A. Fesun¹, orcid.org/0009-0002-1433-3087, A. Tretiakova*², orcid.org/0009-0005-1652-6482, Ye. Lytovchenko³, orcid.org/0009-0006-5739-3556, A. Maksiuta¹, orcid.org/0009-0002-5313-403X, A. Velychko¹, orcid.org/0000-0002-2928-2393

https://doi.org/10.33271/nvngu/2024-2/201

- 1 Kyiv National University of Construction and Architecture, Kyiv, Ukraine
- 2 Interregional Academy of Personnel Management, Kyiv, Ukraine
- 3 Simon Kuznets Kharkiv National University of Economics, Kharkiv, Ukraine
- * Corresponding author e-mail: fin@ei.net.ua

GLOBAL INVESTMENT AND FINANCING OF CIVIL CONSTRUCTION IN UKRAINE UNDER MARTIAL LAW

Purpose. To conduct a comprehensive analysis of investment relations, particularly in the context of investing in civil construction in Ukraine under martial law. It involves comparing financial models and restoration strategies successfully applied in other countries and determining their applicability in the Ukrainian context.

Methodology. The study employed statistical analysis and the "case-study" method, which involves planning the future based on past cases. This approach helped identify common challenges faced by all investors and explore possible solutions. The use of these methods yielded well-founded results and practical recommendations for improving investment relations in civil construction in Ukraine during wartime between different investment classes.

Findings. The study explored opportunities to attract international investments in civil construction amid the largest military conflict since World War II, which is a key element of effective housing recovery. Initiatives facilitating the adoption of eco-friendly technologies were examined, with financial support from the World Bank and IMF serving as essential resources. In the near future, the application of the "case-study" method, utilizing Ukraine's experience and analyzing intellectual assets and developments, is proposed. Sources of funding that can contribute to civil construction development were also investigated and analyzed. The direct impact of military actions on the financial flows of each region was identified, indicating a significant outflow of funds from the country.

Originality. It is recommended to implement EU initiatives at the state level, providing opportunities for the application of eco-friendly technologies. New strategies for effective financial management during wartime are proposed for consideration by government agencies. This approach expands scientific knowledge in the fields of finance and construction management and enhances civil construction management overall.

Practical value. The research results can be utilized by private and public institutions, including the International Organization for Migration (IOM) in Ukraine, for the development of further emergency housing recovery projects for population use.

Keywords: civil construction, housing recovery, construction investment, international economy

Introduction. Today, the question of housing recovery for citizens is very acute against the backdrop of military aggression against our country. As of January 2024, one of the largest projects for housing recovery belongs to the National Recovery Council of Ukraine, established under the leadership of the Cabinet of Ministers of Ukraine. According to the working group "audit of losses due to war" of the National Council (July 2023), the estimated number of destroyed residential buildings is at least one million.

Demographic losses from armed conflicts are significant, but their precise assessment is currently complicated. According to studies by the European Bank for Reconstruction and Development, even 25 years after the end of wars, the population of affected countries remained noticeably smaller than in analogous countries that did not experience armed conflicts. The main components of these losses are casualties from military actions, mass migration of refugees, and reduced birth rates.

According to data from the European Bank for Reconstruction and Development, the average economic loss from wartime conflicts involves a decrease in GDP per capita by 9 % compared to pre-war levels. However, the most devastating and extensive wars have led to a decrease in GDP per capita by as much as 40–70 % (Transition Report 2022–2023). In view of such data, attracting international funds for the reconstruction of civil construction even during wartime, provided that there are no direct military actions on the adjacent territory, is an important task for the country in need of funding for

© Fesun A., Tretiakova A., Lytovchenko Ye., Maksiuta A., Velychko A., 2024

rapid recovery and, ultimately, further development of infrastructure, as well as economic development overall.

Literature review. The wave of damage assessments has engulfed economists worldwide, starting from the second day of hostilities on our country's territory, as having superficial information about the number of damaged buildings, structures, infrastructure, and so on is insufficient. A multiplicative effect emerges. The destruction of non-residential buildings leads to increased unemployment since it becomes impossible for the population to work in them, thereby increasing poverty indicators in the region, which, in turn, reduces tax revenues to local budgets, ultimately hindering the allocation of additional funds from these same local budgets for repairs and reconstruction of anything, including subsidies for damaged housing.

According to UN economists' conclusions, the Ukrainian economy suffered losses of more than 35 % in 2022 due to significant destructive impacts on infrastructure, including railways and other transportation links with neighboring countries, road networks, and bridges. Production and trade activities were disrupted, and a large amount of labor was lost due to migration or mobilization into the army.

According to estimates by the Ministry of Economy and the Kyiv School of Economics in 2023, the total losses to the Ukrainian economy due to the war, considering both direct losses calculated in this project and indirect losses (GDP reduction, cessation of investments, labor outflow, additional defense and social support expenditures, etc.), are estimated at 543 to \$600 billion.

Analysis conducted by Balazs Egert and Christine de la Maisonneuve, scholars at the Organisation for Economic Cooperation and Development (OECD), confirms that human capital losses will have a significant impact for many decades, until 2085. This pertains not only to direct consequences of military actions but also to the overall productivity decrease due to losses in education, health, and other aspects of human potential. A peak productivity reduction of 7 % in 2035 indicates serious challenges facing the country's economy, requiring a comprehensive approach to address.

Material losses resulting from the conflict, according to economists at "Obserwator Gospodarczy", amount to approximately \$140 billion (Fig. 1). However, according to the World Bank, the cost of infrastructure and economic reconstruction may exceed \$410 billion. This significantly surpasses Ukraine's annual GDP before the start of Russian aggression, indicating enormous losses that need to be restored. It is important to note that prior to the conflict, Ukraine's economy demonstrated steady GDP growth, but the invasion significantly altered this indicator and posed serious challenges for economic recovery.

At the same time, they emphasize that energy, housing, and road infrastructure will be relatively quickly restored due to funds from international organizations, initially as grants and as infrastructure and housing investments in the near term.

Recognizing the importance of housing restoration for refugees and the benefits of their return to the homeland for "kick-starting" the economy within the country, which in the era of globalization will contribute to the growth of other countries' economies, certain countries have begun to strive for the rapid development and implementation of plans to provide grants and investments in Ukrainian recovery.

The ideas found reflection in the research by Ukrainian and foreign economists, leading to the conclusion that each project will be unique, and there is no universal approach to achieving the society's goal of rapidly restoring Ukraine's housing stock.

Mustafa Nayyem, the Head of the State Agency for Reconstruction and Development of Infrastructure of Ukraine, during the round table "Export, Logistics, and Transport Corridors" within the framework of #URC2023, noted: "Ukraine, as a future EU member, seeks to integrate into the union's transport system, but it needs assistance in restoring the infrastructure damaged by the war unleashed by Russia. The reconstruction of roads, railways, ports, and the development of cross-border logistics will turn the country into the largest construction site since World War II. Ukraine's infrastructure can become a major market for international financial organizations, banks, private investors, and contractors".

The authors of the article believe that such an approach to attracting international investments is entirely justified. Along-side infrastructure, housing stock will also be restored without exaggeration. Such restoration will significantly and rapidly increase the basic economic indicators and contribute to fur-

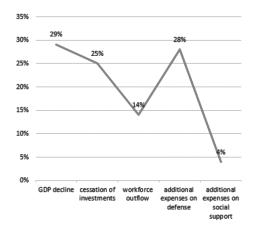


Fig. 1. Graph of indirect economic losses of Ukraine due to war over 1.5 years of hostilities

ther growth. In turn, these investments will be effective and become medium-term investments with future profits for investors not only within the country but also help attract investors from abroad [6].

Unsolved aspects of the problem. Investing in civil construction in Ukraine during wartime faces several unresolved aspects that complicate its implementation. Some of them include:

- 1. Security Risk: The war in Ukraine poses a danger to investors and construction workers. The presence of hostilities in certain regions can lead to the destruction of construction sites and threaten the lives and health of workers.
- 2. Legal System Instability: Ukraine faces issues of corruption and an underdeveloped legal system. This can hinder investors as they may encounter opaque procedures, unlawful interventions, and difficulties in resolving legal matters.
- 3. Economic Instability: War has a negative impact on Ukraine's economy, which can affect investment activity. Currency depreciation, inflation, and reduced purchasing power can decrease demand for new construction and delay investment projects.
- 4. Lack of Infrastructure: Many construction projects in conflict zones cannot be realized due to a lack of necessary infrastructure. Rebuilding and developing infrastructure require significant investments, but without them, construction may be limited or impossible.
- 5. High Security Costs: War necessitates significant spending on ensuring the security of construction sites. This may include expenses for installing security systems, hiring guards, and additional measures to protect workers and equipment.

These unresolved aspects complicate investment in civil construction in Ukraine during wartime. To address these issues, it is necessary to improve the legal system, ensure investor security, improve economic stability, and enhance infrastructure. Additionally, state programs and incentives may be introduced to attract investment in civil construction in conflict zones.

Attracting international investment in civil construction amid ongoing military actions is a key element of effective recovery.

The purpose of the article. The purpose of the article is to conduct research aimed at increasing understanding of the issues and identifying ways to address unresolved aspects of medium-term investment in civil construction in Ukraine during wartime. This research aims to contribute to attracting investments and facilitating rapid development of the construction industry as a whole in the country.

The research goal involves studying and conducting a comprehensive analysis of the implementation of investment relations, particularly in the context of investing in civil construction in Ukraine during wartime. This includes comparing financial models and recovery strategies successfully applied in other countries and determining their applicability in the Ukrainian context.

Methods. To investigate the implementation of investment relations, especially in the context of investing in civil construction in Ukraine during wartime, the following methods were used: statistical analysis for directly analyzing trends, relationships, and the impact of various factors on investment activity in the construction industry, as well as case studies. Specifically, studying specific cases of investments in civil construction in Ukraine during wartime to identify the problems faced by investors and explore possible solutions, including, but not limited to, the investment activities of the International Organization for Migration under the UN [7, 8].

Results. The restoration of civilian housing often becomes a crucial stage for countries seeking to rebuild their economy as well as infrastructure. Attracting investments, including international ones, plays a significant role in this process, along with initiatives that primarily support sustainable, competitive, and environmentally friendly construction.

Among the myriad of programs implemented in the years 2022-2024, the authors would like to focus primarily on the "Green Deal" initiative by the European Union. In the context of recovery during and after conflict, initiatives related to sustainable development and green construction become key. The European Union is implementing the "Green Deal" aimed at reducing CO_2 emissions, increasing energy efficiency, and supporting green technologies in construction.

This movement not only stimulates internal initiatives but also has the potential to attract international investors interested in projects aimed at sustainable reconstruction. In particular, investors may receive incentives and support from European funds on the condition of implementing green technologies [9, 10] (Fig. 2).

Taking into account the Ukrainian Government's declared desire to join the EGD and the steps already taken in this direction, as well as the importance of public awareness of its goals, structure, and instruments for advancing towards climate neutrality, the Representation of the European Union in Ukraine has launched a comprehensive information and communication campaign aimed at conveying to Ukrainians relevant, objective, and comprehensive information about the European Green Deal.

However, the main instruments are the emissions trading system and the carbon tax. The European Emissions Trading System (EU ETS) is implemented based on the European Union Directive on Emissions Trading 2003/87/EC and operates on a "cap-and-trade" principle since 2005. This system allows companies to buy and sell $\rm CO_2$ emission permits, which helps regulate pollution levels and incentivizes the implementation of clean technologies.

The proceeds from the sale of CO_2 emission permits within the EU ETS serve as a source of income for member states, which can be directed towards projects aimed at minimizing carbon emissions and implementing energy systems based on renewable energy sources, including in civil construction. This contributes to reducing the negative impact on the environment and supports the transition to sustainable development.

When considering larger-scale projects, it is worth noting the financial support from the World Bank and the IMF. However, investment and project implementation are only possible after the acute phase of military operations [11, 12].

The World Bank and the International Monetary Fund (IMF) play a crucial role in financing post-conflict recovery projects. Their programs are aimed at improving economic stability, the social sphere, and infrastructure (Fig. 3).

Financial support can be provided in the form of loans and grants for the reconstruction of housing stock, road rehabilitation, energy systems, and other key infrastructure. In this con-

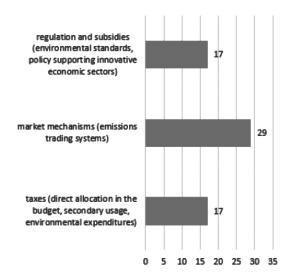


Fig. 2. Instruments for Stimulating CO₂ Emissions Reduction

million euros

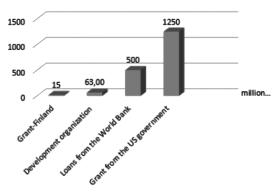


Fig. 3. Assistance from International Financial Institutions to Ukraine (June 2023)

text, it is important to consider sustainability and environmental standards, which can increase the attractiveness of projects for international investors.

Attracting international investments in civil construction amid ongoing military operations is a key element of effective recovery. Initiatives such as the "Green Deal" from the European Union provide opportunities for the implementation of clean technologies, while financial support from the World Bank and IMF serves as a source of necessary resources.

This opens up new prospects for countries recovering from conflicts, promoting economic development and improving the quality of life for the population. Attracting international investments with a focus on sustainability is a step towards creating a sustainable and environmentally safe future [13].

Ukraine's recovery, especially in the civil sector, somewhat differs from other post-war reconstructions faced by humanity in the 20th and 21st centuries. Undoubtedly, the already approved programs of the European Union will not be hindered, but it is primarily worth considering the area — our country is the largest in Europe in terms of territory. This factor plays a key role in planning reconstruction even during a state of war and attracting investors directly in wartime, rather than after its end. Approximately 18 % of the country's territory is occupied, about 2 % are directly affected by hostilities, and the remaining 80 % should already be considered as a planned construction site for future investors.

Using the case study method, which involves analyzing specific situations and cases from the past, known as "cases", for joint analysis and forecasting of the future, the authors analyzed the results of studies by the EBRD, statistical data from UN economists, and so on.

Among the many investment projects aimed at profit generation, one should not underestimate state regulation, which is not profit-oriented but significantly affects many factors; for example, underestimating or failing to account for changes in state regulation can lead to significant losses and bankruptcies of enterprises, and so on.

In the process of studying the role of state regulation and creating a regulatory framework for the construction industry, it is important to consider international experience and best practices applied after World War II.

In particular, the so-called "Marshall Plan", initiated by the United States and providing economic assistance to European countries affected by World War II, is noteworthy. Officially known as the European Recovery Program, this plan operated from 1948 to 1952.

The initiative included providing financial assistance, technical support, and resources for the reconstruction of infrastructure, industry, and agriculture in European countries.

The Marshall Plan was seen as an attempt not only to rebuild the economy but also to create conditions for sustainable development and prevent the spread of communism. The results of the recovery were impressive. The countries receiving assistance quickly restored their economy and improved living standards [14, 15]. For example, West Germany experienced an economic boom and overcame the consequences of war within 2 years, while the United Kingdom experienced significant improvement within the first half-year of assistance. It is worth noting that the United Kingdom received the highest financial support due to the worst situation after the end of hostilities. Its infrastructure, especially in major cities, practically ceased to exist.

The Marshall Plan undoubtedly achieved what it was directly implemented for, namely, instantly (in a few years) increasing the weighted average gross domestic product in Europe by 32.8 %, starting from \$119 billion in 1947 and reaching \$159 billion in 1951, at the time of the actual end of donor assistance to countries (Fig. 4). Not surprisingly, due to such results, this initiative is considered the most successful undertaking for shaping modern foreign policy in the history of the United States.

This case officially ceased its activities on December 31, 1951. However, despite a large amount of criticism throughout its operation, the principles of this practical strategy laid a solid foundation for the formation of investment policy not only on our continent but also worldwide.

The Marshall Plan proved to be a significant step in supporting the reconstruction of Europe after the war and establishing economic stability in the region. However, a number of difficulties were identified, including the lack of coordination between the private sector and government regulation, which in turn led to a decrease in the effectiveness of investment plans. It is worth noting that by the end of the plan implementation, the indicators still exceeded expectations several times, despite the challenges at the time.

Regarding the reconstruction plan for Ukraine, the "Marshall 2.0" version, which was approved by the majority of European countries at the Lugano Forum in 2023 and published in mass media including the online journal "Ukrainska Pravda", comprises 15 points:

- 1. Modernization of residential architecture (\$250 billion). Introduction of energy efficiency enhancements for residential buildings, construction of new housing units, and repair of damaged buildings. The project includes the complete modernization of water supply, sewage systems, and heating.
- 2. Environmental and sustainable development projects totaling \$20 billion. These include the construction of waste recycling complexes, creation of natural parks, restoration of salt mines in Zakarpattia, reduction of the Chernobyl exclusion zone from 30 to 15 km, construction of 15 wildlife crossings, and dozens of wildlife rehabilitation centers.
- 3. Energy security (\$130 billion). Large-scale projects involving other countries such as the construction of hydroelectric and pumped storage power plants, nuclear power plants, completion of two additional units at the Khmelnytskyi Nu-

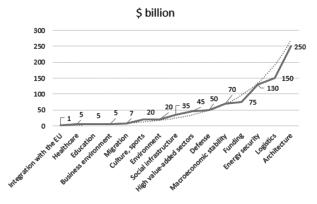


Fig. 4. Donor Assistance for Countries under the Marshall Plan from the United States in 1948–1951

- clear Power Plant, modernization of other nuclear power plants, and infrastructure for green hydrogen production.
- 4. Macroeconomic stability (\$70 billion). Covering the state budget deficit, including maintaining existing infrastructure in good condition.
- 5. Business environment (\$5 billion). Implementation of projects for deregulation and digitalization of business-government interaction.
- 6. Value-added sectors (\$45 billion). Investment in agriculture, implementation of conveyor production in furniture manufacturing, engineering, metallurgy and IT.
- 7. Modern social infrastructure (\$35 billion). Energy-efficient and barrier-free industrial park design, expansion of charging station networks for electric vehicles, and restoration of destroyed facilities.
- 8. Defense and security (\$50 billion). Updating armed forces and defense industry, including construction of modern shelters for advanced weaponry.
- 9. EU integration (\$1 billion). Alignment of Ukrainian and European legislation, bringing Ukrainian norms into the international legal framework.
- 10. Access to financing (\$75 billion). Protection of investments, including construction projects, from military risks, state support through grants and low-interest loan programs during and after the war, bank capital support, and establishment of a development bank based on a state-owned bank.
- 11. Healthcare (\$5 billion). Construction and launch of a national program to support mental health among war-affected people, development of specialized healthcare facilities, and digital services.
- 12. Logistics and communications (\$150 billion). Reconstruction of damaged infrastructure and creation of new facilities, such as building 200 kilometers of European-standard railway tracks, establishing transboundary agricultural warehouses and terminals, and constructing three new border checkpoints with EU countries. Restoration of 25,000 kilometers of roads and reconstruction of several damaged airports, including runways for military aviation, is also prioritized.
- 13. Education (\$5 billion). Investment in university research centers, updating IT programs for leading universities, and school reform.
- 14. Culture and sports (\$20 billion). Architectural solutions for the restoration of destroyed cultural institutions, memorials, museums, cultural centers, and youth sports schools, and development of theater and cinema.
- 15. Social support and migration policy (\$7 billion). Pension system reform, implementation of e-programming for integrating war veterans, and housing access programs.

Such step-by-step planning for Ukraine is a very important and successful initial step in attracting investment and ultimately in rebuilding the economy and social development of the country even during wartime. Financing civil construction will facilitate restoration of the current infrastructure and formation of the new, more modernized necessary infrastructure for the population, create new jobs, and improve the overall quality of life (Fig. 5). The plan will contribute to the rapid recovery of the economy, development of education and healthcare, thereby enhancing the overall quality of life for citizens in the country. As a result of plan implementation, significant achievements will be made, helping Ukraine overcome postwar difficulties and embark on the path to further development.

Conclusions. Ukraine, as a country experiencing war, faces a significant need for the restoration and development of its infrastructure, particularly in civil construction. However, in the conditions of conflict, investing in this sector becomes a challenging task due to a number of unresolved aspects. This article investigated and analyzed sources of funding that could contribute to the development of civil construction. The main ones include:

1. International grants for civil construction development. One possible source of funding for civil construction in

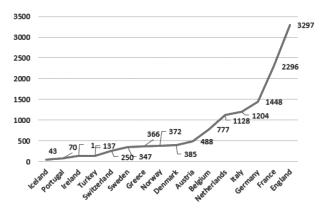


Fig. 5. Reconstruction Plan for Ukraine, Billion USD

Ukraine is international grants. Many international organizations and states provide financial support for the reconstruction and development of infrastructure in conflict zones. For example, the European Union has introduced the "Green Deal" program to promote sustainable development and the restoration of affected infrastructure in Ukraine. This program provides financial support for rebuilding buildings, energy systems, and other infrastructure objects.

Additionally, organizations such as the World Bank and the International Monetary Fund also provide financial support for the reconstruction and development of infrastructure in Ukraine. These organizations offer loans and grants for the construction of roads, schools, hospitals, and other facilities.

2. Other sources of funding. Besides international grants, there are other sources of funding that can be used for development.

For example, private investments can be attracted through the establishment of special investment funds or public-private partnerships. These investments can be directed towards the construction of residential complexes, commercial buildings, and infrastructure objects.

Government budget funds can also be used for the development of civil construction. The government can allocate funding for the construction of schools, roads, hospitals, and other social facilities. Additionally, tax incentives and incentives may be introduced to attract private investments in civil construction.

Attracting international investments with a focus on sustainability is a step towards creating a sustainable and environmentally safe future.

However, it is important to remember the drawbacks that are always present in financial planning. If we look at "Marshall Plan 2.0" through the lens of SWAT analysis, it becomes evident that the excellent indicators achieved more than 70 years ago were due to the implementation of comprehensive reconstruction in existing countries. Also, economic flows between countries, which began to grow rapidly due to the end of hostilities, boosted the economies of countries. It was precisely due to the 40 % increase in trade operations in the first postwar year that a positive effect from the scale was obtained.

It is worth noting that the current military conflict does not affect countries directly bordering Ukraine. All countries sharing borders with our homeland have not lost trade chains between them, do not suffer infrastructure losses, and moreover, citizens capable of working and paying taxes do not flee their countries. On the contrary, they find refuge there and start working, thereby increasing the gross domestic product of these countries while Ukraine suffers from destruction. That is why a clear understanding is needed that differences and adjustments undoubtedly must be implemented and the implementation between Marshall Plan 2.0 for Ukraine nearly 80 years after the successful implementation of the Marshall Plan for the whole of Europe should differ.

References.

- 1. Chrostowski, G. (2023) Ukraina. Straty w kapitale ludzkim mogą obniżyć produktywność nawet o 7 %! *Obserwator Gospodarczy*. Retrieved from https://obserwatorgospodarczy.pl/2023/06/27/ukraina-straty-w-kapitale-ludzkim-moga-obnizyc-produktywnosc-nawet-o-7/.
- **2.** Bigun, N. (2024). We propose foreign businesses to invest in Ukraine in sectors with the greatest growth potential. *Ministry of Economy of Ukraine*. Retrieved from https://www.me.gov.ua/News/Detail?lang=ukUA&id=4274ee88-2119-4cc5-9a3264f94efbe4be&title=ProponumoInozemnomu.
- 3. Kyiv School of Economics. Direct losses inflicted on Ukraine's infrastructure during the war amount to nearly \$63 billion. The total economic losses amount to \$543–600 billion (n.d.). Retrieved from https://kse.ua/ua/about-the-school/news/zbitki-naneseni-infrastrukturi-ukray-ini-v-hodi-viyni-skladayut-mayzhe-63-mlrd/.
- **4.** OECD (2005). Policy of foreign direct investment in Lviv region, Ukraine. Global investment flows. Retrieved from https://www.oecd.org/cfe/leed/37068837.pdf.
- **5.** Chernushov, V., Shynkarenko, V., Kovaliyova, I., & Okara, D. (2019). The current state of foreign investment in agriculture, forestry. Retrieved from http://www.agrosvit.info/pdf/21 2019/7.pdf.
- Adamska, I. (2019). Current state and development trends of the construction industry of Ukraine. *Galician Economic Bulletin*, 5(60), 7-15.
 Atroshchenko, O. (2021). Problems of attracting investments into the economy of Ukraine. Education and science of today: Intersectoral issues and development of sciences. *European Scientific Platform*. https://doi.org/10.36074/logos-19.03.2021.v1.03.
- **8.** Balanska, O., Yemelyanov, O., & Melnyk, V. (2021). Indicator system of retrospective assessment of the riskiness of investing in residential construction. *Scientific practice: Modern and classical research methods. European Scientific*. https://doi.org/10.36074/logos-26.02.2021.v1.06.
- **9.** Balanska, O. I. (2016). Typology of risks of the housing construction financing system. *Bulletin of Mykhailo Ostrogradsky National University of Kremenchug*, 4(99), 100-107.
- **10.** Bukreeva, D. S., & Nosal, O. V. (2022). International financing and restoration of financial stability of Ukrainian enterprises in the postwar period. *Efektyvna ekonomika*, *12*. https://doi.org/10.32702/2307-2105.2022.12.39.
- 11. Viter, O., Kylin, O., & Martyn, O. (2023). World experience of post-war economic recovery: An example for Ukraine. *Theoretical and practical aspects of modern scientific research: II International Scientific and Practical Conference*. April 28, 2023, Seoul, South Korea. https://doi.org/10.36074/logos-28.04.2023.02.
- 12. Goncharov, Yu. V., & Korotenko, V. V. (2022). Successive steps towards the recovery of Ukraine's economy. *Research on innovations and prospects for the development of science and technology in the 21st century: Materials of the International Scientific and Practical Conference*, (pp. 280-283). November 10, 2022, Rivne. Lviv—Toruń: Liha-Press. https://doi.org/10.36059/978-966-397-278-7-69.
- 13. Dzyubanovska, N., & Maslii, V. (2023). Foreign direct investments and their impact on the finances of business entities: Theoretical aspect. *Transformational processes of the national economy in today's conditions: materials of reports of the International Scientific and Practical Conference*, (pp. 122-125). Kyiv, April 8, 2023. Lviv-Torun: Liha-Pres. https://doi.org/10.36059/978-966-397-296-1-26.
- **14.** Zayats, V. S. (2019). Housing construction development as a factor of formation of housing conditions of population. *Demography and Social Economy*, *2*(36), 137-151. https://doi.org/10.15407/dse2019.02.137. **15.** Ivakhnenko, I. (2021). Prospects for the use of modern construction financing mechanisms. *Economy and Society*, *25*. https://doi.org/10.32782/2524-0072/2021-25-26.
- **16.** Kulakov, O.O. (2023). Foreign investments as a factor in the development of international relations. *Reforming international economic relations and the world economy in modern conditions: materials of reports of the International Scientific and Practical Conference*, (pp. 20-23), Uzhhorod, March 24–25, 2023. Lviv-Torun: Liha-Pres. https://doi.org/10.36059/978-966-397-295-4-4.
- 17. Latysheva, O., Rovenska, V., Smyrnova, I., Nitsenko, V., Balezentis, T., & Streimikiene, D. (2020). Management of the sustainable development of machine-building enterprises: A sustainable development space approach. *Journal of Enterprise Information Management,* 34(1), 328-342. https://doi.org/10.1108/JEIM-12-2019-0419.
- **18.** Kryshtanovych, M., Akimova, L., Akimov, O., Kubiniy, N., & Marhitich, V. (2021). Modeling the process of forming the safety potential of engineering enterprises. *International Journal of Safety and Security Engineering*, *11*(3), 223-230. https://doi.org/10.18280/ijsse.110302. **19.** Sumets, A., Kniaz, S., Heorhiadi, N., Skrynkovskyy, R., & Matsuk, V. (2022). Methodological toolkit for assessing the level of stabil-

ity of agricultural enterprises. *Agricultural and Resource Economics*, $\delta(1)$, 235-255. https://doi.org/10.51599/are.2022.08.01.12.

20. Lelyk, L., Olikhovskyi, V., Mahas, N., & Olikhovska, M. (2022). An integrated analysis of enterprise economy security. *Decision Science Letters*, 11(3), 299-310. https://doi.org/10.5267/j.dsl.2022.2.003.
21. Akimov, O., Karpa, M., Parkhomenko-Kutsevil, O., Kupriichuk, V., & Omarov, A. (2021). Entrepreneurship education of the formation of the e-commerce managers professional qualities. *International Journal of Entrepreneurship*, 25(7), 1-8.

22. Mia, M. M., Rizwan, S., Zayed, N. M., Nitsenko, V., Miroshnyk, O., Kryshtal, H., & Ostapenko, R. (2022). The impact of green entrepreneurship on social change and factors influencing AMO theory. *Systems*, *10*(5), 132. https://doi.org/10.3390/systems10050132.

23. Nikonenko, U., Shtets, T., Kalinin, A., Dorosh, I., & 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. *International Journal of Sustainable Development and Planning*, 17(2), 497-505. https://doi.org/10.18280/ijsdp.170214.

24. Kovalko, O., Eutukhova, T., & Novoseltsev, O. (2022). Energy-related services as a business: Eco-transformation logic to support the low-carbon transition. *Energy Engineering: Journal of the Association of Energy Engineering*, 119(1), 103-121. https://doi.org/10.32604/EE.2022.017709.

25. Novak, A., Pravdyvets, O., Chornyi, O., Sumbaieva, L., Akimova, L., & Akimov, O. (2022). Financial and economic security in the field of financial markets at the stage of European integration. *International Journal of Professional Business Review*, 7(5), e0835. https://doi.org/10.26668/businessreview/2022.v7i5.e835.

Глобальне інвестування та фінансування цивільного будівництва в Україні в умовах воєнного стану

А. С. Фесун 1 , А. І. Третякова *2 , Є. П. Литовченко 3 , А. П. Максюта 1 , А. В. Величко 1

- 1 Київський національний університет будівництва і архітектури, м. Київ, Україна
- 2 Міжрегіональна академія управління персоналом, м. Київ, Україна
- 3 Харківський національний економічний університет імені Семена Кузнеця, м. Харків, Україна
- * Автор-кореспондент e-mail: fin@ei.net.ua

Мета. Проведення всебічного аналізу щодо реалізації інвестиційних відносин, зокрема в контексті інвестування у цивільне будівництво в Україні в умовах воєнного стану. Порівняння фінансових моделей і стратегій відновлення, що успішно застосовувались в інших країнах,

і визначення їхньої використання в українському контексті

Методика. У дослідженні були використані статистичний аналіз, а також метод «кейс-студії», що пропонує планування майбутнього на основі минулих кейсів, який, без сумніву, допоміг з'ясувати проблеми, з котрими стикаються усі інвестори без винятку, та розглянути можливі шляхи їх вирішення. Використання даних методів допомогло отримати обґрунтовані результати та практичні рекомендації щодо вдосконалення інвестиційних відносин у цивільному будівництві в Україні в умовах війни між різними класами інвестування.

Результати. Досліджені можливості залучення міжнародних інвестицій у цивільне будівництво в умовах найбільшого військового конфлікту з часів другої Світової війни, що є ключовим елементом ефективного відновлення житла громадян. Розглянуті ініціативи, що надають можливості для впровадження екологічно чистих технологій, тоді як фінансова підтримка від Світового Банку та МВФ стає джерелом необхідних ресурсів. Запропоновано у недалекому майбутньому застосовувати метод «кейс-студії», використовуючи досвід України та аналізуючи наші інтелектуальні надбання й розробки. Проаналізовані джерела фінансування, що можуть сприяти розвитку цивільного будівництва. Виявлено прямий вплив військових дій на фінансові потоки кожної області, що безпосередньо вказує на відтік грошових коштів з усієї країни.

Наукова новизна. Рекомендовано впроваджувати на державному рівні ініціативи для населення від Європейського Союзу, що надають можливості для використання екологічно чистих технологій. Рекомендовані до розгляду державними установами нові стратегії для ефективного управління фінансами у військовий час. Запропонований підхід дозволяє розширити наукові знання в галузі фінансів і будівництва, а також сприяє покращенню управління цивільним будівництвом загалом

Практична значимість. Результати дослідження можуть використовуватися приватними й державними установами, зокрема Міжнародною організацією з Міграції (МОМ) при ООН в Україні, для розвитку подальших проєктів з екстреного відновлення багатоквартирного цивільного житла для подальшого використання населенням.

Ключові слова: цивільне будівництво, відновлення житла, інвестування будівництва, міжнародна економіка

The manuscript was submitted 19.10.23.