Igor Lyutiy
Dr. Sc. (Economics), Professor,
Taras Shevchenko National University of Kyiv, Ukraine
liutyi@knu.ua
ORCID ID: 0000-0002-3561-2432

Euvgenia Nosova
PhD (Economic), Associate Professor,
Taras Shevchenko National University of Kyiv, Ukraine
euvgenianosova@knu.ua
ORCID ID: 0000-0002-7975-0984

Oleksandra Mukoied
Master of Finance, Banking and Insurance
Taras Shevchenko National University of Kyiv, Ukraine
alexandramukoied@gmail.com
ORCID ID: 0009-0008-8530-4260

THE DOMESTIC GOVERNMENT BOND MARKET IN FINANCING THE STATE BUDGET DEFICIT IN TIMES OF WAR

The war in Ukraine significantly disrupted all processes in the state, including the management of public finance, in particular in terms of the management of the state budget deficit. The war led to a sharp increase in military spending and a decrease in income, which necessitated increased borrowing. This change altered the structure of Ukraine's public debt, resulting in a greater reliance on high-interest short-term debt instruments. Of course, such measures do not correspond to the standard understanding of public debt management, in which the main condition is the search for the most favourable lending conditions with minimal risks; however, the unpredictability and recklessness of the crisis we face today dictate different conditions.

The need for rapid and significant financing also highlighted the importance of external lending in maintaining investor confidence and securing international financial support. However, too much hope for long-term external borrowing will lead to a brokerage pit. Therefore, another aspect of the PDM's changes involves an active search for internal financing sources, exemplified by the state's active use of military bonds.

When studying the concept of public deficit and debt, it is worth noting that the problem of public debt has been characterized by a number of domestic and foreign scholars. As for the domestic scholars, the debt policy issue was studied by Bohdan T., Cheberyako O., Fedosov V., Kudriashov V., Kuryshchuk K., Melikh O., Rak R., Rozhko O., Sofiyenko A., Serhienko O., Vasylyk O. Bohdan T. in his works investigates the impact of the war on the financial system and debt policy of Ukraine. Kudriashov V. focuses on methods and instruments of debt policy in the context of armed conflict. Rozhko O. analyzes strategies for the formation and use of debt policy in the context of the war in Ukraine. O. Cheberyako's research focuses on assessing the effectiveness of Ukraine's debt policy during the external aggression. Rak R. studied the history of domestic government bonds and their use as a source of financing the state budget deficit during the war.

Since the beginning of a full-scale war, the main source of financing of the state budget were financing from external sources (grants, bilateral credits, credits from IFIs) and direct redemption of military bonds by NBU. In modern conditions, the market of government debt securities plays an important role in the formation of the country's budget policy and the implementation of monetary policy through the actions of the central bank. Today, government securities are used as the main tool for attracting financial resources through government borrowing, which helps support the country's economy. In addition, they exert a positive influence on the investment processes taking place in the country.

Nevertheless, the successful development of the securities market in Ukraine is largely due to the effective circulation of government debt securities and the active participation of the government in the implementation of the country's debt policy [9]. Thus, to ensure the proper functioning of the securities market in general, it is important to optimally attract financial resources in the market of government debt securities. Therefore, the study of the circulation of government bonds acquires special importance and relevance, especially in the conditions of martial law, as it helps to solve existing problems in the field of public finances and contribute to maintaining the stability of our state's economy.

During wartime, it becomes necessary to find alternative methods of funding the state budget in order to sustain the army's needs, support the economy and resist the aggressor. In the conditions of total uncertainty, the development of internal market of state borrowings, which plays a significant role in financing the deficit of the State Budget of Ukraine, is of particular importance [6]. The methods used to finance the growing deficit and military spending involve issuing special government securities known as «military bonds» as a special type of domestic bonds.

Domestic government loan bonds (DGLB) are «debt securities sold by the government to primary dealers and their clients in the primary market to finance the needs of the state budget» [3]. They are placed on the domestic stock market, confirming the state's obligation to reimburse the bearers of bonds for their nominal value with the payment of income [2]. The placement of GDB is determined by the current needs to finance the state budget of Ukraine.

DGLB has several advantages as a source of financing the budget deficit:

– *Reliability.* The high rating given to Ukrainian government bonds by international agencies indicates their reliability and stability.

– *Liquidity.* The GDB is a liquid instrument that allows to ensure quick financing of the state budget.

– *Attractiveness for investors*. The popularity of government bonds among investors has shown their potential as an investment tool.

– *A wide range of issues*. Government bonds with various terms and rates are issued regularly, which provides diversification for investors.

– *Flexibility.* The state can plan its financial needs with flexibility by issuing government bonds on both short and long term.

Military bonds (MB) represent an investment tool aimed to support the state budget. They are utilized by the government to generate funds for military needs [2]. The main characteristic that distinguishes MB from regular DGLB is their specific allocation of raised funds: the funds raised from such bonds are used to provide uninterrupted financial needs of the state under martial law - social and defense.

Governments benefit from utilizing military bonds as it enables them to raise essential funds without raising taxes or directly impacting the population affected by conflict-related crises. This approach facilitates long-term financial support and encourages participation from a broad spectrum of stakeholders in financing military requirements.

On the other hand, military bonds are good for both the government and the buyer. Firstly, investing in MBs by the public raises the overall level of financial literacy. Secondly, while not on a large scale, they bring people's real savings from the shadows to the light of financial control. Thirdly, compared to other financial instruments, MBs have relative advantages because they are not regulated, don't have income taxes (like deposits), and are easy to get. Finally, the moral and behavioral aspect, where every citizen or business can directly participate in financing the «victory» and supporting the army, plays a crucial role.

The issue of military bonds in Ukraine dates back to 1917, following the proclamation of the Ukrainian People's Republic (UPR). These military securities were placed during the struggle with the Bolsheviks (1917–1920) among the Ukrainians as well as outside the country – the Ukrainian diaspora in Canada and the United States. The main purpose of such bonds was to provide for military needs and maintain the Ukrainian army. Following the defeat in 1920 and the termination of the UPR, the new government suspended the issuance of new military bonds and did not repay payments on the old ones, as these securities had lost their legitimacy. Ukraine gained the right to independently manage its debt policy again after the declaration of independence on August 24, 1991, but the protracted economic crisis hampered the effective implementation of the release of new MBs [4, p. 365-367].

In 2014, due to military aggression in Eastern Ukraine and the annexation of Crimea, there was an immediate requirement to enhance investment in the nation's defense capacity and support the army.

This primarily involved bolstering the number of military personnel, enhancing military capabilities, and financing operations against armed groups. Between 2014 and 2021, defense spending was chiefly funded through domestic and foreign government bonds as well as financial assistance from international organizations and allied nations [4, p. 368-369]. With the start of the ATO in April 2014, the Ukrainian government decided to issue government bonds called «military bonds» at 7% per annum to attract about 1 billion UAH to finance the operation [7]. As a result, the state budget received 100,36 million UAH, with expenses for maintenance and repayment of about 14,002 million UAH [2].

2022 started for Ukraine with news headlines about the potential full-scale Russian invasion. This led to foreign investors selling Ukrainian assets and the Ministry of Finance losing their chance to sell long-term government bonds due to lack of investor interest at prevailing rates in January-February 2022.

On February 24, 2022, the securities market was temporarily closed due to the full-scale invasion. This decision helped prevent panic among investors and avoid rapid capital withdrawal from the Ukrainian market [2]. MB were the only available investment tool used to finance the defense and social protection needs [10].

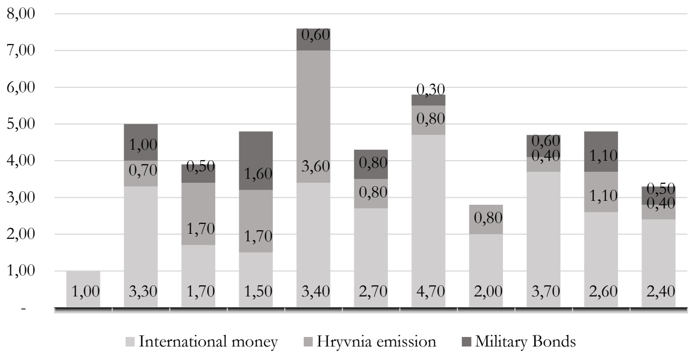

Chart 1. Sources of financing state Ukraine budget in 2023

Sources: authors calculations based on Ministry of Finance & National Bank of Ukraine data

Market operations resumed fully by March 2022, signaling reduced panic and adaptability to wartime conditions. Today to finance the growing deficit during war caused crises, the Ukraine raises funds from MBs, as well as loans from IFI, bilateral loans and grants (Chart 2).

Individuals and legal entities are not permitted to purchase DGLB (including MB) directly from the Ministry of Finance without having the National Securities and Stock Market Commission (NSSMC) licenses. Only authorized primary dealer banks are allowed to purchase DGLB through auctions on the primary market. Usually, at auctions, primary dealers buy bonds in large volumes, which they later sell to their clients on the so-called secondary market. The primary dealers are banks, including state-owned banks (JSC UKRGAZBANK, JSC Oschadbank, JSC Raiffeisen Bank, JSC OTP Bank, JSC Citybank, JSC Ukreximbank, JSC PUMB, JSC PRIVATBANK, PJSC «CENS BANK», PJSC «KREDOBANK», PJSC AB «PIVDENNYI»), as well as financial institutions and investment funds.

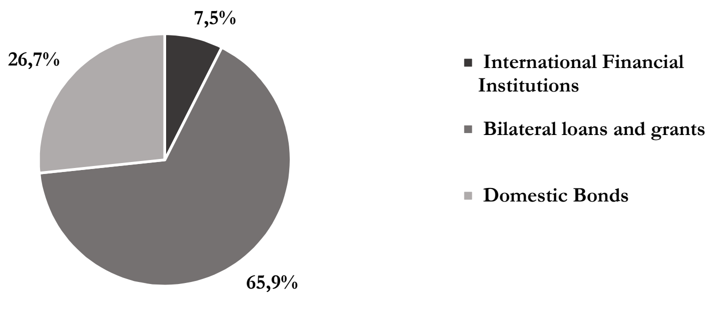

Chart 2. Structure of financing sources in 2023

Sources: Ministry of Finance of Ukraine, Minfin Web-portal

In the secondary market, traders holding an NSSMC license are permitted to engage in transactions. Private individuals can purchase DGLB through various channels including the governmental mobile app «Diia», online brokers or asset management company (ICU, WOTAN, Bond.Ua), and 11 primary dealer banks listed by the Ministry of Finance of Ukraine without paying additional charges. Each primary dealer bank establishes its own minimum investment size: Privatbank, Kredobank and Raiffeisen Bank have set a high threshold while other banks can accommodate applications for even just one DGB purchase.

The National Bank of Ukraine and the banking sector hold the majority share of government bonds (43.5% and 41.5%) respectively, followed by legal entities (8.8%), individuals (3.4%), non-residents (2.7%), and territorial communities (0.1%) (Chart 3).

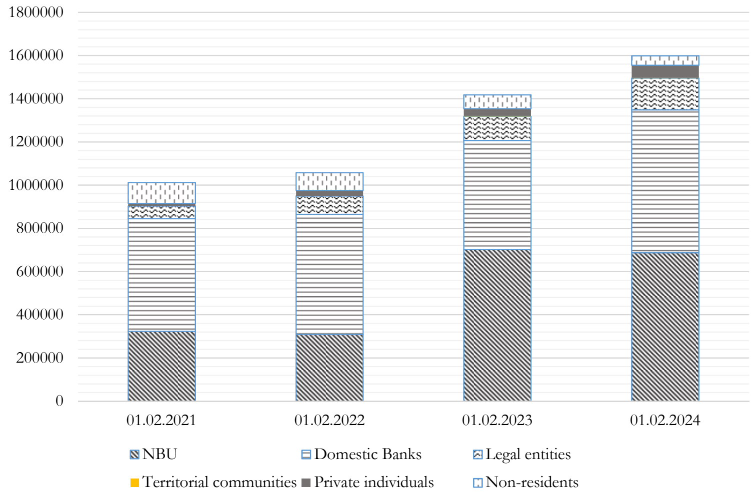

Chart 3. Stakeholders of military bonds in 2021-2024
Sources: authors calculations based on the National Bank of Ukraine data.

Experts have justified the National Bank's bond purchases during both the Russian aggression in 2014-15 as well as for the period of 2022-2023, enabling financing of the defense sector while maintaining monetary and price stability without resorting to NBU budget emissions. Private individuals initially hesitated to invest in DGB before the war due to high entry thresholds, but interest has escalated post-Russia's invasion with opportunities to purchase a single bond for 1,000 UAH becoming more appealing (Chart 4-5).

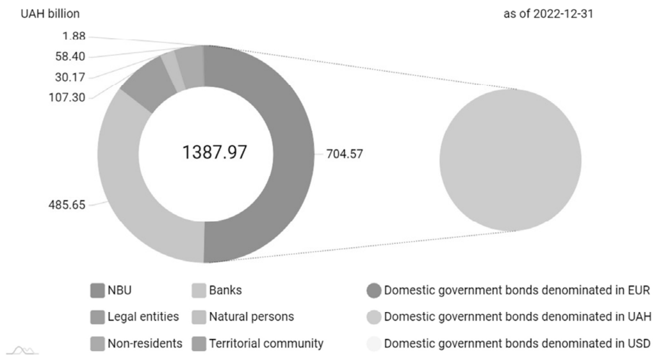

Chart 4. DGB in circulation by outstanding nominal volume in 2022

Source: National Bank of Ukraine official web-portal

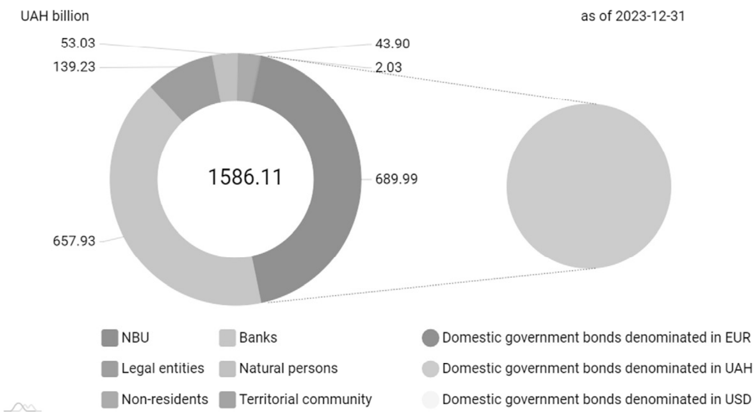

Chart 5. DGB in circulation by outstanding nominal volume in 2023

Source: National Bank of Ukraine official web-portal

From 2014 to 2022, MBs were confined to a secondary market, with only UAH 100.06 million issued out of the planned UAH 1 billion [11]. As the full-scale invasion unfolded, Resolution of the Cabinet of Ministers of Ukraine №156 [8] was enacted, enabling phased issuance of «Military Bonds» totaling up to UAH 400 billion. Military bonds aid in combatting inflation by withdrawing funds from circulation, with proceeds allocated to the defense sector. This mechanism also bolsters the banking system by allowing banks to cover up to 50% of required reserves using benchmark government bonds.

Investors are increasingly attracted to government bonds due to their higher yields compared to inflation rates. The Ukrainian government offers competitive rates for military bonds, up to 19.75% annually in hryvnia, 4.85% in US dollars, and 3% annually in euros, surpassing bank deposit rates. Although demand initially decreased after the Russian invasion, the government has not raised rates to avoid higher debt servicing costs. Recently, rates for hryvnia-denominated military bonds have slightly increased. Despite not factoring inflation, military bonds appeal to investors due to their simplicity, guaranteed return, and contribution to national defense. Proceeds from military bond sales primarily support defense needs, akin to tax revenues [11].

In the new 2024 budget year, Ukraine is facing challenging circumstances due to war and high uncertainty. A lot of pressure on debt financing is expected, due to the completion of the deferral of external debt and the need for significant additional repayment of DGB in favor of banks. These repayments could increase substantially, potentially affecting the financial health of the public sector.

The Ministry of Finance opened the «Pandora's Box» with DGLB in 2008 with the practice of issuing debt to government bonds during financial crises, followed by an immediate purchase by the NBU [1]. This practice became widespread, and during 2008-2013, a debt of UAH 110 billion was issued. During the 2014-2015 crisis prompted by Russia's invasion in East of Ukraine, this scheme intensified, peaking after the nationalization of «PrivatBank» in 2016. Today, about two-thirds of the NBU's government bond holdings are 2022 military bonds, with the remaining third consisting of securities from past financing of state-owned companies and banks, totaling nearly UAH 290 billion [1]. Consequently, 2024 poses a significant test for the financial system, as a substantial portion of these past-period securities remain on the NBU's balance sheet, with the state facing the obligation of repaying government bonds in large amounts over the next five years. This perpetually strains budget liquidity and may necessitate replacing these securities with new ones, potentially driving up rates in the domestic government bond market due to increased demand for market placements. Thus, the importance of effective public debt management and strategic financial risk planning is underscored to ensure stability in Ukraine's financial system.

Today, government bonds remain the main instrument in the debt segment of the stock market, as the government needs them to finance public expenditures and regulate the liquidity of the monetary market. There is a direct connection between the deficit of the state budget and the development of the market for debt instruments. The role of public debt instruments is extremely important since the yield and maturity of DGLB are important parameters for the entire monetary market. Despite serious threats to debt and economic security, Ukraine currently depends on borrowed funds, especially foreign ones, which are the main source of financing the deficit budget in wartime conditions. After the end of the war with Russia, the Ukrainian government securities market will probably not begin to grow intensively, since the national economy will need significant external investments for recovery. However, it is the market of government securities and the decisions made by the regulator that play an important role in the effective attraction and use of these resources.

In conclusion, military bonds are an optimal mechanism that combines both strategic and tactical characteristics. On one hand, military bonds provide timely access to free funds that directly finance the country's military needs, such as military maintenance, equipment modernization, and defense operations, during times of military conflict. On the other hand, MB as a tool to attract money to the budget has good predictability and reliability and therefore allows for strategic considerations regarding further volumes of issues and potential funds received. Taking into account world experience, Ukraine can use the issue of military bonds not only to finance military needs, but also to implement other projects, such as, for example, post-war reconstruction, stimulating the economy, financing social programs, such as improving living conditions or rehabilitating veterans, etc. [4, p.370-371].

References

1. Blinov O. In 2024, the state must repay almost 40 billion UAH of debt for «special» government bonds. Forbes Ukraine (online journal). 2023. URL: https://forbes.ua/money/u-2024-rotsi-derzhava-mae-pogasiti-mayzhe-40-mlrd-grn-borgu.
2. Debt Policy – Government Bonds. Ministry of Finance of Ukraine. URL: https://mof.gov.ua/uk/ovdp (date of access: 01.05.2024).
3. Domestic government bonds in circulation by outstanding nominal volume. National Bank of Ukraine. URL: https://bank.gov.ua/en/markets/t-bills (date of access: 01.05.2024).
4. Liutiy I., Borynets S., Varnalii Z., etc. The financial system of Ukraine: realities, challenges, prospects: monograph / ed. by I. Liutiy. 2023. 420 p.
5. Lyutyy I., Kuryshchuk K. Internal borrowings in the formation of the State Budget of Ukraine: monograph / ed. by I. Liutiy. Ternopil: ZUNU, 2021. 310 p.
6. Lyutyy I., Miedviedkova N. The modern paradigm of the financial policy of the state and the features of its implementation under the war on the territory of Ukraine. Finance of Ukraine. 2023. № 6. P. 61-74. URL: https://doi.org/10.33763/finukr2023.06.061.
7. On the issue of domestic government bonds «Military Bonds»: Resolution of the Cabinet of Ministers of Ukraine of 1.04.2014 № 101. URL: https://zakon.rada.gov.ua/laws/show/101-2014-%D0%BF#Text (date of access: 15.05.2024).
8. On the issue of domestic government bonds «Military bonds»: Resolution of the Cabinet of Ministers of Ukraine of 25.02.2022 №. 156. URL: https://zakon.rada.gov.ua/laws/show/en/156-2022-п#Text (date of access: 15.05.2024).
9. Pereira P., Zhao W., Symochko L., etc. The Russian-Ukrainian armed conflict impact will push back the sustainable development goals. Geography and Sustainability. 2022. P. 277–287.
10. Verheliuk Yu. Using market sources for financing the state budget deficit in Ukraine. Scientific Notes of Ostroh Academy National University. 2022. № 24(52). P. 84-89. URL: https://journals.oa.edu.ua/Economy/article/view/3444/3143.
11. Zakharchuk Ya. All about military bonds – from «a» to «z». 2023. URL: https://armyinform.com.ua/2023/05/01.