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FEATURES OF THE RISK MANAGEMENT SYSTEM DURING MARTIAL LAW
ОСОБЛИВОСТІ СИСТЕМИ УПРАВЛІННЯ РИЗИКАМИ В ПЕРІОД ВОЄННОГО СТАНУ

Собакар М. В. Особливості системи управління ризиками в період воєнного стану. *Український журнал прикладної економіки та техніки*. 2025. Том 10. № 2. С. 278 – 283.

Sobakar M. Features of the risk management system during martial law. *Ukrainian Journal of Applied Economics and Technology*. 2025. Volume 10. № 2, pp. 278 – 283.

The article reveals the theoretical and practical aspects of risk management in Ukrainian enterprises under martial law. Statistical data on the losses of the Ukrainian economy caused by a full-scale invasion are analyzed; the features and size of direct and indirect losses are characterized. The number of losses from the threats of martial law by sectors of the Ukrainian economy is considered, and the need to introduce a risk management system into Ukrainian enterprises is substantiated to strengthen business resilience and increase its competitiveness during periods of military instability. The main types of risks enterprises face during martial law are revealed, and their impact on performance and business development opportunities is indicated. Tools for identifying and assessing such risks are considered. The main types of risk management strategies are shown, and the probability and degree of risk impact criteria propose a methodical approach to choosing the optimal type of strategy. It is determined that the higher the likelihood of threats and the level of damage caused by their effect, the more active and radical management decisions in the risk management system of enterprises should be. Risk management strategies that were used before martial law were determined. The features of choosing the ways of wartime risk optimization by the risk assessment indicators are indicated. Each strategy proposes measures to eliminate risks and/or reduce the negative impacts of existing threats. The possible results of implementing each risk group's proposed risk management strategies are summarized. The study's results can be used in the practical activities of Ukrainian enterprises, especially in frontline areas, when forming a risk management system to minimize existing martial law threats and ensure enterprises' continuous operation.

Keywords: *risk management, martial law, management strategies, threats, risk minimization, losses, enterprises.*

Стаття присвячена розкриттю теоретичних та практичних аспектів управління ризиками на підприємствах України в умовах воєнного стану. Проаналізовано статистичні дані щодо збитків економіки України, що спричинені повномасштабним вторгненням, охарактеризовано особливості та розмір прямих і непрямих втрат. Розглянуто рівень збитків від загроз воєнного стану за секторами економіки України, обґрунтовано необхідність упровадження системи ризик-менеджменту в діяльність українських підприємств для посилення стійкості бізнесу та підвищення його конкурентоспроможності у період воєнної нестабільності. Охарактеризовано основні види ризиків, з якими стикаються підприємства в період воєнного стану, та визначено характер їх впливу на результати діяльності і можливості розвитку бізнесу. Розглянуто інструменти виявлення та оцінки таких ризиків. Зазначено основні типи стратегій управління ризиками та запропоновано методичний підхід до вибору оптимального виду стратегії відповідно до критеріїв ймовірності та ступеню впливу ризику. Визначено, що чим вищими є ймовірність настання загроз та рівень завданої шкоди від їх впливу, тим активнішими та радикальнішими мають бути управлінські рішення в системі ризик-менеджменту підприємств. Визначено стратегії управління ризиками, які є пріоритетними в період воєнного стану. Зазначено особливості вибору напряму оптимізації ризиків воєнного часу відповідно від оціночних показників ризику. Запропоновано низку заходів в межах кожної стратегії, що спрямовані на усунення ризиків та/або зниження негативних впливів існуючих загроз. Узагальнено можливі результати реалізації запропонованих стратегій управління ризиками щодо кожної групи ризиків. Результати дослідження можуть бути використані в практичній діяльності підприємств України, особливо в прифронтових територіях, під час формування системи ризик-менеджменту для мінімізації існуючих загроз воєнного стану та забезпечення безперервної діяльності підприємств.

Ключові слова: *управління ризиками, воєнний стан, стратегії управління, загрози, мінімізація ризику, збитки, підприємства.*

Statement of the problem

Military conflicts always have a powerful destructive impact on the economy, changing the nature of enterprises functioning, increasing uncertainty, and forming a new configuration of the external environment. With the beginning of the full-scale invasion of the Russian Federation into Ukraine in February 2022, Ukrainian businesses faced a lot of challenges that required management decisions to ensure the possibility of continuing to operate. Starting in 2022 and during martial law, enterprises operate in a volatile environment, accompanied by decreased business activity, disruption of logistics chains, changes in the legislative field, and increased financial and operational risks. This requires enterprise management to implement an effective risk management system capable of promptly responding to external threats of military actions.

The role and process of forming a risk management system is the subject of research by foreign and Ukrainian scientists. The role of risk management system in the activities of enterprises was studied by Bugai V. Z. and Matsyuk O. V. [4], Mostenska T.L., Skopenko N.S. [7], Sosnovska O.O., Dedenko, L.V. [9]. Vijayendra Kumar Shrivastava et al. [3] substantiate the role of risk management in strategic decision-making, ensuring stakeholder trust, operational sustainability, value creation and innovation, and cost reduction. Chumachenko O. and Neskorodko O. [12] focus their attention on the role of risk management in ensuring enterprises' financial stability.

Given the ongoing military conflicts, including those on the territory of Ukraine, scholarly attention has also been directed toward the issues of the impact of military actions on business operations and ways to solve such challenges. Dyuhovanets O. et al. [1] investigated the organization of enterprise risk management during wartime and noted some ways to prevent and eliminate risks. Chernyshova L. I. [11] presented models of behavior of modern enterprises under martial law as a response to existing threats. However, despite the already existing developments, there remains a need for additional research on the features of risk management strategies during martial law and the selection of appropriate strategic types for existing risks to reduce their negative impact on the enterprise and simplify the decision-making procedure.

The purpose of the research

The article aims to explore the theoretical and practical aspects of the risk management system in Ukrainian enterprises under martial law.

Presentation of the primary research material

The armed aggression by the Russian Federation has inflicted and continues to cause significant damage to Ukraine's economy, with losses estimated at hundreds of billions of US dollars.

According to the results of the "Rapid Assessment of Damage and Recovery Needs (RDNA4)", which was jointly prepared by the World Bank, the Government of Ukraine, the European Union (EU) services, and the United Nations (UN) [10] as of the end of 2024, the total direct damage caused by full-scale invasion in Ukraine is estimated at approximately $176 billion. The most affected sectors are housing, energy infrastructure, mining, transport, trade, industry and agriculture. A particularly significant increase in damage was experienced in the energy sector.

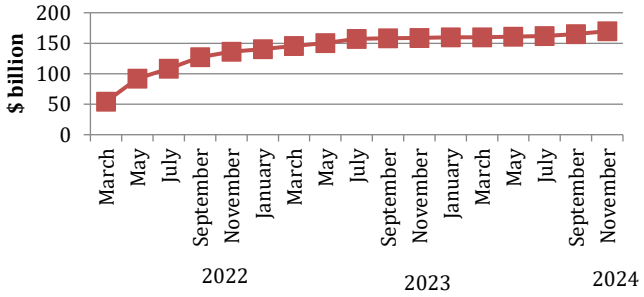

Fig. 1. The total direct losses of the Ukrainian economy due to military actions are $ billion.
Source: prepared by the author based on [2]

According to the Kyiv School of Economics (KSE) [2], the total direct damage to Ukraine's infrastructure as of November 2024 reached $170 billion (Figure 1). This includes destroyed residential buildings, transportation routes, energy facilities, and other critical infrastructure elements.

The housing sector suffered the most tremendous losses, exceeding $60 billion. Transport infrastructure ($38.5 billion), which includes destroyed roads, railways, and ports, also suffered significant losses.

Direct damage to enterprises is estimated at $14.4 billion, which includes significant damage and destruction of enterprise assets, including fixed assets, capital investments, and material stocks.

Ukraine's agricultural sector – one of the leading sectors of the country's economy – suffered losses exceeding $10 billion, which are presented in Table 1. The largest share of the total losses of the agricultural sector is associated with physical destruction and damage to agricultural machinery. This resulted in losses of over $5.8 billion. The second most significant loss category is the destruction or illegal removal (theft) of farm products, with a total value of approximately $1.9 billion. These figures indicate a critical level of material losses in the agricultural production chain, significantly affecting food security and Ukraine's export potential.

Table 1. Losses of the Ukrainian agro-industrial complex caused by war

Types of losses	Measurement unit	Original quantity	Destroyed	Damaged	Estimated losses: $ billion
Agricultural machinery	units	764,323	130,603	50,521	5.8
Granaries	capacity, thousand tons	75,084	11,351	3,341	1.8
Animals	thousand heads	203,292	1,899	11,963	0.2
Bee colonies	units	2,272,740	86,902	192,526	0.03
Perennial crops	ha	197 100	16,364		0.4
Destroyed and stolen factors of production	t	962 951	135,993		0.1
Destroyed and stolen finished agricultural goods	t	25,486,613	4,037,542		1.9
Aquaculture and fisheries facilities	units	2102	228		0.03
Total	X	X	X	X	10.3

Source: [2]

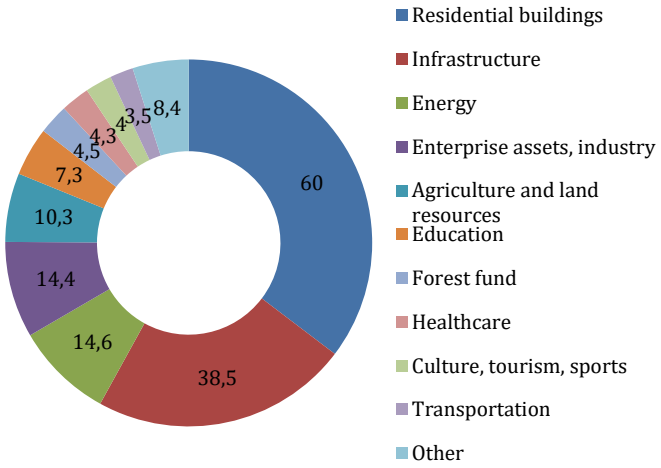

Fig. 2. Direct losses by sectors of the Ukrainian economy caused by military actions, $ billion. *Source: [2]*

General information on losses to the Ukrainian economy by sectors as of November 2024 is presented in Figure 2.

When analyzing the volume of damage by region of Ukraine, the highest losses were suffered by the front-line regions: Donetsk region ($38.6 billion), Kharkiv region ($32.2 billion), Luhansk region ($18.2 billion), Zaporizhia region ($17.0 billion), Kherson region ($13.4 billion).

In addition to direct damage and losses, military actions cause indirect economic losses to the Ukrainian economy, the scale of which significantly exceeds direct losses. There is a significant impact on economic activity – in the form of disruption of production chains, a decrease in production volumes, and an increase in costs associated with the consequences of the war (for example, cleaning up the territories from destruction). The total economic losses in these areas are estimated at over $589 billion [10].

According to a study by the Kyiv School of Economics in cooperation with the Ministry of Infrastructure, other relevant ministries, and the National Bank of Ukraine [5], since the beginning of Russia's full-scale invasion of Ukraine, actual (from February 2022 to June 2024) and projected indirect economic losses in the form of lost income and value-added amount to approximately $1.164 trillion and $385.7 billion, respectively.

Such indirect losses are directly related to the business and enterprise sectors. The most significant indirect economic losses were suffered by key manufacturing sectors, posing additional threats to the development and functioning of the national economy. In terms of lost revenue, the most significant losses were observed in the trade sector ($450.5 billion), industry,

construction and services ($409.9 billion), and agriculture ($83.1 billion). Key infrastructure sectors also suffered significant revenue losses: energy ($43.1 billion) and transport ($38.8 billion).

The daily consequences and outcomes of military operations cause substantial losses. As a result of missile strikes and drone attacks, business assets are destroyed or partially damaged. Disruption of logistics chains and the inability to use several logistics routes significantly limits the ability to ensure the supply of products, especially within the framework of foreign economic activity. Consequently, export-oriented sectors of the national economy are experiencing additional significant operational challenges. Furthermore, further difficulties arise with domestic sales. Domestic demand has sharply decreased due to mass migration and reduced household income.

Additionally, mass mobilization and emigration of the working-age population abroad have caused demographic changes that have led to demographic shifts, causing a labor shortage in several economic sectors. Business operations are also complicated by power supply disruptions, which are a critical factor for the continuous operation of enterprises.

Thus, military actions on the territory of Ukraine cause additional risks for the activities of domestic enterprises. Under such conditions, the issue of implementing a risk management system in Ukrainian enterprises becomes particularly relevant. Risk management in wartime is a strategically important element of the overall enterprise management system. It allows for a holistic response to modern challenges, strengthening business protection and increasing its competitiveness during military instability.

The main objectives of a risk management system in wartime include:

1) ensuring business survival—By implementing effective risk management measures, enterprises can protect their production and financial resources, avoid or minimize significant losses, preserve assets, and maintain key processes even in critical situations.

2) loss reduction – Strategic risk management helps minimize the consequences of shelling, occupation, or destruction of infrastructure, reduce downtime, avoid the loss of production capacity, and prevent supply chain disruptions.

3) Personnel protection – The risk management system aims to develop employee safety measures, including evacuation plans, safe working conditions, and emergency training.

4) Maintaining business reputation: Monitoring the ethical aspects of the company's activities, avoiding cooperation with dishonest counterparties, taking an active social position, and participating in volunteer initiatives contribute to forming a positive image even during a crisis.

5) Formation of a sustainable business model – A risk management system allows a company to adapt to changes, maintain operational stability, and ensure the continuation of business processes in conditions of uncertainty and threats.

One of the main stages of the risk management system is risk identification. Risk identification aims to reveal all potential threats that may negatively affect the enterprise's activities. Such identification is carried out using expert methods (surveys of experts, employees, etc.), brainstorming, SWOT analysis, and PESTEL analysis.

Therefore, it is essential to summarize the types of risks that may arise in the activities of Ukrainian enterprises, especially in wartime conditions. Enterprises face various financial, operational, logistical, and human resources risks. Based on a synthesis of scholarly opinions [1, 6, 11], as well as an analysis of current business conditions, the following types of enterprise risks in wartime can be identified:

1. Operational risks are associated with the complications of enterprises' operational activities and are characterized by interruptions in the production process, shortages of resources, and shortages of personnel.

The most pressing operational risk is the threat of destruction of production facilities due to military actions or missile strikes. Over 40% of Ukrainian enterprises in 2022 suspended their activities due to damage to production facilities or inability to provide logistics [8]. As a result of this risk, there is a threat of the need to relocate enterprises, which leads to the loss or disruption of established business processes, customers, and personnel.

One of the most critical risks resulting from hostilities, shelling, and occupation of Ukraine's territories is limited access to resources for economic activity. This includes natural resources and access to extraction, a significant part of which is limited or inaccessible. Furthermore, energy supply has become a pressing issue due to frequent attacks on Ukraine's energy system. Power outages threaten to stop enterprises' production processes.

2. Occupation risk –directly related to military operations and a full-scale invasion by the Russian Federation. The situation on the front directly affects the level of this risk. In the event of occupation of the company's territory, operational activities are often suspended, profits are lost, and material resources are destroyed. If the company is located near active hostilities, the probability of such a risk materializing increases significantly.

3. Financial risks — which include threats to the sustainable financial condition of enterprises, as well as to the ability to generate income and resources to finance activities. Due to reduced demand, limited access to credit resources, and a reduced volume of investments, an enterprise may face a decrease in income and a drop in production indicators.

This group of risks includes the following primary sources of threats:

- inflation and devaluation of the national currency, resulting in a constant increase in the price of imported goods and changes in the cost of raw materials;
- decrease in consumer solvency caused by a drop in demand, loss of sales markets;
- increasing security costs (asset storage, security, insurance, etc.).

4. Logistical risks – from occupying parts of Ukraine and infrastructure damage caused by shelling. Such risks are driven by disruption of transport infrastructure, blockade of seaports, and complications in export-import operations.

Disrupted logistics routes make sales and product acquisition operations more complicated. This situation primarily results in delivery delays, accumulation of large volumes of finished goods, and shortages of raw materials and other physical resources. Disruption and loss of part of logistics routes also affect the increase in transportation costs.

Such risks especially threaten the possibility of implementing foreign economic activities and complicate the implementation of exports and imports. Due to the closure of ports and restrictions on crossings, many trade transactions are delayed or even become impossible. This poses a substantial obstacle to smooth business operations and continuous supply chains.

5. Personnel risks during military operations in Ukraine are gaining increasing importance and impact on enterprises. The key sources of threats are employee mobilization and forced migration. This causes an outflow of personnel, including qualified ones. The shortage of experienced specialists negatively affects labor productivity, which, in turn, reduces the

enterprise's overall efficiency. In addition, the mental state of employees suffers significantly. Psychological burnout and stress decrease productivity and the risk of errors.

6. Reputational risks may result from declining trust from partners, consumers, and investors. Firstly, force majeure circumstances may cause non-fulfillment of obligations to counterparties, significantly affecting the enterprise's reputation as a reliable partner and jeopardizing the long-term continuation of cooperation.

In addition, ethical standards and socially responsible activity elements are becoming increasingly relevant. Today, more clients are paying attention to the company's reputation: its position on war, involvement in volunteer initiatives, and ties with the aggressor state. The lack of a clear position or contradictory actions can cause a loss of trust among consumers, partners, and potential employees, leading to financial losses or even restrictions on further activities. Collaboration with aggressor countries or failure to adhere to an ethical stance may lead to consumer boycotting.

With the beginning of Russia's full-scale invasion, the number of external and internal risks for businesses has increased significantly. This seriously threatens the stability and continuity of companies' activities. In such conditions, one of the key tasks of the risk management system at the enterprise is the timely identification, assessment, and management of risks to preserve the viability of the business.

Effective risk management is based on developing and implementing action strategies aimed at preventing, avoiding, or reducing their negative impact. To develop measures to manage the identified risks, it is necessary to establish their objective assessment. This includes determining the probability of risk occurrence and the level of potential impact.

Risk assessment can be carried out in two directions. First, a quantitative evaluation calculates quantitative risk indicators and uses forecast modeling based on statistical data (for example, an object's destruction probability).

However, some risks are challenging to determine as quantitative indicators. Therefore, a qualitative assessment of the probability and impact of risks is widely used. One approach to establishing such assessments is to use a 5-point scale to assess the probability and impact strength, where 1 is the lowest level, 5 is critical impact, and 5 is a high probability.

Choosing the most optimal approach allows enterprises to minimize financial losses, preserve their business reputation, increase the efficiency of internal processes, and ensure long-term stability.

Therefore, a critical management task in modern enterprises is to form effective risk response models based on several measures. When building a risk management system, an enterprise can choose one or more risk response strategies.

The most common of them are [7, 9]:

1. Risk avoidance strategy involves a conscious refusal to take actions associated with potential danger. For example, a company may decide not to implement new technologies or enter unstable markets to avoid possible losses. This approach is easy to implement, but it limits the possibilities of making a profit associated with innovative or risky activities. Moreover, total risk avoidance, especially in war or economic instability conditions, is practically impossible.

2. Risk transfer (diversification) strategy — involves shifting responsibility for possible losses to another party. A classic example is insurance, for which the company pays an insurance premium and receives compensation in the event of an insured event. Risk can also be transferred through outsourcing, subcontracting, or financial hedging instruments.

3. Risk minimization (active management) strategy – involves identifying, assessing, and implementing measures that reduce the impact of risk. This strategy enables companies to remain flexible and adaptable to change.

4. Risk-taking strategy: This strategy is used when the probability of an event or its consequences is considered acceptable or when the cost of others exceeds the potential losses. This approach is often used for less critical or manageable risks or when the expected profit justifies the possible losses.

The choice of a particular strategy depends on the nature of the risk, the enterprise's resources, the industry it operates in, its resilience to threats, and the overall business model. In academic circles, the selection of a risk management strategy is usually based on criteria such as the likelihood of risk occurrence and the extent of its impact or consequences. Mostenska T. L. and Skopenko N. S. [7] offer an approach to choosing the direction of optimizing the risk level based on its probability and the level of losses incurred. Based on their methodology, the author has developed recommendations for choosing the type of risk management strategy during martial law. Effective risk management in such conditions involves a competent choice of the appropriate response strategy depending on the likelihood of risk realization and the degree of its impact on the company's activities. Table 1 presents a methodical approach to choosing the enterprise risk management strategy type depending on the risk assessment.

Table 1. Matrix for choosing the type of risk management strategy

<table>
<tr><td colspan="2" rowspan="2">Probability of risk occurrence</td><td colspan="5">Level of impact on the enterprise</td></tr>
<tr><td>not significant</td><td>weak</td><td>average</td><td>considerable</td><td>decisive</td></tr>
<tr><td colspan="2"></td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr>
<tr><td>High</td><td>5</td><td colspan="2">Minimization/ transfer</td><td colspan="2">Avoidance/minimization/transfer</td><td>Risk avoidance</td></tr>
<tr><td>Frequent</td><td>4</td><td colspan="2">Minimization/transfer</td><td colspan="2">Avoidance/minimization/transfer of risk</td><td>Risk avoidance</td></tr>
<tr><td>Random</td><td>3</td><td>Risk-taking</td><td colspan="3">Minimization/transfer</td><td>Avoidance/minimization</td></tr>
<tr><td>Minor</td><td>2</td><td colspan="2">Risk-taking</td><td colspan="2">Taking / transfer</td><td>Minimization/transfer</td></tr>
<tr><td>Unlikely</td><td>1</td><td colspan="3">Risk-taking</td><td>Risk-taking/transfer</td></tr>
</table>

Source: proposed by the author

Thus, the general approach to choosing the direction and type of action is that the degree of enterprise involvement in the risk mitigation process depends on the magnitude of the risk. The higher the probability of threats and the damage caused by their impact, the more active and radical the enterprise's management decisions should be.

A unique feature of risk management in wartime conditions is that most enterprises' risks belong to the class of external risks. These are the result of external factors impacting the enterprise and the result of the activities of other entities. The complexity of risk management in these conditions lies in the fact that the enterprise does not directly influence the sources of such threats. Under normal conditions, the most common risk management strategy is risk minimization strategies, which involve active decisions to reduce primarily internal risks. Therefore, risk minimization strategies in martial law conditions lose priority because the operating environment does not contribute to the choice of this management direction.

Let us consider the presented approach to choosing strategies depending on various combinations of risk impact and probability.

Critical risks are characterized by the highest probability of occurrence and a significant degree of impact. This is the most dangerous type of risk that an enterprise may face during a war. Therefore, such risks require implementing the most

radical avoidance strategies. This applies to threats to the lives of personnel or loss of capacity due to work or the presence of enterprise assets in a combat zone.

The essence of strategies for such threats should be a complete rejection of risk. Elements of such strategies may include business relocation (withdrawal of operations from the dangerous area and evacuation of employees), suspending of activities (refusal of doing business in a war zone, closing branches under direct threat of shelling or occupation), and ceasing to cooperate with unreliable suppliers in unstable regions.

The most dangerous risks are those with high probability and significant consequences. These risks include damage and destruction of production facilities and warehouses, mass evacuation of employees, or loss of logistics routes. An avoidance strategy can also eliminate these risks. However, less radical approaches, such as minimization or partial risk transfer, are also possible. Strategy for such risks aims to reduce their impact to an acceptable level by relocating assets and activities, creating reserves, and duplicating critical processes.

Elements of a risk reduction strategy may include changing logistics routes for the supply and distribution of products towards safer territories. To reduce the likelihood of loss of material supplies and the suspension of production processes, it is recommended to create reserve warehouses or remote production sites. In this regard, transferring some processes to remote and digital formats may also be helpful, as it will also help reduce threats to personnel lives.

Risk transfer strategies include concluding insurance contracts for property, equipment, or business interruption. War risk insurance should be noted among the most effective instruments. This allows enterprises to partially or fully recover losses caused by extraordinary events (e.g., combat operations, damage to property, fires, etc.). The essence of this approach is that the insurance company assesses the probability of the risk, sets the appropriate insurance premium, and compensates for the losses incurred in the event of an event.

During martial law, which is characterized by increased uncertainty, assessing the probability of threats is very difficult. Therefore, the priority when choosing a behavior model with risk is the degree of its impact. If the likelihood of a threat occurring is low but the predicted significant level of impact is high, applying a risk transfer strategy and minimization measures is necessary. Such risks include sudden destruction of infrastructure due to hostilities in remote regions or cyberattacks on enterprise IT systems.

Risk transfer can be achieved through property and liability insurance and third-party partners who assume part of the risks (for example, logistics companies that guarantee delivery).

Minimization may include duplicating important information on cloud services, collaborating with backup providers, creating backups, and storing critical data outside the risk zone.

In the opposite cases, it can be recognized as acceptable when the risk is characterized by high probability and low impact. These risks occur frequently but do not significantly threaten the enterprise. For example, there may be periodic Internet outages, fluctuations in prices for non-core materials, and short-term absence of employees. Therefore, an acceptance strategy may already be recommended for such risks. Possible management decisions may be monitoring the situation and rapid response without significant costs for protection. In such cases, the risk does not require a special response and can be accepted without corrective actions. However, it should be noted that the enterprise can leave the risk without an active response only based on a preliminary assessment showing no critical probability and costs.

The risk acceptance strategy is most appropriate for the least dangerous risks with low probability and impact. These may concern a slight increase in the delivery time of some materials or moderate delays in processing orders. The company incorporates the risk into its operations without the additional cost of managing it. This approach allows focusing resources on more critical risks.

Often, a combination of several approaches is effective. Based on a study conducted on the available risk management strategies, Table 2 generalizes the strategy for each group of enterprise risks during martial law.

Table 2. Strategies for risk management during wartime conditions

Risk group	Sources of threats	Type of strategy	Risk management measures	Implementation result
Operational risks	capacity losses; work in a war zone; assets damages; production stoppages	Risk avoidance	relocation of production facilities to safer regions	Preservation of company assets and the possibility of continuous operation
		Risk minimization	asset preservation	
		Risk transfer	infrastructure insurance	
Risk of occupation	occupation of territories, inability to access the enterprise facilities	Risk avoidance - evacuation strategy	moving production facilities to safer regions, relocating critical data and documents	Avoiding complete loss of assets, ensuring legal protection
Financial risks	Inflation, exchange rate instability, change in consumer demand and purchasing power	Risk minimization – marketing adaptation	Develop anti-crisis plans, search for alternative sources of income, create affordable product lines, and increase brand awareness.	Increasing resilience to economic fluctuations, maintaining financial stability, stimulating demand
Logistical risks	Destroyed transport routes, blockade of ports, export/import restrictions	Risk minimization	Creating raw material reserves, diversifying logistics routes	Reducing dependence on usual routes, stabilizing production and sales
		Risk transfer - supply diversification	Expanding the range of suppliers, new logistics operators	
Personnel risks	mobilization, labor migration, a threat to the lives of personnel	Risk avoidance	Evacuation of employees, remote work, involvement of freelancers	Save the lives of employees, reduce staff shortages, maintain productivity
		Risk minimization	Flexible work formats, automation of processes	
Reputational risks	Cooperation with companies of the aggressor country, absence of social position	Risk avoidance	Public support for the Armed Forces of Ukraine, volunteering initiatives, refusal to partner with companies associated with the aggressor, active PR policy	Strengthening the trust of customers and partners, maintaining market positions

Source: proposed by the author

Conclusions and prospects for further research

Martial law radically changes approaches to enterprise management. To ensure the viability of the enterprise, strategic reorientation to proactive risk management is necessary. This involves flexibility, prompt decision-making, and

readiness to function in force majeure conditions. An effective risk management system is key to enterprises' survival and sustainable development in a crisis period.

During wartime, businesses should regularly analyze all potential risks and choose the appropriate management strategy depending on the probability and level of threat. In many cases, it is advisable to use a combination of techniques—for example, minimize the risk and accept or ensure the consequences. This approach provides flexibility and economic feasibility and increases the chances of the business maintaining its operations even in conditions of extreme uncertainty.

Література

1. Dyuhovanets O., Erfan V., Parfeniuk Y. Organization of risk management at an enterprise during the war. *Visegrad Journal on Human Rights*. 2023. No 3. Pg.16-21. DOI: https://doi.org/10.61345/1339-7915.2023.3.3.
2. Report on damages to infrastructure from the destruction caused by Russia's military aggression against Ukraine as of November 2024. URL: https://kse.ua/wp-content/uploads/2025/02/KSE_Damages_Report-November-2024---ENG.pdf.
3. Shrivastava V., Balasubramanian J., Katyal A., Yadav A., Yogananthan S. Understanding the significance of risk management in enterprise management dynamics. *Multidisciplinary Reviews*. 2024. № 6 :2023ss093. DOI: https://doi.org/10.31893/multirev.2023ss093.
4. Бугай В. З., Мацюк О. В. Ризик-менеджмент як інструмент підвищення ефективності господарювання. *Східна Європа: економіка, бізнес та управління*. 2017. № 5(10). С. 35-40.
5. Звіт про непрямі фінансові втрати економіки внаслідок військової агресії росії проти України станом на 1 липня 2024 року. URL: https://kse.ua/wp-content/uploads/2024/10/30.09.24_Losses_Report-ua.pdf.
6. Макалюк І., Кривда О., Лайкова А. Якісний аналіз ризиків вітчизняних підприємств в умовах воєнного стану. *Економіка та суспільство*. 2024. №62. DOI: https://doi.org/10.32782/2524-0072/2024-62-73.
7. Мостенська Т. Л., Скопенко Н. С. Ризик-менеджмент як інструмент управління господарським ризиком підприємства. *Вісник Запорізького національного університету.* 2010. № 3(7). С. 74–79.
8. Скоробогатова Н. Є., Товкачова А. С., Федоренко К. В. Методи управління економічними ризиками в умовах військового стану. *Бізнес, інновації, менеджмент: проблеми та перспективи:* III міжнар. наук.-практ. конф. 2022. С. 195-196.
9. Сосновська О. О., Деденко Л. В. Ризик-менеджмент як інструмент забезпечення стійкого функціонування підприємства в умовах невизначеності. *Європейський науковий журнал економічних та фінансових інновацій*. 2019. № 1(3). С. 70-79. DOI: https://doi.org/10.32750/2019-0106.
10. Україна. Швидка оцінка завданої шкоди та потреб на відновлення (RDNA4). Лютий 2022 – Грудень 2024. URL: https://documents1.worldbank.org/curated/en/099052925103531065/pdf/P180174-93c8e8c1-83a2-487d-aaec-a8435f9db418.pdf.
11. Чернишова Л. І., Бондар К. Р., Красіловська Л. О. Особливості управління ризиками в умовах дії воєнного стану: моделі поведінки сучасних підприємств. *Науковий вісник. Одеського національного економічного університету*. 2024. № 3-4 (316-317). С. 126-136. DOI: https://doi.org/10.32680/2409-9260-2024-3-4-316-317-126-136.
12. Чумаченко О., Нескородько О. Вдосконалення системи управління ризиками як спосіб підвищення фінансової стійкості підприємств. Вчені записки Університету «КРОК». 2025. №1(77). С. 89–95. DOI: https://doi.org/10.31732/2663-2209-2025-77-89-95.

References

1. Dyuhovanets, O., Erfan, V., & Parfeniuk, Y. (2023). Organization of risk management at an enterprise during the war. *Visegrad Journal on Human Rights*, no. 3, pp. 16–21. https://doi.org/10.61345/1339-7915.2023.3.3.
2. KSE. (2024). *Report on damages to infrastructure from the destruction caused by Russia's military aggression against Ukraine as of November 2024*. Available at: https://kse.ua/wp-content/uploads/2025/02/KSE_Damages_Report-November-2024---ENG.pdf.
3. Shrivastava, V., Balasubramanian, J., Katyal, A., Yadav, A., & Yogananthan, S. (2024). Understanding the significance of risk management in enterprise management dynamics. *Multidisciplinary Reviews*, no. 6:2023ss093. https://doi.org/10.31893/multirev.2023ss093.
4. Buhai, V. Z., & Matsiuk, O. V. (2017). *Ryzyk-menedzhment yak instrument pidvyshchennia efektyvnosti hospodariuvannia* [Risk management as a tool to increase economic efficiency]. *Skhidna Yevropa: ekonomika, biznes ta upravlinnia*, no. 5(10), pp. 35–40.
5. KSE. (2024). *Zvit pro nepriami finansovi vtraty ekonomiky vnaslidok viiskovoi ahresii Rosii proty Ukrainy stanom na 1 lypnia 2024 roku* [Report on indirect financial losses of the economy due to Russia's military aggression against Ukraine as of July 1, 2024]. Available at: https://kse.ua/wp-content/uploads/2024/10/30.09.24_Losses_Report-ua.pdf.
6. Makaliuk, I., Kryvda, O., & Laikova, A. (2024). *Yakistnyi analiz ryzykiv vitchyznianykh pidpryiemstv v umovakh voiennoho stanu* [Qualitative risk analysis of domestic enterprises under martial law]. *Ekonomika ta suspilstvo*, no. 62. https://doi.org/10.32782/2524-0072/2024-62-73.
7. Mostenska, T. L., & Skopenko, N. S. (2010). *Ryzyk-menedzhment yak instrument upravlinnia hospodarskym ryzykom pidpryiemstva* [Risk management as a tool for managing business risk of an enterprise]. *Visnyk Zaporizkoho natsionalnoho universytetu*, no. 3(7), pp. 74–79.
8. Skorobohatova, N. Ye., Tovkachova, A. S., & Fedorenko, K. V. (2022). *Metody upravlinnia ekonomichnymy ryzykamy v umovakh viiskovoho stanu* [Methods of managing economic risks under martial law]. *Biznes, innovatsii, menedzhment: problemy ta perspektyvy: III Mizhnar. nauk.-prakt. konf.*, pp. 195–196.
9. Sosnovska, O. O., & Dedenko, L. V. (2019). *Ryzyk-menedzhment yak instrument zabezpechennia stiikoho funktsionuvannia pidpryiemstva v umovakh nevyznachenosti* [Risk management as a tool for ensuring sustainable enterprise functioning in conditions of uncertainty]. *Yevropeiskyi naukovyi zhurnal ekonomichnykh ta finansovykh innovatsii*, no. 1(3), pp. 70–79. https://doi.org/10.32750/2019-0106.
10. World Bank. (2024). *Ukraine. Rapid Damage and Needs Assessment (RDNA4). February 2022 – December 2024*. Available at: https://documents1.worldbank.org/curated/en/099052925103531065/pdf/P180174-93c8e8c1-83a2-487d-aaec-a8435f9db418.pdf.
11. Chernyshova, L. I., Bondar, K. R., & Krasilovska, L. O. (2024). *Osoblyvosti upravlinnia ryzykamy v umovakh dii voiennoho stanu: modeli povedinky suchasnykh pidpryiemstv* [Risk management features under martial law: models of modern enterprise behavior]. *Naukovyi visnyk Odeskoho natsionalnoho ekonomichnoho universytetu*, no. 3–4 (316–317), pp. 126–136. https://doi.org/10.32680/2409-9260-2024-3-4-316-317-126-136.
12. Chumachenko, O., & Neskorodko, O. (2025). *Vdoskonalennia systemy upravlinnia ryzykamy yak sposib pidvyshchennia finansovoi stiikosti pidpryiemstv* [Improving the risk management system as a way to increase enterprise financial resilience]. *Vcheni zapysky Universytetu «KROK»*, no. 1(77), pp. 89–95. https://doi.org/10.31732/2663-2209-2025-77-89-95.

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