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# DEBT POLICY OF UKRAINE IN THE CONDITIONS OF MODERNIZATION OF PUBLIC FINANCES

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Abstract. Since the full-scale invasion of Russian Federation, public finances (PF) have been operating under conditions of uncertainty and unprecedented security challenges, akin to those experienced by the entire economic system. The level of uncertainty is such that it overshadows the current financial crises and parity with the consequences of the Second World War. This became the core objective of the study, which consisted of substantiating conceptual approaches to the formation of debt policy, considering the peculiarities of the projection of martial law on the functioning of PF. The research employs a systematic approach to methodology, integrating methods of factual and situational analysis that are grounded in international standards for public debt assessment and theoretical generalisations. Furthermore, through a comparative analysis, the interrelationships and mutual influences between debt policy and budget strategy are monitored. Furthermore, the study assesses the potential of leveraging the frozen Russian assets to support Ukraine's post-war recovery through the PF system. The study revealed that the debt policy is an integral component of the PF system. Unlike other program documents, it demonstrated resilience to both endogenous and exogenous challenges and the capacity to implement corrective measures during economic crises. This has laid the foundation for a Marshall Plan-like strategy for Ukraine. The PF strategy, which was approved just before the outbreak of the Russian-Ukrainian conflict, prompted discussions on enhancing the predictability of budgetary policy and debt sustainability. This, together with the adoption of a medium-term public debt management strategy, became the basis for the actual establishment of the Debt Agency as a legal entity, which in the future will ensure, on the one hand, the privileging of grants among the financial mechanisms for covering the budget deficit, and, on the other hand, an additional level of budgetary strategy for generating a multiplier effect from the borrowed funds for post-war reconstruction. On the other hand, this approach will create conditions for the transition from external sources of financing the budget deficit to internal ones by expanding and diversifying the range of investors in government securities. It is proved that debt policy in both the short and medium term will serve as the basis for the implementation of the budgetary strategy of post-war reconstruction, and will create conditions for accelerating the process of forced reparations to compensate for the damage caused by the Russian Federation.

**Keywords:** debt policy, public finance, public debt, budget deficit, post-war reconstruction, European integration, fiscal risks, frozen Russian assets, reparations, budget strategy.

#### JEL Classification: H63, H69

#### 1. Introduction

Since February 24, 2022, the date of the full-scale invasion of the Russian Federation, the state finances of Ukraine, as well as the entire economic system, have been operating in conditions of uncertainty, unprecedented security challenges and social threats. The current level of financial distress in Ukraine is more severe than that experienced during the initial years of the country's independence, the unsuccessful implementation of significant market reforms by



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the first president, L. Kravchuk (2010), and the consequences of the Second World War, which took decades for the country to recover from. It is not fortuitous that the Russian Federation commenced shelling socially and economically significant targets from the outset of the conflict, which ultimately resulted in a loss of over 30% of GDP in 2022 (The World Bank, 2023). Moreover, the implementation of anti-crisis measures within the state finance system, predominantly characterised by supplementary expenditures from the state budget, was permitted in 2023 with the objective of facilitating the recovery of GDP by a mere 5% (National Bank of Ukraine, 2023), a figure that has contributed to the sustained decline. Its breakdown, that is, the transition to an upward trend, requires titanic shifts in the search for sources of resource support for the plan for the recovery of Ukraine from the consequences of war, which, along with the new Ukrainian doctrine, imbued with security guarantees, the support of allies, including within the limits of the special financial instrument of the Ukrainian Fund (Council of the European Union, 2024) determines the cardinality in the ontogenesis of inter-industrial relations, the structure of the national economy, as well as the formation of new goals both in the reform of the system of public finance management and in the management of public debt, carrying in itself the archetype of the code of Ukrainian indomitability.

Debt policy in the context of economic reform, the stabilisation of state finances in the face of geopolitical upheaval and local conflicts, the theorisation of the process of globalisation, the financialisation and dollarisation of economies, and the development of state regulation models, in particular anti-crisis, were initiated and extensively researched by recognised foreign economists in their works D. The following economists have made significant contributions to this field: Baxter (2022), E. Capps (2023), G. Eusepi (2018), P. Lemieux (2013), T. Omond (2016), A. Pienkowski (2020), C. Reinhart (2015), and R. Roosa (1964). It is important to acknowledge that the shift towards a revised approach to debt policy in the West was influenced by the philosophical concept of deconstruction, particularly as articulated by J. Derrida (1994). This includes an examination of the rhetorical interplay and nonobjective arguments between "war and debt" and "peace and the debt burden." These considerations are crucial when determining the objectives of public finance reform. Concurrently, B. Emons (2013) establishes a parallel between the expansion of public debt and the potential for investment, as evidenced by the experiences of countries such as Mexico and Italy. This illustrates the necessity to reconcile the concepts of "investment safety" and "riskfree investment rate" in countries facing internal conflicts, including military ones. In the USA, the fundamental basis for the study of debt policy and the behavioural model of public finance was established by H. Murphy (2012). Based on an in-depth retrospective analysis of the US public debt, Murphy identified invariants of approaches to the archetype of public finance in relation to debt policy during the War of Independence, the First World War and the post-war recovery period.

Debt policy is also examined by recognised international institutions, which study and provide their own recommendations on the architecture of public finances, their sustainability and potential for macroeconomic stability. The foundations for the study of debt policy were laid by experts at the World Bank in the Report on World Development (World Bank, 1978). Thirty years later, with the worsening of the debt problem, a specialised publication was published - "Developing the Domestic Government Debt Market" (World Bank, 2007) - in which parallels were drawn between the public debt, the level of a country's development, the results of reforms and the ability to counteract a financial crisis, historiographically and taking into account the new geopolitical reality. At the same time, experts of the International Monetary Fund (International Monetary Fund, World Bank, 2015) studied the impact of public debt on the financial sovereignty of countries and the yield of government bonds and developed a special standard for the distribution of "debt" data (International Monetary Fund, 2016).

In the National School of Economics and the School of Public Finance, since the independence of Ukraine and up to the present day, issues of debt policy, its mutual influence and relationship with economic reforms, crises (in all forms of their manifestations), the formation of the formal and informal part of institutional rules in the sphere of public and publicly guaranteed debt, their convergence with the basic provisions of international standards for its assessment have been studied by I. Bohdan (2020), T. Bohdan (2022), I. Chugunov (2022), S. Gasanov (2023), T. Iefymenko (2022), A. Krysovatyy (2022), I. Lunina (2020), S. Marchenko (2022), M. Razinkova (2023), M. Tarasenko (2023), S. Yerokhin (2014), etc. In light of these considerations, the legislative basis for the modernisation of public finances (in the form of iterations of the relevant programme documents) was established, and the tools for assessing and managing the public debt were introduced in the form of appropriate medium-term strategies. Consequently, since 2015, considerable positive advancement has been made in the reduction of the debt burden and the assurance of economic growth sustainability. However, the unprovoked invasion of the Russian Federation on the territory of Ukraine necessitates a comprehensive examination of the public debt system in the pre-war period and during the period of the legal regime of martial law, with a particular focus on the military and political conditions in which the Ukrainian public debt system operates. This should be coupled with an investigation into the suitability of past debt management strategies.

The objective is to substantiate the conceptual and methodological approaches and recommendations for the formation of Ukraine's debt policy, taking into account the specific characteristics of the public finance system operating within the legal framework of martial law and its capacity to provide the necessary stimuli for the post-war recovery of the national economy in accordance with the stated political objectives. To achieve this objective, the study identifies a series of interconnected tasks. These include investigating the nature of the budget deficit and the paradigm of debt management; determining the mutual influences and interdependencies between economic growth and debt financing of budget expenditures; and parametrizing the pre-war and wartime level of Ukraine's debt sustainability, as well as carrying out a prospective projection for the next two years, taking into account the needs of Ukraine's post-war reconstruction.

The institutional and regulatory environment and the research centre are state finances in the prewar era and during the legal regime of martial law. They function as a transmission channel, an archetype and, at the same time, a provider - that is to say, the state finance management system. The object is public debt, while the subject is debt policy. In formulating these proposals and recommendations regarding the formation of the debt policy of Ukraine, the modern foundations of public finance have been taken into account, as well as the peculiarities of the functioning of the public finance system in a special period. The research employs a systematic methodology to examine the composition and synthesis of methods for factual and situational analysis. These methods are based on the indicator base of international standards for assessing public debt and theoretical generalisations. Furthermore, a comparative analysis was conducted to monitor the interrelationships and mutual influences between debt policy and budget strategy. Additionally, an assessment of the potential for leveraging frozen Russian assets to replenish Ukraine's public finance system and facilitate post-war recovery from the war's consequences was provided.

#### 2. Causes and Consequences of Budget Deficit

A budget deficit occurs when government spending exceeds revenue. This can be attributed to a number of factors, including the necessity to increase social spending, economic downturns, tax cuts, subsidies, or ineffective administration of taxes, fees, and other revenues. Additionally, budget deficits may emerge in response to unanticipated occurrences and policies. For instance, an increase in defense and security spending may be necessary due to unforeseen circumstances. This was evident in Ukraine, where the full-scale invasion of Russian forces into Ukrainian territory led to an urgent need to enhance security and defense spending. This was crucial in addressing the consequences of armed aggression, including social, economic, and infrastructure restoration, as well as the construction of fortifications and the provision of immediate needs for fortress cities.

There is a strong positive correlation between the budget deficit and the public debt. In order to offset the shortfall in budgetary receipts, governments have recourse to borrowing, which represents one of the avenues for addressing the deficit and is regarded as the least "harmful", or "soft", method of financing public expenditure. In order to cover the deficit, the government borrows funds by issuing marketable securities (foreign and domestic state loan bonds) and other securities, primarily protected against inflation. Consequently, the public debt can be defined as the accumulation of all past budget deficits.

It is recommended that the budget deficit be covered through the issuance of money in cases of acute need for "quick" money and as a foundation for finding an effective long-term solution to the most "soft" balancing of the budget. This is because the emission in the long run has a negative impact on the socio-economic standard of living of the population. Additionally, in order to balance the state budget, the government may consider reallocating funds from certain expenditures or enhancing their efficacy, while also exploring new avenues for expanding the activities of the public sector within the economy. This could involve fostering incentives for the growth of promising industries that generate added value or align with the "knowledge" economy.

In examining the correlation between budget deficits and public debt, it becomes evident that the annual budget deficit represents the state's indebtedness to creditors. This figure is projected to reach the level of the state's financial sovereignty. A budget deficit can result in an increase in borrowing, interest payments and reinvestment, which in turn can have a detrimental impact on fiscal risks, namely the potential loss of planned fiscal revenues in subsequent budget periods.

In the IMF guidelines on the management of public expenditures (Barry & Diamond, 1999), the following key determinants are defined: whether such expenditures are carried out within the planned budget parameters, whether there is a redistribution of budgetary priorities, and whether there are cash gaps, unplanned fiscal risks, or other problems during

the implementation of the state budget schedule. This naturally gives rise to the question of how one might measure deficits and debt. It can be reasonably assumed that an increase in the deficit will result in an expansion of the public debt. Should the public debt increase at a faster rate than the gross domestic product (GDP), a change in the ratio between the two will result in economic destabilisation. This will initially manifest as a recession and subsequently give rise to a new crisis. This is why the Maastricht criteria (European Central Bank, 1999) (a set of economic indicators that must be met by EU member states, countries that aspire to join this group of countries and must fulfil them even after joining) recommend that countries maintain a state budget deficit at a level no higher than 3% of GDP, and a public debt level of up to 60%.

Ukraine, as a candidate for EU accession, has already implemented a part of the Maastricht criteria in its legislation, namely 1) according to the second paragraph of the first part of Article 14 of the Budget Code of Ukraine (hereinafter referred to as the BCU) (The Budget Code of Ukraine, 2010), the state budget deficit of Ukraine for each year of the medium-term period may not exceed 3% of the forecast nominal GDP for the respective year; 2) in accordance with part two of Article 18 of the Budget Code, the total amount of public and publicly guaranteed debt at the end of the budget period may not exceed 60% of the annual nominal GDP. However, these provisions do not apply to cases of martial law or a state of emergency in Ukraine or the anti-terrorist operation in Ukraine. At the same time, the Government and the Verkhovna Rada of Ukraine in the Budget Declaration, the main mediumterm budget planning document that defines the main provisions of the budget policy and parameters of the state budget, among other things, determine the threeyear horizon of the state budget deficit, sources of its financing and, accordingly, the indicators of public debt, publicly guaranteed debt and the provision of state guarantees.

Theoretically, long-term and excessive deficits create additional risks to fiscal stability and moderate inflation, causing high interest payments on the accumulated debt. Countries counteract budget deficits by ensuring economic growth through fiscal regulation tools, in particular, by reducing public spending and raising fiscal rates, thus mitigating fiscal risks.

The phenomenon of sub-nationality gives rise to the concept of "sub-national debt", which is a consequence of the inefficient architecture of the system of inter-budget relations in the respective country. This may include, for example, vertical or horizontal imbalances, or a system of inter-budget transfers without transparent distribution criteria that are favourable for making special subjective decisions. To illustrate, in Ukraine, the Ministry of Finance (2019) indicates that the reform of interbudgetary transfers resulted in an increase of approximately 9 billion UAH in medium-term loans from local selfgovernment bodies.

Furthermore, the public debt has increased significantly during periods of global instability and upheaval. In recent years, the global pandemic has served as a catalyst for this growth, resulting in a prolonged period of elevated debt levels in the short- and medium-term, as well as an increase in real interest rates (International Monetary Fund, 2023). At the same time, the COVID crisis has created invariance in the spread of default risks and scaled them geographically. Thus, most of the global economy, especially in developing countries, was trapped in the financial crisis, and almost 60% of low-income countries increased their debts or were at high risk of destabilising their public finance systems (Horn, Reinhart, Trebesch, 2022). In this context, a World Bank study (2023) shows that difficult global financial conditions and low external demand are holding back economic growth in emerging and developing countries, which Ukraine belonged to before the war.

Ukraine also did not avoid the need to increase the planned deficit of the state budget: in April 2020 the deficit was increased from 2.2% to 7.5% of the projected volume of GDP, but in fact, according to the results of the fiscal year, the state budget was executed with a deficit of 5.6% of GDP (Medium-Term Public Debt Management Strategy for 2021-2024, 2021). The expansion of the state budget deficit was a consequence of the implementation of restrictive measures with the objective of preventing the propagation of the coronavirus, as well as the necessity for financial support for measures designed to stimulate the economy. As a consequence of inadequate funding for these measures, the Ministry of Economy of Ukraine (2021) reported a 4.2% decline in industrial production during January and February 2021, compared to a 3% reduction during the same period in 2020. Similarly, the agrarian sector experienced a 6.1% contraction, representing a deterioration from the 0.1% growth observed in the same two-month period of 2020. Furthermore, the construction sector experienced a 12.8% decline (in January-February 2020, the parameter exhibited a value at the same level as that observed in January-February 2019), while the transport sector demonstrated a 7.7% reduction (in January-February 2020, a decline of -3.8% was noted). The situation was similar in other countries of the world (Petrukha, Petrukha, Alekseienko, Kushneruk, Mazur, 2023; Petrukha & Korolenko, 2020; Petrukha & Petrukha, 2020). In response to the global economic crisis, governments worldwide have increased their

borrowing in order to provide financial support for anti-crisis measures designed to stabilise the economy. As estimated by the IMF (Chun, Naidoo, Sobrinho, 2022), the average borrowing among developed economies was 7.5% of GDP in 2021, while for the G7 group of countries it was 9.1%. In Ukraine, the real GDP decreased by 4.0% in 2020, which was in line with the forecasted parameter of 4.8% during the introduction of the next changes to the state budget. Concurrently, the ratio of public debt to GDP was 53.9%, in comparison to 44.3% at the conclusion of 2019 (Medium-Term Public Debt Management Strategy for 2021-2024, 2021), resulting in a subsequent negative debt inertia.

Prior to the full-scale invasion of the Russian Federation, the economy of Ukraine had exhibited a progressive upward trajectory for three consecutive years following the financial and economic recession of 2014-2015. The growth of GDP accelerated to 3.3% in comparison to the previous year, representing the highest indicator since 2011. The money supply for the initial nine months of 2018 increased by 22.7% in comparison to the same period in the previous year, providing support for the implementation of the measures. In accordance with the National Economic Strategy for the period until 2030 (The Resolution of the Cabinet of Ministers "On Approval of the National Economic Strategy for the period up to 2030", 2021), the Medium-Term Strategy for Public Debt Management for 2021-2024 (Medium-Term Public Debt Management Strategy for 2021-2024, 2021) has been adapted. UAH 70.8 billion from the state budget were directed only to the implementation of measures provided by the Special State Program to overcome the negative consequences in the economy of Ukraine caused by COVID-19 (British Embassy Kyiv, Verkhovna Rada of Ukraine, WFD, 2021) to support small and mediumsized businesses. As a result of the increase in the total public debt to support the implementation of these measures (by about 1.7%, according to the estimates) to the level of 57197 million USD at the end of 2021, it was not possible to maintain employment and reduce job losses, in particular, during this period, 130000 people received the status of unemployed, more than 10 million people received wages that differed from the pre-quarantine period. That is, the anti-crisis COVID measures were not as effective and, most importantly, they did not create a positive "debt" inertia, like similar measures taken by the government after the 2008 global economic crisis, thanks to the implementation of which the ratio of public and guaranteed debt to GDP decreased year-on-year for the first time since 2011: from 80.9% at the end of 2016 to 71.8% at the end of 2017.

In the pre-war period, Ukraine also received significant support from international financial organisations to overcome the consequences of the COVID-19 crisis and to carry out structural reforms, in particular under the IMF SBA programme, the state budget received 5 billion USD, with a package of macro-financial assistance – 1.2 billion EUR, under the agreement on financial cooperation with Germany – 214.55 million EUR (in the form of loans) and 38.9 million EUR (in the form of grants).

It is also important to consider the economic impact of the partial annexation of Ukrainian territories by the Russian Federation and the subsequent occupation of the Autonomous Republic of Crimea between 2014 and 2020. Estimates from CEBR (MacDonald, 2022) suggest that these actions resulted in economic losses of approximately 280 billion USD, with an annual increase of 40 billion USD during the phase of the positional war. A straightforward mathematical projection of this parameter on the public debt indicators as of the end of 2020 reveals a scenario in which the debt is entirely absent and an additional reserve of at least 200 billion USD is available for the implementation of socio-economic development programmes. This phenomenon also elucidates the abrupt surge in state debt in 2015, which reached 43445.4 million USD, representing a 12% increase (Ministry of Finance of Ukraine, 2023) and an average growth rate of 6.33% over the subsequent five budget periods, preceding the full-scale invasion.

A unique historical decision for Ukraine in the pre-war period was the establishment of the State Debt Management Agency (hereinafter referred to as the Debt Agency) as a central executive body implementing the state budget policy in the field of public debt and publicly guaranteed debt management, whose activities are directed and coordinated by the government through the Minister of Finance. In fact, this should have become a new model of public debt management, for the implementation of which, inter alia, 50 million UAH (The Law of Ukraine "On the State Budget of Ukraine for 2019", 2018) and 52.8 million UAH (The Law of Ukraine "On the State Budget of Ukraine for 2020", 2020) have been provided in the State Budget for 2019 and 2020, respectively (The Order of the Cabinet of Ministers of Ukraine "On Approval of the Strategy for Reforming the Public Finance Management System for 2017-2020", 2017; The Resolution of the Cabinet of Ministers of Ukraine "On Establishment of the State Debt Management Agency of Ukraine", 2020): granting the Agency the right to act as an issuer of debt securities of the Government of Ukraine, including government bonds, treasury obligations and government derivatives (derivatives, according to internationally accepted standards, are not part of debt securities and are not included in the public debt), liquidity management of the unified treasury account and currency accounts of the State budget, including the placement of temporarily free funds of the unified treasury account and funds of currency accounts of the State budget. However, as of today, the Debt Agency has not been created, and its functions are performed by the Ministry of Finance in accordance with the procedure set out in Chapter VI, Section 35 of the Final and Transitional Provisions of the Budget Code of Ukraine.

In the context of institutional uncertainty in the public debt management system, Ukraine demonstrated resilience in its domestic government bond issuance in hryvnias, with a 12% increase from 231 billion UAH in 2019 to 259 billion UAH in 2020. (Cabinet of Ministers of Ukraine, 2021), which resulted in the mitigation of currency "debt" risks and the achievement of favourable shifts in the ratio of public and public-guaranteed debt, thereby creating the corresponding "debt" inertia for the subsequent budget periods. This is corroborated by the pertinent data from the Ministry of Finance of Ukraine (2021), which indicates that the ratio of public and public-guaranteed debt to GDP in the prewar period gradually approached the optimal value of 60% with the gross foreign debt as of the end of 2021. The total debt was 129.7 billion USD, comprising 13.4 billion USD owed to the IMF, 6.5 billion USD in bilateral loans and 22.7 billion USD in Eurobonds. The balance in the USD currency structure was 61.3%, a figure that had been in decline.

In the period preceding the war, according to estimates produced by the United Nations (UN Development Program, UN Women, UN Food and Agriculture Organization, 2022), Ukraine was classified as a country that had successfully overcome the consequences of the global pandemic in a manner that was conducive to debt security. Additionally, in 2021, Ukraine established the conditions necessary for macroeconomic stability and the sustainability of public finances. According to the results of 2021, Ukraine exhibited a state budget deficit indicator of 3.6% of GDP, which created conducive macroeconomic conditions for its reduction to 3% of GDP in 2022 (Medium-Term Public Debt Management Strategy for 2021-2024, 2021). This also informed the strategic planning of the public debt management system for the period 2021–2024, which sought to optimise the structure of public debt and associated risks while maintaining an acceptable level of debt burden.

The Russian-Ukrainian conflict had the effect of nullifying gains made in the system of public finances and public debt management through fiscal consolidation mechanisms. Significant progress in this area was achieved between 2017 and 2021, during which time the public and public-guaranteed debt decreased from approximately 81% of GDP in 2016 to 49% in 2021. Concurrently, the implementation of structural reforms and the further sociologization of state finances, coupled with the pressing financial requirements of the security and defense forces, resulted in a 602 billion UAH (approximately 15.7% of GDP) increase in the state budget deficit in 2022 compared to the previous year. This ultimately reached 817.9 billion UAH, financed through international grants and preferential financing, amounting to approximately 33.9 billion EUR. As illustrated in Table 1 and Figure 1, the public debt and public-guaranteed debt increased by 1352.4 billion UAH (71.6% of GDP) and 51.0 billion UAH, respectively, in 2022. Conversely, in

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Public debt dynamics and the impact of the Russian-Ukrainian war on i
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	Pre-war period - 2021		The period of the Russian-Ukrainian war			
Elemental architecture of public debt			2022		June 2023	
	billion UAH	% of the total amount	billion UAH	% of the total amount	billion UAH	% of the total amount
External debt including:	1300	55	2325	63	2922	67
International organisations, EU	584	25	1254	34	1782	41
Foreign governments	41	2	183	5	250	6
Commercial banks	51	2	60	2	59	1
Eurobond holders	625	26	829	22	831	19
Domestic debt including:	1063	45	1390	37	1455	33
NBU	314	13	703	19	690	16
Holders of domestic government bonds	529	22	438	12	515	12
State-owned banks, state- owned companies and the Deposit Guarantee Fund	219	9	249	7	249	6

Source: compiled by the authors on the basis of sources (Accounting Chamber, 2023; Medium-Term Public Debt Management Strategy for 2024-2026, 2023; Petrukha, Petrukha, Miakota, Krupelnytska, Tarasenko, 2023)

dollar terms, these debts decreased by 1.5 billion USD (6.9% of GDP).

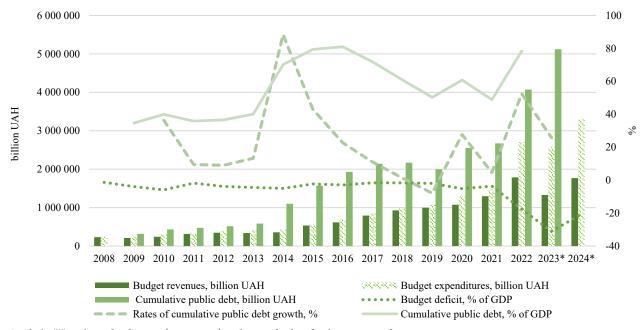
The defence of national sovereignty against unprovoked Russia's aggression led to an increase in defence spending, which put additional pressure on the budget. Tax revenues in 2022 decreased by 14.2%, while expenditures increased by 81.4%.

In fact, the state budget was divided into "military" and "civilian", with a slight decrease in the structure of the former due to a more than tenfold increase in spending on the needs of the security and defence sector, and in 2024 spending on it will increase to UAH 1,164 trillion (The Law of Ukraine "On the State Budget of Ukraine for 2024", 2023), or more than 70 times compared to 2014, i.e., with the initial phase of Russia's aggression against the Ukrainian people and the entire democratic world.

In 2024, the proportion of the state budget allocated to the "military" sector was 1.69 trillion UAH (approximately 53% of total budget expenditure or over 95% of total budget revenue), representing 22.1% of GDP (The Law of Ukraine "On the State Budget of Ukraine for 2024", 2023). This figure aligns with the corresponding indicators for the period between January and August 2023, the military situation remained unchanged, with the active phase of hostilities continuing and no additional financing provided to the security and defence budget. Furthermore, the search for a compromise regarding the new law on mobilisation led to the creation of additional costs that had not been foreseen previously. These estimates were made by R. Pidlasa, the mobilisation of 500,000 people will cost Ukraine 720 billion UAH, representing a new level of deficit and debt burden. Furthermore, it will require revision as early as the fall of 2024, which will exert additional pressure on the system of public finances and increase the probability of exceeding a new debt anti-rating mark.

It should be noted that by the midway point of the second year of the Russian-Ukrainian conflict, marketable securities constituted 40% of the public debt structure. This included 19% in the form of Eurobonds, 12% in the form of domestic government bonds, and 10% in the form of bonds belonging to the National Bank of Ukraine. The proportion of external market securities in the overall volume of public debt has undergone a notable decline, from 26% in 2021 prior to the conflict to 19% as of June 2023. The remaining portion of the public debt is comprised of non-marketable securities, including domestic government bonds issued for the purpose of recapitalising state-owned banks and state-owned enterprises. Concurrently, the necessity for reforming the state sector of the economy in order to guarantee the financing of additional requirements of the security and defence sector is pressing. This should be achieved not at the expense of additional debt sources, but through the reallocation of state budget expenditures, in particular for the maintenance of inefficient (lossmaking) subjects of the state sector of the economy.

Debt to international financial organisations and foreign governments accounts for 46% of the total public debt, which, on the one hand, clearly demonstrates the support of Ukraine's allies for



Symbols: "\*" – planned indicators (parameters) in the state budget for the corresponding year.

#### Figure 1. Dynamics of the state budget deficit and the impact of the Russian-Ukrainian war on it

Source: compiled by the authors on the basis of sources (Ministry of Finance of Ukraine, 2023; Petrukha, Petrukha, Alekseienko, Kushneruk, Mazur, 2023; State budget web portal for citizens, 2024)

its sovereignty and its aspirations to become a full EU Member State. On the other hand, this trend contradicts the intention to increase the share of market instruments, but ensures that the debt is balanced with concessional financing received from international financial institutions. Compared to countries with similar credit ratings (as of January 2024, Ukraine's long-term foreign currency sovereign rating is at "CCC" with a possible downgrade outlook (Ministry of Finance of Ukraine, 2024)), Ukraine is in a group of countries with Argentina, Ecuador, Egypt, Ghana, Nigeria, Pakistan, Sri Lanka and Turkey. If to consider regional affiliation, one get a projection to countries such as Bulgaria, Croatia, Cyprus, Czech Republic, Hungary and Poland. At the same time, despite the fact that Ukraine is in an active state of war and intends to become an EU Member State, peer countries (from selected groups) that are not EU Member States have a higher share of external financing, and EU Member States have a more stable domestic debt market, which requires a more targeted implementation of debt reforms in the public finance management system.

#### 3. Management of Public Debt in Ukraine

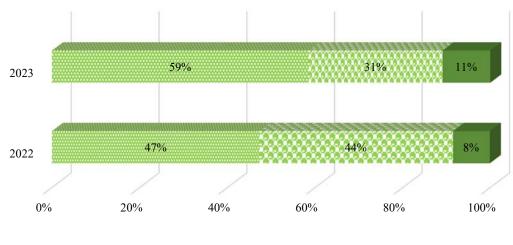
"Today, you, Ukrainians, are a symbol of unbreakable strength. During this time, we have united Europe, we have united the countries of the European Union at a new level. It is a symbol that people in any country can become the best people on Earth at any time" (Zelenskyy, 2022). It is proved that the existing architecture of the public finance management system is not only stable, but also capable of creating budgetary impulses for anti-crisis regulation of the national economy. Thanks to this, within a few months after the start of the large-scale invasion of the Russian Federation, the country's reconstruction processes began. And here I would like to emphasise that the socalled "reconstruction" took place both through the prism of adapting the economy to the new military, political, social and economic realities and restoring critical infrastructure facilities that were damaged by the aggressor country's missile attacks. According to estimates by RDNA2 (World Bank, Government of Ukraine, European Union, United Nations, 2023), the total reconstruction and rehabilitation needs amount to 411 billion USD, almost double the prewar GDP level and equivalent to three Marshall Plan budgets for European countries in today's prices. However, in light of the shift in the structure of macrofinancial assistance from allies between 2022 and 2023 (Figure 2), the growing misalignment between the pace of economic recovery (i.e., fiscal potential) and the damage caused by new missile attacks on Ukraine (e.g., "Shahed 136"), the uncertainty, even the presence of signs of "wavering" in the provision of future macro-financial assistance by donor countries in 2024 and in the medium term, new critical challenges emerge in the system of both public finance management and debt policy formation.

At the same time, the EU's position on further financial assistance to Ukraine through the mechanisms of the Ukraine Facility programme was clearly outlined on February 1 this year and envisaged the allocation of 18 billion EUR in 2024, of which 4.5 billion EUR should be received in the first quarter, which puts this instrument in the first place among external sources of financing the state budget deficit in the near future. For example, the time horizons for receiving 60 billion USD in US aid (of which 75% is military and defence aid, i.e., funds actually invested in the US military industry, and 24% is aid to support the economy, energy, and civilian security) were outlined only in April 2024. Prior to that, this created additional threats to both macroeconomic stability and the likelihood of additional damage and losses due to insufficient military support for the security and defence forces.

Also, the period 2024-2026 will see peak public debt repayments of more than 1000 billion UAH per year on average (Figure 3), which will create an additional crisis for the stability of public finances and further uncertainty about the debt crisis in Ukraine. To overcome this impasse, it is imperative to attract assistance from the United States at the end of the first – beginning of the second quarter of this year to ensure the implementation of public debt management operations (primarily to refinance domestic and foreign debt obligations before their final repayment), minimise refinancing risks in the short and medium term, which, in particular, lies in Ukraine's compliance with the requirements of the Technical Memorandum with the IMF (2023).

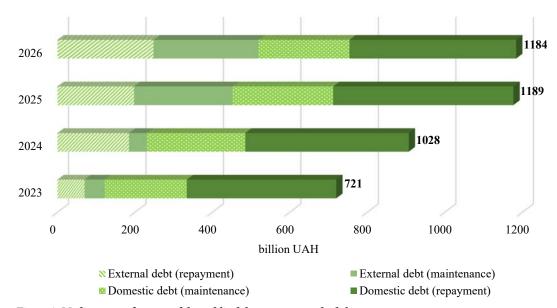
In the medium term, the government envisages fiscal space of 154328.6 million UAH in 2025 and 27615.6 million UAH in 2026, which is sufficient to ensure compliance with the public debt repayment schedule:

First, the prompt and effective implementation of public debt management operations will reduce the need to cover the deficit of the "civilian" part of the state budget in the long run, providing more relevant information for the activities of the interagency working group on the preparation of proposals for budget financing of the security and defence sector in 2025-2027. At the same time, it is necessary to strike a balance between the needs of the security and defence forces, the pace of economic recovery (GDP growth is expected to reach 4.6%, 6.8% and 6.6% in 2024-2026, respectively (Ministry of Finance of Ukraine, 2023)), and the pace of increase, and possibly regression in some parts, of the expenditure side of the "civilian" budget, given the following



Credits redits ■ IMF
Figure 2. Dynamics of the structure of external sources of financing the budget deficit

Source: compiled by the authors on the basis of sources (Medium-Term Public Debt Management Strategy for 2024-2026, 2023; Ministry of Finance of Ukraine, 2023)



**Figure 3. Medium-term forecast of the public debt repayment schedule** Source: compiled by the authors on the basis of sources (Medium-Term Public Debt Management Strategy for 2024-2026, 2023; Ministry of Finance of Ukraine, 2023)

projected public debt repayments 730.77 billion UAH in 2025, 595.7 billion UAH in 2026, 524.97 billion UAH in 2027, 464.41 billion UAH in 2028, 425.16 billion UAH in 2029, and 402.43 billion UAH in 2030 for the reduction of the share of external debt.

Second, preserving the fiscal potential of the economy while at the same time reducing the need to repay the external public debt is also within the scope of implementing the tasks envisaged in the National Revenue Strategy until 2030 (Ministry of Finance of Ukraine, 2023), in particular in terms of reducing the share of public debt and reducing the primary budget deficit, taking into account the need for further growth of budget expenditures for the needs of stimulating

the economy (including through the "Affordable loans 5-7-9%" programme, grant support for manufacturing and small business, creation of technoparks and humanitarian demining) and its recovery from the consequences of Russia's military aggression. In the period preceding the war, the multiplication factor of this kind of measure on a national scale was within the range of 4-6 conventional units (Gasanov & Petrukha, 2014). In the context of post-war recovery, this factor has the potential for significant growth. This results in a potential growth of up to 10 conventional units (Petrukha, Kosinskyi, Shubalyi, 2022), which would ensure the growth of the fiscal potential of the economy, accelerate its reconstruction, reduce the

state budget deficit, and transition from external sources of its financing to internal ones.

Thirdly, it should be taken into account that a significant part of the assistance from the allies, which is aimed at the needs of the reconstruction of the Ukrainian economy and its post-war recovery, is provided in the form of loans, which will create an additional debt burden mainly in the medium and long term (up to 25 years according to the current structure of debt in 2045-2049, on the contrary, forecast payments had minimum values of 92.24 billion UAH, 89.79 billion UAH, 87.43 billion UAH, 72.61 billion UAH and 72.07 billion UAH, respectively). In the near term, specifically over the next four years, the Ukraine Facility program will result in the allocation of 33 billion EUR in loans, which will contribute to an increase in the nominal public debt between the dollar and the euro. Furthermore, this will exacerbate the debt crisis and create additional potential for instability in the public finance management system. It is therefore crucial to attempt to utilise the package of legislative initiatives proposed by the EU (Council of the European Union, 2022) in terms of the application of interest subsidy tools. This would entail applying the principle that EU countries, rather than Ukraine, pay interest on loans under the Ukraine Facility programme.

It should also be remembered that a potential source of reducing the budget deficit and simultaneously providing resources for the post-war reconstruction of Ukraine is the use of funds from the "frozen" assets of the Russian Federation. This is a distinctive form of compelled reparation, which aligns with the resolution of the UN General Assembly in Resolution A/RES/ES-11/5, entitled "Furtherance of remedy and reparation for aggression against Ukraine". It can, to some extent, address Ukraine's urgent needs. In the EU alone, it is about 200 billion EUR of the Central Bank of the Russian Federation placed in Euroclear accounts. And if only the interest income generated by these assets is reimbursed through the excess profits taxation tool, Ukraine will receive at least 5 billion EUR in additional funds to cover the state budget deficit in 2024. The initial steps were taken by the Government of Belgium in mid-2023, with the transfer of 92 million EUR to Ukraine (Barron's, 2023). These funds were derived from the taxation of financial assets belonging to the Russian Federation, which were held in Euroclear accounts. At the same time, their combined fiscal potential in 2022 alone was 625 million EUR, which, based on the principle of "Russia must pay", can already be used for Ukraine's needs in the short term. In the medium term, one should also hope for the adoption of the Restoring Economic Prosperity and Opportunity for Ukrainians Act (US Congress in the House of Representatives, 2023), which will allow for the transfer of 300 billion USD of Russia's frozen assets to the Ukraine Support Fund and cover more than half of the damage caused by Russia's military aggression without putting additional debt burden on the public finance management system.

### 4. Conclusions

The debt policy is part of the public finance management system, which, unlike other sectoral and niche documents of the programme level, has demonstrated not only resilience to endogenous and exogenous security challenges, resistance to the rash, resistance to new budget expenditures for the needs of the security and defence sector, but also the ability to correct the national economy, provide financial resources for the priority needs for its recovery and lay the seeds of the Marshall Plan for Ukraine. Thus, the Public Finance Management System Reform Strategy for 2022-2025, adopted on the eve of the unprovoked military invasion of Ukraine by the Russian Federation, initiated discussions on ensuring the predictability of budget policy and strengthening debt sustainability as part of the fiscal risk and state asset management tasks, and, as a result, renewed the need to prepare the Budget Declaration from January 1, 2024. This, together with the adoption of the Medium-Term Public Debt Management Strategy for 2024-2026, formed the basis for the actual creation of the Debt Agency as a legal entity, planned according to the budget program under coding of program classification of expenses and crediting (Classification of the Functions of Government (COFOG) / Program and Budget Classification Code (PABCC)) 3508010 "Leadership and management in the field of policy implementation on issues of public debt management" UAH 45,8 million, which in the long run will provide, on the one hand, either the privilege of grants among the financial mechanisms used by allies to cover the budget deficit of Ukraine (mainly its "civilian" part) or an additional level of budget strategising of the level of generation of the multiplication factor on a national scale from borrowed loan funds for the post-war reconstruction of Ukraine, including through the tools of the Ukraine Facility program. On the other hand, this approach will create conditions for a gradual transition from external sources of financing the budget deficit to the domestic debt market by expanding and diversifying the range of investors in government securities, including through the return of non-residents to the domestic bond market. In other words, the debt policy, both in the short and medium term, will serve as the basis for the implementation of the budgetary and economic strategy for the recovery of Ukraine from the consequences of the Russian-Ukrainian war. Together with the diplomatic tools, it will create the conditions for accelerating the process of forced reparations to compensate for the losses caused by the Russian Federation at its expense, specifically those resulting from the "frozen" assets. Further scientific study in this area should also contribute to this, given the tendency towards the formation of a military "face" of state finances, the highly probable transition of the national economy to military "rails" and the need for additional approximation of the experience of countries that have suffered from conflicts (or are in them) on debt policy and public finance architecture.

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