Economic University, 2008. – 24 p.
11. Karpuntsov M.V. Risk resistance of the enterprise / M.V. Karpuntsov // Actual problems of economy. – 2008. – No 3. – P. 71–76.
12. Kasminina K.O. Risk resistance of the enterprise as a prerequisite for its development: essence and indicators of definition / K.O. Kasminina, S.Yu. Kulakova // Agrosvit. – 2016. – No 12. – P. 60–64.
13. Kozlova E.A. Analysis of economic risk stability of industrial enterprises: dis. Cand. econ. Sciences: 08.00.05 / Kozlova Elena Aleksandrovna. – Chelyabinsk, 2002. – 205 p.
14. Kozlova E.A., Shepelev I.G. Methodological bases of assessment of economic risks and risk resistance of the firm / E.A. Kozlova, I.G. Shepelev // Organizer of production. – 2006. – No 4. – P. 60–66.

15. Konyashova A.V. Indicators of assessment of functional components of economic stability of enterprise development / A.V. Konyashova // Bulletin of Chelyabinsk State University. – 2013. – No 8 (299). – P. 123–128.

16. Kravchenko O.S. Risk resistance as a prerequisite for effective development of the enterprise: indicators of definition and methods of diagnosis / O.S. Kravchenko // Bulletin of DonNUET (Series: Economic sciences). – 2013. – No 4 (60). – P. 81–90.

17. Lyaskovskaya E.A. Conceptual foundations of sustainability management of entrepreneurial structures in the implementation of innovation strategies / E.A. Lyaskovskaya // Bulletin of SUSU (Series: 68. Economics and Management). – 2011. – No 41 (258). – P. 57

18. Methodical approaches to risk assessment of trade enterprises / M.V. Karpuntsov // Science and Economics. – 2013. – Ed. 4 (2). – P. 202–212.

19. Siora R. Methodological approaches to assessing the level of enterprise risk resistance // S. Kulakova, R. Siora // Economics and Region. – 2019. – № 4 (75). – P. 20–27

20. Tkachenko S.M. The essence of economic stability of enterprises and its components / S.M. Tkachenko // Effective economy. – 2011. – No 5. – P. 128–134

21. Homyachenkova N.A. The mechanism of an integrated estimation of stability of development of the industrial enterprises: the author's abstract diss. for the degree of Cand. Econ. Sciences / N.A. Khomyachenkova. – M., 2011. – 35 p.

22. Shekshuev A.V., Ibragimov R.S. Sustainability of the enterprise: financial and economic aspects / A.V. Shekshuev, R.S. Ibragimov // Increase of stability and realization of innovative potential of the financial system of the Russian Federation: collection. Art. following the results of the international. scientific conf. February 26–27, 2010. – Ivanovo, 2010. – P. 265–269.

УДК 658:338.2

JEL O13,Q13

**Кулакова Світлана**, кандидат економічних наук, доцент. **Чевганова Віра**, кандидат економічних наук, професор. **Стетенко Юлія**, студентка. Національний університет «Полтавська політехніка імені Юрія Кондратюка». **Оцінювання впливу ризикостійкості на ефективність діяльності підприємства.** Аналіз наукової літератури дозволив систематизувати сучасні підходи до трактування категорії «ризикостійкість підприємства». Було визначено, що багато економістів ототожнюють поняття «ризик», «стійкість» та «ризикостійкість підприємства». Тому виконано порівняльний аналіз категорій «ризик», «стійкість» і «ризикостійкість підприємства», виявлення їхні спільні риси та відмінності, що дозволило авторам визначити ризикостійкість як системну характеристику підприємства, яка кількісно визначає його найбільш важливі внутрішні та зовнішні взаємодії в ієрархічній системі та можливості функціонування і розвитку в умовах нечіткого середовища. Її оцінний показник – рівень ризикостійкості – є моментним показником, котрий характеризує конкретну економічну ситуацію, що склалася в певний момент часу під впливом об'єктивних і суб'єктивних факторів. Визначено три складові ризикостійкості: фінансова стійкість, ринкова стійкість та виробнича стійкість. Дано коротку їх характеристику. Оскільки рівень ризикостійкості встановлювати рівнем стійкості за кожною складовою, запропоновано інтегральний показник ризикостійкості визначати як середньозважене значення з показників, що характеризують поточний, тактичний і стратегічний рівень ризикостійкості. Виявлено склад показників, що визначають рівень ризикостійкості за кожною складовою, їхню вагомість, алгоритм їх оцінювання. Пропонований методологічний підхід до оцінювання ризикостійкості підприємства дозволить оцінити загальний рівень його ризикостійкості, а також на основі причинно-наслідкових зв'язків визначити ключові ударні акценти, активація яких дасть змогу підвищити фінансові результати діяльності підприємства в довгостроковій перспективі.

**Ключові слова:** ризик, ризикостійкість підприємства, складові ризикостійкості, індекс ризикостійкості.

UDC 658:338.2

JEL O13,Q13

**Kulakova Svitlana**, PhD (Economics), Associate Professor. **Chevhanova Vira**, PhD (Economics), Professor. **Stetsenko Yuliia**, student. National University «Yuri Kondratyuk Poltava Polytechnic». **The Evaluation of the Risk Tolerance Impact on the Enterprise Efficiency.** The analysis of scientific literature made it possible to systematize modern approaches to the interpretation of the category of

«enterprise risk resistance». Thus, the article provides a comparative analysis of the categories «risk», «resistance», «enterprise risk resistance», identifies their common features and differences, and proposes a three-level model of enterprise security. Since the level of enterprise resistance to risk is determined by the level of stability for each component, it is proposed to determine the integral riskiness indicator as the weighted average value of indicators characterizing the current, tactical and strategic level of enterprise resistance to risk.

**Keywords:** risk, enterprise risk resistance, components of enterprise risk resistance, enterprise risk resistance index.