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MECHANISMS OF EXTERNAL FINANCING OF THE UKRAINIAN ECONOMY DURING WAR AND APPROACHES TO THEIR OPTIMIZATION

The article analyzes external financial and economic assistance to Ukraine during the full-scale invasion of Russia since February 24, 2022. Successful examples of financing and external assistance to countries of the world during and after full-scale military actions are considered. External financing of Ukraine requires more predictable, systematic and strategically significant financing of the domestic economy on a regular, preferably grant basis. More effective mechanisms of external financing of the Ukrainian economy are proposed.

Keywords: *external financing of the economy; the country's economy during the war; economic European integration; international economic relations; world economy.*

Full-scale invasion of Ukraine since early 2022 has led to significant transformations, significantly disrupting socio-economic processes in many countries around the world, especially in Europe and the post-Soviet space. In addition to direct military losses of population, territory, infrastructure, assets, this event in Ukraine also had a particularly catastrophic impact on social, budgetary, debt, and financial-economic processes. Ukraine's budget was forced to quickly restructure to strengthen and meet military needs, which significantly affected the financing of other important areas of the country's life. In the extremely difficult conditions of

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a budget deficit, Ukraine finds it difficult to maintain defense spending, launch a domestic military-technical complex and at the same time finance salaries for employees of budgetary institutions, pensions, scholarships, social assistance, and provide high-quality medical and educational services. Therefore, timely, prompt, systemic and unburden some external assistance to Ukraine is a key factor on the path to victory, successful European integration and a faster exit from the socio-economic crisis associated with the full-scale invasion. In this context, the analysis of the mechanisms of external financing of the Ukrainian economy during the war and the search for approaches to its optimization is a relevant topic for research.

A number of foreign and domestic scientists have studied the analysis of the world economy during the full-scale invasion of Ukraine, as well as issues of foreign aid during and after the war: T. Bogdan, O. Borzenko, V. Geets, R. Grieveson, Yu. Gorodnichenko, J.M. Keynes, N. Mulder, V. Sidenko, I. Sologub, and others. The contribution of these scientists is significant, but the existing and potential challenges for the Ukrainian economy during the war and after its completion require a strategically balanced, updated approach to the assessment, forms, and methods of aid, which will allow for a more comprehensive optimization of the mechanisms of external financing of the Ukrainian economy in the future.

The purpose of this article is to summarize the best international experience of assistance during and after devastating wars and conflicts, as well as to prepare recommendations for the formation of an updated policy for attracting external financial assistance to Ukraine based on more effective mechanisms and principles.

An analysis of the economic theory of state financing of wartime expenditures shows that it is almost impossible to finance the economy, social sphere and military actions at the expense of the budget, especially in full-scale and protracted wars. As the experience of the First and Second World Wars shows, most active participating countries used loans and credits from central banks, commercial banks, business structures, the population, and also foreign countries. The consequence of such actions was mainly a difficult recovery, significant inflation, impoverished population and depressed state of the economy (Mulder, 2018; von Krosigk, 1974; Johnson, 2017).

The "Marshall Plan" for 16 Western European countries (except Spain) was an unconventional solution after the end of World War II, which focused on financial, technical, food and consulting assistance to the war-stricken European countries to restore their socio-economic situation. The policy of forming a new (after World War II) system of international relations, which can be considered successful overall, contained the Marshall Plan for Western European countries as an economic component, a stabilization program for Japan, expansion of American capital investments in Latin America, creation of a system of influential international economic organizations and agreements — the IMF, WB, IBRD, GATT. Within the framework of the "Marshall Plan", the USA purposefully used economic assistance to stimulate unifying tendencies in Western Europe in the political sphere and, thus, having overcome disputes between European national states, to strengthen, stabilize and develop the capitalist market system in the mainstream of European integration. The change in the situation in Western Europe as a result of the "Marshall Plan" is evidenced by the fact that annual aid of 4-5 billion US dollars allowed production output to increase by 20 billion US dollars in 3 years. The high efficiency of this plan is largely explained by the fact that it was aimed at increasing supplies of Western European production, selective import of raw materials and materials. In the strategy for the recovery of the Western European economy, the leading place was given to the renewal of the main production assets; the program for the development of fixed capital and the maintenance of stable finances was also successfully implemented. In such conditions, US investments in the main production assets of Europe significantly increased the competitiveness of European exports in foreign markets (Mocherny, 2001).

Subsequently, the programs of the International Monetary Fund (IMF) and the World Bank (WB) played a significant role in supporting countries that faced military conflicts and their consequences. Here are some examples of such programs and their impact:

I. IMF programs:

Balkans (1990s) — provided credit lines and technical assistance to stabilize the economies of newly independent states such as Bosnia and Herzegovina, Serbia, and Montenegro. These programs helped stabilize exchange rates, reduce inflation, and rebuild the financial system, which laid the foundation for further economic growth and integration into the European economy.

Iraq (2003—2010s) — provided loans and policy advice to restore macroeconomic stability and reform the economy. IMF programs helped stabilize the national currency, reduce inflation, and create the foundations for economic growth despite internal conflicts.

Ukraine (2014 — present) — several financial assistance programs provided, including Extended Fund Facility (EFF) and Stand-By Arrangement (SBA). These programs helped stabilize the Ukrainian economy, reduce inflation, and initiate structural reforms aimed at improving the economic situation.

II. World Bank programs:

Rwanda (1994 — present) — provided significant financial resources and technical assistance to rebuild infrastructure, education, and health care. World Bank programs have helped rebuild Rwanda's economy and make it one of Africa's fastest growing economies.

Afghanistan (2002 — present) — provided funding for infrastructure development, health, education and agricultural support. Despite the ongoing conflict, World Bank programs have helped improve access to basic services and contributed to some economic growth.

Liberia (2003 — present) — provided funding and technical assistance to rebuild infrastructure, improve governance and develop the private sector. Programs have helped restore basic services and improve the economy, although the country continues to face significant challenges.

Financial support programs of the IMF and the WB provide the necessary financial resources to stabilize the economy and restore infrastructure to many countries in need. In addition to finance, these organizations provide technical assistance and advice on the development and implementation of economic policies. At the same time, the success of the programs depends on internal stability and the ability of governments to implement reforms. In some cases, recovery is faster, in others — slower, depending on many factors, including the continuation of conflicts and the political will to reform [1].

Research conducted by Yang Jiao (2024) emphasize that the debt (its significant share and systemic increase) in foreign currency to GDP of developing countries is essential for the transition of the economy to a state of crisis and high inflation, when the balance sheets of companies and their financial and investment opportunities deteriorate. But grant financial assistance and the effect of expectation of regular financial assistance significantly stabilize the expectations of the population and business structures, contribute to economic growth.

Summarizing the international experience of financing the social sphere, economy and military expenditures during and after full-scale wars, we note that their optimally balanced financing without certain distortions with corresponding investments in consumption (social sphere), in productive channels of the economy (in fixed assets, in their modernization and renewal, in new promising areas of activity), which subsequently ensures the corresponding dynamics of the country's development even with its participation in a full-scale war. In addition, an important component is the form of assistance — bank loans, government loans, debt or other property obligations, which significantly suppress the country's budget, its social sphere and economy during war and post-war times. One of the leading components for long-term stability in war and during post-war reconstruction is also price stability and low inflation rates. Systematic grant financial assistance, technical and technological assistance in updating fixed assets, assistance in export, introduction of innovations and updating of infrastructure that meets modern requirements are the key to successful reconstruction and development.

Let us analyze the current state of the domestic economy and aid to Ukraine during a full-scale invasion in order to identify the specifics of the impact of aid on the state and prospects of the domestic socio-economic sphere. Thus, the Russian invasion in 2022 became an unprecedented test not only for society and the army, but also for the economy of Ukraine. In the first year of a full-scale war, Ukraine's GDP significantly decreased (–29%) and business activity was suppressed. The economy of Ukraine suffered significantly from military actions: 10% of domestic enterprises did not resume their activities, problems related to logistics, working capital, low purchasing power significantly hinder, and refugees from frontline territories appeared. Thus, as of the beginning of 2024, 6.4 million of them are considered to have left the country; 3.7 million citizens are internally displaced

[1] IMF country information. *International Monetary Fund.* URL: https://www.imf.org/en/Countries (accessed on: 16.07.2024); Projects & Operations. *World Bank Group.* URL: https://projects.worldbank.org/en/projects-operations/projects-home (accessed on: 16.07.2024).

persons. From 25 to 30 percent of the entire population of Ukraine found themselves in the status of displaced persons. In addition, according to the Government of Ukraine, as of the end of 2023, Ukraine's total economic, social and other losses amount to almost $499 billion. The sectors most affected were trade, industry, agriculture, energy and transport, 10% of the country's housing stock and about half of the generating capacity (more than 9 GW) were destroyed [2, 3, 4].

Despite the shock conditions, unfortunately, aid to Ukraine in the first months of the large-scale war was irregular and insufficient. In this regard, the National Bank of Ukraine (NBU) began to resort to monetary financing of budget expenditures in order to finance the budget in this way. Unfortunately, this had to be done throughout 2022. By the end of the year, the NBU provided an additional 400 billion hryvnias, i.e. 12.5 billion US dollars, into circulation. Therefore, the inflation rate increased significantly in 2022 (27%), and the hryvnia as a currency lost almost half of its value against the world's leading currencies [5].

To support Ukraine, such developed countries of the world as the USA, Great Britain, Canada, Japan, Australia, South Korea and the vast majority of EU countries began to provide significant assistance with grants, loans and various technical assistance at the level of intercountry cooperation, regional and international entities (IMF, EU, NATO, WB, UN). Thanks to this, in the second half of 2022, it was possible to stabilize the domestic economy and the national currency exchange rate, and already in 2023, Ukraine's GDP recovered and grew by +5.3%. Since in 2023, GDP resumed at a very insignificant level, this also significantly affected tax payments. At the same time, the state is forced to direct significant funds to the defense and security sector, and other areas of activity are now mainly financed through external financial assistance. Thus, the Prime Minister of Ukraine notes that in 2023-2024, Ukraine will spend absolutely all domestic budget resources on the war. 100% of taxes paid by businesses and citizens are directed to meet the needs of the security and defense forces. Moreover, 2/3 of defense expenditures are military salaries and 1/3 is army equipment (equipment, weapons and ammunition) [6].

In 2023, financing of the Ukrainian budget from abroad was received more systematically, which stabilized prices, inflation and expectations in the Ukrainian

[2] The number of refugees from Ukraine with temporary protection status in the EU increased by 37.6 thousand in December. *Interfax-Ukraine*. URL: https://interfax.com.ua/news/general/965933.html (accessed on: 08.02.2024).

[3] War losses amount to almost $500 billion: Shmigal named the most affected sectors of the economy. *Ukrinform*. URL: https://www.ukrinform.ua/rubric-economy/3827525-vtrati-vid-vijni-majze-500-milardiv-smigal-nazvav-najbils-postrazdali-sektori-ekonomiki.html (accessed on: 15.02.2024).

[4] Economic statistics. National accounts. *State Statistics Service of Ukraine*. 2024. Jun 05. URL: https://www.ukrstat.gov.ua/

[5] Macroeconomic indicators. *National Bank of Ukraine*. 2024. Jun 05. URL: https://bank.gov.ua/en/statistic/macro-indicators

[6] Samoiluk M. How Ukraine's Economy Works During War. A Big Explainer on the Budget, Taxes, and the Dollar Exchange Rate. Center for Economic Strategy. January 10, 2024. URL: https://ces.org.ua/velikiy-ekspleyner/

currency market. At the same time, from 11.2023 to 04.2024, due to the political crisis in the House of Representatives, military, financial and humanitarian aid to Ukraine from the United States was blocked, but due to agreed diplomatic and political measures, aid to Ukraine from other partners (EU countries, Japan, Great Britain) did not stop, so this period was much more favorable for the domestic economy than for military support, which is due to the not so strong military-industrial complex of other partner countries. Below we will consider Table, which shows the size and structure of aid from countries of the world to Ukraine.

An analysis of Table shows that during the period of the full-scale invasion, Ukraine's partners provided assistance in the amount of 192 billion euros. The largest military assistance came from the United States (50.37 billion euros), while the largest financial assistance came from the EU (33.68 billion euros), which is approximately 50% of the corresponding types of assistance. At the same time, the military expenditures of the aggressor country, the Russian Federation, in 2022 amounted to 60-65 billion euros, in 2023 — 70-75 billion euros, in 2024 — 110 billion euros (planned by the Russian budget); in total, during this period, the military expenditures of the Russian Federation amounted to approximately 245-250 billion euros. This is 2.5 times more than the military aid of Ukraine's part-

Volume and structure of assistance to Ukraine from international partner countries from Feb 24/2022 to Apr 30/2024, billion euros

Countries	Military aid	Financial assistance	Humanitarian aid	General assistance
USA	50.37	20.97	2.62	73.96 (0.34% of GDP)
Germany	10.2	1.41	3.05	14.65 (0.37% of GDP)
United Kingdom	8.79	3.27	0.55	12.62 (0.43% of GDP)
Japan	0.06	6.18	1.02	7.27 (0.16% of GDP)
Canada	2.77	4.79	0.38	7.13 (0.38% of GDP)
Denmark	5.60	0.12	0.25	5.97 (1.61% of GDP)
Netherlands	4.35	0.72	0.57	5.63 (0.60% of GDP)
Poland	3.00	0.94	0.38	4.33 (0.68% of GDP)
France	2.69	0.80	0.36	3.85 (0.14% of GDP)
Sweden	2.69	0.34	0.16	3.19 (0.54% of GDP)
Finland	2.03	0.09	0.15	2.27 (0.82% of GDP)
Norway	0.92	0.77	0.35	2.04 (0.45% of GDP)
The remaining 25 countries	8.27	2.46	2.42	13.15
EU	—	33.68	2.32	36
Total	100.94	76.55	14.56	192.06

Source: compiled by the author: Ukraine Support Tracker. *Kiel Institute for the World Economy*. URL: https://www.ifw-kiel.de/topics/war-against-ukraine/ukraine-support-tracker/?fbclid=IwY2xjawFDLyVleHRuA2FlbQIxMQABHV1hlJULVYG7FK5I5bj90AUAKkObabpf4NigRvuDWKmSOvZv-pJ0WrU32A_aem_PbmKktc_qeoOlH1m3XK6eg (accessed on: 15.07.2024).

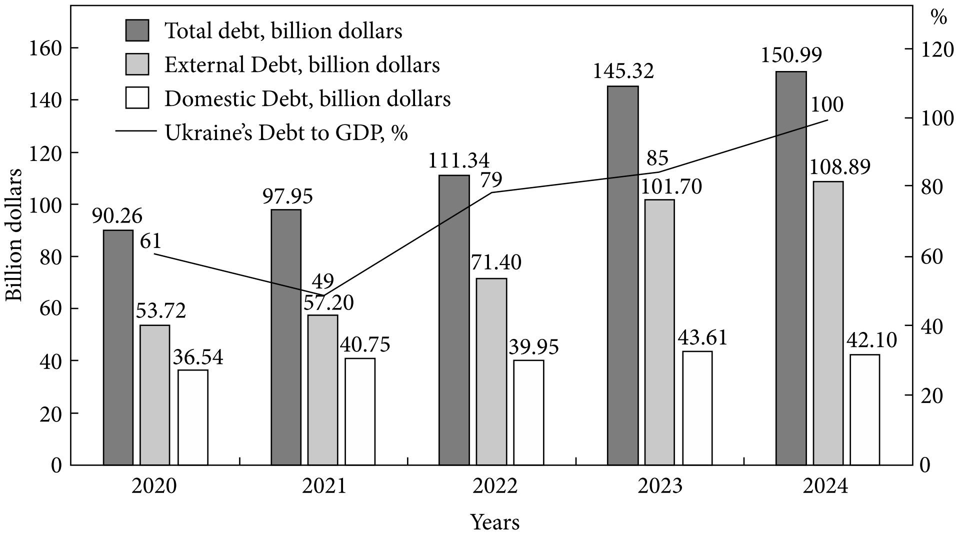

Fig 1. Ukraine's debt obligations (billion dollars) and their level to GDP (%) in 2020-2024
Source: State and State Guaranteed Debt. *Ministry of Finance of Ukraine.* 2024. Jul 15. URL: https://mof.gov.ua/en/derzhavnij-borg-ta-garantovanij-derzhavju-borg

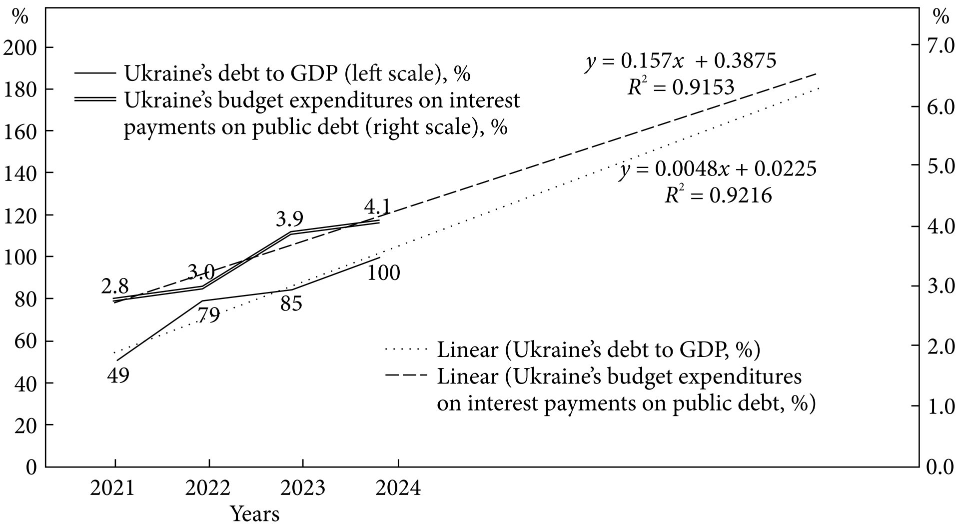

Fig. 2. Existing and projected risks of increasing the debt burden on the budget of Ukraine
Source: generated by the author based on Fig. 1.

ners, and even with 20% of Ukraine's GDP in defense spending (annually at about 30-35 billion euros) — they are no more than the aggressor's expenses, and given the non-systematic and unpredictable nature of the aid, they do not provide successful, necessary means on the path to Ukraine's victory in the war. Financial aid has significantly supported the social expenses of the domestic budget, stabilized prices and the foreign exchange and financial market, but has not had a qualitative impact on socio-economic development. Unfortunately, Ukraine is unable to overcome the significant decline in 2022 and significant impoverishment of the

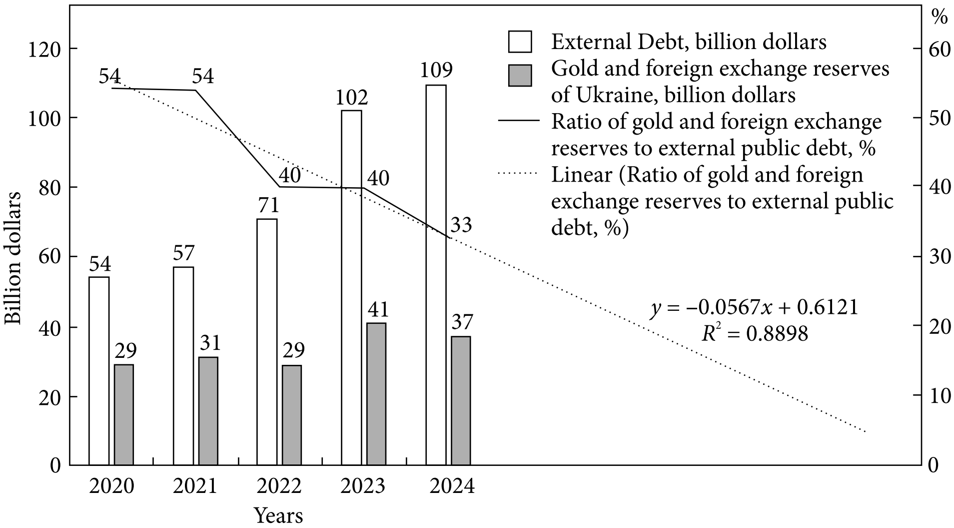

Fig. 3. Dynamics of external public debt and gold and foreign exchange reserves of Ukraine
Source: adapted by the author from: State debt of Ukraine. *Minfin*. URL: https://index.minfin.com.ua/ua/finance/debtgov/ [in Ukrainian] (accessed on: 15.07.2024).

population. Russia, with its GDP level (2.2-2.3 trillion US dollars), high world oil prices and inadequate sanctions, can continue to finance its aggression and maintain internal socio-economic stability for a long time. In general, military, financial and humanitarian aid from partners can be characterized as parity aid or deterrence aid, but it is not systemic and insufficient, not leading to scaling and victorious positions of Ukraine in the war. It should be noted that a significant share of aid is issued in the form of loans, which subsequently negatively affects the budget and creates risks for investment attractiveness and currency and financial stability of the domestic economy (Fig. 1).

As of May 31, 2024, Ukraine's public debt in foreign currency equivalent amounted to $151 billion, having increased by $58 billion (+62%) since the beginning of the war. By the end of this year, its growth in GDP is expected to be at the level of 100-110%. In 2021, Ukraine spent 2.8% of GDP on paying interest on the public debt, in 2022 — 3% of GDP, in 2023 — 3.9% of GDP, in 2024, subject to continued restructuring, it will be 4.1% of GDP [7]. There is a tendency towards an increase in debt servicing costs by the Ukrainian budget, which will negatively affect the financing of other important areas of activity (military spending and security, social sphere, economy and infrastructure) in the short, medium and long term. The Fig. 2 and Fig. 3 show the risks of a systemic increase in the debt burden on the budget of Ukraine and gold-foreign exchange reserves.

[7] Hetmantsev D. What will happen to Ukraine's national debt. Will Ukraine be able to continue paying its creditors and is there a risk of default? *Economic Truth*. URL: https://www.epravda.com.ua/columns/2024/06/18/715386/ (accessed: 18.06.2024) [in Ukrainian]; Markuts Yu., Studennikova I., Varshalok T. Draft law on the state budget for 2024: key features. *VoxUkraine*. 2023. Sep 26. URL: https://voxukraine.org/en/draft-law-on-the-state-budget-for-2024-key-features (accessed on: 15.07.2024).

The analysis of Fig. 2 shows that with the current trajectory of increasing the debt burden in Ukraine, military, social spending, as well as spending on infrastructure restoration and stimulation of business activity will be forced to decrease over time. According to the predicted approximation with high probability (R = 0.92), over the next 5 years, Ukraine's debt burden may increase by 2-2.5 times and become a significant part of budget expenditures at the level of 6-6.5%. In the scientific works of T. Bogdan (2016; 2022) and O. Borzenko (2021), many risks associated with the unwinding of the debt burden are revealed: a decrease in solvent demand, a decrease in business activity, primitivization of economic processes, an increase in the risks of currency and financial destabilization and liquidity crises, a deterioration in lending to business structures, etc.

Fig. 3 shows a trend of significant increase in external debt in relation to gold and foreign exchange reserves of Ukraine. There is a significant discrepancy in these indicators during the war. If the current trend continues, the ability to service the national debt in the future at the expense of gold and foreign exchange reserves will be difficult, almost impossible. In addition, if the gold and foreign exchange reserves of Ukraine for debt servicing decrease to a critical level of 15-20 billion US dollars, Ukraine will most likely experience panic among the population and business structures, which will further aggravate the currency, financial and economic crisis. According to the predicted approximation, with high probability (R = 0.89), over the next 5 years, if this trend continues, the above problems may arise. Provision and accumulation of even preferential loans for Ukraine in the future creates significant problems in debt servicing and repayment of tranches, which is due to the underdevelopment of the domestic economy, the presence of insignificant gold and foreign exchange reserves and the factor of military actions on the territory of Ukraine.

The transition of military actions to a protracted nature, in addition to the above, creates existential challenges for Ukraine and Europe, in connection with which an operational and large-scale financial and investment injection of funds into the economy of Ukraine is required, at least at the level of 70-80% of grant, technical and gratuitous financing with appropriate mechanisms for monitoring the spending of these funds.

The Ukrainian economy is also experiencing problems with production, logistics and exports (agricultural products, metallurgy, ore, etc.) due to a full-scale war. This worsens Ukraine's ability to grow GDP and service the increased debt burden. The Ukrainian economy has been export-oriented for the last 20 years, the share of exports in GDP has always been very high (30-50%). As Fig. 4 shows, Ukraine has a significant dependence on agricultural and raw materials in exports, correlated with world prices for them, which requires correcting the structure of the economy and establishing the appropriate infrastructure for innovative and technological re-equipment of the domestic economy (Fig. 4).

As Fig. 4 shows, export volumes have significantly decreased in 2022-2023, the price index also shows a negative trend for stabilization and recovery of the

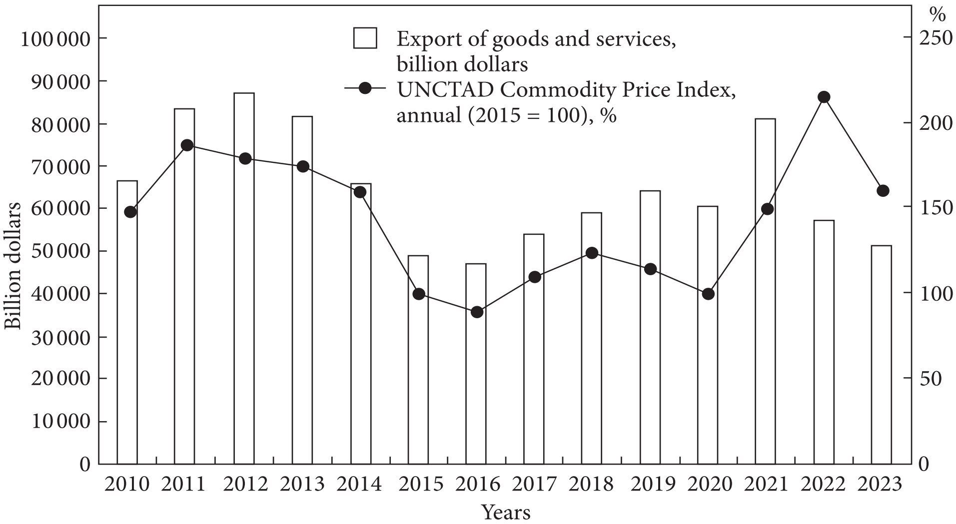

Fig. 4. UNCTAD commodity price index and Ukraine's exports of goods and services in 2010-2023

Source: compiled by author on the base of: UNCTAD Commodity Price Index, annual (2015=100). *UN trade & development.* URL: https://unctadstat.unctad.org/datacentre/dataviewer/US.CommodityPriceIndices_A; External sector Statistics. *National Bank of Ukraine.* URL: https://bank.gov.ua/en/statistic/sector-external (accessed on: 15.07.2024).

Ukrainian economy. In the current conditions, with an unchanged structure of the Ukrainian economy and with the corresponding rates of debt growth (even if the war ends), a decrease in prices for agricultural products in the world will significantly aggravate the financial, investment and socio-economic situation in our country and may lead to crisis phenomena. In our opinion, only a high-quality reorientation of assistance in the context of the "Marshall Plan" for Ukraine with a focus on including its economy in high-tech value chains of companies in Western countries, and especially in the EU countries, can correct the current situation. The mechanism for financing Ukraine through budget lending should be transformed into a mechanism for financing the creation of an innovative and creative economy. Acceptance of Ukraine's application for accession to the EU requires a rethinking of the existing model of the domestic economy, which must be transformed and fully included in the investment, financial, economic and trade environment of the EU countries.

With the acceptance of Ukraine's application to join the EU, financial support for Ukraine should become more stable and predictable, so the European Commission proposed in June 2023 to include it in the EU budget. Seven months later, on 1 February 2024, the European Council adopted the Commission's proposal virtually unchanged, thereby expressing the EU's political will and setting support for Ukraine as a priority from 2024 to 2027. Ukraine Aid Fund «Ukraine Facility» is designed for 50 billion euros in grants and loans — this is the largest amount of aid to a non-EU country in the history of the European Union. Grants will make up one third of the fund, i.e. 17 billion euros; the share of loans will be two thirds, i.e. 33 billion euros. Interest rates on loans will be subsidized. From 2024 to 2027, the aid fund will have to cover both the short-term needs of the Ukrainian state and the medium-term goals of reconstruction and modernization of the country. Scope of application 50 billion euros (Ukraine Facility) does not apply to humanitarian aid, defense and support to EU countries providing protection to Ukrainian refugees. Funds for these purposes are allocated through other EU financial instruments.

The Ukrainian Financial Aid Fund "Ukraine Facility" 3 main areas of application: financial stabilization of Ukraine (the largest part of the fund), investment program (about 8 billion euros) and technical assistance. Financial support in the form of grants and loans to the state is intended to support the sustainability of Ukraine's public finances. In order to receive this assistance, Ukraine submitted a plan for the restoration, reconstruction and modernization of the country, as well as a reform plan (more than 150 indicators in 69 areas of reform, the implementation of which is planned for the period up to 2027), which must be carried out in the process of joining the EU. On March 20, 2024, Ukraine received the first tranche of funding from the European Union in the amount of 4.5 billion euros through «Ukraine Facility», and on April 24, 2024, the European Union received another 1.5 billion euros under this program [8, 9].

Financial assistance under the program «Ukraine Facility» is a very timely and systemic support for the budget and economy of Ukraine. Regular quarterly tranches will significantly stabilize the budget sphere; facilitate the operation of the foreign exchange market within the target parameters of the NBU, curb inflation and price growth; while providing the Government of Ukraine with the opportunity to allocate more domestic budget funds for military needs. A significant part of the loans in this program (2/3), as well as the rapid increase in the debt burden on the budget for government bonds (from 59% at the end of 2021 to 100% in 2024) creates risks in the long term regarding the possibility of servicing debt obligations and, even if the war ends, will not allow Ukraine to actively develop socio-economically. It is also important for EU partners to understand that the Ukrainian economy requires urgent modernization and transition to a state of military-innovative economy, an economy with a larger share of the processing industry, and this requires significant investments in the relevant infrastructure and the development of human capital. To achieve this, it is necessary to increase the level of cooperation with leading EU and US corporations in the military-industrial complex and processing; it is advisable to promote this process and intensify it. In our opinion, such cooperation is still unsystematic and of little significance, and the investment component under the program Ukraine

[8] Polskaya K. 50 Billion for Ukraine. What You Need to Know About New EU Aid. *Deutsche Welle.* 2024. Feb 06. URL: https://www.dw.com/ru/50-milliardov-dla-ukrainy-vse-cto-nuzno-znat-o-novoj-pomosi-es/a-68180548 (accessed on: 15.07.2024).

[9] Government approves plan to implement Ukraine Facility programme. *Government portal.* 2024. Mar 18. URL: https://www.kmu.gov.ua/en/news/uriad-zatverdyv-plan-dlia-realizatsii-prohramy-ukraine-facility (accessed on: 15.07.2024).

Facility (8 billion euros) taking into account the 4 years is a very small amount for large-scale attraction of Western companies to cooperation [10].

In addition, Ukraine has many inefficient markets and not very high-quality state regulation, the presence of oligarchic and corrupt players affects reforms, as a result of which entrepreneurship and economic growth suffer, and as a result, the shadow economy actively functions. In such conditions, narrow private interests displace public ones, so the funds of international partners should contribute to the formation of professional political and state institutions in Ukraine that are focused on public interests and strategically thoughtful development of the socio-economic environment. The rule of law, full protection of property and investment, maximization of public services in an inclusive transparent digital format, the introduction of a system for selecting highly professional and honest personnel for the civil service — monitoring and improving these processes (specification of reforms and their implementation time) will contribute to productive financing from the EU and real reform of Ukraine according to European standards.

It is also impossible not to take into account the fact that, according to «Reuters», 9 million Ukrainians lived in poverty in 2023, which is about 29% of the population. The number of Ukrainians living in poverty has increased by 1.8 million since 2020, which is explained by the Russian invasion in 2022. The increase in poverty is also due to a decrease in the employment rate: more than 1/5 of the adult population who worked before the war lost it. In Ukraine, there is currently a 25% drop in aggregate demand to the pre-war level. For systemic economic growth (above 3-5%), significant consumer demand for goods manufactured in Ukraine is necessary; also important is the growth of exports of products with high added value and systemic public investment in infrastructure and the development of social capital. In the medium and long term, it is important to take into account the demographic factor; even before the war, Ukraine had one of the lowest birth rates in the world. With the start of a full-scale war, birth rates have become even worse. Therefore, this EU funding program should promote the improvement of social standards, the development of small and medium-sized businesses, and the provision of young families with children with additional incentive programs. In areas affected by war and military actions, as well as for refugees, it is advisable to introduce more efficient forms of social assistance, financing of their infrastructure, assistance in restoring housing, and provide business structures with opportunities for their rapid launch through grants, preferential loans, budgetary and regional programs for the development of certain industries. There are no such resources from the EU yet [11].

[10] Grieveson R. Lessons for Ukraine and Moldova from EU-CEE. *WIIW*. 2024. Aug 02. URL: https://wiiw.ac.at/lessons-for-ukraine-and-moldova-from-eu-cee-n-641.html (accessed on: 03.08.2024).

[11] Redziuk Y. Six questions to the Ukraine program Facility. *Mirror of the Week*. 2024. May 14. URL: https://zn.ua/macroeconomics/shest-voprosov-k-prohramme-ukraine-facility.html [in Ukrainian] (accessed on: 15.07.2024).

Based on the above analysis, we believe that the optimal mechanisms and instruments of international financial assistance for the economic recovery of Ukraine are:

i) increasing the grant share of assistance to 70-80%;

ii) implementation of programs and opportunities for preferential debt write-offs for successes in reforming the socio-economic environment of Ukraine (for this, it is necessary to conduct negotiations with partner countries and representatives of international organizations);

iii) the formation of financial and investment funds for attracting high-tech Western companies to Ukraine using funds from international donors (for this, it is necessary to create an appropriate international information and consulting structure and to form a high-quality infrastructure and legislation in Ukraine for accepting foreign companies);

iv) connection of grant funds for cross-border cooperation within the framework of cooperation of EU countries along the border with Ukraine (Poland, Slovakia, Hungary, Romania);

v) formation of funds from international donors for financing modern innovation and industrial infrastructure (to create a network of innovation and industrial parks), as well as the creation of a modern innovation ecosystem, which will facilitate the emergence in Ukraine of small and medium-sized businesses in the field of IT, modern science, industry and processing;

vi) an increase in the number of funds and programs for insuring military risks using funds from international donors and domestic insurance companies for the infrastructure and business structures of Ukraine, which is already beginning to be partially implemented;

vii) financing digital transformations aimed at reducing the level of discretion in the customs sphere, tax administration, legal proceedings and law enforcement functions;

viii) formation of funds from international donors to finance social security for needy Ukrainians and, especially, young families with children (Redziuk, 2017; 2021).

CONCLUSIONS

As the study showed, the Ukrainian economy, due to a number of internal reasons and external challenges, is in a state of underdevelopment, stagnation and gradual decline in activity. Ukraine faces significant challenges: wars and the consequences of military actions, inefficiency of the state apparatus and markets, there is also a significant number of people who suffered and became impoverished during the war, while business structures operate in anti-crisis mode. Therefore, financing from partners from the USA and the EU plays a key role in the sustainability of the socio-economic environment of Ukraine during the active phase of the war. At the same time, the launched assistance programs have a number of limitations and shortcomings that need to be corrected if the goal is the systemic, long-term and comprehensive development of our country. The credit form of providing financial assistance must be transformed into the form of grant, technical and gratuitous financing with appropriate mechanisms for monitoring the spending of these funds. Otherwise, over time, the debt burden will be one of the leading items in the budget of Ukraine, significantly hindering its socio-economic development. It should be noted that 10 billion euros per year for the state budget under the largest financial assistance program «Ukraine Facility» is an insignificant amount for tangible social support for Ukraine. In addition, the investment component (8 billion euros) taking into account 4 years is also a very small amount for large-scale, strategic attraction of Western companies to cooperation and preparation of infrastructure for these processes. In our opinion, the Ukrainian government should demonstrate justified and decisive activity in transforming and improving the «Ukraine Facility» program to its European partners, demonstrating its professionalism, integrity and strategic vision of the model of the domestic economy integrated into the EU.

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МЕХАНІЗМИ ЗОВНІШНЬОГО ФІНАНСУВАННЯ
ЕКОНОМІКИ УКРАЇНИ ПІД ЧАС ВІЙНИ
ТА ПІДХОДИ ДО ЇХ ОПТИМІЗАЦІЇ

Досліджено підходи й механізми фінансування економіки України країнами ЄС під час повномасштабної війни з РФ, що показало значну обмеженість виділених ресурсів для системного протистояння агресору і повноцінної євроінтеграції. Виявлено, що фінансові ресурси, які виділяють міжнародні партнери України (переважно США та ЄС), обмежені, їх вистачає лише для стабілізації курсу і цін та фінансової стабілізації, проте недостатньо для економічного відновлення і розвитку. Запропоновано переглянути і розширити параметри найбільшої наявної програми фінансової допомоги «Ukraine Facility» для відчутнішої соціально-економічної підтримки України. Інвестиційна складова цієї програми також є дуже незначною за обсягом для масштабного, стратегічного залучення західних компаній до співпраці й страхування бізнес-ризиків. По суті, лише грантове, технічне і безоплатне фінансування з відповідними механізмами контролю може змінити траєкторію відновлення української економіки.

Запропоновано низку заходів (сім інструментів фінансової допомоги) для зміцнення вітчизняної соціально-економічної сфери, наведено переконливі аргументи для перегляду українською владою політичного діалогу на міжнародному рівні. Активно трансформуючи і вдосконалюючи програму «Ukraine Facility», Уряд України має продемонструвати орієнтованість на співпрацю з європейськими партнерами відповідно до стратегічних планів розвитку вітчизняного соціально-економічного середовища.

Ключові слова: *зовнішнє фінансування економіки; економіка країни під час війни; економічна євроінтеграція; міжнародні економічні відносини; світова економіка.*