Review Paper



Mechanisms of Post-War Economic Recovery in Ukraine: The Role of the International Community

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ABSTRACT

The article is devoted to the analysis of possible mechanisms of economic recovery after the conflict in Ukraine, as well as the role of the international community in this process. The article examines financial and economic instruments that can be used to support economic recovery in Ukraine after the war international financial aid and investments. The authors claim that the effective use of these tools can contribute to a rapid and sustainable economic recovery in Ukraine. The article presented the methodology and results of the research of literary sources with the aim of substantiating and describing the management models of economic systems in the post-war period, considering the requirements for reconstruction. An analysis of the world experience of post-war reconstruction was carried out and differences between the situation in Ukraine and similar processes in Europe were determined. The advantages and disadvantages of management models of economic systems were studied, and the grouping of KPI factors was carried out. The methods of economic and mathematical modeling were used to form the information and analytical support of the models. The methodology for calculating the integral coefficient of the assessment of the effectiveness of the economic system in the post-war period, which is formed by structuring the basic coefficients and weighting coefficients of the KPI factors, has been developed. The proposed evaluation system is proposed as hypothetically possible for practical application, and to confirm the relevance and adequacy of the model and methodology, the calculation of the integral coefficient of evaluation of the effectiveness of the economic system in the post-war period by the regions of Ukraine was carried out. The results of the research were used to form a geographical map of the zoning of the regions of Ukraine that were most affected by the war and need support, investment, and recovery mechanisms. The study confirmed that the success of post-war reconstruction depends on the efficiency of the economic system and its ability to attract investment to create the conditions for development. The result of the research is the development of methodological recommendations for the optimization of economic activity management mechanisms during post-war recovery, which can be applied in KPIs is periods and adapted to a specific situation.

HIGHLIGHTS

• The article is devoted to the analysis of possible mechanisms of economic recovery after the conflict in Ukraine, as well as the role of the international community in this process. The article examines financial and economic instruments that can be used to support economic recovery in Ukraine after the war international financial aid and investments.

Keywords: Economy, post-war reconstruction, world aid, aid to Ukraine, investments, international investments, economic recovery mechanisms

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Reconstruction and development of Ukraine after military aggression will require the use of traditional and innovative tools, as was the case with other countries after World War II. The investment resources of highly developed countries played an important role in the reconstruction of Europe and supported its economy, but this process had its limitations. Therefore, a program of technical and economic assistance was developed the Marshall Plan, which contributed to the support and recovery of the European economy. Similarly, the world's leading countries are developing plans for the recovery of Ukraine, which is integrating and moving towards joining the EU. Key principles of international aid for reconstruction include the creation of a separate agency under the auspices of the EU to coordinate and manage aid, assistance in the form of foreign capital and technology, mainly in the form of grants, as well as considering future sustainable development. There are several potential sources of funds for the recovery of Ukraine. The first is bilateral aid from different governments in the form of grants, loans, credit guarantees or in-kind contributions. This assistance is available through agencies such as USAID and SIDA. The second is international institutions, in particular the World Bank, the European Bank for Reconstruction and Development, other institutions specializing in development assistance, as well as the United Nations and humanitarian organizations. The International Monetary Fund can also provide short-term financing. The third is private companies and individuals, such as private foundations and individuals, as well as the Ukrainian diaspora. Finally, one could consider Russia's current revenues from oil and gas and direct part of these revenues to a compensation fund or collect a tax on them, which will be collected by the EU to compensate for the grants provided for the reconstruction of Ukraine. Therefore, it is expedient to consider the mechanisms and the implementation of these mechanisms through special international institutions that can ensure the effectiveness of postwar recovery processes of Ukraine.

The purpose of the article. Therefore, considering the relevance and practical significance of the outlined problem of the post-war reconstruction of Ukraine both for the national economy and for the economy of Europe and the world, it is advisable to develop recommendations for the formation of effective mechanisms for ensuring the post-war reconstruction of the economy, taking into account the possibilities of international partnership.

To achieve the goal of the study, the following tasks were performed:

- an analysis of models of post-war reconstruction of the country was carried out using the example of countries that were destroyed during the Second World War,
- the problems of the development of the economic system of Ukraine, which are related to Russia's military aggression and post-war reconstruction, are identified.
- KPI models of managing the economic system, which consider the resulting factors of activity, have been developed.
- the weighting coefficients for the resulting factors that affect the efficiency of financial and economic systems are determined.
- developed an integral coefficient for evaluating the economic system's effectiveness.
- calculations were made and a geographical map of the zoning of the regions of Ukraine was presented based on the indicator of the integral coefficient of the evaluation of the effectiveness of the economic system.
- mechanisms for providing investments to the regions of Ukraine that need reconstruction have been developed, in accordance with the potential opportunities of the international community.

LITERATURE REVIEW

The analysis of literary sources made it possible to determine several important factors for reconstruction. Thus, in the article defining the directions of development of the post-conflict territories of Europe, the priorities of economic development are determined. It should be noted that the goal of convergence and equal distribution, including lagging areas, may complicate efforts to ensure growth. On the contrary, the goal of competitiveness can increase regional and social inequalities by directing efforts to areas of difference where projects achieve greater results (dynamic cities, higher levels of general education, most advanced projects, infrastructure with heavy traffic, etc.) [Carluer, F. (2007), Kısacık, S., Eseler, B. and Camilleri, M.J. (2022), Atstaja, D., Koval, V., Grasis, J., Kalina, I., Kryshtal, H. & Mikhno, I. (2022)].

The article by Kotenko, S., Nitsenko, V., Hanzhurenko, I., & Havrysh, V. investigates the mathematical modeling of freight transport combination for uncertain, fuzzy, and stochastic parameters. The authors propose modeling methods and consider several stages of the process. The results of the study can be useful for the development of economic systems, including the construction of a model of post-war reconstruction.

An article describing the mathematical model of the process of forming the safety potential of engineering enterprises, based on the use of safety and economic efficiency indicators, is interesting. The authors analyzed the factors that affect the security of the enterprise and developed a methodology for calculating the security potential, which allows you to effectively manage risks and ensure the security of the enterprise [Kryshtanovych, M., Akimova, L., Akimov, O., Kubiniy, N. & Marhitich, V. (2021)].

The article by Akimova, L., Akimov, O., Maksymenko, T., Hbur, Z. & Orlova, V. is devoted to the adaptive management of the entrepreneurship model as a component of the enterprise resource planning system. The authors study the issue of the use of information technologies and monitoring systems that allow for an adaptive approach to the management of enterprise resources. The article contains research results that may be useful for practical application in entrepreneurship and business management in the conditions of postwar reconstruction [Akimova, L., Akimov, O., Maksymenko, T., Hbur, Z. & Orlova, V.].

The article provides a comparative analysis of innovative development strategies for the fuel and energy complex of Ukraine and EU countries. The international experience in the innovative activity of the energy sector was studied, and the legislative framework for the development of the energy sector in Ukraine and the EU was analysed [(Levytska, O., Mulska, O., Ivaniuk, U., Kunytska-Iliash, M., Vasyltsiv, T. & Lupak, R. (2020). The article highlights important problems that hinder the innovative development of the fuel and energy complex of Ukraine and suggests ways to overcome them. The research can be useful for government bodies and business structures involved in the energy sector and are going to expand innovative activities in the industry [Redko, K., Borychenko, O., Cherniavskyi, A., Saienko, V., Dudnikov, S. (2023)]. This article is devoted to the study of territorial

Inis article is devoted to the study of territorial planning and sustainable development of territories intended for resettled people. The authors analyzed the experience of refugee-hosting countries and proposed a step-by-step plan for the sustainable development of areas hosting refugees. The study found that effective spatial planning can ensure sustainability in the provision of housing and infrastructure for refugees and reduce the negative impact of their presence on the local economy and environment [Uhodnikova, O. ,Viatkin, K. Gordiienko, S. Viatkin, R. Moroz, N., 2023].

The purpose of the study by Mattera, M. and Soto, F. is to assess the impact of sustainable business models on building corporate reputation and sustainability. Specifically, the financial indicators of companies included in the Spanish stock exchange IBEX-35 index will be evaluated, starting from the beginning of the armed conflict in Ukraine on February 24, 2022. Based on the triple bottom line (TBL) theory, the case of companies using environmental, social, and corporate governance (ESG) strategies to comply with their corporate social responsibility (CSR) is analyzed. To achieve this goal, energy companies operating in Spain are evaluated. Companies operating in the energy sector, including in the IBEX35 index - Spain's largest trading platform, are considered. The analysis includes an assessment of fluctuations in the price of their shares and the impact of the use of renewable and other energy sources that limit dependence on external events. Communication and dissemination of intangible information, as well as the use of international standards in these areas, are also considered. The obtained results indicate that long-term CSR commitments and ESG strategies significantly influence companies' ability to overcome KPIses and improve financial performance [Mattera, M. and Soto, F. (2023), Glenn, J.C. and Gordon, T.J. (2002)].

The research aims to explore the experience of Ukrainian teenagers who suffered from the war between Russia and Ukraine. The study focuses on the changes in the lives of adolescents caused by war, emotional responses of adolescents to war-related disorders, strategies for managing disorders, and the role of information technology in supporting the new reality and strategies for managing adolescent disorders. The study was based on semi-structured interviews conducted on Zoom with 27 Ukrainian adolescents aged 10 to 18 years. The participants were recruited using snow sampling and represented different regions of Ukraine. Interview notes and partial transcripts were analyzed using thematic analysis to identify common and unique patterns in participants' responses. These interviews revealed signs of traumatic experiences and different stages and methods of countering them. Participants' resilience was supported by external factors such as families, communities, continuing education, opportunities to connect with friends, information technology, and internal skills such as social competence, problem solving, critical awareness, autonomy, and a sense of purpose. The impact of war on the mental health of teenagers may affect the economy of Ukraine in the future. Failure to provide adequate attention and support to adolescent survivors of war can have long-term effects on their physical and psychological health, as well as their future academic and professional performance. This can lead to a reduction in the workforce and the competitiveness of the nation. In addition, mental trauma can affect people's ability to communicate and cooperate effectively, which can hinder the development of the economy both at the scale of individual enterprises and at the scale of the country. Thus, providing adequate attention and support to adolescent survivors of war can help ensure the sustainable development of the nation in the future [Lopatovska, I., Arora, K., Fernandes, F.V., Rao, A., Sivkoff-Livneh, S. and Stamm, B. (2022), Djip, V. (2014)].

An important element of the development of territories, especially in post-war conditions, is ensuring the livelihood and health of the population, especially the able-bodied mental health, which is the basis of the formation of the competitiveness of human resources and, accordingly, the development of the economy.

The protracted armed conflict in Ukraine has wideranging consequences for the civilian population in the mental health, social and economic spheres. This emphasizes the need for comprehensive and sustainable reform of the Ukrainian mental health system. The Government of Ukraine approved the vision of the national reform of mental health. The purpose of this study is to take advantage of the experience of mental health reform in other post-conflict countries to identify priority areas for the application of national mental health policy in conflict regions to improve the social inclusion of people with mental illness (Donetsk and Luhansk region, directly affected by the conflict). A literature review was conducted to identify lessons for implementing mental health reform in other postconflict countries. Findings were summarized and best practices applied to national and regional policy contexts. The literature describes emergency situations as an opportunity to create sustainable mental health systems. Achieving this goal requires a systematic and long-term reform strategy. Postwar mental health can affect economic development, as people with mental health problems can have difficulties in carrying out professional duties and daily activities. Undiagnosed and undertreated mental illness can lead to lost productivity in the workplace, as well as increased medical costs and disability. In addition, after the war, socio-economic development may depend on the mental health of the population [Nikonenko, U., Shtets, T., Kalinin, A., Dorosh, I. & Sokolik, L. (2022)]. For example, reduced levels of depression and anxiety can have a positive impact on people's employability and more active participation in community life. In addition, improving mental health can increase investment in the local economy, as it creates favorable conditions for more productive work. Therefore, after the war, the mental health of the population is an important factor for economic development and social integration. Improving the support system for military and civilian victims of war and improving the availability of mental health care can be effective measures to support post-war mental health and promote economic development [Quirke, E., Klymchuk, V., Gusak, N., Gorbunova, V. and Sukhovii, O. (2022)].

METHODS

The article provides the methodology and results of the analysis of literary sources, which made it possible to substantiate and describe

the management models of economic systems, including in the post-war period, considering the requirements and requests for reconstruction. The advantages and disadvantages of the models were determined the analysis of the world experience of post-war reconstruction was carried out, and the differences of the situation in Ukraine from similar processes in the post-war period in Europe were determined. Analysis and identification of the advantages and disadvantages of the models made it possible to group the KPI factors of economic systems. The information and analytical support of the models considered in the article is developed by analyzing and synthesizing the results of research by leading domestic and foreign scientists and by accumulating statistical reports of international financial institutions. The formation of information and analytical support made it possible to evaluate the weighting coefficients of KPI factors of economic systems by using methods of economic and mathematical modeling. By accumulating a system of calculations of KPI-factors and their weighting factors, the research proposed a method of calculation and a formula for determining the integral coefficient for evaluating the effectiveness of the economic system in the post-war period, which is formed by structuring the basic coefficients, selected KPI-factors within the framework of the population and weighting factors. The proposed evaluation system is proposed as hypothetically possible for practical application, to confirm the relevance and adequacy of the model and the developed evaluation methodology, the calculation of the integral coefficient of the evaluation of the effectiveness of the economic system in the post-war period by the regions of Ukraine was carried out.

As a result of the conducted research and determination of calculations, a geographical map of the zoning of the regions of Ukraine most affected by military actions and, accordingly, in need of greater support, investment support, and recovery mechanisms was formed. Accumulation and analysis of reports of international financial organizations made it possible to determine trends in the development of the economic system of Ukraine in the conditions of post-war reconstruction. Using the methods of induction, deduction, and synthesis, mechanisms were developed to provide investments to the regions of Ukraine that need reconstruction, in accordance with the potential opportunities of the international community.

RESULTS

The study of best world practices and European standards of models of economic systems made it possible to establish requirements for financial and economic processes. These requirements include such characteristics as adaptability, strategic orientation, multifactorial, relevance and adequacy of the model, as well as its practical implementation. Adaptability implies the ability of the model to mobile adapt to changes in the internal and external environment, with the help of managerial influences. Strategic orientation is aimed at forming models aimed at the long-term perspective, with possible current adjustments in conditions of instability. Multifactorial involves taking into account the interaction of the factors of the model with each other and with the factors of the external environment, as well as the possibility of adding or removing factors from the structure of the model depending on the specifics of the industry, the state of the economic system, and other factors. The relevance and adequacy of the model determine the systematization of a set of factors and their interrelationships as the basis for the formation of accurate indicators by confirming the proposed hypotheses. The practical implementation of the model determines the ease of using the model in practical activities, that is, the possibility of using it based on a certain amount of available statistical or informational data.

Ukraine together with Switzerland held the International Conference on the Reconstruction of Ukraine (URC 2022) in Lugano in July 2022. The conference discussed the recovery and development plan of Ukraine, methods and principles of recovery, social, economic, environmental, and infrastructural recovery and reforms that need to be implemented. URC 2022 became the international start of the process of restoration of Ukraine. The National Recovery Plan, which the Ukrainian government presented at the Lugano conference, is a comprehensive and detailed document that reflects the main directions of recovery and contains measures, including legislative changes. Ukraine's recovery plan consists of 15 national programs and is designed for 10 years, its total cost is more than

\$750 billion. In October 2022, at an international conference in Berlin, Ukraine presented a smaller-scale recovery plan that requires \$38 billion to finance the budget deficit and \$17 billion for urgent restoration of social, energy and transport infrastructure.

After the end of the Second World War, the period of post-war reconstruction began. Different reconstruction processes took place in different countries of the world depending on the scale of destruction caused by the war, the country's economic capabilities and political conditions. One of the most famous post-war reconstruction plans was the Marshall Plan, introduced by the United States in 1948. This plan provided financial aid to war-torn European countries to rebuild their economies and support democratic governments. In many countries, special state administration bodies were created, which were responsible for the reconstruction of the country. For example, in Germany, the Federal Development Agency was created to coordinate the country's reconstruction plans. In Japan, the Commission for Reconstruction and Development was created, which planned the country's economic policy. The reconstruction process included the restoration of the country's industrial potential, the construction of new residential buildings and infrastructure, as well as assistance to people who lost their places of life and work during the war. Many countries have introduced social programs such as unemployment benefits and social support for residents to help them get back to normal life. As part of the Marshall Plan, the United States provided significant financial aid to European countries, which helped rebuild their economies. In addition, numerous international organizations, such as the United Nations, the International Monetary Fund, and the European Union, were established to maintain peace and promote economic development. Postwar reconstruction also involved the rebuilding of social infrastructure such as schools and hospitals, as well as the revival of arts and culture, which was an important element of the post-war revival. The Marshall Plan consisted of several key blocks - Fig. 1.

Analyzing the blocks of the Marshall Plan and conducting an analysis of literary sources, reports of international financial organizations, and scientific periodicals, the article proposes to form a set of information and analytical support for the model of the post-war reconstruction of the economy of Ukraine, which will allow a quantitative assessment of the results of the implemented mechanisms. Informational and analytical support is presented in Table 1.

Based on the conducted research, it was proposed to use the indicators as KRI factors for the evaluation of economic systems. The proposed indicators include: The ratio index (R), Fixed assets (F) Liquidity (L), Solvency (S). The KPI model of the financial and economic system was developed, which is presented in Fig. 1 and is based on the proposed indicators.

To establish the weighting coefficients of KPI factors on the economic system, an analysis of correlation dependence was carried out on the example of five administrative units of Ukraine (A – Kharkiv region, B – Sumy region, C – Kherson region, D – Mykolaiv region, E – Chernihiv region), and the results of the analysis are summarized in Table 2.

By applying the correlation formula in MC Excel, the weighting coefficients of the KPI factors were automatically calculated. With the help of selection and creation of a set of KPI factors for the economic system and determination of their weighting factors, the article proposes a formula for calculating the integral coefficient for evaluating the effectiveness of the economic system, which is represented by formula 1.

$$K = \sum_{k} (0.5 * R + 0.7 * F + 0.2 * L + 0.7 * S) \dots (1)$$

The article considers the calculation of the integral coefficient of the assessment of the effectiveness of the economic system. For this, analysis, and calculation of the proposed coefficient for the regions of Ukraine were carried out. The obtained results are presented in the form of a geographical map, which indicates the Integral coefficient for the area where active ground combat operations were conducted. Calculations were not carried out for Donetsk, Luhansk regions and the Autonomous Republic of Crimea due to temporary occupation or active hostilities, which makes it impossible to obtain statistical data for assessment. The obtained results are presented in fig. 3

Financial assist	ance
Aimed at ensuring s	upport for the economy of countries affected by the Second World War.
A significant amoun	t of money was allocated to help countries recover from the war.
Technical assist	ance
	ssistance in the form of engineers, technical specialists, machines, equipment means that helped restore the economies of the participating countries.
Development A	
	in the creation of infrastructure such as roads, bridges, railways and other o support the economic recovery of participating countries.
Aid in agricultu	re
	ing and supporting agriculture that has been significantly damaged by the war. e supply of grain, seeds and equipment for agricultural development.
Mining Aid	
	ing and supporting the mining industry, which was also severely damaged by the ed the supply of the necessary equipment and technology to restore the mining
Aid in the deve	lopment of science and technology
	g the development of science and technology in the participating countries, which he efficiency of innovative development.
Economic block	
Under this bloc, initi	ansion of production, creation of jobs, development of trade and infrastructure. latives such as the Marshall Plan were proposed, which provided financial aid to to support the recovery of their economies.
Political block	
	d democracy in Europe through the development of democratic institutions, huma of the press. Within the framework of this bloc, the creation of the European Unior
Security block	
	Europe by restoring military capabilities and strengthening countries' defense the framework of this block, the creation of the North Atlantic Treaty (NATO) was
Cultural bloc	
	exchange and mutual understanding between countries, which would contribute to

Fig. 1: The key building blocks of the Marshall Plan

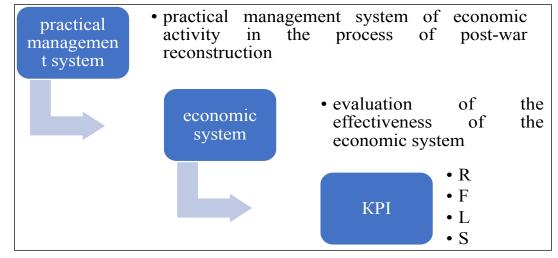


Fig. 2: The KPI model of the economic system

AessrA

Index	Formula	Parameters	Characteristic
The ratio index	Debts	<1	Ratio of total debt to the value of assets
	Total assets		
Fixed assets	Current assets	>1	A form of liquidity measurement
	Short-term debts		
Liquidity	Cash	0,2 - 0,25	The ability to pay your short-term or
	Short-term- debt		long-term debts
Solvency	Fn + Ff + CF	0,3 – 0,35	Ratio of debts to liquidity of assets
	CL		
	Fn - funds and equivalents in national		
	currency		
	<i>Ff</i> - funds and equivalents in foreign		
	currency		
	CF - current financial investments		
	CL - Current liabilities		

Table 1: Information and analytical provision of KPI-factors of the activity of economic systems in the conditions of the challenges of post-war reconstruction

Table 2: Calculation of the correlation dependence of KPI factors

	Α	В	С	D	Ε	Correlation
R	0,35	0,51	0,27	0,37	0,53	0,53
F	0,31	0,21	0,29	0,31	0,23	0,71
L	0,22	0,24	0,28	0,3	0,28	0,16
S	1,2	1,5	1,3	1,8	1,1	0,67
Profitability	0,34	0,29	0,28	0,36	0,21	



Fig. 3: Assessment of the integral efficiency coefficient of the economic system by regions affected by active ground hostilities

Based on the calculations, the ranking of the integral coefficient of the economic system performance assessment was proposed - Table 3.

So, in the table based on the results of the ranking, methodical recommendations are proposed, which will allow to effectively implement the system of management of economic activity during the postwar reconstruction. Specific recommendations are developed in accordance with the rank of the region, which is determined by the results of the calculation of the integral coefficient.

Table 3: Ranking of the integral coefficient of the assessment of the effectiveness of the financial and
economic system

Evaluation result	Rating	Issues	Road map
0-1,2	Essential	Lack of development of important economic sectors that can ensure sustainable economic development of regions. There are also possible problems with raising the standard of living and providing adequate medical and educational assistance to the population.	Study of the potential of the region: conducting research and analysis of the market opportunities of the region, determining the advantages and weaknesses of the regional economy. Infrastructure development: planning and implementation of infrastructure projects, such as the construction of roads, railways, airports, ports, energy facilities and others. Supporting small and medium-sized businesses: creating favorable conditions for the development of small and medium- sized businesses, such as simplifying the tax system, reducing bureaucracy, and supporting innovative projects. Development of tourism: creation of favorable conditions for tourism business, development of infrastructure for tourists, marketing activities to promote the region as a tourist destination. Support of education and science: development of education and science in the region, support of scientific projects and creation of innovation centers. Supporting the development of green energy: supporting the development of renewable energy sources and reducing the use of coal and other harmful energy sources.
			Support for the development of agriculture: development of agriculture and support for farms, cultivation of ecologically clean products and their export.
1,3-1,6	Altitudinous	Lack of infrastructure, especially in those regions not affected by the war. Without proper infrastructure, any economic and social development will be limited. It is necessary to resolve the issue of reconstruction and construction of new roads, bridges, airports, residential complexes, schools, and hospitals. There may also be problems with creating new jobs. Due to war and economic instability, many companies lost their enterprises and businesses. This could lead to job losses and worsening the economic situation in the least affected regions.	Study of the potential of the region: conducting research and analysis of the market opportunities of the region, determining the advantages and weaknesses of the regional economy. Infrastructure development: planning and implementation of infrastructure projects, such as the construction of roads, railways, airports, ports, energy facilities and others. Supporting small and medium-sized businesses: creating favorable conditions for the development of small and medium- sized businesses, such as simplifying the tax system, reducing bureaucracy, and supporting innovative projects. Support of education and science: development of education and science in the region, support of scientific projects and creation of innovation centers. Support for the development of agriculture: development of agriculture and support for farms, cultivation of ecologically clean products and their export.

1,6 - more		Humanitarian crisis: thousands	Assessment of the level of damage and losses: to start the recovery
		of people have lost their homes	process, it is necessary to assess the extent of the damage to the
		and are forced to live with	territories, determine the needs and identify important areas
		internally displaced persons	of activity for the development of the infrastructure and socio-
		or displaced persons. Due to	economic potential of the region.
		the war, buildings, schools,	Infrastructure restoration: infrastructure such as roads, bridges,
		medical facilities, kindergartens,	electricity networks, water supply, sewerage, etc. must be restored to
		churches, and infrastructure	sustain life and restore the economy of the region.
		were destroyed.	Development of economic activities: after the infrastructure is
		Economic crisis: The war led	restored, it is necessary to attract investors to carry out economic
		to a decline in production	activities in the region. This can be an important step in providing
		and economic activity in the	jobs and increasing the income of the population.
		region. Many enterprises and	Social development: an important step in the recovery of the region
		entrepreneurs who operated in	is to ensure an adequate standard of living and social support of
	E	government-controlled territory	the population. The restoration of social services, such as schools,
	l m	were forced to stop their	hospitals, cultural centers, etc., can help ensure an adequate
	Maximum		standard of living and the development of the human potential of
	Z	Social problems: The war	the region.
		created a lot of tension among	Environmental aspect
		the population, which led to	· · · · · · · · · · · · · · · · · · ·
		increased domestic violence and	
		the spread of alcoholism and	
	drug addiction.		
	Security problems: illegal armed		
	groups operate in the occupied		
	territories, which threatens the		
	security of the residents of the		
		region. Moreover, the war has	
		led to the proliferation of armed	
		conflicts and acts of terrorism,	
		which also threaten the lives and	
		safety of residents.	

DISCUSSION

Considering the different degrees of destruction in different regions of Ukraine because of the war, in order to ensure investments, it is necessary to develop mechanisms that will take into account the ranking of regions by the degree of destruction. Here are some recommendations:

- Creation of an investment fund for each region, which would attract investments from international sources.
- Conducting presentations and exhibitions for representatives of the international community to draw attention to the needs of regional recovery.
- Development of investment projects for each region, which would consider its needs according to the ranking by the degree of destruction.
- Involvement of local enterprises in regional

restoration projects with the aim of creating jobs and increasing economic activity in the region.

- Strengthening cooperation with specialized international organizations that can provide technical and financial assistance for the restoration of regions.
- Conducting an advertising campaign with the aim of attracting investors and raising awareness of the possibilities of investing in the restoration of regions.
- Increasing the transparency and openness of the management of funds allocated for the reconstruction of regions to show investors that their funds will be used efficiently and in accordance with the purpose.

CONCLUSION

During the research, it was established that the efficiency of the economic system will determine the overall success of post-war reconstruction processes.

The main task of reconstruction after the war is to attract investments to create financial conditions for the development of social and economic systems. Optimization of financial management mechanisms allows to create an innovative system. Evaluation of efficiency can be carried out using the integral coefficient of the results of the economic system, which allows the use of evaluation processes in practical management and ensures the ranking of management approaches in accordance with the current situation. Based on the research, methodological recommendations were developed for the practical implementation of the economic activity management system during post-war recovery. These recommendations are aimed at improving the efficiency of economic systems depending on their initial positions and potential opportunities. The developed proposals are highly relevant for crisis periods, for post-war recovery, are easy to implement and can be specified for specific cases, using the developed assessment template and other factors that researchers consider more relevant, taking into account the financial and economic specifics of the studied system.

REFERENCES

- Akimova, L., Akimov, O., Maksymenko, T., Hbur, Z. and Orlova, V. 2020. Adaptive management of entrepreneurship model as a component of enterprise resource planning. *Academy of Entrepreneurship J.*, **26**(3): 1-8.
- Atstaja, D., Koval, V., Grasis, J., Kalina, I., Kryshtal, H. and Mikhno, I. 2022. Sharing model in circular economy towards rational use in sustainable production. *Energies*, 15(3).
- Carluer, F. 2007. "Managing Conflict in Economic Convergence of Regions in Greater Europe", Carluer, F. (Ed.) Managing Conflict in Economic Convergence of Regions in Greater Europe (Contributions to Conflict Management, Peace Economics and Development, Vol. 3), Emerald Group Publishing Limited, Bingley, pp. ix-xx. https://doi. org/10.1016/S1572-8323(06)03001-3
- Djip, V. 2014. "Entrepreneurship and SME development in post-conflict societies : The case of Bosnia & Herzegovina", *J. Entrepreneurship and Public Policy*, **3**(2): 254-274.
- Glenn, J.C. and Gordon, T.J. 2002. "Future international environmental security issues and potential military requirements", *Foresight*, **4**(3): 12-25.

- Kısacık, S., Eseler, B. and Camilleri, M.J. 2022, "Syria Internal War as a Case Study Within the Context of Catastrophe of Men's War on Children: A SUI Generis Case Study of Turkey's Policy Towards Syrian Children", Yerdelen, B.K., Elbeyoğlu, K., Sirkeci, O., Işıkçı, Y.M., Grima, S. and Dalli Gonzi, R.E. (Ed.) Being a Child in a Global World, Emerald Publishing Limited, Bingley, pp. 101-114. https:// doi.org/10.1108/978-1-80117-240-020221010
- Kotenko, S., Nitsenko, V., Hanzhurenko, I. and Havrysh, V. 2020. The mathematical modeling stages of combining the carriage of goods for indefinite, fuzzy and stochastic parameters. *Int. J. Integrated Engineering*, **12**(7): 173-180.
- Kryshtanovych, M., Akimova, L., Akimov, O., Kubiniy, N. and Marhitich, V. 2021. Modeling the process of forming the safety potential of engineering enterprises. International *J. Safety and Security Engineering*, **11**(3): 223-230.
- Levytska, O., Mulska, O., Ivaniuk, U., Kunytska-Iliash, M., Vasyltsiv, T. and Lupak, R. 2020. Modelling the conditions affecting population migration activity in the eastern european region: The case of ukraine. *TEM Journal*, **9**(2): 507-514.
- Lopatovska, I., Arora, K., Fernandes, F.V., Rao, A., Sivkoff-Livneh, S. and Stamm, B. 2022. "Experiences of the Ukrainian adolescents during the Russia-Ukraine 2022 War", *Information and Learning Sciences*, **123**(11/12): 666-704.
- Mattera, M. and Soto, F. 2023. "Dodging the bullet: overcoming the financial impact of Ukraine armed conflict with sustainable business strategies and environmental approaches", J. Risk Finance, **24**(1): 122-142.
- Nikonenko, U., Shtets, T., Kalinin, A., Dorosh, I. and Sokolik, L. 2022. Assessing the policy of attracting investments in the main sectors of the economy in the context of introducing aspects of industry 4.0. *Int. J. Sustainable Development and Planning*, **17**(2): 497-505.
- Quirke, E., Klymchuk, V., Gusak, N., Gorbunova, V. and Sukhovii, O. 2022. "Applying the national mental health policy in conflict-affected regions: towards better social inclusion (Ukrainian case)", *Mental Health and Social Inclusion*, 26(3): 242-256.
- Redko, K., Borychenko, O., Cherniavskyi, A., Saienko, V., Dudnikov, S. 2023. Comparative analysis of innovative development strategies of fuel and energy complex of Ukraine and the EU countries: international experience. *Int. J. Energy Economics and Policy*, **13**(2): 301-308.
- Territorial Planning and Sustainable Development of Refugee Areas Uhodnikova, O., Viatkin, K. Gordiienko, S. Viatkin, R. and Moroz, N. 2023, 536 LNNS, pp. 368–377 Lecture Notes in Networks and Systems https://www. webofscience.com/wos/author/record/16822751