

## ECONOMIC PROBLEMS AND PROSPECTS OF OCCUPATIONAL SAFETY: THE PATH TO SUSTAINABLE DEVELOPMENT

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**Abstract.** The article examines the economic significance of occupational health and safety in Ukraine as an important factor in improving production efficiency and ensuring the sustainable development of enterprises. Occupational safety is considered not only as a social component but also as an economic lever capable of influencing labour productivity, reducing compensation costs, decreasing staff turnover, and improving the quality of the working environment. The article analyzes key economic issues related to the underfunding of occupational safety measures, low safety culture, weak enforcement of labour legislation, and the consequences of poor working conditions. Improving the occupational health and safety system can not only reduce losses but also become a source of economic growth through the optimization of labour processes, reduction of unproductive time losses, and increased employee motivation.

**Keywords:** occupational safety, economic significance, workplace safety, labour productivity, costs, staff turnover, working conditions.

**Анотація.** У статті розглянуто економічне значення охорони праці в Україні як важливого чинника підвищення ефективності виробництва та забезпечення сталого розвитку підприємств. Охорона праці розглядається не лише як соціальна складова, а й як економічний важіль, здатний впливати на продуктивність праці, зниження витрат на компенсації, зменшення плинності кадрів і підвищення якості робочого середовища. У роботі проаналізовано основні економічні проблеми, пов'язані з недостатнім фінансуванням заходів з охорони праці, низьким рівнем культури безпеки, слабким контролем за дотриманням законодавства та наслідками несприятливих умов праці. Покращення системи охорони праці може не лише зменшити втрати, а й стати джерелом економічного зростання завдяки оптимізації трудових процесів, скороченню непродуктивних витрат часу та підвищенню мотивації персоналу.

**Ключові слова:** охорона праці, економічне значення, виробнича безпека, продуктивність праці, витрати, плинність кадрів, умови праці

**Introduction.** In the current conditions of the development of the Ukrainian economy, the issue of occupational safety is becoming increasingly relevant. A safe and healthy working environment is not only a guarantee of social protection for employees, but also an important factor in the economic stability and growth of enterprises. Practice shows that an effective occupational safety system contributes to increasing labour productivity, reducing the level of industrial injuries, reducing the employer's costs for sick leave, compensation and training of new personnel. Despite this, Ukraine still has a low level of funding for safety measures, which complicates the formation of a culture of occupational safety at enterprises. Therefore, it is

important to consider occupational safety not only as a duty or element of social responsibility, but as an economic tool that directly affects the efficiency of production activities. In this context, there is a need for a thorough analysis of the economic aspects of occupational safety and the development of effective mechanisms for its improvement.

**Analysis of the state of the issue.** In the global dimension, occupational safety and health has long gone beyond a purely social function, becoming an integral element of strategic management of the enterprise. Leading international organizations, in particular the International Labour Organization (ILO), the World Health Organization (WHO), and the Organization for Economic Cooperation and Development (OECD), are actively focusing on the relationship between investments in safe working conditions and economic results of business [1].

In developed countries, occupational safety and health is an important component of corporate social responsibility, and costs for occupational safety are considered long-term investments. Studies show that every dollar invested in the prevention of occupational injuries and diseases can bring from 2 to 6 dollars of economic benefit due to reduced sick leave, reduced insurance payments, and increased productivity. It is worth noting separately that in the EU countries there is a comprehensive regulatory framework that obliges employers to create safe working conditions. For example, Directive 89/391/EEC provides for the employer's obligation to prevent risks, conduct hazard assessments and regularly update safety measures [2]. At the same time, much attention is paid to digital solutions in the field of occupational safety and health – from automated monitoring of workers' condition to the use of artificial intelligence to predict risks. In developing countries, the situation remains more complex: limited funding, weak institutional framework and low safety culture create significant risks for workers. However, even there, there is a growing awareness that safe work is not a cost, but a guarantee of long-term competitiveness.

Thus, in world practice, occupational safety and health is increasingly treated as an economically feasible investment, rather than a burden. This approach is gradually gaining support in Ukraine, although the domestic occupational safety and health system still needs deep reforms and qualitative updating.

**The purpose of the study** is to substantiate the economic feasibility of investing in occupational safety and health and identify its impact on the efficiency of enterprises in the conditions of the modern economy.

**Methods, materials and research results.** The state of occupational safety both in Ukraine and in the world is an important aspect of ensuring effective and safe work of employees, which has a direct impact on the economic stability and development of enterprises. In Ukraine, occupational safety remains a critical, but often underestimated component of management. The main problem is insufficient funding for occupational safety measures, especially in small and medium-sized businesses, where funds for employee protection, training and improvement of working conditions are allocated irregularly or are ignored altogether. Often, occupational safety is considered formally: documents are drawn up, briefings are held, but real safety mechanisms are not

implemented properly. The situation is aggravated by the low level of safety culture - both among employees and employers. Many do not take safety rules seriously, ignoring instructions, and management does not provide proper control. Another serious problem is a significant share of informal employment. Employees who work without formal registration are deprived of any social guarantees and rights to protection in the event of accidents. In addition, the system of state supervision over compliance with labour protection requirements has been weakened due to reforms and a reduction in the number of regulatory bodies. All this together leads to an increase in risks in the workplace, an increase in the number of occupational diseases and injuries. No less important is the deterioration of psychophysiological working conditions: increased stress levels, overwork, and disorganization of the work process negatively affect personnel safety.

At the global level, labour protection is no longer considered simply as an employer's duty, but as a strategic element of the company's sustainable development. In developed countries, labour protection is integrated into the overall enterprise management system and is considered as part of the corporate strategy. Digital technologies are being actively implemented: intelligent sensors, video analytics systems, and software for risk prediction are used. Considerable attention is paid not only to physical safety, but also to psychosocial factors – protection from emotional burnout, stress, and conflicts. The main emphasis is on prevention, rather than on compensation for the consequences of injuries or diseases. Preventive measures – such as systematic training, building a safety culture, and regular risk assessment – are becoming the norm in international practice.

In addition, international standards, in particular ISO 45001, are important, which are increasingly being implemented in the activities of companies, especially those operating in global supply chains [3]. Compliance with the requirements of these standards is often a prerequisite for participating in tenders and cooperating with international partners. Thus, occupational safety in the world is evolving towards technologicality, responsibility and employee orientation, while in Ukraine there are still many challenges that require a systemic solution – both at the level of state policy and at the level of enterprises.

Improving the occupational safety system should become one of the key areas of development of modern enterprises, because it not only guarantees the preservation of the life and health of employees, but also directly affects the productivity, financial stability and long-term effectiveness of the company. First of all, it is worth focusing on the transition from a reactive to a proactive approach in occupational safety management. This means that the emphasis should not be on eliminating the consequences of accidents, but on identifying and preventing risks before they become a threat. Regular and high-quality risk assessment, the introduction of early detection systems for dangerous situations, and the development of emergency action plans should become mandatory elements of the company's internal policy [4].

One of the effective areas of improvement is the introduction of digital technologies into the occupational safety system. The use of smart devices, video

analytics systems, programs for online monitoring of dangerous conditions, and personal trackers for employees allows for the prompt identification of risks and the taking of measures in real time. This not only increases the level of safety, but also makes it possible to minimize downtime in production, loss of time associated with injuries or evacuation, as well as optimize the distribution of human and material resources. An equally important component is the formation of a safety culture in the company, where each employee, from the manager to the worker, is aware of his responsibility for his own safety and that of his colleagues. This requires continuous education, training, information campaigns and involving employees in the decision-making process regarding occupational safety. The development of a motivational system, when compliance with safety rules is encouraged not by punishments, but by bonuses, can positively affect personnel behavior and reduce the level of violations.

Another area of improvement is the integration of the occupational safety system into the overall management system of the enterprise. Safety should not be a separate function of the occupational safety service, but part of strategic planning, investment policy, organizational development and quality management [5]. This approach allows you to achieve a synergy effect: reducing compensation costs, reducing absenteeism and downtime, reducing costs for treatment or equipment repair after accidents. As a result, the overall efficiency of the business increases, the corporate reputation is strengthened, employee loyalty increases, and the enterprise gains a competitive advantage in the market. Enterprises should more actively implement international occupational safety management standards, in particular ISO 45001. This will not only improve internal processes, but also ensure compliance with the requirements of international partners, expand export opportunities, and increase investor confidence. Ensuring decent, safe, and healthy working conditions should be considered an investment in human capital, which over time returns in the form of increased productivity, reduced staff turnover, and sustainable growth of the enterprise in modern market conditions.

**Conclusions.** During the study of the economic significance of occupational safety, it was found that the issue of safety in the workplace is not only socially important, but also directly related to the economic efficiency of enterprises. Modern challenges associated with globalization, rapid technological development and increased competition force enterprises to reconsider their attitude to occupational safety, recognizing it as a tool for increasing productivity, reducing indirect costs and ensuring sustainable development.

The current state of occupational safety in Ukraine is still characterized by a number of serious problems: insufficient funding, outdated approaches to risk management, a low level of safety culture at most enterprises, weak control over compliance with legislation and limited use of modern technologies. These factors lead to a high level of occupational injuries, reduced staff motivation and loss of economic potential. In the world, however, more and more companies are implementing proactive occupational safety management systems focused on risk prevention, the use of digital monitoring tools, the formation of a safety culture and the integration of

safety issues into the overall strategic management system. This approach allows to significantly reduce the costs associated with accidents, reduce staff turnover and increase labour productivity.

Improving the labour protection system in Ukraine should be based on a comprehensive approach, which includes modernization of the regulatory framework, implementation of international standards, digitalization of safety control processes, development of the employee training system and strengthening motivation to comply with safety rules. Particular attention should be paid to increasing the level of managerial responsibility for safe working conditions, because it is from the management that the strategic vector of enterprise development in this direction depends. Labour protection should be considered not as a burdensome obligation, but as a strategic investment that ensures long-term sustainability, competitiveness and development of the enterprise. Increasing the level of labour protection helps to reduce unproductive costs, improves the quality of labour processes and employee motivation, which ultimately leads to increased economic efficiency.

## References

1. Національна стратегія з охорони праці на період до 2027 року. – Кабінет Міністрів України. – Режим доступу: <https://www.kmu.gov.ua>.
2. ILO. Safety and health at the heart of the future of work: Building on 100 years of experience. – Geneva: International Labour Organization, 2019. – Режим доступу: <https://www.ilo.org>.
3. ISO 45001:2018 – Occupational health and safety management systems – Requirements with guidance for use. – International Organization for Standardization.
4. Європейське агентство з безпеки та гігієни праці (EU-OSHA). – Режим доступу: <https://osha.europa.eu>.
5. Державна служба України з питань праці. Офіційний сайт. – Режим доступу: <https://dsp.gov.ua>.