

Research Paper

# Optimization of Operational and Financial Risks of Conducting Business Activities Under the Conditions of Changes and Sustainable Development

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## ABSTRACT

Risk is one of the main elements of any type of company's activity, which should be taken into account when planning its development. It is impossible to completely eliminate risks from commercial activities, particularly, while the economic climate is changing. In addition, the company's management cannot always successfully get out of risky situations, which can lead to negative consequences. This is precisely why the issue of optimizing operational and financial risks is given primary attention in the economic literature nowadays. The purpose of the academic paper is to highlight in the scientific literature the main trends of work on optimizing operational and financial risks of management both under conditions of changes and during the company's sustainable development, as well as establish the main practical aspects of the issue outlined. In the course of the research, an analytical and bibliographic method was used to study the scientific literature on the optimization of operational and financial risks in enterprise management. At the same time, induction, deduction, analysis, synthesis of information, system-structural, comparative, logical-linguistic methods, abstraction, and idealization were applied to study and process data. The research authors also conducted a questionnaire in online mode to clarify practically the most important issues related to risk management under conditions of changes and sustainable development. Based on the research results, the principal and most significant theoretical aspects of optimizing business operational and financial risks have been singled out, as well as the standpoints of enterprises' heads regarding the key aspects of this issue have been investigated.

## HIGHLIGHTS

- The purpose of the academic paper is to highlight in the scientific literature the main trends of work on optimizing operational and financial risks of management both under conditions of changes and during the company's sustainable development, as well as establish the main practical aspects of the issue outlined.
- The principal and most significant theoretical aspects of optimizing business operational and financial risks have been singled out.

**Keywords:** Anti-crisis management, risk optimization, risk prevention measures, social investment projects, anti-crisis policy, assessment of possible losses, risk minimization

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In modern conditions of development, every company is faced with the need to choose the most effective types of optimizing various types of risks of its activity. It should be noted that there are both general risks for all companies and individual risks for each industry.

Anti-crisis management is one of the functional directions of corporate management. This is a constant process of identifying signs of crisis phenomena and implementing a general plan to prevent their spread. The choice of ways to avoid a crisis includes the company's strategic management, as well as the determination of tactics for implementing the chosen strategy (operational management), an important component of which is the qualitative optimization of risks and, if possible, their prevention.

The theoretical part of the present research analyzes the scientists' standpoint regarding the concept of risks, types of their optimization and measures that make it possible to prevent the negative impact of various types of operational and financial risks on the companies' activities in conditions of changes and sustainable development.

The practical part of the research includes clarifying the priorities of the financial and operational risk management system in business in the conditions of changes and the company's sustainable development. It also determines the most important financial methods of managing operational and financial risks of conducting business activities, risk optimization methods requiring scientific refinement and experimental confirmation of their effective use under conditions of change and stable working conditions for business entities (Bielova, A., Koval, S., Zhuravska, N., Agayev, A. 2022). By the way, the practical part identifies the principal types of state methodical, organizational and legal support for enterprises.

Based on the research results, conclusions were made regarding the issues under consideration. In particular, it has been established that from the perspective of company heads, under the conditions of work during changes in the economic environment, the most significant tasks of the financial and operational risk management system are the identification and assessment of possible risks in implementing financial transactions, ensuring the

minimization of the enterprise's possible financial losses in case of a risky event and developing the most acceptable ways of neutralizing financial risks (Iryna Ksonzhyk, Yuliana Lavrushchenko, Oleksiuk Marcin, Volodymyr Saienko, Buryk Zoriana, 2021). At the same time, given the company's sustainable development, the goal of optimizing operational and financial risks is an objective assessment of the probability of risky events while implementing financial decisions and predicting the size of possible financial losses and ensuring the minimization of the risk level in relation to the planned profitability level of financial operations. The survey made it possible to establish the prevailing financial methods of managing operational and financial risks during the sustainable development of the enterprise, namely: the method of technical and economic calculations, the balance sheet method and economic and statistical methods. When working in conditions of changes, the most acceptable methods are the method of cost discounting, expert assessment and risk hedging. The survey showed that the decision tree method, sensitivity analysis, and regulatory method are the most significant ones among risk optimization methods requiring scientific refinement and experimental confirmation of the effectiveness of their use under conditions of changes. Along with this, in order to optimize risks in the conditions of sustainable development, it is worth paying particular attention to the experimental study of risk optimizations of companies' activities using the method of mathematical programming, game-theoretic methods, as well as methods using auxiliary functions (Liudmyla Ladonko, Nataliia Mozhaikina, Zoriana Buryk, Ihor Ostrovskyy, Volodymyr Saienko. 2022). During the survey, the respondents noted that the most desirable methods of state intervention in the sustainable development of the business environment are optimizing economic and social measures and creating a favorable investment climate. Moreover, in the case of a changing economic situation, the most necessary types of support are permission for temporary non-compliance with antimonopoly legislation, support for tax reorganization and provision of targeted tax benefits.

The purpose of the research is to determine the heads' standpoint of industrial companies regarding the features of anti-crisis policy in the conditions of changes and sustainable development of enterprises.

## Literature review

The modern literature contains numerous interpretations of the term “risk”, which is the reason for the difficulty of studying this phenomenon. Risk, as a social-economic category, is an integral part of industrial relations and an organic component of the economic mechanism. In general, this concept is interpreted as a measure of the possibility of an adverse event or a certain combination of several such events. A manifestation of a risky situation is a deviation of the actual values of critical indicators from normal, stable, average or alternative levels (Cincinelli, Pellini, & Urga, 2022).

The issue of effectively managing the operational and financial risks of enterprises is very relevant in the conditions of the formation of market relations. After all, financial and operational risks have the greatest impact on the financial result of the company and, therefore, on its market value (Derbali & Jamel, 2019).

Risk management is part of effective corporate governance. Currently, such management replaces the traditional approach, that is, passive-protective, based on the complete transfer of risk to insurance companies, with an active, offensive approach, based on risk control and confidence in the availability of various solutions to existing problems (Landi et al., 2022), (Zhu & Zhang, 2018).

Identifying signs of the deterioration of the enterprise’s state makes it possible to prevent the occurrence of events according to the scenario that will lead to bankruptcy and to determine the optimal ways to increase and strengthen financial stability (Pet’ko, L., Popova, L., Kulyk, O., Kardash, L., Ovsiienko, L., Denysiuk, I., Proskurniak, O. 2021). Therefore, analyzing the enterprise’s financial state is a necessary stage of anti-crisis management. A systematic, comprehensive approach to risk optimization is necessary at the current stage. Thus, the decisive moment of this process is the choice of directions and objects of the research, namely, the specific indicators that will be analyzed. In addition, it is necessary to establish the criteria for evaluating these indicators and the permissible limits of their fluctuations. At the same time, the crossing of these limits will be a signal to take anti-crisis measures (Kryshtanovych, M., Akimova, L., Akimov, O., Parkhomenko-Kutsevil, O., Omarov, A.

2022). Therefore, a mandatory prerequisite for the diagnosis and timely prevention of the enterprise’s insolvency is the availability of a scientifically based system of aggregated indicators and criteria that comprehensively and in detail characterize the company’s economic state and help detect the fact of insolvency (Sun, Liu & Chen, 2022), (Han, Wang & Xu, 2019). Also, the migration of highly qualified workers has a significant impact on economic indicators, competitiveness, and economic growth of the country (Oliinyk, O., Bilan, Y., Mishchuk, H., Akimov, O., & Vasa, L., 2021).

The basis of information for the analysis of the company’s financial condition is the annual report and primary accounting documents. External sources of information are also of particular importance, namely: the legal framework; macroeconomic statistics; messages in mass media about market conditions, state regulation of business activity, tax policy, as well as the results of external monitoring of the environment by independent experts, etc. (Hosseini et al., 2022), (Jegers, 2018), (Wang Wang, 2018). The country’s natural resources, namely their strategic sustainable management, influence the provision of the country’s ecological development (Koval, V., Mikhno, I., Udovychenko, I., Gordiichuk, Y., & Kalina, I., 2021). Scientists have developed risks and studied their mathematical modeling of multimodal transportation for the situation in the country (Nitsenko, V., Kotenko, S., Hanzhurenko, I., Mardani, A., Stashkevych, I., & Karakai, M., 2020).

The primary goal of the company is to ensure a stable financial position, the prerequisite of which is the achievement of maximum profit, which is the main source of increasing financial resources. It is necessary to distinguish the phases of deterioration of the financial situation in order to find the optimal way out of the enterprise from the crisis (Zhang & Luo, 2022), (He & Guo, 2022).

## Methodology

A practical study of modern tendencies in optimizing operational and financial risks of management under conditions of changes and the company’s sustainable development was conducted by surveying 211 heads of industrial companies in Sumy, Rivne, Chernihiv, Cherkasy and Kyiv regions of Ukraine. The research was conducted using the Google Forms service.

## RESULTS

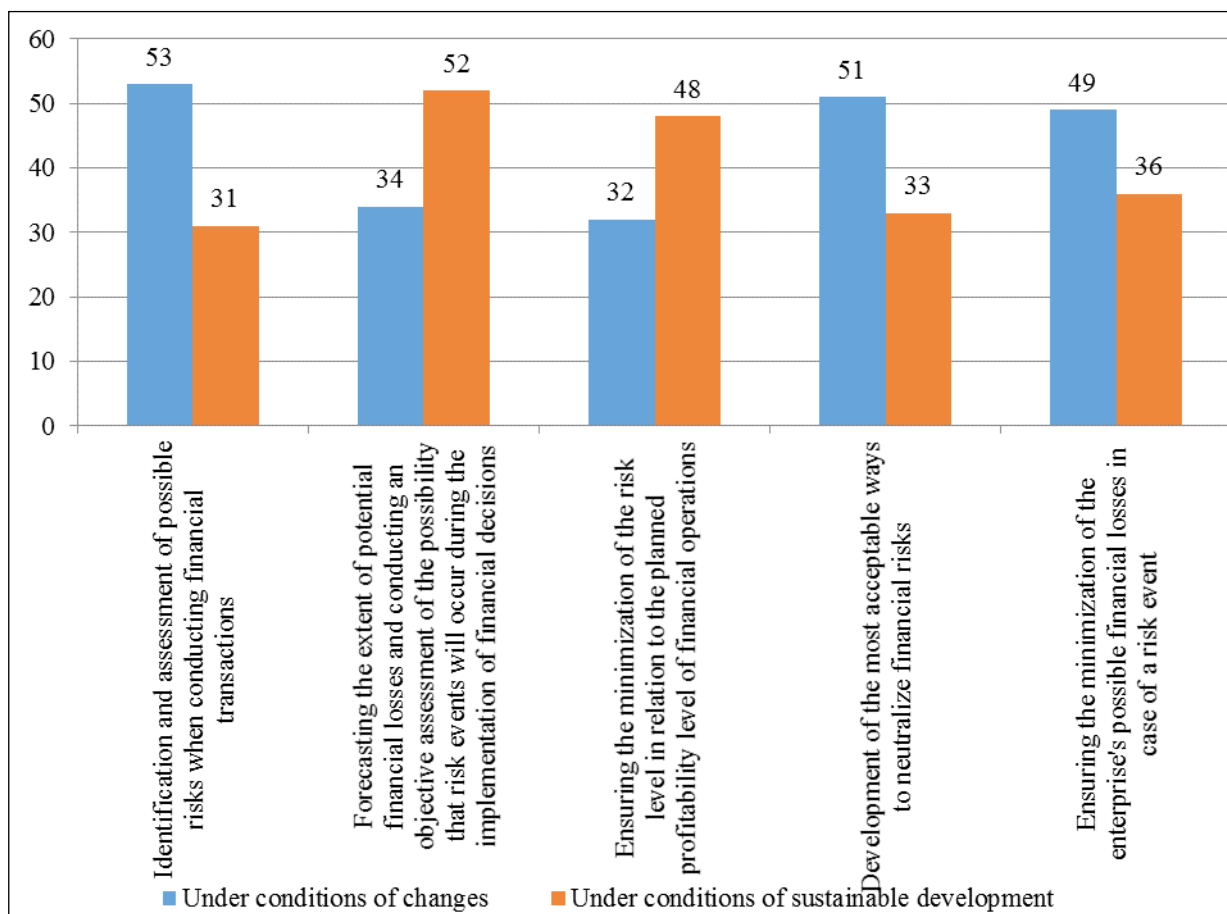
According to the survey participants' standpoint, currently, when it is necessary to take into account and predict various possible conditions of the functioning of companies, the primary goals of the financial and operational risk management system in business are as follows (Fig. 1).

It is seen from Fig. 1, according to company executives' standpoint, that the primary goals of the financial and operational risk management system under the conditions of changes are the identification and assessment of possible risks in financial transactions, ensuring the minimization of possible financial losses of the enterprise in case of a risky event and the development of the most acceptable ways of neutralizing financial risks. At the same time, in the course of the company's sustainable development, the tasks of optimizing operational and financial risks include an objective

assessment of the probable occurrence of risky events while implementing financial decisions and predicting the size of possible financial losses and ensuring the minimization of the level of risk in relation to the planned level of financial operations' profitability.

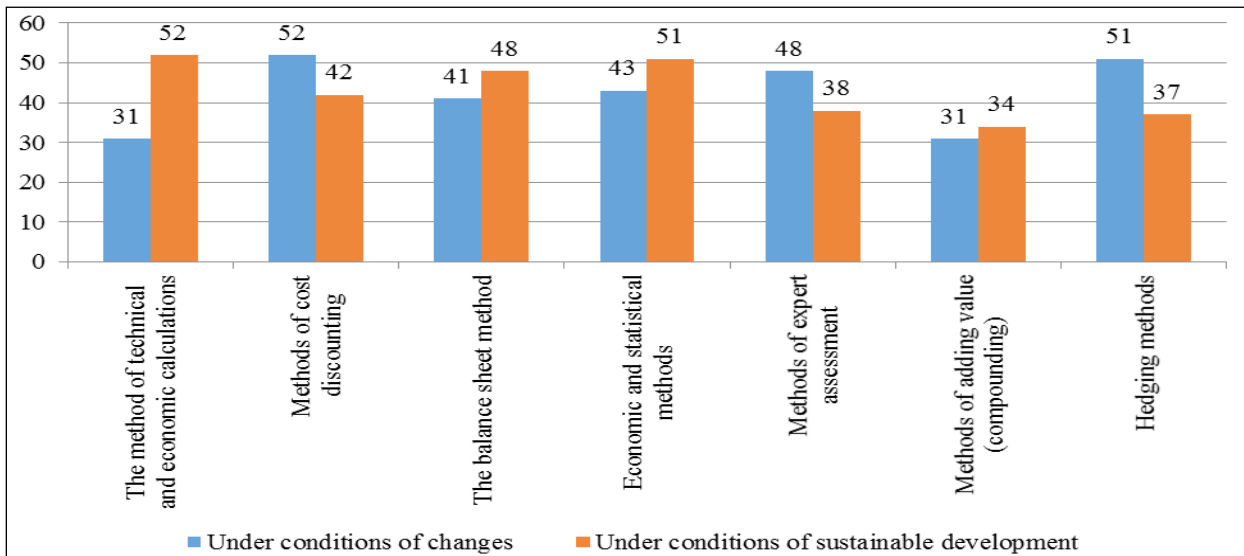
Financial methods for managing operational and financial risks include such methods and techniques that substantiate and control specific management decisions in various areas of the enterprise's financial activity. The survey participants revealed that these methods should be used and applied differently when companies are undergoing changes and developing sustainably (Fig. 2).

According to the respondents' viewpoint, they most often use the method of technical and economic calculations, the balance sheet method and economic and statistical methods during the enterprise's sustainable development. When working



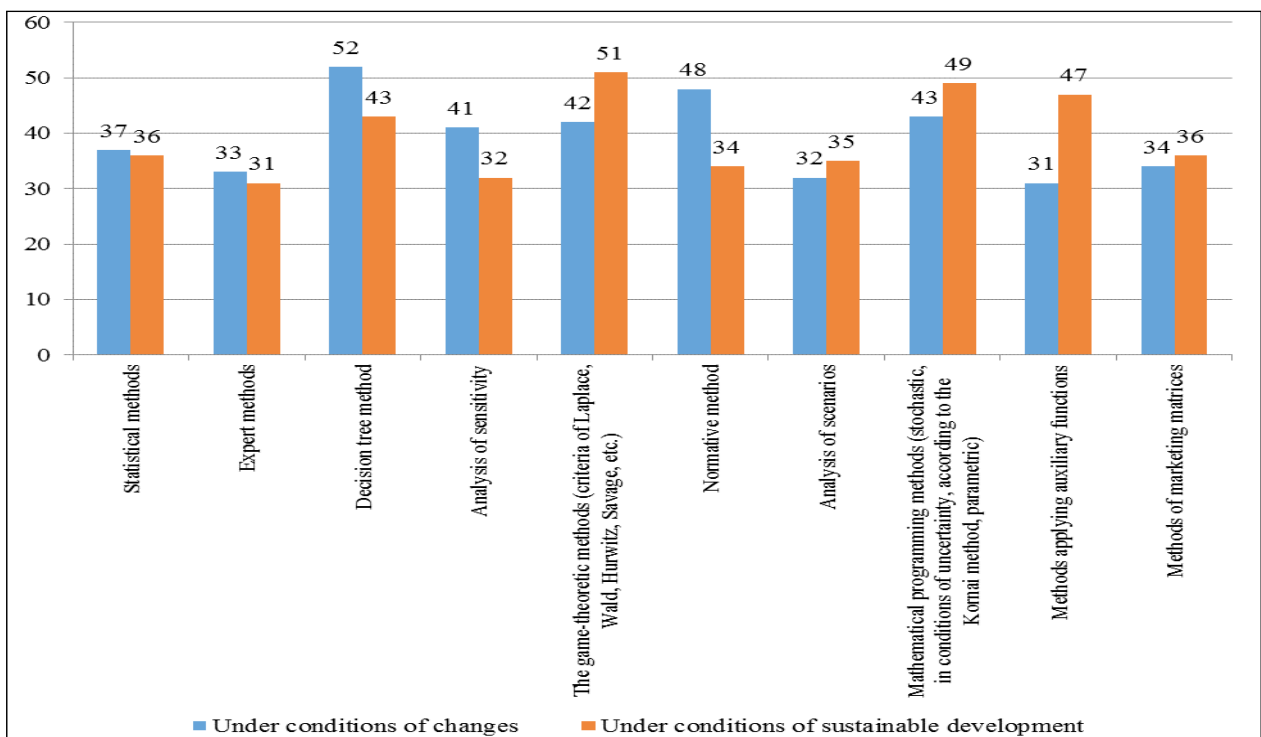
Source: compiled by the authors.

**Fig. 1:** The primary goals of the financial and operational risk management system in business in the conditions of changes and sustainable development of the company, %



Source: Compiled by the authors

**Fig. 2:** Financial methods of managing operational and financial risks of conducting economic activity in conditions of changes and sustainable development, %



Source: Compiled by the authors.

**Fig. 3:** Risk optimization methods requiring scientific refinement and experimental confirmation of the effectiveness of their using under conditions of changes and sustainable development of the business entities' activities, %

in conditions of changes, the most acceptable methods are the method of cost discounting, expert assessment and risk hedging.

The survey made it possible to establish the standpoint of the respondents regarding risk

optimization methods, requiring scientific refinement and experimental confirmation of the effectiveness of their use under conditions of changes and sustainable development of the business entities' activities (Fig. 3).

As can be seen from Fig. 3, companies' heads believe that the decision tree method, sensitivity analysis, and normative method require scientific study to work under conditions of changes. In the case of actions in the conditions of sustainable development, it is worth paying particular attention to the experimental study of optimizing the risks of companies' activities using the method of mathematical programming (stochastic, in conditions of uncertainty, the Kornai method, parametric), the game-theoretic method (criteria of Laplace, Wald, Hurwitz, Savage, etc.), as well as methods applying auxiliary functions.

The clarification of the primary forms of state methodical, organizational, and legal support of business entities, which is most necessary in the conditions of changes and sustainable development of businesses, is a significant outcome of the research (Fig. 4).

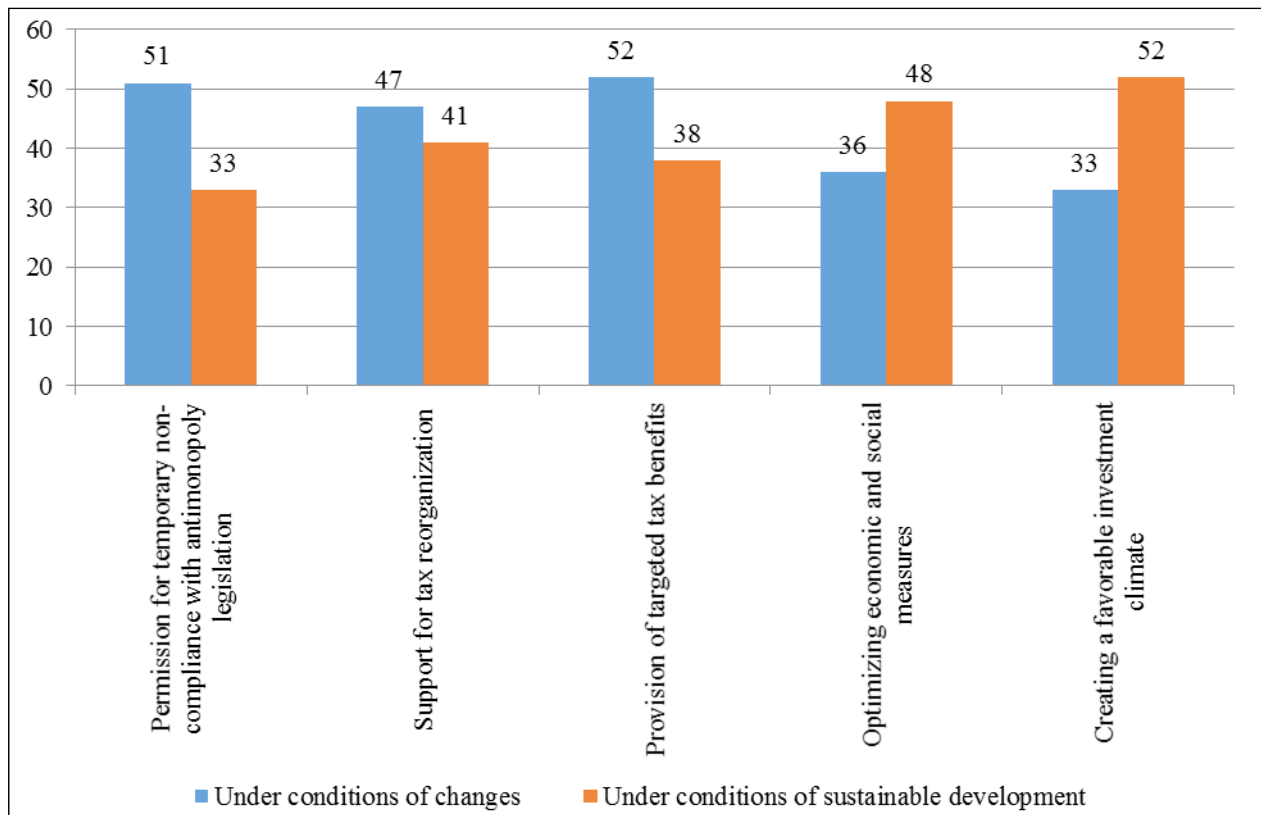
The survey participants believe that the most desirable methods of state intervention in the sustainable development of the business environment

are optimizing economic and social measures and creating a favorable investment climate. At the same time, in the case of a changing economic situation, the most desirable types of support are permission for temporary non-compliance with antimonopoly legislation, support for tax reorganization and provision of targeted tax benefits.

## DISCUSSION

Specific challenges to obtaining profitability arise when companies operate in an environment where the global economy is not sufficiently stable. Many companies today often find themselves in a crisis situation. Several measures are carried out in order to overcome the above-mentioned phenomena at enterprises, restore their viability, and prevent bankruptcy and liquidation, which in the economic literature are called remedial measures (Levich, Conlon & Potì, 2019).

Enterprises conducting their production activities in market conditions should create such a planning



Source: Compiled by the authors.

Fig. 4: The main types of state methodical, organizational and legal support of business entities, which is most necessary in the conditions of changes and sustainable development of companies, %

system that can quickly and effectively respond to the market's needs. The well-being of the company depends mainly on the amount of profit at its disposal. Consequently, it is especially important to pay attention to this indicator when planning the enterprise's activities (Chen & Zhao, 2022), (Xin, Hung & Qiao, 2018).

The current state of the economy and finance and the main macroeconomic and macro-financial indicators of the economy reflect a different degree of either existing crisis phenomena or the risk of their occurrence. The implementation of effective budget planning under such conditions becomes more and more significant. By the way, it is advisable to introduce real medium-term budget planning for further improvement using the method of extrapolation planning based on the "rolling three-year period". Drawing up such a financial plan makes it possible: firstly, to quickly respond to changes in the structure of social and economic development, and secondly, to achieve a balance of various cyclical trends in developing macroeconomic and macro-financial indicators (Banner, Bofinger & Rock, 2022), (Ali *et al.* 2018), (Gil-Alana *et al.* 2018), (Fan, Ke & Wang, 2020).

Relevant measures make it possible to prevent the negative impact of risks on companies' activities: avoidance, minimization, diversification and risk reduction. Any industrial enterprise must plan its activities to use available resources effectively in conditions of the external environment's instability in order to be able to predict and prevent possible risks. Risk planning in the company's activities will allow to reduce the degree of uncertainty, eliminate the risk of loss of corporate profit, develop and make more effective management decisions regarding the company's activities, optimize available resources and financial stability, and to increase competitiveness in the market (Amiri *et al.* 2020), (Capelli, Ielasi & Russo, 2021).

## CONCLUSION

Therefore, the analysis of the scientific literature on the research topic and the results of the questionnaire showed that studying risks in the activities of industrial companies is a necessary process, forasmuch as the financial and economic situation in the world is unstable. Enterprises are

exposed to certain risks in their activities and try to optimize them. At the same time, the main problem of the risk management system is the lack of a comprehensive and systematic approach to this process. Consequently, it is expedient for enterprises to develop risk prevention measures and means in their activities. Therefore, in order to increase the efficiency of operations in modern economic conditions, industrial enterprises should implement individual risk management systems that allow identifying the causes of their occurrence and choosing a set of measures to minimize the impact of risks or neutralize them.

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