FINANCIAL INSTRUMENTS FOR THE POST-WAR RECONSTRUCTION OF CRITICAL INFRASTRUCTURE: INTERNATIONAL EXPERIENCE AND PROSPECTS FOR IMPLEMENTATION IN UKRAINE

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Abstract. *The article examines successful practices and cases of financial support for post-war reconstruction of critical infrastructure in countries of the world that at one time suffered from armed conflicts and active hostilities. The study of world experience shows the need to attract international funding mainly in the form of grants, focusing on the tasks of effective development of critical infrastructure using the mechanism of public-private partnership. At the same time, each country has its own specific features. It has been established that the main financial instruments used in the countries of the world for the post-war reconstruction and modernization of critical infrastructure facilities include the following: non-refundable financial assistance from the USA, loans, direct foreign investments, state budget funds, funds of individuals and legal entities, grants funds, donor assistance from international financial organizations, financial assistance from non-governmental organizations, preferential loans, reparation. On the basis of the generalization of the best international experience, the prospects of its introduction in the modern conditions of the development of the economy of Ukraine are determined. It is proposed to develop a National Strategy for the post-war reconstruction of critical infrastructure in Ukraine and a Plan for its implementation, in which appropriate financial instruments and institutions will be defined.*

Keywords: *national economy, critical infrastructure, post-war reconstruction, development, financial instruments, financial institutions, financial support, international experience.*

Introduction. Currently, there are many examples of effective practice of post-war reconstruction of critical infrastructure in countries that at one time suffered from armed conflicts and active hostilities. At the same time, the creation of adequate financial support is recognized as one of the priority directions for the restoration and modernization of critical infrastructure facilities in most countries of the world.

The study of various aspects of ensuring the effective development of critical infrastructure as a multifunctional system is given considerable attention in the works of leading scientists (A. Parlikad, B. Rathnayaka, D. Rehak, C. Scholz, L. Shen, R. Srinivasan, R. Wróbel, C. Zhang and others).

Thus, this problem determined the purpose of the paper, which consists in researching and summarizing best practices in the application of financial instruments for the post-war reconstruction of critical infrastructure in the countries of the world.

Research methodology. The following general scientific methods were used in the research process: analysis and synthesis, induction and deduction, component analysis, comparison, analogy, classification, expert survey, structural and logical generalization.

As a result of a survey conducted in 2020 by The Global Infrastructure Investor Association (GIIA) together with the international research company Ipsos Group, it was established that investments in infrastructure development should become a key component in the plans of governments of various countries around the world to ensure economic recovery after natural disasters and cataclysms, armed conflicts and wars, pandemics, etc. At the same time, 79% of respondents agree that investments in infrastructure will contribute to the creation of new jobs and increase the level of economic development. And 68% of respondents believe that the government should prioritize investments in infrastructure as part of the recovery of the national economy. However, 59% claim that the government of their country implements insufficient measures to provide infrastructure for the development of the economy.

Research results. As research shows, one of the instruments of the post-war reconstruction of the infrastructure of European countries was the financial investment from the USA within the framework of the "Program for the Reconstruction of Europe" (or "Marshall Plan"), the implementation of which began in 1948. Over the course of four years, the United States provided Europe with more than 17 billion dollars (currently it is about 210 billion dollars) in the form of cheap loans (20% of the total amount) and free financial assistance (80%) mostly for raising industry. In addition, during 1945-1947, Europe received 14 billion directly for the restoration of infrastructure. The United States announced that its money was earmarked for eighteen European countries, but Great Britain, France, Italy, and West Germany received the largest share. 2/3 of all

financial resources were spent on these four countries. The study of quite successful foreign practices and cases shows the need to attract international funding mainly in the form of grants, focusing on the tasks of effective restoration and development of critical infrastructure using the public-private partnership mechanism. At the same time, each country has its own specific features and differences.

It was established that the main financial instruments used in the countries of the world for the post-war reconstruction and modernization of critical infrastructure facilities include the following: non-refundable financial aid from the USA (Italy, Germany, Great Britain, France, Iran, South Korea, Japan); credit resources (Italy, Germany, Iran); direct foreign investments (Iran, Serbia, South Korea, Japan); state budget funds (South Korea, Croatia, Japan); funds of individuals and legal entities (Bosnia and Herzegovina, Iran, South Korea, Croatia, Japan); grant funds (Bosnia and Herzegovina, Germany, South Korea, Croatia); donor aid from international financial organizations (Bosnia and Herzegovina, Iran, Croatia); financial assistance to non-governmental organizations (Bosnia and Herzegovina, Iran, Croatia); preferential loans (Bosnia and Herzegovina, Iran); reparation (South Korea).

If we consider Ukraine, it should be noted that the priority direction of the post-war reconstruction of the national economy is recognized as the development of critical infrastructure facilities from the standpoint of ensuring national security [1-3]. According to expert assessments of the Kyiv School of Economics, the total amount of damage caused to the infrastructure of Ukraine as a result of the full-scale invasion of Russia is 143.8 billion dollars.

According to the calculations of the World Bank, the total amount of necessary financial funds for the post-war reconstruction and modernization of the economy of Ukraine amounts to 411 billion dollars. At the same time, the necessary volume of investment resources for the reconstruction and restoration of critical infrastructure facilities in 2023 is 14 billion dollars or 3.4% of the total amount of financing. Over 22% of the investment volume is for the reconstruction of transport infrastructure; 17% – residential and communal; 11% – energy; 7% – infrastructure of the agro-industrial complex. In addition, the World Bank approved in 2023 additional financing of the project "Restoration of the main logistics infrastructure and connection to the network" in the amount of 535 million dollars. Funding in the form of grants will be provided within the framework of the Support, Restoration, Reconstruction and Reformation Trust Fund of Ukraine.

Conclusions. Therefore, with the aim of post-war reconstruction of critical infrastructure in Ukraine, it is expedient to apply the best experience of various countries of the world. First of all, it is necessary to develop a National Strategy for the Development of Critical Infrastructure and a Plan for its Implementation,

in which to define financial instruments (free financial assistance from international financial and non-governmental organizations, grant funds, loans, crowdinvesting, public-private partnership, reparation, etc.) and institutions (Recovery Fund property and destroyed infrastructure, the Fund for Reconstruction and Transformation of the Economy, the Investment Guarantee Agency, the Multilateral Trust Fund for Directing Donor Support to Ukraine, the Target Fund for Support, Restoration, Reconstruction and Reform of Ukraine).

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