Counteracting legal and economic risks of enterprises under martial law

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Abstract. The hyper-dynamic environment in 2024 has already brought considerable changes to the activities of modern enterprises, creating a series of new risks of both legal and economic nature, which increases the relevance of choosing the form of response to them. The purpose of this study was to analyse possible ways of improving the technology of counteracting the factors that facilitate the formation of a crisis situation at an enterprise in the system of managerial decision-making. The research methodology involved the use of formal legal analysis of legislation and the expert method to identify external and internal economic and legal factors, as well as methods of system analysis and hierarchy analysis. As a result, the most significant negative economic and legal factors were identified. A matrix grid between these factors, both internal and external, was presented. The main result of the study is a model that presents a technology for counteracting negative factors that can lead to crisis situations at a modern enterprise in Ukraine. Among these factors, a special place is occupied by those caused by the specific features of the current regulatory framework for the activities of enterprises under martial law, which is based on the Resolution of the Cabinet of Ministers

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of Ukraine No. 303-2022-p of 2022 and the Law of Ukraine No. 2136-IX "On the Organisation of Labour Relations under Martial Law". As a result, the proposed technology lays the information foundation for making effective management decisions by key security actors in a modern enterprise. The practical value of this study lies in the possibility of using the proposed approach in the activities of Ukrainian enterprises to meet the information needs of security actors

Keywords: legal factors; economic factors; counteraction technology; matrix grid; modelling _

Introduction

Since the beginning of the hybrid aggression in 2014, the Ukrainian economy has been facing severe challenges, including rising inflation, weakness of the national currency against foreign currencies, falling purchasing power of citizens, and increased out-migration of workers caused by the full-scale invasion of the Russian Federation (RF) in 2022 and other factors, creating a very unstable environment for Ukrainian businesses. Therefore, any business faces a variety of risks and threats that can lead to a crisis in a certain way. Therewith, a modern enterprise operates in a certain environment, which is divided into internal and external. These two areas, albeit different, can both adversely affect a company's operations. It is important to assess the economic and legal factors of the external and internal environment that directly affect the emergence of crisis situations. Notably, the chosen research topic is vital in the context of wartime in Ukraine, due to the critical need for effective decision-making systems. Such a system would help prevent and mitigate crises exacerbated by economic and legal factors. In active hostilities, rapid and often unpredictable changes in the economic and legal environment can lead to increased vulnerability. These changes may include economic sanctions, disruption of trade routes, legal uncertainties in international law, and crisis management challenges. In this context, understanding how technology can be used to counteract negative influences becomes crucial.

The interaction between economic and legal factors and their impact on crisis situations in enterprise decision-making systems is a complex area that crosses various fields of business and socio-economic research (Balas et al., 2019; Hrybinenko et al., 2020). Modern scientific and practical literature contains many studies on the topic of security development and crisis management. Thus, F.A.F. Alazzam et al. (2024) investigate a methodological approach to choosing a business management strategy against the background of changes in commercial activities. Their research highlights the significance of strategic adaptation in response to economic change, providing a relevant framework for understanding how businesses can manoeuvre through crises by adjusting their strategic approaches. M.I. Zveryakov and L.L. Zherdetska (2019) discussed the specific links between the currency collapse and the inflationary crisis in Ukraine, highlighting how macroeconomic factors directly affect the stability of enterprises. Their findings highlight the critical role of national economic policy in shaping the operating environment for business. M. Dubyna et al. (2023) analysed how digitalisation helps to ensure the financial and economic security of trade enterprises in the face of external shocks. Their research is key to understanding how digital tools can serve as buffers against the destabilising effects of economic and legal unpredictability. M.A.M. Bani-Meqdad et al. (2024) delve into the current challenges of intellectual property protection in the cyber environment, emphasising the significance of legal frameworks in ensuring sustainable development. This study is directly related to understanding how legal adjustments can protect businesses from cybereconomic threats.

One of the founders of the school of security studies, V.I. Franchuk et al. (2020) emphasised the significance of forecasting the resilience of enterprises in the context of economic security management. Their research provides methodologies for predicting the long-term viability of enterprises, which is important for preventing and managing crisis situations. M.F. Kryshtanovych et al. (2024) investigate the development of new information systems using artificial intelligence to improve decision-making in business. Their research provides insights into how technological advances can be used to improve governance strategies amidst economic and legal challenges. A.M. Shtangret et al. (2019a) focused on the necessary information systems to manage the economic security of high-tech enterprises. Their research emphasises the significance of robust information systems in navigating and mitigating the impact of economic and legal factors on business operations. M.I. Kopytko et al. (2023a) discussed the development of marketing strategies that meet the goals of sustainable development. This study is important because it links market-oriented strategies to the long-term sustainability of enterprises in uncertain economic times.

To summarise, it was noted that the most noticeable gaps in the literature today are as follows: many studies focus on the general principles of crisis management and economic security, but often ignore the specifics of different industries or regions; despite the existence of studies that consider individual economic and legal factors, there is often a lack of comprehensive data on the interaction between these factors; insufficient attention to the role of mathematical modelling in solving scientific and practical problems. This necessitates the analysis of ways to improve the technology of counteracting the factors that lead to crisis situations at the enterprise in the system of managerial decision-making, which is the purpose of this study.

Materials and methods

The main purpose of using the expert method was to identify the key economic and legal factors that make crisis situations in the activities of modern enterprises possible. After an analysis, which included reviewing the studies of national and foreign researchers in the field of crisis management and interviewing 45 expert economists and lawyers in the field of crisis management, the key factors were identified. Reporting on research involving human subjects, it should be noted that the study was conducted according to the following standards: the American Sociological Association Code of Ethics (1997), The International Code of Marketing, Social and Opinion Research, and Data Analysis ICC/ESO-MAR (2016), and the European Commission's Guidelines on Ethics and Data Protection (2021). All participants were fully informed that anonymity was guaranteed, why the study was being conducted, how their data would be used, and whether there were any associated risks. The survey

was conducted exclusively online due to the introduction of martial law. Therewith, a question-and-answer form was presented. The ethics of sociological research was observed. Using the Delphi method, the experts' responses were collected and analysed to identify consensus and differences in their assessments and opinions. In case of significant discrepancies in the answers, additional rounds of surveys were conducted, where experts could review their answers, having read the average scores of other participants, and make the necessary corrections or additional explanations. The result of this process was a report that highlighted the key economic and legal factors that can trigger crisis situations, identified through the competent judgement of experts, providing an in-depth and multifaceted analysis of this complex topic. This report reflects not only a diversity of views, but also a consensus among experts, which is crucial in the complex and multifaceted issues that are crisis management. Thus, the Delphi method proved to be an effective tool for identifying and analysing the key factors. The purpose of systemic analysis was to understand the complex interrelationships between the various components of a company's decision-making system, especially under the influence of the identified crisis factors. The hierarchy analysis method involved breaking down a problem into a hierarchy of easier-to-understand subtasks, each of which could be analysed independently. The factors identified by the expert method were arranged in a multi-level hierarchical structure. Pairwise comparisons were made to evaluate economic and legal factors against each other according to certain criteria, such as severity of impact and controllability.

In the study of the legal aspect of the problem, the following regulations of Ukraine were examined: Law of Ukraine No. 2435-IX (1999); Law of Ukraine No. 389-VIII (2015); Resolution of the Cabinet of Ministers of Ukraine No. 303 (2022); Law of Ukraine "On the Organisation of Labour Relations under Martial Law" (2022). The study also considered the Tax Code of Ukraine (2010), Labour Code of Ukraine (1996), and the Commercial Code of Ukraine (2003). The following international regulations were considered: IAS 1 – Presentation of Financial Statements (2007); IFRS 1 – First-time Adoption of International Financial Reporting Standards (2009). Thus, the study employed formal legal analysis and analysed the sources that, as of 2024, directly affect the activities of enterprises in Ukraine.

Results

The martial law, together with the ongoing hostilities, has seriously affected the operational capabilities and economic stability of businesses across the country. The imposition of martial law was accompanied by a series of strict regulations, including movement restrictions, curfews, and special administrative rules, which directly interfered with the normal operations of businesses. Therewith, the Law of Ukraine "On the Organisation of Labour Relations Under Martial Law" (2024) changed the standard operating framework for enterprises regarding labour relations. This includes the possibility for employers to increase the maximum working week to 60 hours, depending on the needs of the enterprise, especially those engaged in defence or critical infrastructure. The introduction of martial law has led to adaptations in the regulatory environment for businesses, affecting how they can operate during this period. This includes suspending certain business operations or adjusting their operational scope,

especially in relation to interaction with territories subject to active hostilities or other military activities. Notably, according to the Resolution of the Cabinet of Ministers of Ukraine No. 303 (2022), all planned and unplanned actions of state supervision (control) and state market control are suspended during the period of martial law. However, an exception is made for unscheduled state supervision (control) measures aimed at preventing unjustified price increases for socially important goods.

From a legal standpoint, the activities of Ukrainian enterprises today are highly dependent on changes in legislation. The main legislative act regulating business activities in Ukraine is the Commercial Code of Ukraine (2003). The Code defines the legal framework for entrepreneurship, the rights and obligations of business entities, and regulatory measures to ensure fair competition and consumer protection. Labour law in Ukraine is primarily governed by the Labour Code of Ukraine (1996), which sets out comprehensive guidelines for labour relations. This code ensures that both employees and employers adhere to standards that promote fair labour practices and protect workers' rights. Financial accounting and reporting in Ukraine are regulated by a series of laws and standards aimed at ensuring transparency and reliability of financial statements. The Law of Ukraine No. 2435-IX "On Accounting and Financial Reporting" (1999) requires companies to keep proper accounting records and prepare financial statements following national and international accounting standards. Ukrainian companies must follow the International Financial Reporting Standards as adopted in the country. For instance, this refers specifically to the IFRS 1: First-time Adoption of International Financial Reporting Standards, (2009). This Standard establishes procedures for an entity's first financial statements prepared following the International Financial Reporting Standards (IFRS). IAS 1: Presentation of Financial Statements (2007), which governs the general requirements for financial statements, including their structure, minimum content requirements, and key concepts such as going concern, accrual basis of accounting, and current/long-time distinction. It details how to transition from former generally accepted accounting principles (GAAP) to IFRS, including how to recognise, measure, present, and disclose assets, liabilities, and equity. Businesses in Ukraine face potential tax risks due to frequent changes in tax legislation and the complexity of tax regulations. Since the start of the full-scale invasion, for instance, a simplified taxation system has been introduced to support small and medium-sized businesses, including reduced VAT and single tax rates for certain categories of entrepreneurs. The income tax for companies producing military products was also temporarily abolished. To mobilise resources, the government introduced additional military levies to finance the country's defence needs. The risks themselves may include discrepancies in tax reporting, underpayment of taxes, and increased attention to tax audits and fines. Businesses should keep abreast of changes in legislation and implement robust tax planning and compliance strategies to minimise these risks (Tax Code of Ukraine, 2010).

The introduction of martial law in Ukraine has led to considerable innovations in the legal system aimed at ensuring national security and optimising governance in the face of new challenges (Law of Ukraine No. 2136-IX, 2022). The key changes included restrictions on certain civil rights and freedoms, such as the right to private property and movement, as well as the introduction of information censorship and increased control over communications. The imposition of martial law gave the government the authority to nationalise certain enterprises critical to the country's defence and security and to simplify procedures in making important administrative decisions. The introduction of martial law in Ukraine has indeed led to marked changes in the legal system aimed at ensuring national security and optimising governance in emergency situations. The main provisions governing these innovations are mandated in the Law of Ukraine "On the Legal Regime of Martial Law" (2015), which has undergone significant changes since the outbreak of full-scale war. Therewith, the introduction of martial law allows the government and military authorities to carry out certain actions and make decisions in a simplified manner. Specifically, Item 2 of Article 8 prescribes the possibility of introducing special regimes for the management and operation of enterprises, institutions, and organisations, which may include simplification of administrative decision-making procedures to respond to threats promptly. Such regimes include the possibility of establishing simplified procedures for administrative decisions, which allows enterprises to respond more quickly to defence and military needs. Under special management regimes, the government is entitled to centrally allocate material and financial resources that are critical during wartime. This also includes the possibility of temporary seizure of privately owned property for military purposes, subject to proper compensation. The law stipulates that such actions are taken exclusively under martial law and are aimed at ensuring maximum efficiency and effectiveness in a rapidly changing environment.

Furthermore, the physical destruction of infrastructure and the unpredictable security situation have led to the closure or severe restrictions on the operations of many businesses. Most businesses faced crisis situations, with the manufacturing, retail, and service sectors having a particularly difficult time. The unpredictable and volatile environment has made it difficult for businesses to plan for the future, secure supplies, or even maintain a stable workforce. Economic uncertainty has been exacerbated by significant population movements, both internal and refugee, which have depleted the consumer base and the available labour market for many businesses (Fig. 1).

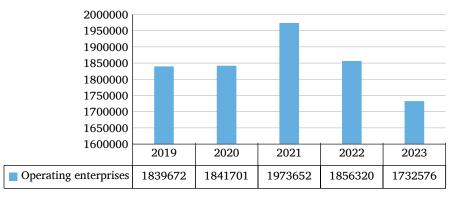


Figure 1. Dynamics of changes in the number of operating enterprises in Ukraine for 2019-2023, units **Source:** calculated according to data from the State Statistics Service of Ukraine (2023)

As a result of the expert analysis, the study identified the most significant internal economic and legal factors that have led to the emergence of crisis situations at a modern enterprise. They will be further referred to as $M = \{M1, M2, M3, M4, M5, M6, M7\}$:

M1. Lack of effective internal labour regulations. Establishes rules for employee behaviour in the workplace and defines liability for violations. Such rules help manage the risks associated with inappropriate behaviour or actions of employees that may threaten security.

M2. Low innovation activity. Innovation is the key to competitiveness. Lack of innovation can lead to the "obsolescence" of products and services, reduced efficiency of operations and loss of market positions.

• M3. The presence of constant internal conflicts between management and managers, and between staff. Conflicts within, especially between distinct levels of management, can seriously undermine morale, productivity, and efficiency, which can lead to crisis situations.

M4. Outdated form of risk management. The modern business environment requires flexible and secure approaches to risk management. Obsolete methods may fail to identify or mitigate ever-changing risks. M5. Ineffective meeting the information needs of key economic security actors and the crisis management system. Information is a key resource in a modern enterprise. Ineffective satisfaction of information needs can lead to incorrect management decisions in crisis management, as management and managers base their decisions on inaccurate, outdated, or incomplete information.

M6. Reduced human resources potential. A decrease in the qualifications, motivation, or number of employees can lead to lower productivity, poorer quality of products or services, and a loss of competitiveness.

M7. Problems with privacy and data protection policies. Defines how the company collects, uses and protects personal and commercial data. This is vital to ensure the protection of information and may include policies on cybersecurity and physical protection of data.

Using an analogous survey method, the study identified the most significant external economic and legal factors that can lead to crisis situations at a modern enterprise and denoted their totality as $N = \{N1, N2, N3, N4, N5, N6, N7\}$:

N1. Mass migration abroad as a result of martial law. Martial law has led to mass migration, which could lead to a shortage of skilled labour. This makes it difficult to recruit employees and maintain prominent levels of productivity. According to the United Nations (United Nations High Commissioner for Refugees, 2024), over 8 million Ukrainians have been forced to leave the country, seeking safe haven in Europe and other countries. This has created a serious shortage of skilled labour in various sectors of the Ukrainian economy, including the IT sector, construction, healthcare, and education.

N2. International norms and standards. If a company operates in the international market, it must follow international norms and standards, including business rules, export controls, anti-corruption measures, and corporate governance standards.

N3. Legislation on cybersecurity. Regulates the protection of information systems and databases from unauthorised access, attacks, and leaks. This includes requirements for data protection, cryptographic protection, and rules for handling cybersecurity incidents. One of the most significant examples of the impact of cybersecurity legislation on a modern enterprise is the situation with the implementation of the European Union's General Data Protection Regulation (GDPR). One concrete example of the impact of GDPR on a modern enterprise can be observed in the case of British Airways. In 2018, the company was the victim of a major cyber-attack where attackers gained access to the personal data of approximately 500,000 customers, including credit cards, addresses, and other personal information. This happened due to vulnerabilities in their security system. As a result, in 2020, the UK's Information Commissioner's Office (ICO) fined British Airways GBP 20 million for failing to follow the GDPR regulations on customer data protection. The European Union's General Data Protection Regulation (GDPR) has not been ratified in Ukraine as such, as it is directly applicable only in the European Union. However, Ukraine has taken steps to harmonise its legislation with the GDPR within the framework of its commitments to the EU and international partners

N4. High interest rates. The rising cost of lending is negatively contributing to the lack of access to finance for businesses, especially small and medium-sized businesses.

N5. Full-scale invasion of Russia. The war waged against Ukraine has resulted in the destruction of infrastructure, loss of markets, supply chain disruptions, and general uncertainty. All this has sharply increased business risks and forced companies to cease operations.

N6. Rising inflation. High inflation can reduce purchasing power and increase costs for businesses as the costs of raw materials, energy, and other resources rise. In Ukraine, high inflation has become a significant external economic factor that contributes to the emergence of crisis situations for modern enterprises. For instance, in 2022, Ukraine faced an inflation rate of 26.6%, which is substantially higher than in 2021, which was 9.4%. This sharp rise in inflation has led to a considerable increase in the costs of raw materials, energy, and other resources that are critical to businesses. According to the National Bank of Ukraine, the cost of raw materials increased by an average of 30%, while energy costs jumped by more than 50% over the same period. As a result, businesses have faced higher operating costs and decreased profitability, which has created difficult economic conditions and increased the risk of crises (State Statistics Service of Ukraine, 2023).

 N7. Increased competition in the market. Increased competition can lead to lower prices and margins, requiring businesses to be more innovative, efficient, and customer-focused to stay competitive. Even in times of war, there may be an increase in market competition, often driven by internal migration. War causes considerable population movements within the country, as people leave dangerous regions and move to safer areas with relatively stable business conditions. This leads to a concentration of entrepreneurs, specialists, and labour force in less affected regions, which leads to an increase in the number of new businesses and, consequently, increased competition.

A dependency matrix was used to show the interdependencies between different elements of a system. Each element of the system is displayed as a row and a column in the matrix, and their relationships are marked in the corresponding cells of the matrix. This way, it is easy to identify how changes in one element can affect the others. The matrix grid of dependence between the identified economic and legal factors that may cause crisis situations at a modern enterprise is presented in figure 2.

<u>N7</u>	0	0	0	0	0	0	0	
N6	0	0	0	0	0	0	0	
<u>N5</u>	1	1	0	1	0	0	0	
N4	0	0	0	0	0	0	0	
<u>N3</u>	0	1	0	0	0	1	1	
N2	0	0	0	0	0	1	0	
<u>N1</u>	0	1	0	0	0	1	0	
	N1	N2	N3	N4	N5	N6	N7	
M7	0	1	0	0	0	1	0	
M6	0	0	0	0	0	0	0	
M5	1	1	0	0	0	1	0	
M4	0	1	0	0	0	0	0	
M3	0	1	0	0	0	0	0	
M2	0	0	0	0	0	0	0	
M1	0	1	1	0	0	1	1	
	M1	M2	М3	M4	M5	M6	M7	

Figure 2. A matrix grid of dependence between certain economic and legal factors that can cause crisis situations at a modern enterprise Source: created by the authors of this study

The reason for the 0 or 1 in the dependency and reach matrices is to identify and illustrate the relationships and influences between the elements or factors being analysed. Specifically, a "1" is indicated in a cell of these matrices to denote a direct influence or relationship between a row element (factor) and a column element (factor) based on a pairwise comparison. This means that the row factor has some kind of influence or advantage over the column factor. Conversely, a "0" is indicated when no direct effect or relationship is observed in a pairwise comparison. Such matrices thus provide a structured way of visualising and analysing the dynamics in a system or hierarchy, allowing dependencies to be identified and hierarchies to be established among elements. The "1" on the diagonal is fundamental. This designation indicates that each element or factor reaches itself by default. In essence, the principle of reflexivity is applied here, which means that each factor has a direct impact or connection with itself. Next, the achievability matrix shows which elements of the system can be achieved from each element through a series of intermediate steps. This helps to determine how certain factors can spread through the system, identifying potential pathways for the spread of crises or important changes (Fig. 3).

N7	0	0	0	0	0	0	1	
N6	0	0	0	0	0	1	0	
N5	1	1	0	1	1	0	0	
N4	0	0	0	1	0	0	0	
N3	0	1	1	0	0	1	1	
N2	0	1	0	0	0	1	0	
N1	1	1	0	0	0	1	0	
	N1	N2	N3	N4	N5	N6	N7	
M7	0	1	0	0	0	1	1	
M6	0	0	0	0	0	1	0	
M5	1	1	0	0	1	1	0	
M4	0	1	0	1	0	0	0	
M3	0	1	1	0	0	0	0	
M2	0	1	0	0	0	0	0	
M1	1	1	1	0	0	1	1	
	M1	M2	M3	M4	M5	M6	M7	

Figure 3. Matrix grid of achievability between certain economic and legal factors that can cause crisis situations at a modern enterprise Source: created by the authors of this study

Let the set of available factors that are connected to each other according to the matrix grid be denoted as S. When the notation is 1, it indicates the influence of the defined factor represented by this vertex on the factor. Accordingly, the set of all antecedents in a graph forms a subset P. Therewith, to form one of the hierarchy levels for both external and internal economic and legal factors identified here, which may cause crisis situations at a modern enterprise, the following equality (1) must be fulfilled:

$$R = S \cap P, \tag{1}$$

is the level of the hierarchy if P = R. The implementation of the specified set of measures (1) creates the initial (and the least significant in terms of impact on the analysed process) level of the hierarchical structure of the factors identified by experts according to the Delphi method that can cause crisis situations at a modern enterprise. The calculated matrix grid for determining the hierarchy of economic and legal factors that may cause crisis situations at a modern enterprise is presented in figure 4. Each level of the hierarchy is evaluated using pairwise comparisons, where elements are compared in terms of their significance or superiority to one another. These comparisons are usually quantified using a scale. Thus, for internal factors, equality is initially fulfilled for M2 and M6, which will be the lowest level in the hierarchy. Then those factors are removed from the grid, and this continues until the highest level is formed for both M and N factors. By skipping intermediate calculations, it is possible to form a holistic hierarchy in the context of presenting the technology to counter them (Fig. 5).

	М	S	Р	R	Ν	S	Р	R
	1	1;5	1;2;3; 6;7	1	1	1;5	1;2;6	1
	2	1;2;3;4; 5;7	2	2	2	1;2;3;4;5	2;6	2
	3	1;3	2;3	3	3	3	2;3;6;7	3
_	4	4	2;4	4	4	4;5	4	4
	5	5	1;2;5;6	5	5	5	1;2;4;5	5
	6	1;5;6;7	6	6	6	1;2;3;6	6	6
	7	1;7	2;6;7	7	7	3;7	7	7

Figure 4. A matrix grid for determining the hierarchy of economic and legal factors that can lead to crisis situations at a modern enterprise Source: created by the authors of this study

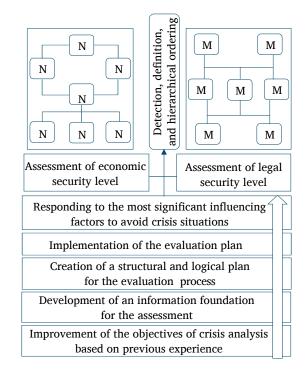


Figure 5. Technology for counteracting negative economic and legal factors that can lead to crisis situations at a modern enterprise

Source: created by the authors of this study

To improve the internal and external response to crisis situations at an enterprise, it is first necessary to focus on more effectively meeting the information needs of key economic security stakeholders. In the context of external threats, such as a full-scale invasion by the Russian Federation, the company should develop a strategy for geographical dispersion of assets and diversification of supply chains, which will reduce vulnerability to external shocks and ensure greater resilience.

Therewith, internal and external legal factors play a critical role in ensuring the legal security of an enterprise. Internal factors, such as corporate security, privacy policies, and work rules, provide the basis for internal governance and control, ensuring that all actions are within legal and policy frameworks. On the other hand, external legal factors, such as national health and safety legislation, cybersecurity, and international regulations, impose obligations to follow security, cybersecurity, and external relations standards, which helps businesses identify and manage external risks while complying with the requirements of legislation and international agreements. To ensure the legal security of a business during the war in Ukraine, it is critical to keep up-to-date with rapidly changing national and international regulations and compliance requirements. Businesses should create a crisis management department that includes legal experts who can continuously assess risks and adapt strategies accordingly. This department should focus on asset protection, data security, and business continuity in the face of extraordinary regulations. It is also important to maintain strong communication with regulators and obtain legal advice on new legislation and government directives.

The final stage is a discussion of the results. Specifically, they should be compared with analogous ones in this area. For instance, B.M.A.R. Tubishat et al. (2024) focus on improving the efficiency of commercial relations to support sustainable development through regional legal frameworks. The present study expands on this by systematically analysing both internal and external economic and legal factors affecting enterprises, analogous to the use of a matrix grid to assess the interaction of factors suggested above. The methodological approach developed by V. Panchenko et al. (2022) for managing innovation activities is consistent with the emphasis placed on systematic analysis combined with expert methods. The present study contributes to this aspect by proposing a technology for counteracting the economic and legal factors that facilitate a crisis situation at an enterprise in the system of managerial decision-making to ensure its security development, improving the methodological tools available for managing enterprises during economic shocks.

O. Vovchak et al. (2021) and L. Dokiienko (2021) provided a framework for diagnosing financial crises and assessing financial security, respectively. The present study complements these paths by proposing a holistic technology that not only detects but also actively counteracts the negative influences that lead to crises, thereby providing a proactive tool in crisis management. I. Isaienko (2020) discussed the crisis in public administration, which resonates with the findings on the need for strong decision-making systems. The proposed model potentially serves as a bridge to apply these approaches to the private sector. The spatial challenges assessed by O. Zybareva et al. (2022) reflect the complexity of economic security management at the industrial level. The technology covered above uses analogous concepts, but refines the application specifically to address crisis situations, thereby increasing the security potential of the enterprise. M. Kopytko et al. (2023b) and O. Sylkin et al. (2019) explored creative responses to pandemic crises and crisis management modelling, respectively. The technology developed in the present study aligns with these approaches by providing a structured method for anticipating and mitigating crises by integrating creative problem solving into the decision-making process. A. Shtangret et al. (2019b) focused on the development and functioning of the organisational and economic mechanism for ensuring the economic security of the enterprise. This research is important for the present study because it provides a basic context for understanding the structural aspects of economic security. Thus, the proposed technology extends this approach.

Conclusions

In conclusion, the study made a significant contribution to the development of methods of counteracting crisis situations at enterprises through the analysis of economic and legal factors. The innovation lies in the creation of a matrix grid that systemises the links between internal and external factors that affect the stability of the enterprise. Therewith, an approach to their assessment and ordering was proposed. In total, the study identified 14 crucial economic and legal factors of the external and internal environment that influence the process of crisis formation at an enterprise through the involvement of experts. As a result of establishing the interrelationships between them and their hierarchical ordering, the study proposed a technology for counteracting negative economic and legal factors that may lead to crisis situations at a modern enterprise. The developed model of counteraction technology has significant practical value, as it provides enterprises with a tool for early response to crisis threats. Using this model, decision makers can set up their security strategies with minimal losses and optimise strategic planning processes. The technology also helps to improve the financial stability of the enterprise and strengthen its socio-economic security. Despite its considerable advantages, the model has certain limitations.

The analysis of economic and legal factors in the formation of crisis situations in enterprises highlighted the complex intertwining of legislation and corporate decision-making. Legal frameworks define the operational boundaries within which businesses operate and respond to crises. The study highlighted significant legal vulnerabilities that could cause or exacerbate crises. These vulnerabilities often arise from gaps in knowledge of the law, misinterpretation of new regulations, or non-compliance with existing laws. The rapid evolution of legal standards, especially in dynamic economies, can render existing compliance strategies obsolete, thereby exposing businesses to legal risks. The main limitation is its dependence on accurate and up-to-date input data, which can be difficult to collect in the ever-changing legal environment of Ukraine. It is also worth considering the need to constantly update the methodological framework and adapt to new economic realities, which may require additional resources and efforts on the part of the enterprise to fully implement the technology.

Prospects for further research in this context from the legal standpoint may focus on the analysis of new legislative initiatives and their impact on the economic stability of enterprises. Particular attention should be paid to the investigation of the adaptation of enterprises to the changes brought about by martial law in the country. It is also crucial to interact with state security structures to ensure coordination of efforts to counter military threats and minimise their impact on the economic security of enterprises.

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Conflict of interest

The authors of this study declare no conflict of interest.

References

- Alazzam, F. A. F., Tubishat, B. M. A.-R., Storozhuk, O., Poplavska, O., & Zhyvko, Z. (2024). Methodical approach to the choice of a business management strategy within the framework of a change in commercial activities. *Business: Theory and Practice*, 25(1). doi: 10.3846/btp.2024.19676.
- [2] American Sociological Association. (1997). <u>The Code of Ethics of the American Sociological Association</u>. Suite: American Sociological Association.
- [3] Balas, A.N., & Kaya, H.D. (2019). Economic crisis and security concerns of wholesalers in Eastern European and Central Asian countries. *Journal of Eastern European and Central Asian Research (JEECAR)*, 6(2), 245-258. doi: 10.15549/jeecar.v6i2.262.
- [4] Bani-Meqdad, M.A.M., Senyk, P., Udod, M., Pylypenko, T., & Sylkin, O. (2024). Cyber-environment in the human rights system: Modern challenges to protect intellectual property law and ensure sustainable development of the region. *International Journal of Sustainable Development and Planning*, 19(4), 1389-1396. doi: 10.18280/ijsdp.190416.
- [5] Commercial Code of Ukraine. (2003, January). Retrieved from https://zakon.rada.gov.ua/laws/show/436-15.
- [6] Dokiienko, L. (2021). Financial security of the enterprise: An alternative approach to evaluation and management. Business, Management and Economics Engineering, 19(2), 303-336. doi: 10.3846/bmee.2021.14255.
- [7] Dubyna, M., Verbivska, L., Kalchenko, O., Dmytrovska, V., Pilevych, D., & Lysohor, I. (2023). The role of digitalization in ensuring the financial and economic security of trading enterprises under the conditions of external shocks. *International Journal of Safety and Security Engineering*, 13(5), 821-833. doi: 10.18280/ijsse.130506.
- [8] European Commission. (2021). <u>The European Commission's guidelines on ethics and data protection</u>. Brussels: European Commission.
- [9] Franchuk, V., Melnyk, S., Panchenko, V., Zavora, T., & Vakhlakova, V. (2020). Enterprise sustainability forecasting in the context of economic security management. *Journal of Security and Sustainability Issues*, 9(M), 336-346. doi: 10.9770/jssi.2020.9.M(27).
- [10] Hrybinenko, O., Bulatova, O., & Zakharova, O. (2020). Evaluation of demographic component of countries' economic security. Business, Management and Economics Engineering, 18(2), 307-330. doi: 10.3846/jbem.2020.12309.
- [11] IAS 1: Presentation of Financial Statements. (2007). Retrieved from <u>https://www.ifrs.org/content/dam/ifrs/publications/pdf-standards/english/2021/issued/part-a/ias-1-presentation-of-financial-statements.pdf.</u>
- [12] ICC/ESOMAR International Code on Marketing, Opinion and Social Research and Data Analytics. (2016) Retrieved from https://esomar.org/uploads/attachments/ckqtawvjq00uukdtrhst5sk9u-iccesomar-international-code-english.pdf.
- [13] IFRS 1: First-time Adoption of International Financial Reporting Standards. (2009). Retrieved from <u>https://www.ifrs.org/content/dam/ifrs/publications/pdf-standards/english/2024/issued/part-a/ifrs-1-first-time-adoption-of-international-financial-reporting-standards.pdf?bypass = on#:~:text = The%20Board%20restructured%20IFRS%201,of%20at%201%20 January%202004.</u>
- [14] Isaienko, I. (2020). The crisis of power as a problem of the development of public administration in the postmodern world.
 Postmodern Openings, 11(3), 231-243. doi: 10.18662/po/11.3/210.
- [15] Kopytko, M., Boychuk, I., Balyk, U., Mykhailyk, N., & Hryhoruk, P. (2023a). Formation of marketing strategy for sustainable development of enterprises in the domestic market. *Review of Economics and Finance*, 21, 2271-2278. <u>doi: 10.55365/1923.</u> x2023.21.243.
- [16] Kopytko, M., Zaverbnyj, A., Diachuk, I., Nikonenko, U., & Khalina, O. (2023b). Features of managing the creative development of the socio-economic system in the conditions of influence of COVID-19 pandemic. *Creativity Studies*, 16(1), 343-354. doi: 10.3846/cs.2023.16192.
- [17] Kryshtanovych, M., Snihur, L., Buzhyna, I., Tiurina, D., & Imeridze, M. (2024). Development of new information systems with the involvement of artificial intelligence for the men and women's work: A methodical approach to assessment and selection of the optimal. *Ingénierie des Systèmes d'Information*, 29(2), 723-730. doi: 10.18280/isi.290234.
- [18] Labor Code of Ukraine. (1996, July). Retrieved from https://zakon.rada.gov.ua/laws/show/322-08.
- [19] Law of Ukraine No. 2136-IX "On the Organization of Labor Relations under Martial Law". (2022, March). Retrieved from https://zakon.rada.gov.ua/laws/show/2136-20#Text.
- [20] Law of Ukraine No. 2435-IX "On Accounting and Financial Reporting". (1999, July). Retrieved from https://zakon.rada.gov. ua/laws/show/996-14.
- [21] Law of Ukraine No. 389-VIII "On the Legal Regime of Martial Law". (2015, May). Retrieved from <u>https://zakon.rada.gov.ua/</u> laws/show/389-19.
- [22] Panchenko, V., Ivanova, R., Viunyk, O., Androshchuk, I., & Guk, O. (2022). Forming a methodological approach to the management system of innovative activities at enterprises in conditions of economic development. *Journal of Business Economics* and Management, 23(5), 1155-1169. doi: 10.3846/jbem.2022.17804.
- [23] Resolution of the Cabinet of Ministers of Ukraine No. 303-2022-π "Regarding the Suspension of Scheduled and Unscheduled State Supervision (Control) Measures During Martial Law". (2022, March). Retrieved from <u>https://zakon.rada.gov.ua/laws/show/303-2022-π#Text</u>.
- [24] Shtangret, A., Melnyk, N., Shevchuk, I. Sydoruk I., & Shyra, T. (2019a). Information support for the management of the economic security of high-tech enterprises. In 2019 9th international conference on advanced computer information technologies (ACIT) (pp. 350-353). Ceske Budejovice: IEEE. doi: 10.1109/ACITT.2019.877992.
- [25] Shtangret, A., Shynkar, S., Shyra, T., Karaim, M., & Kavyn, S. (2019b). Formation and functioning of the organizational and economic mechanism of ensuring the economic security of the enterprise. In 2019 IEEE international scientific-practical conference problems of infocommunications, science and technology (PIC S&T) (pp. 117-122). Kyiv: IEEE. doi: 10.1109/ PICST47496.2019.9061255.

- [26] State Statistics Service of Ukraine. (2023). Retrieved from https://www.ukrstat.gov.ua/.
- [27] Sylkin, O., Kryshtanovych, M., Zachepa, A., Bilous, S., & Krasko, A. (2019). Modeling the process of applying anti-crisis management in the system of ensuring financial security of the enterprise. *Business: Theory and Practice*, 20, 446-455. doi: 10.3846/btp.2019.41.
- [28] Tax Code of Ukraine. (2010, December). Retrieved from https://zakon.rada.gov.ua/laws/show/2755-17.
- [29] Ticu, I. (2021). Migration as a (non)traditional security issue of the risk society. Postmodern Openings, 12(2), 387-409. doi: 10.18662/po/12.2/314.
- [30] Tubishat, B.M.A.R., Alazzam, F.A.F., Viunyk, O., Yatsun, V., & Horpynchenko, O. (2024). Planning to improve the efficiency of open systems commercial relations to ensure uninterrupted sustainable development: Regional legal aspect. *International Journal of Sustainable Development and Planning*, 19(3), 1089-1097. doi: 10.18280/ijsdp.190327.
- [31] United Nations High Commissioner for Refugees. (2024). Over 8 million people have fled Ukraine. Retrieved from https://data.unhcr.org/en/documents/download/106707(UNHCR).
- [32] Vovchak, O., Kulyniak, I., Halkiv, L., Pavlyshyn, M., & Horbenko, T. (2021). Development of crisis diagnostic at the enterprise: financial and economic breakdown. *Financial and Credit Activity Problems of Theory and Practice*, 3(38), 292–303. <u>doi: 10.18371/</u> fcaptp.v3i38.237459.
- [33] Zveryakov, M.I., & Zherdetska, L.L. (2019). Currency failures and inflation crisis: Ukrainian specific and relationship assessment. Financial and Credit Activity Problems of Theory and Practice, 1(28), 130-138. doi: 10.18371/fcaptp.v1i28.163933.
- [34] Zybareva, O., Shevchenko, I., Tulchynska, S., Popov, O., & Yangulov, E. (2022). Assessment of spatial challenges of the economic security system of industrial enterprises. *International Journal of Safety and Security Engineering*, 12(4), 421-428. doi: 10.18280/ijsse.120402.

Протидія організаційно-правовим та економічним ризикам роботи підприємств в умовах воєнного стану

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Анотація. Гіпердинамічність зовнішнього середовища в межах вже 2024 року привнесла значні зміни в діяльність сучасних підприємств, утворивши ряд нових ризиків як правового так й економічного характерів й, що підвищує актуальність вибору форми реагування на них. Метою статті є аналіз можливих шляхів удосконалення технології протидії чинникам, що уможливлюють утворення кризової ситуації на підприємстві в системі прийняття управлінських рішень. Методологія дослідження передбачала застосування формально-юридичного аналізу законодавства та експертного методу для виокремлення зовнішніх й внутрішніх економіко-правових чинників, методів системного аналізу й аналізу ієрархії. В результаті було виокремлено найбільш вагомі негативні чинники економічного й правового характеру. Представлено матричну сітку між цими факторами як внутрішніми, так й зовнішніми. Основним результатом статті стала модель, яка представляє технологію протидії негативним чинникам, що можуть спричинити утворення кризових ситуацій на сучасному підприємстві в Україні. Особливе місце серед цих чинників займають ті, що викликані особливостями сучасної нормативної регламентації діяльності підприємств в умовах воєнного стану, основу якої складає Постанова Кабінету міністрів України № 303-2022-п 2022 року та Закону України № 2136-IX «Про організацію трудових відносин в умовах воєнного стану». Як результат, запропонована технологія закладає інформаційне підгрунтя для прийняття ефективних управлінських рішень ключовими суб'єктами безпеки на сучасному підприємстві. Практична цінність роботи полягає в можливості використання запропонованого підходу в діяльності підприємств України з метою задоволення інформаційних потреба суб'єктів безпеки

Ключові слова: правові чинники; економічні чинники; технологія протидії; матрична сітка; моделювання