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THEORETICAL AND METHODOLOGICAL ASPECTS OF FINANCIAL RISKS MANAGEMENT OF THE ENTERPRISE

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Summary. The article is devoted to the theoretical and methodological aspects of the financial risk management of the enterprise. The paper analyzes approaches of Ukrainian and foreign scientists and economists to the definition of the concept of «financial risk of the enterprise» and highlights the key concepts inherent in them. Based on the identified advantages and disadvantages, it is proposed to interpret the concept of financial risk in broad and narrow aspects. In a broad aspect, financial risk should be understood as the risk of the financial condition deterioration, the threat of bankruptcy and liquidation of the enterprise. In a narrow aspect, financial risk should be considered as the risk of loss of profitability, liquidity, financial stability, solvency, or business activity, as well as the risk of income underachievement or overspending. Furthermore, approaches of scientists and economists to the methods of assessing risks that may arise in the enterprise are summarized. It is determined that the most common methods for analyzing financial risks in domestic practice are such as comprehensive, systematic, statistical, normative, rating, expert, analytical and assessment of financial stability. The specified methods are summarized with the description corresponding to them. The method of financial risk assessment, developed by Prof. Zakablukom G.O. was highlighted and tested. «Mikrokredit» LLC, which has been engaged in lending to individuals for more than ten years, was selected for testing. According to the application results of the financial risk assessment method, it was found that during 2020–2021 the financial risk at the enterprise was low, while in 2022 it was high. Based on that, the strategies that the company's financial risk management system should meet are proposed. Among the most significant of them, it is worth highlighting the following: development and implementation of a risk management system at the enterprise; the monitoring system improvement; improvement of risk management technology at enterprises; formation of an information database necessary for risk analysis and assessment; development and implementation of the financial risk management system in the enterprise; the risk management monitoring system improvement; improvement of the methodology of risk assessment and methods of assessing of risk management effectiveness. A model of financial risk management of the enterprise has been developed, which consists of a clear sequence of interrelated stages and considers the conditions and specifics of domestic enterprises activities.

Key words: financial risk, essence, methods, criteria, management, model.

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ТЕОРЕТИКО-МЕТОДОЛОГІЧНІ АСПЕКТИ УПРАВЛІННЯ ФІНАНСОВИМИ РИЗИКАМИ ПІДПРИЄМСТВА

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Резюме. Присвячено теоретико-методологічним аспектам управління фінансовими ризиками підприємства. Проаналізовано підходи українських і зарубіжних науковців та економістів до визначення

поняття «фінансовий ризик підприємства» з виокремленням притаманних їм ключових понять. На основі визначених притаманних їм переваг та недоліків запропоновано трактувати поняття фінансового ризику у широкому та вузькому аспектах. У широкому аспекті під фінансовим ризиком варто розуміти ризик погіршення фінансового стану, загрози банкрутства та ліквідації підприємства. У вузькому аспекті під фінансовим ризиком варто розглядати ризик втрати прибутковості, ліквідності, фінансової стійкості, платоспроможності чи ділової активності, а також ризик недоотримання доходів чи перевитрат. Узагальнено підходи науковців та економістів до методів оцінювання ризиків, які можуть виникати в діяльності підприємства. Визначено, що найпоширенішими методами аналізування фінансових ризиків у вітчизняній практиці є такі, як комплексний, систематичний, статистичний, нормативний, рейтинговий, експертний, аналітичний та оцінювання фінансової стійкості. Зазначені методи узагальнено з приведенням відповідної їм характеристики. Виокремлено та апробовано метод оцінювання фінансових ризиків, розроблений проф. Закаблуком Г. О. Для апробації обрано Товариство з обмеженою відповідальністю «Мікрокредит», яке вже понад десять років займається кредитуванням фізичних осіб. За результатами застосування методу оцінювання фінансових ризиків виявлено, що упродовж 2020–2021 років фінансовий ризик на підприємстві був низьким, тоді як у 2022 році – високим. Запропоновано стратегії, яким повинна відповідати система управління фінансовими ризиками на підприємстві. Серед найвагоміших із них варто виокремити такі: розроблення та впровадження на підприємстві системи ризик-менеджменту; вдосконалення системи моніторингу за внутрішніми та зовнішніми чинниками; вдосконалення технології ризик-менеджменту на підприємствах; формування інформаційної бази даних, необхідної для аналізування та оцінювання ризиків; розроблення та впровадження у діяльність підприємства системи управління фінансовими ризиками; вдосконалення системи моніторингу управління ризиками; вдосконалення методики оцінювання ризиків та методів оцінювання ефективності управління ризиками. Розроблено модель управління фінансовими ризиками підприємства, яка складається з чіткої послідовності взаємопов'язаних етапів і враховує умови та специфіку діяльності вітчизняних підприємств.

Ключові слова: фінансовий ризик, сутність, методи, критерії, управління, модель.

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Introduction. The dynamic changes that characterize market relations in Ukraine are caused by a significant number of factors, among which the leading role belongs to the categories of risk and uncertainty. Any business entity activity is associated with many risks, among which the leading role belongs to financial ones. Risks are the primary cause of non-compliance of the actual results of the business entity with the expected ones. The lack of an effective risk management system at enterprises, especially financial ones, most often ends in the financial condition deterioration, bankruptcy, and liquidation of the latter. Accordingly, the chosen research topic is extremely relevant.

Review of the latest research and literature. Many publications by domestic and foreign scientists are devoted to problems related to the enterprise's financial risks. Such scientists as I. Blank, O. Shurov, O. Bezditko, L. Donets, N. Skopenko, O. Taran, I. Khoma paid attention to the study of the conceptual apparatus and components of the financial risk management system. O. Goltyaeva, Yu. Peregnyak, E. Pozhar, S. Bilousova, O. Zhikhor, O. Shishkina investigated issues related to the purpose, goals, tasks, and principles of financial risk management of enterprises. I. Tomashuk, A. Khmara, S. Dovban, R. Stus, T. Kuzminets, H. Zakabluk mainly focused their attention on the research and development of methods for assessing financial risks at the enterprise. However, despite the significant number of scientific works devoted to the study of financial risks, many issues remain debatable and unresolved. For example, it concerns the financial risk management model that would correspond to the peculiarities of domestic enterprises activities.

The purpose of the scientific research is to determine the essence of the concept of «financial risk of the enterprise», to identify the criteria that the financial risk management system must meet, as well as to build a financial risk management model that would consider the conditions and specifics of domestic enterprises activities.

Task setting. In accordance with the set goal, the tasks of scientific research are: clarification of the essence of the concept of «financial risk of the enterprise»; analysis of

methods of assessing financial risks and approbation of the most accurate and objective methods for the domestic enterprise activities; development of a financial risk management model at the enterprise.

Presentation of the main material of the study with justification of the obtained scientific results. For today, a single approach to the interpretation of the concept of «financial risk» has not been developed among scientists and economists. According to the results of the analysis of domestic and foreign researchers' approaches to the definition of the concept of «financial risk», which are shown in Table 1, it has been proposed such an interpretation of this concept, which, in our opinion, reveals its essence and meaning to the greatest extent. So, in a broad sense, financial risk should be understood as the risk of the financial condition deteriorating and the threat of bankruptcy and liquidation of the enterprise. In a narrow aspect, financial risk should be considered as the risk of loss of profitability, liquidity, financial stability, solvency, or business activity, as well as the risk of income underachievement or overspending.

Table 1. Results of the analysis of scientists and economists' approaches to the definition of the concept of «financial risk of the enterprise»

Authors	The essence of the approach	Key concepts
I. Blank, A. Borodina, A. Kozhidlo, O. Bezditko	Financial risk is the risk of failure to receive income that arises during the enterprise's relationship with financial organizations	Lack of income
O. Shurov, K. Kotkevich, R. Sukh, H. Zakabluk, S. Smoliy, T. Tarnavska	Financial risk is the uncertainty that arises in the process of forming and using the company's own and borrowed financial resources	Uncertainty of activity
N. Vnukova, T. Okun, P. Tymchyshak, M. Valova, D. Dymyda, I. Khoma	Financial risk is the risk of unprofitable activity that arises under the influence of a changing internal and external operating environment	Risk of unprofitable activity
O. Shishkina, P. Rymar, O. Savchenko, M. Mykhalchuk, L. Ilechko, T. Kuzminets, Yu. Peregniak	Financial risk is the risk of capital loss caused by the uncertainty of the financial and economic activity of the enterprise	Risk of capital loss
S. Dovban, S. Bilousova, V. Babenko, L. Berko, T. Semkiv, A. Tasyanova	Financial risk is the uncertainty and conflict that arises during the company's activities	Uncertainty and conflict
I. Tomashuk, M. Mamatova, O. Sytnyk, I. Levitska, E. Pozhar	Financial risk is the result of making and implementing inefficient management decisions, reinforced by the negative impact of the external environment	The result of decision-making
I. Lashchyk, P. Vibliy	In a broad sense, financial risk is the risk of the financial condition deterioration, bankruptcy, and liquidation of the enterprise. In a narrow sense – the risk of a decrease in the level of profitability, financial stability, liquidity, property status or business activity, which arises because of the negative effect of factors of the internal and external environment	Risk of bankruptcy (liquidation). Risk of financial indicators deteriorating

Generalized and improved based on [1–12].

Depending on what is understood by the concept of «financial risk», appropriate methods of its assessment are distinguished. A summary of the analyzed approaches of economists and scientists to the identification of enterprise's risk analysis methods is shown in Table 2.

Table 2. Summarized approaches of economists and scientists to distinguish methods of enterprise's risk analysis

Methods	Method characteristics
Complex	The presence and level of financial risk is assessed through the analysis of absolute and relative indicators of the financial and economic activity of the enterprise, their comparison with reference, recommended and normative values
Systematic	The assessment of financial risks is carried out based on the β -coefficient, which characterizes the level of fluctuations in the results of the enterprise's activities
Statistical	The assessment of financial risks takes place considering the indicators of previous periods
Analytical	The assessment of the presence and level of financial risks is carried out based on the use of economic and mathematical models (discounting method, scenario method). Such methods are most often used when assessing the risk level of an innovative or investment project of the enterprise
Expert	The assessment of the presence and level of risk is based on the intuition, experience and professional competence of experts, whose position serves as the initial database
Estimates of financial stability	It involves the assessment of potential threatening areas of the company's activity. It is carried out based on a comparison of the actual activity indicators with the predicted ones
Rating	The assessment of risk level is carried out by comparing individual indicators of a real enterprise with a reference one using evaluation coefficients, assigning them weight and an evaluation scale
Normative	It involves the calculation of a certain group of financial ratios, as well as their comparison with recommended or normatively approved values

Generalized based on [1–12].

Risk management arising in the company's activities is an extremely complex process that requires a clearly defined sequence. The most common opinion is the following stages of enterprise risk management [7–9]: risk detection, risk identification, risk assessment, risk minimization (neutralization). For the sake of successful activity, the above-mentioned sequence should form the basis of the risk management system of each enterprise.

In modern conditions, the problem of risk management of domestic business entities is particularly acute, which is primarily related to the dynamic external environment. Over the past few years, the most threatening and influential factors in the domestic enterprises activity are the covid-19 pandemic, as well as the military state in Ukraine. Such factors led to the emergence of an economic, political, and social crisis in Ukraine. These factors also require constant monitoring of enterprises' financial condition, as well as the development or improvement of the financial risk management system.

It should be noted that the effective system of financial risk management at any enterprise is based on methods and models for assessing their presence and identifying the type. The methods of assessing financial risks at the enterprise are extremely important because they allow to respond to problems in a timely manner and make adequate and timely management decisions aimed at their elimination.

In our opinion, the following are the main criteria that must be met by the methods of assessing financial risks at the enterprise: objectivity and reliability of the obtained results; accuracy; economic feasibility (the costs of carrying out the assessment should not exceed the income received as a result of its results application); availability of data necessary for the method application; ease of the method application; time resources minimization (the financial risk assessment method application should not require a significant amount of time).

Having analyzed scientists' approaches to financial risk assessment at enterprises, it was concluded that the economic and mathematical model of assessment and identification of financial risks, proposed by Professor G. O. Zakabluk, meets the criteria mentioned above to the greatest extent.

G. O. Zakabluka's method is based on an integral indicator calculation, the basis of which is the relative indicators of the enterprise financial state, namely indicators of liquidity, financial stability, profitability, business activity and property potential [3, c. 35].

The author proposes to calculate integral indicators for each group of financial ratios, and then based on them to calculate a generalized indicator of financial risk. To identify the level of financial risk at the enterprise, the author developed a table of relevant limits with which the value of the general indicator of financial risk is compared and a conclusion is drawn about its appropriate level.

Let's try out the above-considered method of assessing financial risks of «Microcredit» LLC activity [4]. To begin with, it will be presented the formula for the integral indicator calculation for each group of financial ratios. For its calculation, the author offers the following formula [3, c. 36]:

$$R_{\text{and}} = \sqrt[n]{\prod_{i=1}^n K_i}, \quad (1)$$

R_{and} – is an integral indicator of each group of coefficients of the financial condition (liquidity, financial stability, profitability, property potential, business activity), K_{and} – is the value of financial indicators, n – is the number of indicators in the i -th group.

Let's calculate the values of the integral indicators and summarize the obtained results in Table 3.

Table 3. The results of integral indicators calculation of the financial condition of «Microcredit» LLC

Model indicators	Value of indicators by years		
	2020	2021	2022
Indicators of property potential, units			
Depreciation coefficient of fixed assets ($Kdfa$), units	0.86	0.79	0.70
Coefficient of suitability of fixed assets ($Ksfa$), units	0.14	0.21	0.30
The coefficient of assets mobility (Kam), units	10.1	9.9	11.3
Fund return (Kfr), units	6.21	7,8	7.7
<i>Integral indicator of property potential level (Rpp), units</i>	<i>1.6</i>	<i>1.8</i>	<i>1.1</i>
Liquidity indicators, units			
Absolute liquidity ratio (Kal), units	0.14	0.15	0.06
Total liquidity ratio (Ktl), units	0.14	0.15	0.06
Coverage coefficient (Kcc), units	3.28	2.68	1.89
<i>Integral indicator of liquidity level (RI), units</i>	<i>0.4</i>	<i>0.39</i>	<i>0.18</i>
Indicators of financial stability, units			
Coefficient of current assets provision with own funds (Kof), units	0.67	0.60	0.45
Equity maneuvering coefficient (Kem), units	0.87	0.86	0.83
Coefficient of autonomy (Ka), units	0.70	0.63	0.49
Coefficient of financial leverage (Kfl), part unit.	2.32	1.73	0.96
<i>Integral indicator of financial stability level (Rfs), unit</i>	<i>0.9</i>	<i>0.8</i>	<i>0.5</i>
Indicators of business activity, units			
Turnover of current assets ($Ktca$), units	1.71	1.77	1.27
Transformation coefficient (Kt), units	1.55	1.61	1.17
Equity turnover (Kte), units	2,2	2.4	2.1
<i>Integral indicator of business activity level (Rba), units</i>	<i>1.7</i>	<i>1.8</i>	<i>1.3</i>
Profitability indicators, units			
Return on equity (ROE), units	0.023	0.029	0.013
Return on assets (ROA), units	0.013	0.011	0.005
Profitability of sales (Rs), units	0.008	0.007	0.005
<i>Integral indicator of profitability level (Rp), unit</i>	<i>0.013</i>	<i>0.013</i>	<i>0.006</i>

Analyzed based on [4].

Further, the results of integral indicators calculation of financial stability, liquidity, property potential, profitability and business activity are necessary to calculate the overall integral indicator of financial risks at the enterprise, the calculation formula of which is given below:

$$T_{f.r.} = \sum_{i=1}^n Ri \times Vi, \quad (2)$$

$T_{f.r.}$ – integral indicator of financial risk; Ri - integral indicators of financial stability, liquidity, profitability, business activity and property potential of the enterprise; Vi – weighted coefficients for each group of indicators of the model [3, c. 38].

The values of the weighted coefficients are shown in Table 4.

Table 4. The value of the weighted coefficients of the enterprise's financial risk assessment model

Integral indicators	The value of the weighted coefficients
An integral indicator of property potential level	0.17
An integral indicator of liquidity level	0.13
An integral indicator of financial stability level	0.28
An integral indicator of business activity level	0.17
An integral indicator of profitability level	0.3

Analyzed based on [4].

As already mentioned, the application of the model allows not only to assess the presence or absence of financial risks at the enterprise, but also to identify their level. The table for identifying the financial risks level is given below.

Table 5. Limits and levels of financial risks identification

Indicator limits	Appropriate levels of financial risk
[0–0.34]	Critical
[0.35–0.57]	High
[0.58–0.81]	Satisfactory
[0.82–1]	Low
>1	Null

Analyzed based on [4].

Let's calculate the integral indicator value of financial risks of «Microcredit» LLC for the analyzed years 2019–2021 and summarize the results in Table 6.

Table 6. Results of calculating the integral indicator value of financial risks of «Microcredit» LLC and identifying risks level

Years	The value of the integral indicator	Financial risk level
2020 year	0.86	Low
2021 year	0.88	Low
2022 year	0.56	High

Analyzed based on [4].

As it can be seen, that in 2020 and 2021, financial risk level at «Microcredit» LLC was low, while in 2022 it significantly increased, reaching the «high» level. Analyzing the value of integral indicators, it is also evident the presence of the risk of loss of profitability, liquidity, and financial stability at the enterprise. Ignoring such risks is extremely dangerous and can lead to bankruptcy proceedings and liquidation of the enterprise in the future.

For today, the problem of the absence of a clearly formed model of financial risk management, which would consider the most common factors of the internal and external business environment, as well as the specifics of Ukrainian enterprises activity, remains unresolved. After analyzing and summarizing scientists' approaches to solving this problem, a model of financial risk management of the enterprise was developed, which would consider the requirements and criteria defined above. A graphic interpretation of the company's financial risk management model is presented on Figure 1.

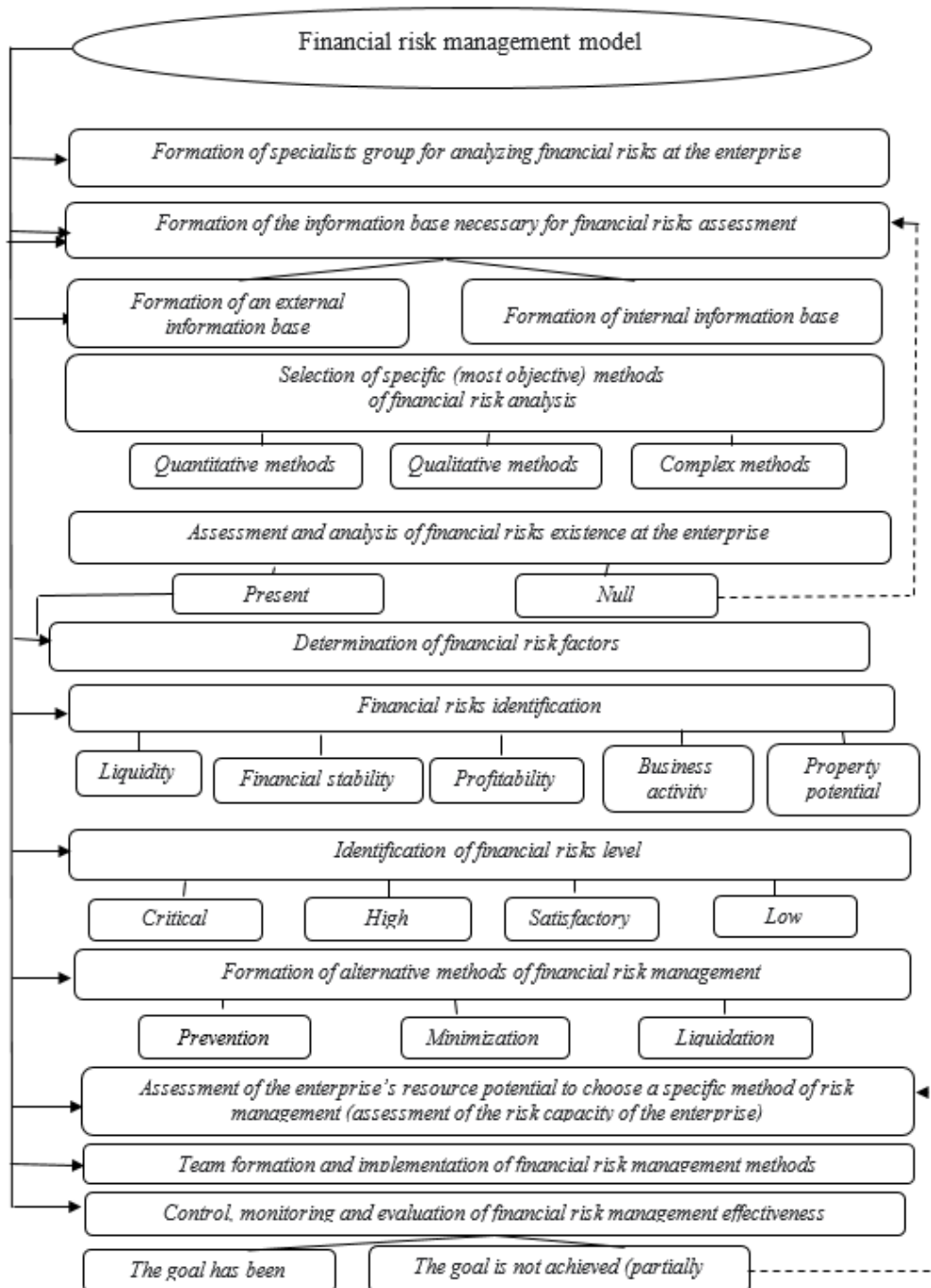


Figure 1. The model of financial risk management

To begin with, let's consider what sequence of actions (stages) should be followed when managing financial risks. The main component of the financial risk management model is the

monitoring system. The effectiveness of the financial risk monitoring system depends on the choice of specific management methods, as well as the success and timeliness of their implementation. Among the main components of the financial risk monitoring system, it is worth highlighting the following [5–10]:

- building a risk profile (risk type, level (depth));
- assessment of influence degree of the financial risk on the enterprise activity;
- adoption of alternative options for decisions on the financial risks neutralization or minimization;
- evaluation of financial risk monitoring system effectiveness.

The financial risk management system at the enterprise must contain clearly formed strategies, among which the following can be distinguished:

- development and implementation of a risk management system at the enterprise as an integral component of the overall management system;
- the monitoring system improvement for internal and external factors;
- constant improvement of risk management technology at the enterprise;
- an information database formation necessary for risk analysis and assessment;
- development and implementation of the financial risk management system at the enterprise;
- improvement of the risk management monitoring system;
- improvement of the methodology of risk assessment and methods of assessing the risk management effectiveness.

To preserve the competitive advantages and value of the business unit, the risk management system should be based on the development and implementation of non-standard, bold management solutions.

Conclusions and prospects for further research. Dynamic changes in the operating environment of domestic enterprises, the expansion of the financial relations sphere, the constant improvement of financial technologies and tools lead to an increase in the probability of financial risks occurrence, ignoring which in the long run may end in the loss of the value of the business unit, bankruptcy, and liquidation. This can be avoided with the help of constant monitoring of the business environment of enterprises, as well as the corresponding improvement of the financial risk management system, in which, in our opinion, the financial risk management model occupies the first place. A promising direction of further research will be the development of a method of assessing financial risks at the enterprise, which will consider not only the conditions and specifics of the latter's activity, but also the stage of its life cycle.

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