

## RECOVERY FUNDS IN THE SYSTEM OF ENSURING THE FINANCIAL SECURITY OF UKRAINE

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**Abstract.** *Purpose* – to study the prospects for the post-war reconstruction of Ukraine through the creation of financial recovery funds based on an analysis of the current financial condition of the warring country, trends in functioning under an ongoing full-scale war, and the historical experience of post-war reconstruction.

*Research methodology* – dialectical method, systemic-structural method, comparison, theoretical generalization, grouping, and tabular method.

*Findings* – the main prerequisite for the post-war reconstruction of Ukraine is to obtain reliable security guarantees regarding the impossibility of resuming hostilities in the Ukrainian territory and the development by the Ukrainian Government of a Recovery Plan supported by international donors, through the formation of recovery funds.

**Keywords:** Russian-Ukrainian full-scale war, Marshall Plan 2, financial recovery of Ukraine, recovery funds, financial security.

**JEL Classification:** B5.

### Introduction

The full-scale war of Russia against Ukraine, which began on February 24, 2022, was not only a large-scale systemic shock for Ukraine, in particular, for its economic, financial, environmental, social, and other systems. The war also has global consequences associated with a slowdown in the growth of the economies of the world, the recession of many developed countries, a sharp increase in energy and food prices, record inflation rates, and revision of military budgets.

Under martial law, the Ukrainian economy is losing 50–60% of “non-produced” GDP, and direct losses (excluding losses in economic growth) for Ukraine’s infrastructure, according to preliminary calculations for the beginning of 2023, reach at least \$700 billion. With this in mind, the post-war financial recovery of Ukraine is of particular relevance, as it should become a powerful contribution to the support of global peace. During the full-scale war of Russia against Ukraine, the world security

organizations once again showed their incapacity. Therefore, ensuring financial security at all levels is becoming an important task for many countries, including Ukraine, especially in the context of a protracted financial crisis, a pandemic, and Russia’s war against Ukraine.

It is impossible to solve the problems facing a country, region, or enterprise without providing them with financial security, determined by specific indicators of the functioning of the economic system of the state for a certain period of time: the amount of internal and external debt; inflation rate; stability of the national currency; balance of payments.

Financial security is the protection of financial interests at all levels of financial relations; a certain level of financial independence, stability, and sustainability of the country’s financial system under the influence of external and internal destabilizing factors that pose a threat to financial security; the ability of the financial system of the state to ensure the effective functioning of the national economic system and sustainable economic growth.

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World experience shows that the countries that were participants in hostilities suffer from devastating consequences, devastation, and depletion of the economy. The further development of the country depends on effective and successful recovery, which is usually carried out with the help of other states, and IFIs in the absence of resources for self-recovery. An example of a successful recovery from a devastating war is the rebuilding of Europe after World War II under the Marshall Plan.

After the unconditional victory of Ukraine in the war unleashed by Russia and the return of the borders of 1991, the country must take the path of rapid recovery and innovative development. In general, restoration and recreation are categories of external and internal processes, security and the economy, ecology and climate, relations, production, distribution and consumption, investment and modernization, law, etc.

Large-scale destruction actualizes the issues of financial renewal of Ukraine through the creation of recovery funds. This is a challenge not only to Ukraine but to the whole world. After all, recovery requires international efforts, significant coordination between governments, international organizations, non-governmental organizations, enterprises, and other interested parties, as well as the creation of mechanisms, institutions, and alliances for the financial recovery of Ukraine.

The financial recovery of Ukraine is a set of measures for the physical restoration of everything destroyed by Russia in Ukraine during the war (housing stock, commercial real estate, industrial enterprises, social facilities, agriculture, infrastructure, etc.) to ensure the life of society, to achieve the pre-war volume of GDP, as well as economic, social and demographic recovery to ensure financial security in the post-war period. In general, a successful recovery process must include physical, economic, social, and institutional dimensions.

At present, the Funds for the Reconstruction of Ukraine have been established, namely six funds: the Fund for Support of Small and Medium Businesses, the Fund for Support of the Army, the Fund for Economic Reconstruction and Transformation, the Humanitarian Fund, the Fund for Servicing and Repayment of the Public Debt, and the Fund for Restoring Property and Destroyed Infrastructure, which deal with the relevant spheres. Depending on the specialization of the funds and their means, they are intended to support the Ukrainian army and provide humanitarian assistance to the victims, restore the destroyed infrastructure, transform the economy, resume the work of small and medium-sized businesses, service Ukraine's international financial obligations, etc.

Unfortunately, the destructive war of Russia against Ukraine has not yet ended. But at the beginning of 2023, \$349 billion is already required for recovery and recovery (The World Bank, 2019) to \$1.1 trillion dollars (The European Investment Bank). Undoubtedly, after the victory in front of Ukraine, there will be bigger challenges. Therefore, it is urgent for the state to form, together with

foreign donors, and take into account the historical experience of the post-war reconstruction of some countries of the world, the strategic foundations of the financial post-war reconstruction.

## Research methods

The *purpose* of the paper is to determine trends in the functioning of the warring country based on an analysis of its current financial situation in the context of an ongoing full-scale war and historical experience, the prospects and opportunities for the post-war restoration of Ukraine through the creation of financial recovery funds. Ukraine must balance and prioritize investment needs, explore financing options, and develop a comprehensive and sophisticated mechanism for financial recovery among all actors: IFIs, countries, and alliances.

The *object* of the study is the funds for the restoration of Ukraine to ensure financial security; the *subject* is a set of theoretical and practical aspects of the formation of financial funds during the war and the post-war period. After the Second World War, a number of informative analytical studies by domestic and foreign experts appeared, which examine the goals, and mechanisms for creating funds for post-war reconstruction in order to ensure global security. Reconstruction is a complex, holistic, and multi-dimensional process aimed at improving the military, political, economic, and social conditions and should contribute to strengthening peace, and security and achieving sustainable socio-economic development in a war-torn country. The basis of the fundamental research methodology is finance (both internal and external), which can be decisive in determining the winners, as well as in determining the duration of the war. The post-war reconstruction of Ukraine appears as a huge financially costly, but obligatory and necessary task. But existing institutions and funding instruments do not match the scale, complexity, and consequences of Russia's unprovoked war against Ukraine. To overcome the challenges caused by the Russian war, it is necessary to apply extraordinary political and financial approaches to their solution.

**Research methodology.** The following methods were used in the research process: *dialectical* – to reveal the essence of post-war reconstruction; *system-structural* – to determine the mechanism, necessary institutions, and instruments for financing Ukraine in the conditions of war and post-war reconstruction; *comparison* – to develop strategic recovery perspectives; *theoretical generalization* – to study and systematize Russia's wars over the past three decades, the incapacity of security organizations and humanitarian organizations and foreign experience of post-war financial recovery, *grouping and tabular* – to illustrate the results of the study.

The study of restoration issues began in the 19th century. Then, in 1815, David Ricardo began to consider the topic of post-war economic recovery and the reorientation of capital flows towards peaceful activities (Coulomb,

2004, pp. 92–94). John Stuart Mill in 1848 considered in sufficient detail the question of the importance of human potential for recovery from losses caused by natural disasters, and cataclysms (Coynes, 2005, p. 325).

After the end of the First World War in Austria, the League of Nations carried out the first-ever international post-war reconstruction, which was based on the work and proposals of an economic fact-finding commission. Similar but smaller work was subsequently carried out in Hungary (Williams, 2005, pp. 546–8). The most post-war reconstruction took place after the end of World War II: the work of the United Nations Relief and Reconstruction Administration for Europe and China (1943–1946), the World Bank for Reconstruction and Development loan to Europe, the Marshall Plan for Western Europe (1948–1951) and economic aid to Japan (de Long & Eichengreen, 1993; Lewarne & Snelbecker, 2004, p. 55). Foreign practice and experience of post-war reconstruction are of great importance for Ukraine today.

Domestic and foreign scientists still pay insufficient attention to the creation of funds for the post-war reconstruction of Ukraine and the rational use of the existing experience of European countries. Certain aspects of the post-war recovery of the Ukrainian economy and post-war recovery have already been considered in the works of Ivanova S., Zveryakova M., Irtishcheva I., Kramarenko I. and Sirenko I., Marshuk L., Okhrimenko O., and others.

Thus, Zvieriakov M. analyzes the impact of current realities on the current state of the Ukrainian economy, and determines their potential consequences and prospects for the country's further development – new industrialization and increasing value-added production (Zvieriakov, 2022).

Irtishcheva I., Kramarenko I., and Sirenko I. consider the state of the military economy and the possibilities of post-war economic development of Ukraine, predict global economic growth during the war in Ukraine, and determine the global factors of socio-economic development (Irtishcheva et al., 2022). L. Marshuk explores the positive and negative aspects of Ukraine's financial cooperation with international financial institutions in the conditions of war and considers the prospects for introducing a financial assistance package to Ukraine to continue resisting the aggressor by attracting financial resources from international financial institutions (Marshuk et al., 2022).

Amelin A. focused on the rationale for the restoration of the Ukrainian economy after the war, following the example of Israel (Amelin, 2022). Steps that can be useful and instructive for Ukraine, taking into account its specific features and circumstances of development, are determined by Danylyshyn (2022a). He points to those sources from which Ukraine can receive funds to restore the economy after the war, and suggests practical measures that need to be implemented for this. Ivanov S. considers the main factors that ensured the recovery and development of countries after wars and military conflicts, which should be taken into account when creating

a new concept for the reconstruction of the Ukrainian economy (Ivanov, 2019).

Okhrimenko O. substantiates the importance of attracting diversified sources of foreign funding in various formats for the reconstruction of the country in compliance with the rules of transparency, accountability, efficiency, and counteracting corruption risks of the post-war reconstruction of Ukraine (Okhrimenko & Popov, 2022). Bohdan T. highlights the most significant sources of funding for the post-war reconstruction of Ukraine, and dwells on the possibility of creating a Trust Fund for Solidarity with Ukraine, which will perform the functions of attracting and coordinating international assistance in the form of grants (gratuitous aid), rather than loans (Bohdan, 2022b).

But it should obviously be noted that the strategy for the post-war reconstruction of Ukraine must inevitably take into account preliminary miscalculations and development lessons.

## 1. World experience of post-war financial recovery

To build the future, you need to know your past well. In the 20th century, Europe and Ukraine at least twice carried out major post-war reconstruction. In a historical context, there is a third generation of financial assistance: the *first* generation is the restoration of European countries according to the Marshall plan after the Second World War; the *second* generation was formed after the Cold War and the fall of the socialist bloc – Bosnia, Kosovo, Croatia, Macedonia; the *third* generation is associated with the events of September 11, 2001, and subsequent military operations in the Middle East (Iraq, Afghanistan).

For the implementation of the post-war reconstruction of Ukraine, which would ensure a rapid recovery of economic activity to improve the financial security of the state, it is necessary to turn to the historical discourse of the post-war reconstruction of some countries of the world: the European Recovery Program (ERP) (Marshall Plan), the West German economic miracle, the Italian boom, Japan's Economic Expansion, South Korean Miracle (Semeniuk, 2013), Bosnia and Hercegovina Reconstruction Programs (Balkan Recovery), Israeli Reconstruction, Revival, Afghanistan, Georgia (Afghanistan Reconstruction Trust Fund, n.d.; Reutres, 2021).

Other positive examples of post-war recovery could be as follows: The “record years” of the Swedish economy (1945–1973); “Wirtschaftswunder” or “Rhine miracle” – the economic revival of Austria and West Germany; “Glorious Thirty Years” – the economic revival of France (1945–1975); Greek economic miracle (1950s–1970s); Japanese economic miracle (1950–1975); Spanish economic miracle (1959–1973); Brazilian economic miracle (1968–1973, 2000s to present).

With all the horrors of the Russian war against Ukraine, which continues and breaks human destinies,

and negatively affects other countries, Ukraine is already faced with the task of clearly defining a strategy and practical steps to restore the country after the end of the war. Taking into account the world experience of post-war financial recovery, it should be understood that in each country it largely depended on its economic, geopolitical, and cultural characteristics, even in the pre-war period.

But there are a number of common tools for all countries successfully rebuilt after the war: economic liberalization, the creation of a large number of jobs by the state, an export-oriented economy, and a significant injection of external financial resources. However, even with all the tools for economic growth, it is important to use them effectively. Whether a country succeeds or joins a long list of failures like Afghanistan or Iraq depends on this.

## 2. Financial condition of Ukraine

The war destroys the potential of Ukraine, and brings huge economic losses, which undermines not only the national security of Ukraine but also poses a threat to global security. The scale of military losses consists of financial, human, destroyed infrastructure and production capacities, neutralized natural potential, suspended investment projects, reduced demand from the population, destroyed critical infrastructure facilities, blocked ports, restrictions on cross-border foreign exchange payments, as well as a narrowing of the spectrum of energy imports, etc.

For a year of Russia's full-scale invasion of Ukraine, we have the following negative consequences, supported by statistical data:

1. The total amount of losses inflicted by Russian aggression is known only approximately and amounts to \$600–750 billion.
2. About 123,000 residential buildings were partially or completely destroyed, and approximately 70% of all destruction occurs in the frontline regions (Ministry for Communities, 2023).
3. Real GDP decreased by 30.8% compared to the third quarter of 2021. But by the end of 2022, it gradually began to increase – in the third quarter of 2022, it increased by 9.0% compared to the second one (State Statistics, 2023). Perhaps this is because the register of large taxpayers has grown by 220 companies.
4. Decrease in imports and exports in Ukraine. Thus, in January–November 2022, exports of goods amounted to \$40,671.2 million, or 66.4% compared to January–November 2021, and imports – \$49,194.9 million, or 75.8% (State Statistics, 2023). The negative balance amounted to \$8,523.7 million, which is more than double the negative balance of the same period in peaceful 2021 (\$3,635.3 million).
5. More than 14.5 million citizens have already left Ukraine, of which at least 11.7 million went to the EU countries.

Currently, according to rough estimates of the KSE (Report, 2022), the damage to infrastructure is more than \$138 billion, and the implementation of the plan for the renewal of Ukraine will cost about \$750 billion. The current state of Ukraine is quite difficult, given a number of political, socio-economic, and environmental problems that directly affect the quality of life of the population. Currently, there are a number of significant threats to the growth of public debt, including inflation, which, most likely, has already been transformed into stagflation. But we are at the beginning of a new stage in the life of the country, where everyone plays a big or small role.

The Ukrainian economy is not able to finance the war on its own. Under current conditions, the government has two realistic ways to fill the budget: foreign aid or printing funds. The latter entails negative consequences in the form of inflation, which is felt by all Ukrainians.

At the same time, foreign aid is still not enough: it covers only more than half (52%) of the needs of the state budget since February 24. Low funding receipts in April, May, and the first half of June forced the NBU to finance the budget deficit of UAH 170 billion.

## 3. Recovery program and sources of formation of recovery funds

Russia has already caused enormous damage to Ukraine, worth hundreds of billions of dollars, and the longer the war goes on, the greater the losses will be, and the fewer people will return to Ukraine.

The natural consequences of the war are the destruction of the production potential of at least 30–50% (mainly in the east of the country), critical infrastructure, rising unemployment, a decrease in solvent consumer demand, migration of labor potential, etc. Moreover, a third of agricultural crops were not sown, and 94 ships with agricultural products for export were blocked in the Black Sea by the Russians. Only 1% of Ukrainian companies have not yet suffered damage as a result of hostilities. It is unrealistic to neutralize military dangers using only market instruments.

The formation of a solid security foundation after Ukraine has received reliable security guarantees with the impossibility of resuming hostilities is a prerequisite for conducting post-war reconstruction in a certain phase. The most important task of the post-war reconstruction program should be the restoration and creation of a new physical infrastructure to support the life of society and maintain long-term economic growth.

The key goals of the post-war economic recovery should be the following:

- a) restoration of property and infrastructure destroyed or damaged as a result of the war;
- b) rapid resumption of economic activity;
- c) return to Ukraine of refugees, internally displaced persons and their inclusion in economic processes;
- d) formation of the foundations for sustainable economic growth.

The Ukrainian reconstruction program should be ready before the end of the war and will be the largest reconstruction project since World War II. The post-war recovery of Ukraine will have more in common with the recovery of Europe after World War II than with the recovery of countries affected by modern wars. In the process of implementing the recovery program, four types of flows will have to be managed: humanitarian aid, industrial equipment, raw materials, and cash.

Recovery should include three clear stages with different goals and constraints:

1. Recovery here and now – an immediate response, similar to that provided to countries in the event of a natural disaster;
2. Fast recovery – restoration of damaged infrastructure and services;
3. Long-term transformation that will lay the foundation for future growth and modernization.

It is advisable to carry out restoration in two approaches: the first is regional when partners take responsibility for a specific region or locality (for example, Latvia will help rebuild Bucha, and Switzerland will help Odessa region); the second approach is parametric (refers to the energy efficiency program).

The indicative sectoral directions of the post-war economic recovery program may look as follows:

- restoring a safe environment for production activities and human habitation (demining and decontamination of territories, disposal of ammunition, etc.);
- priority humanitarian assistance (provision of shelter, food, medicines, and medical services, fuel);
- the restoration of critical infrastructure (transport routes, water supply, electricity networks, heating networks);
- the restoration of production facilities, assistance in attracting foreign investment and modern industrial technologies;
- the restoration of the housing stock and social infrastructure (medical, educational, rehabilitation institutions, as well as social services);
- technical assistance to strengthen the ability of the authorities to implement projects for the reconstruction of the country, support for the development of civil society, institutional reforms, strengthening the rule of law;
- solution to the problem of debt burden (GDP options in combination with government debt obligations can provoke a debt crisis, it is desirable to obtain sufficient volumes of cheap debt refinancing or to restructure it);
- strengthening the country's defense capability, and development of the domestic military-industrial complex.

To restore post-war Ukraine, receiving funds from various sources is planned. Now the country has begun rapid recovery at the expense of the state budget and the support of partners (Table 1).

Table 1. Key Sources of Funding for the Post-War Reconstruction of Ukraine (source: built on the authors' ideas, based on Barakat and Cockburn (1991), Bohdan (2022a, 2022b), Cheberyako et al. (2022), Danylyshyn (2022b, 2022c), Zhelezniak (2022))

<p><b>Reparations from the aggressor country.</b> Reparations are payments from the aggressor state to the victim state in the event that the aggressor lost the war.</p> <p>For the first time, Weimar Germany began to pay for reparations after the defeat in the First World War. After the defeat in the Second, additional payments were imposed on the Germans – despite the fact that they did not pay the previous ones. Germany paid reparations for the First World War only in 2010, that is, more than 90 years after the end of the war. Reparations for the Second World War were basically written off by both the FRG and the GDR back in the 50s of the last centuries. Finland also paid reparations. Iraq paid for the occupation of Kuwait, and the UN Security Council resolutions became the basis for the payments. That is, examples of successful and full payment of reparations still exist.</p> <p>On November 14, 2022, the UN General Assembly adopted a resolution to provide remedies and reparations in connection with the Russian aggression against Ukraine. Then the document was supported by 94 countries, opposed by 14, and 73 countries abstained. Obviously, Russia will not be in a hurry to pay reparations voluntarily. The best option would be the confiscation of the frozen assets of Russian enterprises that fell under sanctions, the property of individuals, and the gold and foreign exchange reserves of the Russian Central Bank. For this, a special commission and a Fund should be created with the involvement of international participants and observers. In The Hague, there will be a register of damage caused to Ukraine by the Russian war, which will be the first component of a comprehensive reparations' mechanism.</p> <p><b>Confiscated Russian assets.</b> According to various estimates, they range from 300 to 500 billion USD (the Russian National Wealth Fund, the reserves of the Russian Central Bank). The only problem is that some Western partners so far refuse to support the confiscation of Russian assets in favor of Ukraine, appealing to the inviolability of private property. In most countries, there is no mechanism in the legislation for the confiscation of the property of one state in exchange for compensation to another, and no state has carried out expropriation. Therefore, Ukraine should lobby for the adoption at the international level and separately in each important jurisdiction for us of a mechanism for recovering frozen assets as compensation for the damage caused. The US, Canada, and England have already passed legislation allowing the confiscation of private and sovereign assets.</p> <p>To legalize the expropriation of Russian assets, the European Commission is considering the creation of an international court with the support of the UN. In August 2022, a decree of the President of Ukraine was approved on the confiscation of 903 objects belonging to Russia: 79 items are corporate rights, and 824 items are property. On February 10, 2023, the Government adopted Decree No. 125, which determined the sale of confiscated Russian assets and property through the UTS Prozorro. Funds based on the results of online auctions for the sale of confiscated Russian assets will go to the Fund for the Elimination of the Consequences of Russia's Armed Aggression and will be used to restore Ukraine, the energy system, people's housing, demining, etc.</p>
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End of Table 1

<p><b>Bilateral assistance.</b> This assistance can take many forms – grants, loan guarantees, loans, contributions in kind, etc. On a bilateral basis, assistance at the state level (approved by the government) was provided by the United States, Germany, and Great Britain, which are the largest “donors”, as well as Canada, Poland, France, the Netherlands, and Norway. In general, more than 50 countries of the world provided military and financial assistance to Ukraine, including humanitarian and financial assistance – more than 30 foreign companies. In terms of the share of aid in their own GDP, the Baltic states and Poland remain the leaders. Estonia only spends 1.1% of its GDP on military assistance to Ukraine, Latvia – 1%, Lithuania – 0.7%, and Poland – 0.6%.</p>
<p><b>International institutions.</b> The World Bank, European Bank for Reconstruction and Development, European Investment Bank and other development institutions are natural sources of financing. The United Nations and humanitarian organizations such as Médecins Sans Frontières can provide emergency humanitarian assistance. The International Monetary Fund may provide short-term financing to provide access to foreign exchange and cover temporary fiscal imbalances. The EU can create a trust fund for the recovery of Ukraine or use special procedures to give Ukraine access to EU structural funds available to EU countries.</p>
<p><b>Donor funds.</b> Private foundations and individuals, as well as the Ukrainian diaspora, have already collected significant amounts in support of Ukraine — funds from “E-support”, cryptocurrency, state, and non-state funds (NBU special accounts for military and humanitarian needs, Come Back Alive Fund, Shelter Fund, KSE Foundation, Nova Ukraine, Razom Charitable Foundation, United Help Ukraine, United24 donation platform, ARD Telethon), etc. Although less structured than other sources of funds, private aid is likely to continue to play a significant role.</p>
<p><b>Budget funds.</b> For military purposes, internal funds are used, coming from taxes and government bonds. From March to June, the CMU financed the needs of defense from the reserve fund (61.9% of all funds). The 2023 budget is a record defense spending (18.2% of GDP or 50% of all spending) and a deficit exceeding 20% of GDP.</p>

The most significant sources of funding for the post-war reconstruction of Ukraine should be reparations from the aggressor country and assistance from the international community. In 2022, the government of Ukraine received \$31.1 billion of external funding to fill the state budget, including \$14.3 billion (46%) – in the form of grants and \$16.8 billion (54%) – of loan financing.

At present, the Funds for the Reconstruction of Ukraine have been established, namely six funds: the Fund for Support of Small and Medium Businesses, the Fund for Support of the Army, the Fund for Economic Reconstruction and Transformation, the Humanitarian Fund, the Fund for Servicing and Repayment of the Public Debt, and the Fund for Restoring Property and Destroyed Infrastructure, which deal with the relevant spheres. The proceeds will be used depending on the specialization of the fund – supporting the Ukrainian army and providing humanitarian assistance to the victims, restoring the destroyed infrastructure and transforming the economy, resuming the work of small and medium-sized businesses, and servicing Ukraine’s international financial obligations (Government portal, 2022).

The EU, the governments of partner countries, and international institutions – the World Bank, the International Monetary Fund, the European Investment Bank, the European Bank for Reconstruction and Development, and others will play a key role in forming a pool of international assistance for the restoration of Ukraine.

The wide variety of potential sources of aid and the complexity of recovery calls for the creation of a special agency similar to the Economic Cooperation Administration (ECA) that administered the Marshall Plan. The agency should coordinate donors, and use the competitive advantages of different donors in order to “close” certain needs.

In our opinion, it is expedient to create a Trust Fund for Solidarity with Ukraine, which will perform the functions of attracting and coordinating international assistance. The fundamental point is that the functioning of the Trust Fund should provide support to Ukraine mainly by grants (gratuitous assistance), and no loans, since the grant nature of financing the Recovery Plan, unlike credit, will avoid a debt crisis and support economic growth in Ukraine.

As of 1<sup>st</sup> of January 2023, the state and state-guaranteed debt of Ukraine amounted to \$111.4 billion (91.2% of the total amount – of public debt (57.1% external debt, 34.1% domestic debt, 8.8% of the total – guaranteed debt), which exceeded 100% of GDP and indicates an exorbitant debt burden, and significant resources are spent on servicing the debt. In 2023, Ukraine will spend UAH 658.44 billion on servicing and paying off the public debt that was formed on January 1, and payments peak in May, June, and November.

There is also a relationship between the size of public debt and economic growth rates. According to a World Bank study, if the amount of public debt exceeds a certain limit, then its further growth leads to a slowdown in GDP growth. For developed countries, this limit is 77% of GDP. For developing countries, to which Ukraine belongs, it is 64% of GDP. The high level of public debt and the risks associated with it can turn the situation into an analog of a financial pyramid – in order to cover loans taken at high interest rates, new loans will have to be taken at even higher interest rates.

According to the World Bank, the excess of public debt in relation to the country’s GDP by 1% over 64% costs the economy 0.02% growth. This means that debt of 106% of GDP in 2023 could slow down the growth of the Ukrainian economy by 0.84% per year. Therefore, the grant nature of the financing of the Recovery Plan, unlike credit, will help avoid a debt crisis and support economic growth in Ukraine.

In addition, there is no precedent in world history that can be compensated for the loss of human potential, because Ukraine has lost the most: almost 10 million people who left because of the war (women with children), who died from attacks, defenders, etc. The restoration of the country may take at best five years, but the restoration of Ukraine’s potential may take decades.

#### 4. Problems and strategic prospects for the formation of recovery funds in Ukraine

While Ukraine continues its efforts to recapture Russian-occupied territories, the government of Ukraine and its allies, as well as international financial institutions and think tanks around the world, are planning to manage and fund its recovery. At the same time, there are new challenges facing the implementation of post-war economic recovery programs: numerous urgent humanitarian problems; destroyed infrastructure; problems of efficient distribution and material resources.

Scholar Collier (2007) proposes a package of policies aimed at providing significant assistance, low taxation, the involvement of independent service providers and, low inflation. In conditions of great social need, the governments of post-war societies should not be tempted by aggressive taxation.

High taxation hinders the recovery of the private sector, which is the engine of economic growth. At the same time, governments must rely on natural resource revenues, or, if the economy depends on agriculture, on aid.

However, while this is a viable strategy for the post-war period, aid dependency has long-term consequences. Essentially, aid dependency makes governments accountable to foreign donors instead of their own citizens. To avoid this, aid could be limited to 50% of tax revenue (Wood, 2008) in stages over 10–15 years. One of the main challenges is to convince donors to agree to such a restriction.

In our opinion, the following components should be the conceptual prerequisites for a successful post-war reconstruction of Ukraine: the existence of a clear recovery strategy; providing a secure recovery environment; strong leadership. In turn, the strategy for structural restructuring of the Ukrainian economy should be based on an active, targeted state policy for creating jobs and cover the following areas:

- localization and import substitution;
- production of armaments, military conversion of industry;
- energy security;
- logistics and transport infrastructure of the economy;
- nationalization and financial rehabilitation of enterprises of strategic importance, which are threatened with bankruptcy.

The main approaches in the implementation of these areas should be:

1. The main goal of reconstruction should be to restore Ukraine's economy and society by modernizing not only its infrastructure but also its economic, political, and social institutions, thus paving the way for EU accession.
2. Donor countries and institutions must strictly and jointly monitor their reconstruction assistance to ensure that the goals of the program are achieved and that corruption in Ukraine is stopped. Import-

tant elements of effective oversight include transparent procurement and financial management processes, oversight, and audit mechanisms.

3. Ukrainians should take the lead in setting priorities for the reconstruction and implementation of the country. The Ukrainian representation should be inclusive, including representatives from both national and local governments, as well as leaders from civil society and the private sector.
4. Reconstruction will take time (10 years in some plans), but providing assistance indefinitely will undermine Ukraine's ability to achieve self-sufficiency. Aid, at least in the early stages of reconstruction, should be primarily in the form of grants so as not to burden Ukraine with unmanageable debt.

#### 5. Discussion

One of the main problems that can play a terrible thing for Ukraine is corruption. A significant amount of financial assistance is now directed to the Ukrainian economy, but these funds are not subject to strict monitoring and restrictions. Therefore, there is a possibility that the funds will not flow in full to their destination. For Ukraine, an important factor is the preservation of its independence in economic terms. That is, it is necessary either to develop a strategy for post-war reconstruction, taking into account financial assistance and to take into account that the further development of the country should not depend on constant external donors.

#### Limitations

Currently, investing in a country in which hostilities are unfolding is quite risky, but thanks to our cooperation with the World Bank, reinsurance of investment risks will be available. Thus, investors will feel somewhat more confident about the market.

#### Conclusions

The war is a massive structural shock to Ukraine's financial security. Today we have a new world, a new reality, where radical uncertainty and new global threats of exogenous and endogenous origin reign. With the increase in the scale and duration of predatory hostilities, an increasing number of threats arise related to ensuring the financial security of Ukraine.

When developing the next steps, we should include the following:

*Firstly*, the economic situation in our country, although it leaves much to be desired, is far from a global catastrophe (total devastation during World War II). It cannot come close to the indicators of Georgia, which during the hostilities demonstrated, albeit minimal, growth (up to 2%). Undoubtedly, economic growth in Ukraine can be ensured by the soonest completion of hostilities and the rapid implementation of reforms.

According to *George Soros*, for radical reforms we need to form a financial package of European funds in the amount of \$50 billion, then the country will not be on the verge of bankruptcy, but will develop. To this end, Ukraine has already accumulated some experience in the formation of programs through which financial resources can be used for development purposes.

*Secondly*, the topic of the restoration of Ukraine is important both in the already liberated territories and in the potentially returned ones. The state and local self-government bodies carry out all the necessary and assigned functions to ensure the gradual restoration of the territories. The main aspect of the further recovery process is the assistance of international institutions and organizations.

*Thirdly*, today, external partners can help us, and then count on a competitive country with a strong market and new opportunities. Ukraine will be able to become a constructor country, a springboard for implementing new ideas and raising business.

Therefore, summing up all of the above, we will focus on the main aspects:

- the main amounts of filling the recovery fund, coming in the form of assistance, grants, and loans from foreign countries and world organizations;
- within the country, financing is possible through interbudgetary transfers, from the territories that are now in a better position, those budgets that need it more will undergo a regeneration process;
- funds filled with donations from the population and directed to restore infrastructure. Also, at the end of the war, some funds will change their course of action, and some of them, today engaged in military support, will contribute their shares to the restoration;
- reparations, frozen assets – and these options will have to be fought at the legal level;
- enhanced control over the implementation of programs and estimates by the state;
- Ukrainians will be able to help in recovery by involving their investment-attractive business. First of all, the main driving force of control and restoration should be defenders, volunteers and simply educated people who are interested in building and living in an honest, non-corrupt country.

The next steps in ensuring financial security in the context of the creation and use of recovery funds should include the following:

1. *To study international experience.* The post-war restoration of the economy and the destroyed state is a rather lengthy and complex process. For a successful recovery, our country needs to learn from the experience of other countries so as not to repeat their mistakes. Also, the post-war reconstruction will require quite significant resources, therefore, unfortunately, our country will not be able to cope without the support of partners. The country needs to raise a huge amount of funds, and in order for this attraction to happen more quickly

and effectively, we believe that it is necessary to develop a mechanism that would combine as many sources of funding as possible into one fund.

2. *To perform control over the inflow and outflow of funds* by international auditors (other international institutions) and introduce a mechanism for the transparency of spending in the territorial communities. In our opinion, the innovative development of the economy in the affected regions can only be ensured by the creation (first in the controlled territories, and then in the reclaimed ones) of special economic zones and research and production parks. Such creation will stimulate the development of industries based on new advanced technologies, an increase in the number of jobs, the volume of exports, etc.
3. *To develop post-war economic recovery measures.* After the cessation of hostilities, Ukraine will be able to begin a large-scale post-war economic recovery, which should be carried out on the basis of a Plan developed by the Ukrainian government and supported by international donors. The main prerequisite for the post-war recovery of the economy is the receipt by Ukraine of reliable security guarantees with the impossibility of resuming hostilities on our territory. It is clear that sustainable economic growth and development can only take place on a solid foundation of security. Security by its very nature is a public good that must be provided by the state and the international community.

As a result, the restoration of Ukraine opens up an opportunity to modernize the country and secure its future. The key principles of international recovery assistance are: (1) Ukraine is moving towards EU membership; (2) a separate agency is set up under the auspices of the EU with considerable autonomy in coordinating and managing the aid and reconstruction programme; (3) Ukraine is the “owner” of the reconstruction program; (4) encouragement and assistance in the flow of foreign capital and technology; (5) aid should be predominantly in the form of grants rather than loans; (6) recovery must be based on a carbon-free future with minimal dependence on fossil fuels (Skidmore et al., 2022).

### Recommendations for further research

First, it is important to coordinate donors and funds. Obviously, it would be possible to create a multi-donor fund, bringing together various sources of funding and assistance. The advantages of such a structure would be flexibility and predictability of funding, visibility, alignment of interests within an overall strategic approach, and reduced information, coordination and administrative costs.

Second, more research is needed to better understand the impact of bailouts on Ukraine’s economic growth. This should focus on two areas:



- the impact of various external financial flows (including foreign direct investment) on the socio-economic situation of Ukraine in post-war conditions;
- the relationship between aid and investment, taking into account the country's capital (private and public) to study the impact of financial aid on the post-war growth of Ukraine.

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