Budgetary security of Ukraine in the context of a large-scale war

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Abstract. The large-scale war taking place on the territory of Ukraine as of 2023 has a significant impact on budgetary processes and the financial system. In the face of new challenges, the budget system is becoming a key tool for ensuring financial stability and fulfilling the strategic objectives of the state. Military expenditures, reconstruction of the affected territories, social support for citizens and other unforeseen expenditures require effective management of the state and local budgets and improvement of the financial security mechanism. The purpose of this article is to define the theoretical and practical foundations of Ukraine's budget security, to develop proposals for a strategy and measures to ensure the sustainability of the budget system in times of war. In studying the issues of formation and functioning of Ukraine's budget security, the author used a combination of empirical, comprehensive, systemic and analytical methods and approaches that helped to achieve this goal. The study analysed statistical data reflecting the state of budget security, including indicators reflecting the specifics of the state budget system management. Nevertheless, the events that took place in the period from 2014 to 2022 led to political and economic instability in the country, which resulted in an imbalance in the functioning of Ukraine's budget security. Given the difficulties associated with ensuring budgetary security in a time of war, the author offers recommendations for achieving future stability of the state's financial system, which involves adherence to the national strategy and development of new financial security mechanisms. At the same time, a sustainable budget policy promotes efficient resource management and stimulates economic development. Investments in key industries, support for enterprises and innovations help to strengthen the country's economy. The scientific results obtained in the course of this study solve the urgent problem of developing and substantiating theoretical and methodological approaches to the functioning of budget security, and can also be used to determine ways to improve it and apply it by the country's state authorities

Keywords: budget system; budget process; indicators of budget security; threats; national interests; directions of improvement

INTRODUCTION
Budget security is a critical component of the economic and financial security of the state. It is defined as the ability of a country to effectively manage financial resources and ensure the stability of the financial system in the face of external and internal challenges. The budget system is the main instrument for accumulating and distributing the state's financial resources. Therefore, its state, problems, ways to overcome them, and development prospects should be subject to constant analysis.

As of 2023, there is no single generally accepted definition of budget security; it is multifaceted and combines political and economic components, and the essence of this concept has changed depending on the tasks, internal and external threats. In economics, this term is considered...
both as a system of legal and organisational relations and as an indicator of the effectiveness of the state budget policy (Lysiak & Zhuravel, 2018). Due to the dual nature of the essence of budget security, scholars interpret this term differently. Scientist Z. Varnali (2020) understands budget security as the state of ensuring the financial solvency of the state, taking into account the balance of revenues and expenditures of the state and local budgets and the efficiency of the use of budget funds, which allows the relevant institutions to perform their functions as efficiently as possible.

O. Bogma (2016) believes that budget security is an important element of the state budget policy, which is aimed at ensuring solvency and guaranteeing the financial stability of public finances, supporting the welfare of society, and effective management carried out by state authorities within their powers. The main goal in the field of budget security should be to ensure the sustainable development of the state budget system in the direction of accumulating financial resources for economic development and countering the potential negative effects of external and internal risks and threats. Ukraine’s economy is highly sensitive to destabilising factors – threats to budgetary security – due to limited financial resources and the inability to ensure a stable reproduction process. In turn, threats to budget security are conditions and factors that can lead to deformation of the budget system, disrupting its financial stability and solvency.

T. Bondaruk et al. (2020) carried out a systematic analysis of the key threats to the state’s budget security, including a significant redistribution of gross domestic product (GDP) through the budget system, an increase in the total amount of public and publicly guaranteed debt of Ukraine, an increase in payments for its servicing and repayment, a high permanent deficit in the state budget, and a high level of centralisation of budget funds. The authors believe that Ukraine’s budget system was formed under the influence of destructive external and internal risks, which exacerbated the issue of budget security.

Scientists N. Fatiukha & V. Manukovska (2021) believe that the country’s financial security has internal and external aspects. The external aspects of financial security include the independence of the national financial system from the influence of international financial institutions and transnational capital, as well as the preservation of the country’s financial sovereignty. However, in today’s environment, absolute financial independence of the country is becoming impossible due to the processes of financial globalisation, which are gaining in importance and impact on the financial security of Ukraine every year. These trends make it necessary to consider financial security issues in the context of international relations, as they go beyond national borders. Ensuring the optimal level of budgetary security of the state remains a subject of scientific interest. In particular, O. Dakhnova & T. Gorodetska (2018) assessed the state of budget security indicators of Ukraine in the context of hybrid warfare, identified threats to budget security and provided proposals for stabilising the public finance system in the current environment.

T. Koliada & M. Guz (2019) assessed the impact of the budget deficit on the financial security of the state by monitoring the indicators of budget security of Ukraine and developed proposals for stabilising the public finance system. Based on the analysis of budget security indicators, the authors concluded that the main measures in this direction should be aimed at stabilising the economic situation by optimising the structure of budget expenditures, reducing the amount of public debt and its servicing costs. On the other hand, an increase in the budget deficit contributes to the growth of public debt by attracting loans to cover the deficit and repay previous debts, which creates a debt spiral. Minimising budgetary risks will depend on the mechanisms for responding to internal and external challenges and threats that are present not only in the fiscal sphere, but also in the area of socio-political transformations in the country.

N. Shykina & G. Kotsiurubenko (2020) believe that the state budget deficit is a key indicator of Ukraine’s budget security and the basis for the formation of the protection of Ukraine’s national interests and the sustainable development of the national economy. The authors believe that the total set of all threats to Ukraine’s national security, regardless of their nature (hidden, overt, potential, direct and indirect), is clearly reflected in the analysis of the state of public finances in general and the dynamics of changes in the state budget deficit as a percentage of GDP.

The purpose of this study was to highlight the theoretical and practical features of Ukraine’s budget security, based on the principles of functioning of the budget system in the context of a large-scale war. To achieve this goal, the following tasks have been identified in this paper: to highlight the theoretical foundations of the functioning of Ukraine’s budget security, to analyse budget security indicators and to identify threats, peculiarities of ensuring Ukraine’s budget security in the context of war, and to formulate ways to improve the system of ensuring budget security.

MATERIALS AND METHODS
To achieve the goal of considering the process of formation and functioning of the budget security of Ukraine, various empirical, complex and theoretical methods and approaches were used, in particular: historical, analytical – to analyse budget security indicators; systemic and structural methods – to study trends in the budget system; the method of statistical comparisons – to study post-war reconstruction strategies in different countries. The information base of the research work consists of legislative and regulatory acts, as well as statistical and analytical materials related to the budget security of Ukraine (Law of Ukraine No. 2469-VIII, 2018; National Ministry of Finance of Ukraine, n.d.; Bank of Ukraine, n.d.). According to the Order of the Ministry... (2013), the state of budget security is assessed by four main indicators:

1. The ratio of the state budget deficit/surplus to the gross domestic product is an indicator of type A. This indicator allows assessing budgetary and macroeconomic risks in general, and also makes it possible to analyse the impact
of the state's fiscal policy on the state of the financial system, the balance of payments, and domestic demand.

2. The next indicator is the share of the deficit of budgetary and extra-budgetary funds of the general government sector in GDP, which is calculated according to the International Monetary Fund (IMF) methodology. This key indicator is a generally accepted criterion for countries considering a loan from this international financial organisation, and for Ukraine – a lender of last resort in times of war.

3. The level of redistribution of GDP through the consolidated budget, which reflects the amount of financial resources of the state that are redistributed through the system of public finance, indicates the level of centralisation of the state's financial system.

4. The ratio of total public debt service and repayment payments to state budget revenues is an indicator that determines the greatest budgetary threat. This indicator is calculated as the ratio of total public debt service and repayment payments to state budget revenues, according to the IMF methodology.

RESULTS

The state is the main regulator of political, economic and social development of the population. To ensure this, it is important to have a system of economic security that is the foundation for national security. One of the main mechanisms affecting the functioning of economic security is its financial component, and in turn, one of the most important levers in its structure is the country's budgetary security.

The financial security of the state is based on budgetary security, which is a key factor in the formation and functioning of the budgetary system of Ukraine, and is a criterion for the effectiveness of its fiscal policy and the organisation of the budget process. Budgetary security is a condition that ensures the solvency of the state through balanced revenues and expenditures of the state and local budgets, as well as efficient use of budget funds.

In order to better understand the state of budget security of Ukraine as of 2023, it is proposed to analyse the dynamics of all key indicators and compare them. The level of the budget deficit is considered to be one of the key indicators of the state's budgetary sustainability. In a situation where the actual budget deficit exceeds the planned one, there is a serious threat to the country's budget security. This indicator assesses the financial state of the state and determines the impact of fiscal policy on the balance of payments, the level of domestic demand and the overall state of the monetary system.

Analysing the ratio of the state budget deficit/surplus to GDP, it should be noted that until 2020, this indicator remained within the normal range, namely less than 3% (Ministry of Finance of Ukraine, n.d.). However, in 2020 and 2022, this ratio increased significantly to 5.18 and 17.62%, respectively, which is significantly higher than the established norm. The reason for this increase was a significant budget deficit (Table 1).

Table 1. State budget deficit/surplus to GDP ratio, %

<table>
<thead>
<tr>
<th>Year</th>
<th>State budget deficit, UAH million</th>
<th>GDP, UAH million</th>
<th>Indicator, % of GDP</th>
<th>Threshold value</th>
<th>Indicator status</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>-78,049.5</td>
<td>3,974,564</td>
<td>-1.96</td>
<td></td>
<td>Optimal</td>
</tr>
<tr>
<td>2020</td>
<td>-217,096.1</td>
<td>4,194,102</td>
<td>-5.18</td>
<td>-3%</td>
<td>Unsatisfactory</td>
</tr>
<tr>
<td>2021</td>
<td>-197,937.4</td>
<td>5,459,574</td>
<td>-3.63</td>
<td></td>
<td>Unsatisfactory</td>
</tr>
<tr>
<td>2022</td>
<td>-914,701.7</td>
<td>5,191,028</td>
<td>-17.62</td>
<td></td>
<td>Unsatisfactory</td>
</tr>
<tr>
<td>2023</td>
<td>-1,333,110.7</td>
<td>5,459,623</td>
<td>-24.42</td>
<td></td>
<td>Unsatisfactory</td>
</tr>
</tbody>
</table>

Source: compiled by the authors based on State Statistics Service of Ukraine (n.d.) and Ministry of Finance of Ukraine (n.d.)

The change in the ratio of the state budget deficit/surplus to GDP indicates the successful results of managing the budget deficit through fiscal consolidation measures in 2021. These measures were a response to the escalation of problems in 2020, during the COVID-19 crisis, when the deficit imbalance grew to dangerous levels. This required measures to overcome this situation, including the creation of an optimal structure of budget expenditures and the development of an effective system of control over the rational use of budget funds (Law of Ukraine N. 2469-VIII, 2018).

However, in 2022-2023, the situation deteriorated again due to the large-scale war in Ukraine, high risks of an increase in the volume of external public debt, an inconsistent strategy for refinancing previous debts in budget periods, and significant pressure from debt obligations on the financial stability of the state. The value of the indicator that reflects the ratio of the deficit/surplus of budgetary and extra-budgetary funds of the general government sector to GDP has long remained in the danger zone, and the main reason was the need for financial support for extra-budgetary funds (Ministry of Finance of Ukraine, n.d.). In particular, it is important to note that the chronic deficit of the Pension Fund of Ukraine was covered by the State Budget, and this indicator tends to grow annually (Table 2). The financial burden of pension payments on the state budget is quite significant. Subsidies to the budget of the Pension Fund of Ukraine at the expense of the State Budget lead to the necessary reduction of expenditures on other programmes, such as economic, social, cultural, innovative development, etc. Thus, the national pension system is one of the key factors leading to the fiscal vulnerability of the economy.
The level of GDP redistribution through the budget indicates the level of centralisation of the country's financial system and reflects the amount of financial resources that the state redistributes through the public finance system. At the same time, the amount of GDP redistribution through the consolidated budget is an important factor that affects the pace of economic development of the country (Table 3).

<table>
<thead>
<tr>
<th>Year</th>
<th>General government deficit, UAH million</th>
<th>Consolidated budget deficit, UAH million</th>
<th>GDP, UAH million</th>
<th>Indicator, % of GDP</th>
<th>Threshold value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>-75,118.8</td>
<td>-67,788.5</td>
<td>3,558,706.0</td>
<td>-0.21</td>
<td>from -2 to 0%</td>
</tr>
<tr>
<td>2019</td>
<td>-84,513.9</td>
<td>-84,316.4</td>
<td>3,974,564.0</td>
<td>-0.005</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>-23,706.2</td>
<td>-223,944.3</td>
<td>4,194,102.0</td>
<td>-0.31</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>-138,837.2</td>
<td>-186,908.3</td>
<td>5,459,574.0</td>
<td>0.88</td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td>-802,408.7</td>
<td>-844,827.9</td>
<td>5,191,028.0</td>
<td>0.82</td>
<td></td>
</tr>
</tbody>
</table>

Source: compiled by the authors based on Ministry of Finance of Ukraine (n.d.) and National Bank of Ukraine (n.d.)

Table 3. The level of GDP redistribution through the consolidated budget, %

<table>
<thead>
<tr>
<th>Year</th>
<th>Budget revenues, UAH million</th>
<th>GDP, UAH million</th>
<th>Indicator, %</th>
<th>Threshold value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>1,289,779.8</td>
<td>3,974,564.0</td>
<td>32.45</td>
<td>25-28%</td>
</tr>
<tr>
<td>2020</td>
<td>1,376,661.6</td>
<td>4,194,102.0</td>
<td>32.82</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>1,662,242.7</td>
<td>5,459,574.0</td>
<td>30.45</td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td>2,196,273.3</td>
<td>5,191,028.0</td>
<td>42.31</td>
<td></td>
</tr>
<tr>
<td>2023 (plan)</td>
<td>3,104,306.6</td>
<td>5,459,623.0</td>
<td>56.86</td>
<td></td>
</tr>
</tbody>
</table>

Source: compiled by the authors based on State Statistics Service of Ukraine (n.d.) and Ministry of Finance of Ukraine (n.d.)

In 2019-2021, this indicator was on the verge of entering the danger zone, but in 2022 and 2023, it saw a sharp increase due to the large-scale war, which also indicates the existence of serious problems in the fiscal sphere that have accumulated over many years and are systemic. All of this leads to a decrease in the effectiveness of the tax system's incentive and social role, and exacerbates problems in customs and tax administration. The ratio of total public debt service and repayment payments to state budget revenues is an indicator that identifies the most significant budgetary threat (Table 4). A sharp increase in the budget deficit, inflationary trends, the loss of the hryvnia's value, and limited access to low-cost financial resources on the financial markets have led to an increase in public debt service costs. Analysing this indicator in comparison with the previous indicators of the state of budget security, it can be determined that it poses the greatest threat to the state's budget security. This, in turn, has a negative impact on the overall state of the country's financial security (Fig. 1).

<table>
<thead>
<tr>
<th>Year</th>
<th>Public debt service, UAH million</th>
<th>Public debt repayment, UAH million</th>
<th>State budget revenues, UAH million</th>
<th>Indicator, %</th>
<th>Threshold value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>115,431.2</td>
<td>234,467.8</td>
<td>928,108.3</td>
<td>37.7</td>
<td>6-20%</td>
</tr>
<tr>
<td>2019</td>
<td>120,392.3</td>
<td>282,136.9</td>
<td>1,076,016.7</td>
<td>46.6</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>141,473.1</td>
<td>282,136.9</td>
<td>1,296,852.9</td>
<td>39.4</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>149,065.7</td>
<td>394,038.8</td>
<td>1,787,395.6</td>
<td>41.9</td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td>156,845.3</td>
<td>449,726.4</td>
<td>2,671,998.0</td>
<td>33.9</td>
<td></td>
</tr>
<tr>
<td>2023 (plan)</td>
<td>220,573.2</td>
<td>393,945.6</td>
<td>2,671,998.0</td>
<td>23.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: compiled by the authors based on Ministry of Finance of Ukraine (n.d.) and National Bank of Ukraine (n.d.)

Figure 1. Dynamics of the indicator of the ratio of total public debt service and repayment payments to state budget revenues

Source: compiled by the authors based on Ministry of Finance of Ukraine (n.d.) and National Bank of Ukraine (n.d.)
It should be noted that the issue of repayment of the country’s public debt, which is growing rapidly, especially in view of the current situation in 2023 caused by the coronavirus pandemic and the large-scale war, which has a negative impact on all sectors of the economy and exacerbates the crisis, requires special attention. In 2021-2023, the gap between public borrowing and public debt repayments is growing steadily. Thus, in the future, the debt burden on the state budget of Ukraine will increase further and will have a negative impact on the debt, budgetary and, accordingly, financial security of the country as a whole. At the same time, it is impossible to completely get rid of all threats and risks in the context of economic instability, so it can be said that budget security is a state that is almost impossible to achieve in the face of new challenges. However, it is necessary to try to avoid the presence of factors and threats in the budget system that may lead to the danger of the budgetary situation (Tsyhanenko et al., 2023).

According to budget security assessments, the main difficulties in 2024 will be concentrated primarily in the areas of public debt management, the operation of off-budget funds of the public administration sector, and budget deficit management. This will require improving both the tools for generating budget revenues and the mechanisms for managing budget funds (Piddubniy, 2022).

The events of 2000-2023 in politics and the economy were destructive factors that undermined the stability of Ukraine’s economy in general and the country’s financial system in particular. Since the budget system reflects the socio-economic processes in the country in peacetime, its indicators are highly volatile and unpredictable. This requires new approaches to analysing the state and development of the budget system, taking into account qualitatively different levers of influence on the state of budget security. Therefore, in order to ensure the effective functioning of the budgetary sphere and to take into account the urgent needs of residents of territorial communities during martial law, the Office of the President of Ukraine, the Government, the Verkhovna Rada of Ukraine, the National Security Council and other central executive authorities make a number of prompt, quick and effective decisions (Overview of instruments..., 2023).

Since the beginning of the full-scale war, the Government of Ukraine has been investing huge resources in military operations against the aggressor and financing the country’s socio-economic needs. Since February 2022, state budget expenditures and the budget deficit have reflected an increase in the share of funds allocated to military needs and a reorientation of funding primarily towards military purposes.

Since 2022, the following trends have emerged in Ukraine’s public finances:
- a significant increase in total state budget expenditures (41.5% real growth) and the share of funding from the security and defence sector budget;
- a nominal decrease in budget revenues due to the narrowing of economic activity and the provision of tax benefits to Ukrainian businesses;
- active attraction of government loans and growth of public debt to compensate for the loss of tax revenues due to increased public spending;
- providing grants and loans from external official creditors as a form of solidarity with Ukraine by the world’s leading countries;
- termination of access to external private sources of government funding for an indefinite period;
- issuance of domestic military bonds and attraction of resources of the National Bank of Ukraine to financially support the desired volume of bonds, while participation of private investors is weak.

Due to certain objective circumstances, tax revenues to the state and local budgets, on the one hand, have significantly decreased as a result of the cessation of economic activity of business entities in Ukraine due to military operations and destruction, and on the other hand, the costs of the war, including expenditures from the state budget, have increased significantly (Ministry of Finance of Ukraine, n.d.). Issuance of government securities (GS) is an important element of the state's financial activity, which allows timely coverage of the state budget deficit and fulfilment of the main goals and objectives of the state military or socio-economic policy.

One of the most efficient and effective ways to raise funds to ensure the implementation of priority expenditures of the state budget of Ukraine under martial law is to purchase military bonds. The decision to issue these bonds was made by the Cabinet of Ministers of Ukraine on 25 February 2022. In March 2022, auctions for the sale of military bonds began. They are a type of domestic government loan bonds (OVDPs), which are targeted debt securities issued by the state represented by the Ministry of Finance of Ukraine, an investment instrument to support the state budget available to citizens, businesses and foreign investors, aimed at servicing the needs of the Armed Forces of Ukraine and the state during wartime. Military bonds are available for purchase in UAH, USD and EUR. One of their advantages is that the interest income is tax-free, i.e. not subject to income tax and military duty. Every Tuesday, the Ministry of Finance holds auctions for the sale of military bonds. Thus, amidst the war and Ukraine’s credit rating downgrades, the activation of the domestic debt securities market remains a priority. As a result, the National Bank of Ukraine purchased UAH 225 billion worth of military bonds from the government in 2022, including UAH 20 billion in March, UAH 20 billion in April, and 4 purchases of UAH 50 billion in each month. In June, the volume of emission financing of the budget deficit increased to UAH 105 billion (Zanuda, 2022). The increase was driven by irregular and slow international aid inflows in May and early June, as well as weak government engagement. Domestic debt markets were affected by the reluctance to raise hryvnia government bond yields to market levels. In particular, on 23 June 2022, at regular meetings of the Financial Stability Council, which are dedicated to analysing the current situation with state budget financing and...
identifying systemic risks to financial stability caused by financing the state budget deficit, the National Bank of Ukraine applied key areas of action aimed at narrowing the state budget deficit and reducing the volume of its monetary financing (National Bank of Ukraine, 2022).

The Verkhovna Rada of Ukraine also adopted Law of Ukraine No. 2390-IX (2022). It allows local governments, regional state authorities, and military-civilian authorities to make expenditures that are not included in the respective local budgets during martial law to ensure national security and territorial defence measures, support local infrastructure, and social protection of citizens under martial law. These expenditures are made through interbudgetary transfers from the respective local budget. As for the reforms outlined in the Ministry of Finance of Ukraine (2023), the main variable aspects will be measures to reform tax policy and tax administration. Among them, there are two key reforms that focus on data security and access to information on the volume and turnover of taxpayers' funds in their bank accounts and tax risk management. In addition, in 2023-2030, it is planned to ensure the prevention and elimination of corruption risks in the activities of the State Tax Service.

To ensure Ukraine’s rapid recovery after the end or termination of martial law, as well as to ensure economic growth in the medium term and the implementation of its European course, the country should take a number of measures. Among them, a prudent fiscal and budgetary policy, increased cost efficiency, optimisation of tax and customs administration, and improvement of the tax and benefit structure are important. According to the Ministry of Finance of Ukraine (2023), the key areas are the development of partnerships between business and the state, and the improvement of the investment climate, taking into account the social and environmental dimensions. Restoring taxpayers’ trust in the regulatory authorities is crucial. This will require the introduction of transparent and fair control mechanisms, as well as a constructive dialogue between the public sector and the business community.

It has been established that during the period of martial law, namely since 2022, the Ukrainian government has approved more than 160 amendments to the Budget and Tax Codes (Dzhyhora, 2022). These changes simplify budgetary procedures at the state and local levels to ensure the functioning of the budgetary component, to ensure that budget security and the vital needs of the population are met at the proper level during the martial law period. In terms of financial market development, regulation, supervision, and financial planning are possible, including strengthening the regulation and supervision of the financial market to ensure its stability and reliability, and introducing effective financial planning and risk management tools (Ovsianikov, 2017). Following the example of the Korean reconstruction, international cooperation, attracting financial support, and participation in international programmes in general are important. This component involves seeking opportunities to attract international financial support and technical assistance. Active participation in international programmes and initiatives to ensure financial stability.

Importantly, considerable attention should be paid to effective public debt management. A debt strategy can be developed, which provides for a clear strategy for managing public debt to reduce risks and optimise costs. At the same time, another area worth highlighting is rational refinancing, i.e. optimising the structure of debt obligations and rational refinancing to reduce the volume of payments (Varnali, 2020). Proposed areas for strengthening the budget system are shown in Table 5.

Table 5. Areas of strengthening the budget system and ways to apply them

<table>
<thead>
<tr>
<th>Fiscal discipline</th>
<th>Expenditure control, i.e. the introduction of strict monitoring and analysis of all budget expenditures to identify effective and ineffective ones. Effective financial planning: developing mechanisms for planning and optimising budget expenditures.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reform of the tax system</td>
<td>Tax reform, including the introduction of new policies to increase tax revenues and reduce tax exemptions. Fighting tax evasion – improving mechanisms to prevent and stop tax fraud.</td>
</tr>
<tr>
<td>Stimulating economic growth</td>
<td>Investment projects, including the implementation of large projects to boost economic development and create new jobs. Innovation policy: support for innovation and the development of technological industries to ensure sustainable economic growth.</td>
</tr>
<tr>
<td>Fighting corruption</td>
<td>Anti-corruption measures, i.e. the implementation and strengthening of these measures in the area of financial management and public procurement. Openness and transparency: ensuring these components in financial processes to avoid corrupt practices.</td>
</tr>
</tbody>
</table>

Source: compiled by the authors based on Order of the Ministry… (2013) and Ministry of Finance of Ukraine (2023)

In the context of improving public finances, including the budget system, it is important to pay attention to the development of digitalisation. This approach is based on the idea that the introduction of transparent digital solutions can reduce the risks of corruption in the long run, and the use of innovative technologies becomes a powerful tool for maximising benefits in the face of limited resources. Digitalisation should cover several key areas simultaneously. The use of digitalisation in the government and public sectors contributes to Ukraine's reputation on the global stage and improves its position in international rankings. This process also improves the quality of public services, simplifies and increases the efficiency of processes, creates a favourable infrastructure, and contributes to macroeconomic stability (Bui & Kovalchuk, 2020). The development of the IT sector affects export capacity in the service sector,
creates additional employment opportunities, and is one of the key strategic competitive advantages of the economy (Bril & Pyvavar, 2022).

The entire Ukrainian economy, including the budgetary system, has been severely affected by the military events and has undergone significant disruptive changes. It will be possible to overcome the negative consequences only after the end of hostilities. However, it is already important to develop a strategy for further development after the war. This strategy should define goals and measures, calculate resources and sources of their financing, and create preconditions for Ukraine's rapid recovery, namely, the development of a transparent, modern and sustainable budget system supported by qualified professionals.

Thus, state and local budget expenditures in wartime should be primarily aimed at financing defence and ensuring the security of the state. During the wartime period, the emphasis is on reimbursement of expenses related to the conduct of hostilities. However, after the end of the war, budget expenditures will be redistributed to other areas, such as infrastructure, energy, the military-industrial complex, information technology and other competitive and innovative industries. Financing to support small and medium-sized businesses is also important.

**DISCUSSION**

Public finances characterise the financial activities of the state, and in order to perform its functions, the state must have sufficient financial resources obtained through the formation and use of a centralised fund of funds – the state budget. The state budget is a key element of public finance, a complex and multifaceted phenomenon in society. At the same time, in order to overcome any threats and strengthen Ukraine's budget security, it is necessary to focus on ensuring the socio-economic and financial development of the state (Borynets et al., 2018).

The use of the indicator approach to assessing the level of budget security in peacetime is not new in the scientific literature and this approach is actively used by scholars (Dakhnova & Gorodetska, 2018). The Methodological Recommendations for Assessing the Level of Economic Security of Ukraine define and define the components of financial security – budgetary, debt, monetary, currency, banking and non-banking financial sector security. However, the most important component is budgetary security, which is defined as a state of affairs that ensures the solvency and financial stability of public finances and allows public authorities to perform their tasks as efficiently as possible (Zakhozhai et al., 2023). The analysis of the indicators shows a complex downward trend caused by a number of macroeconomic factors with their cumulative effect due to the financial crisis, the coronavirus crisis, and the hybrid and large-scale war in Ukraine.

In the context of a large-scale war, the problems of public finance management are particularly acute due to the identification of new real and potential threats to the budget system of Ukraine. Budgetary security depends on the availability of financial resources to ensure priority financing of the defence industry, and the ability of regions and enterprises to receive and allocate financial resources to defend the country. Therefore, military spending has broad security implications and long-term developmental consequences (Nate et al., 2023).

With the outbreak of a full-scale war and the introduction of martial law, budget policy changed, almost all financial security indicators went far beyond acceptable limits, key macroeconomic indicators declined, and the state's ability to fill the state budget significantly decreased. At the same time, there was a need to sharply increase funding for national security and defence – more than 50% of state budget expenditures in 2023. The political imbalance in the financial sector forced the continued use of debt capital, which eventually led to a number of threats and risks (Stetsenko et al., 2023). The large-scale war has fundamentally changed the financial system, caused a critical deterioration in Ukraine's budget security, reduced the tax base for filling budgets at all levels, and increased dependence on external financing of growing military spending. Therefore, the search for sources of funding and determination of their use is the basis for ensuring sovereignty, territorial integrity and defence capability in wartime and for the development of production and sustainable development of the country in peacetime.

The study of budgetary security, which is related to vulnerability to political and economic risks, should be continued in the direction of not only reviewing the specifics of its provision in the context of war and post-war recovery, but also the existing indicators of financial security, which have gone far beyond financial policy and relate to all areas of national security. The government is actively attracting new loans from the IMF as a lender of last resort, both resident and non-resident. However, the constant attraction of large-scale loans threatens the country's debt security and increases the burden on the economy for future external debt servicing and repayment. Therefore, government securities and their new type (military bonds) are the only means at the disposal of the authorities to ensure Ukraine's debt security in the context of a large-scale war. A full-fledged and liquid domestic market for government securities will reduce the cost of government borrowing and reduce the risk of default, as the war has reversed the positive trend of reducing the share of public debt in GDP and forced a shift away from the strategy of strengthening debt security, and the growth of public debt during martial law is a forced phenomenon. Ensuring the financial security of the state in wartime requires a more thorough definition of the legal framework for the stable functioning of the budget system, although it is difficult to predict the future state of budget security in such circumstances. Further steps to strengthen the budget security of Ukraine should be based on the European principles of public administration – transparency, accountability, efficiency, continuous monitoring and control.
CONCLUSIONS
As a result of the study of theoretical and practical issues of ensuring the budget security of Ukraine and improving its functioning, the following conclusions have been drawn. Having analysed the main indicators of budget security, it is observed that the budget system is in a crisis state. Given that budgetary security is a fundamental element of the overall state security system, the inability to overcome crisis situations negatively affects the functioning of the system of ensuring the national security of the state. The crisis phenomena of 2022 had a significant impact on key macroeconomic indicators, and the deficit of the general government sector is of particular concern. This calls for immediate measures to stabilise the financial system and develop an effective concept of budget security in order to eliminate the state budget deficit.

The government should focus on several key tasks, including the importance of regulating the volume of public spending, establishing new clear, flexible and transparent fiscal rules at the legislative level, and modernising the methodology for assessing the level of budget security. Implementation of these measures will lead to a reduction in public debt and an increase in the efficiency of budget policy. This, in turn, will have a positive impact on both the level of budget security and the economy of Ukraine as a whole. Ensuring the country’s budgetary security implies ensuring its financial stability, the welfare of society and the development of an efficient economy that can function effectively in the globalised world. In order to overcome possible threats and increase the level of budgetary stability of Ukraine, it is important that the state budget strategy is aimed at promoting the socio-economic and financial development of the country.

Thus, due to the ongoing large-scale war with significant destruction and tangible losses in the economy and budget system, Ukraine is in a difficult financial situation. Overcoming the negative consequences of the war will be possible only after the end of hostilities. However, the government needs to develop a post-war development strategy that will define goals and measures, calculate resources and sources of their receipt. A sustainable budget policy promotes efficient resource management and stimulates economic development. Investments in key industries, support for small and medium-sized businesses and innovation will help strengthen the country’s economy. Budgetary security is important for resisting external challenges, such as economic sanctions, trade conflicts and other economic pressures. At the same time, it is important to create the preconditions for a quick recovery, including a transparent, modern and sustainable budget system supported by qualified professionals.

ACKNOWLEDGEMENTS
None.

CONFLICT OF INTEREST
None.

REFERENCES


Бюджетна безпека України в умовах широкомасштабної війни

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Анотація. Широкомасштабна війна, що відбувається на території України станом на 2023 рік, має значний вплив на бюджетні процеси та фінансову систему. В умовах нових викликів, бюджетна система стає ключовим інструментом для забезпечення фінансової стійкості та виконання стратегічних завдань держави. Військові видатки, реконструкція постраждалих територій, соціальна підтримка громадян та інші непередбачені видатки вимагають ефективного управління державним та місцевими бюджетами і вдосконалення механізму фінансової безпеки. Метою даної статті є визначення теоретичних та практичних засад бюджетної безпеки України, розробка пропозицій щодо стратегії та заходів для забезпечення стійкості функціонування бюджетної системи в умовах війни. Досліджуючи питання становлення та функціонування бюджетної безпеки України, було застосовано сукупність емпіричних, комплексних, системних та аналітичних методів і підходів, що допомогли реалізувати поставлену мету. У процесі дослідження було здійснено аналіз статистичних даних, які відображають стан бюджетної безпеки, серед яких індикатори, що відображають специфіку управління бюджетною системою держави. Незважаючи на це, події, що відбувалися у період з 2014 по 2022 роки, призвели до політичної та економічної нестабільності в країні, що стало наслідком розбалансування функціонування бюджетної безпеки України. Зважаючи на складнощі, які пов’язані із забезпеченням бюджетної безпеки в умовах війни, було запропоновано рекомендації для досягнення майбутньої стабільності фінансової системи держави, що передбачає дотримання національної стратегії та розробки нових механізмів фінансової безпеки. При цьому, стійка бюджетна політика сприяє ефективному управлінню ресурсами та стимулює економічний розвиток. Інвестиції в ключові галузі, підтримка підприємств та інновацій допомагають зміцнити економіку країни. Отримані в процесі даного дослідження наукові результати вирішують актуальну проблему розроблення й обґрунтування теоретичних і методичних підходів до функціонування бюджетної безпеки, а також можуть бути використані при визначені шляхів її удосконалення та застосування державними органами країни

Ключові слова: бюджетна система; бюджетний процес; індикатори бюджетної безпеки; загрози; національні інтереси; напрямки покращення