STRATEGIES FOR ENHANCING BUDGETING AND FINANCIAL MANAGEMENT TO BOOST BUDGET PROCESS EFFICIENCY

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Abstract: Effective budgeting at the macro level is a crucial tool for managing a country's economy and contributing to its development and social progress. Budgetary policy plays a vital role in the state's financial provision for socio-economic development. This article aims to analyse the effectiveness of budgeting mechanisms and financial management, as well as to explore ways to improve them. The study employed various scientific methods, including the monographic method, statistical analysis, expert assessment method, and mathematical and statistical modelling. It investigated the theoretical principles of the budgeting process, identified the stages and conditions for its implementation, and analysed the peculiarities of budgeting in today's economic and social realities. The study also examined the essence, algorithms, and main components of the budgeting system mechanism. The effectiveness of implementing budgeting methodology as a component of financial management policy was evaluated, considering its practical aspects. The main factors influencing its effectiveness were determined. It was argued that optimizing the organizational mechanism of the existing budgetary system is necessary to improve the overall management paradigm of strategic development. The article identifies basic conceptual principles for applying budgeting methodology in the process of effective financial management. It proposes directions for improving the organizational mechanism of the revenue and expenditure formation system, and specifies a relevant toolkit for this purpose. The practical significance of the research results lies in their applicability to the practical experience of optimizing financial management technologies.

Keywords: financial planning, budgeting, strategy, management mechanism, economic effect.

1 Introduction

Achieving the right balance between income and expenditure is crucial for managing the level of national debt and maintaining financial stability. Directed budget usage can also help control inflation. Effective financial planning and rational resource allocation can prevent monetary circulation overlap and preserve price stability.

The effectiveness of budgetary policy depends on the level of development of the fiscal and budgetary system aimed at promoting economic growth. It is crucial to clarify the economic essence and direction of budgetary policy as a tool for economic growth and to introduce effective budgetary mechanisms in the context of economic transformations.

Researchers and experts analyse problems associated with the budgeting process. Forecasting income and expenditure can be challenging, especially in conditions of economic instability. Insufficient analysis and forecasting may result in inaccuracies in financial planning (Zharikov, 2023). Static budgets can become problematic as they are unable to adapt to changes in societal and economic conditions. Budget flexibility is key to accommodating unexpected circumstances. Attention is required to adjust the institutional environment to socio-economic changes and to determine priority directions for further development of financial-budgetary relations (Chugunov & Liubchak, 2023).

Inefficient financial resource management and complications in the budgeting process may arise due to the absence or inadequate use of information technologies (Kolawole, 2023; Savașaneril, 2024). Budgeting may be less effective if it is not part of strategic planning and does not support the organization's strategic goals (Keho, 2023). Current research has shown that countries within the European Union budgetary system should invest more in sustainable production to benefit in real-time from integration into the European Union (Tsyhanenko et al., 2023). Researching these issues can improve budgeting methods and practices, leading to more effective financial management for organizations and countries.

The purpose of the article is to determine the effectiveness of budgeting mechanisms and financial management, and explore ways to improve them in a dynamic economic environment.

2 Materials and methods

Various scientific approaches and tools are used to objectively and comprehensively assess the effectiveness of budgeting processes. Scientific methods applied in this context include the monographic method for analysing and evaluating financial information related to expenditures, revenues, deviations, etc., statistical analysis to identify and study patterns in budget data, and the expert evaluation method, which considers the position of qualified experts to assess the effectiveness of budgeting based on their experience and knowledge. Econometric models are used to analyse the relationships between different financial parameters and evaluate their impact on budgeting efficiency. Mathematical and statistical models are created to simulate various budget process scenarios and assess their impact on the results. The dynamics of changes in various budget indicators over time are investigated to identify trends, anomalies, and peculiarities.

This study aims to identify possible factors affecting budget performance by examining correlation relationships between various economic and financial indicators. The use of scientific research methods ensures objectivity and allows for the drawing of reasonable conclusions about the effectiveness of budgeting, as well as identifying opportunities for improvement.

3 Results

The effectiveness of a budget is determined by how well an organization uses its financial resources to achieve strategic goals and ensure sustainability. A budget is considered effective if it aligns with the organization's strategic objectives. Resource utilization should contribute to achieving better outcomes. An accurate and realistic revenue and expenditure forecast enhances the ability to manage financial resources effectively. The effectiveness of a budget is determined by its ability to control expenses and avoid overspending, as well as its capacity to adapt to changes in the external environment or internal conditions. Additionally, the cost and performance of projects or programs funded within the budget should be evaluated to determine its effectiveness.

The capacity to draw and maintain backing from diverse stakeholders, such as shareholders, partners, and employees, is also a measure of budget effectiveness. A well-designed budget considers opportunities for ongoing enhancement of planning, execution, and control procedures. It should equip managers with the requisite information to make sound strategic and operational decisions.

Budgetary organizations can use performance indicators and key performance indicators to assess their budgeting process and results. Continuous monitoring and analysis of budget effectiveness can help improve financial management and achieve organizational strategic goals. The budgeting system of the European Union has been particularly effective in achieving these goals (Figure 1).

Based on official data from EUR-lex (2024), the European Union's budget revenues and expenditures have shown a polynomial trend over the past 13 years, with significant growth observed in the last two years. This growth can be attributed to the economic recovery following the global COVID-19 pandemic and the intensification of Russia's military aggression against Ukraine. The budgeting system in Ukraine reflects the country's economic turbulence (Figure 2).

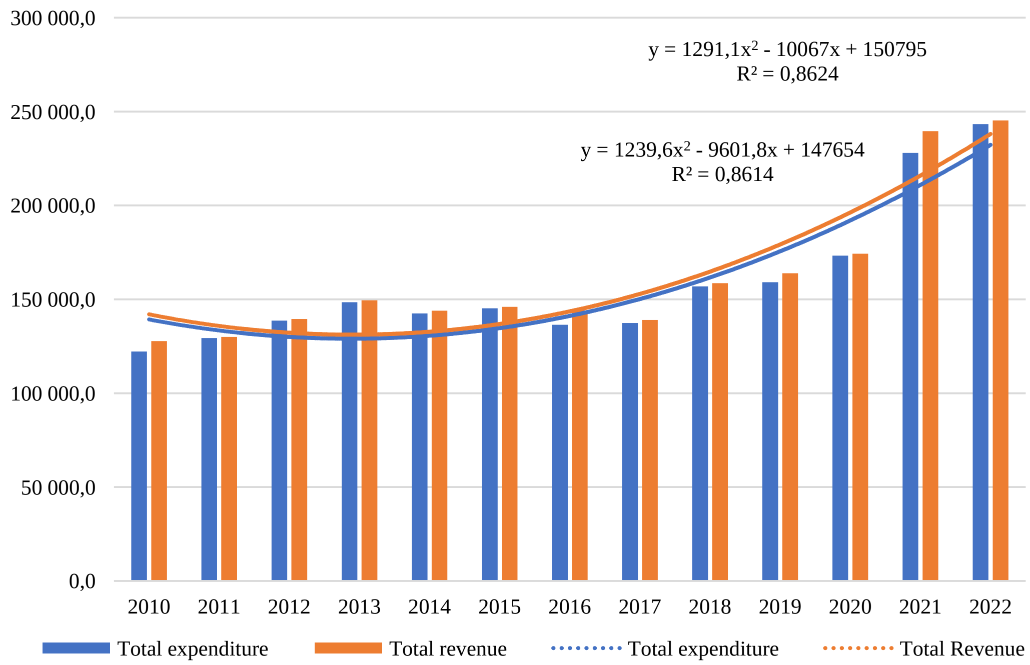

Figure 1: Dynamics of the EU budget revenues and expenditures, 2010-2022, EUR million
Source: An official website of the European Union. (EU) Budget.

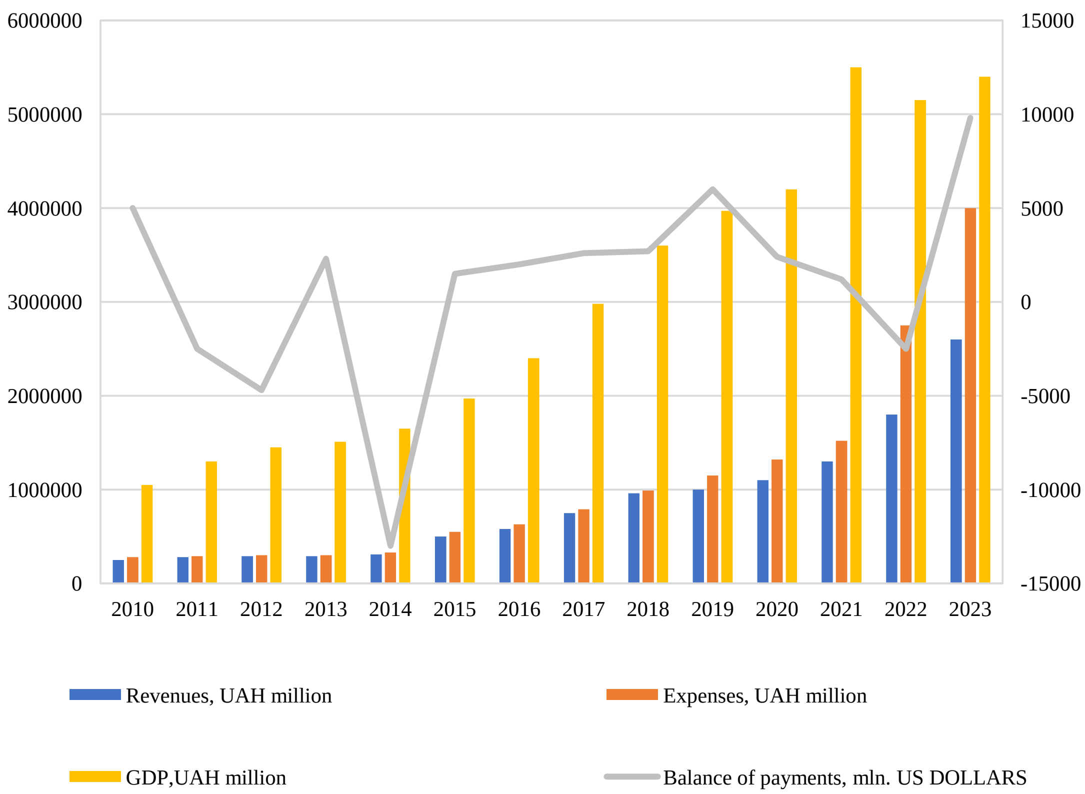

Figure 2: Key indicators of the State Budget of Ukraine, 2010-2023
Source: Rates, indices, tariffs (2024). The Ministry of Finance.

During the peak periods of military aggression in 2014 and the full-scale invasion by Russia in 2022, Ukraine's balance of payments underwent significant changes. Improving the system of budget expenditure management and enhancing the efficiency of their utilization is an important step towards addressing the key issue of effective use of budgetary funds in conditions of limited resources. During times of war, the budgetary mechanism for socio-economic development must effectively and efficiently achieve the country's economic, social, and defence priorities. This includes planning budget expenditures and analysing the results of budgetary fund utilization (Zharikov, 2023).

Improving budgeting and financial management mechanisms are crucial steps in ensuring the stability and effectiveness of the country's financial system. The correlation analysis shows a significant dependence between Ukraine's state debt and budgetary indicators, including revenues, expenditures, balance of payments, and gross domestic product. The correlation matrix data reveals a high degree of correlation between the state debt and State Budget revenues (98.1 %), expenditures (96.3 %), GDP (90.1 %), and the balance of payments (47.9 %) (Table 1).

Table 1: Matrix of correlation analysis of the impact of the State Budget of Ukraine on the formation of public debt, 2010-2023

	State debt, UAH million (Y)	**Revenues, UAH million (X1)**	**Expenses, UAH million (X2)**	**Balance of payments, USD million (X3)**	**GDP, UAH million (X4)**
Public debt, UAH million (Y)	1				
Revenues, UAH million (X1)	0,98127142	1			
Expenditures, UAH mn (X2)	0,96326827	0,988209	1		
Balance of payments, million USD (X3)	0,47936888	0,496604	0,443071	1	
GDP, million UAH (X4)	0,90139269	0,900144	0,835614	0,479369	1

Source: own calculations based on data Consolidated Budget of Ukraine (2011-2023); Balance of payments of Ukraine (1998-2023); Gross domestic product (2002-2022).

Traditionally, governments perform functions involving various levels of budgetary responsibility: intervention, distribution, development, stabilization, regulation, and public service.

The aim of government intervention is to correct market failures and achieve distributional efficiency. The intervention discussed here focuses on the distribution of accrued wealth rather than the efficiency of market functioning. It aims to improve conditions for better economic indicators, including investments in infrastructure and human resources. Governments use fiscal and monetary tools to correct macroeconomic imbalances such as inflation, unemployment, slow growth, and balance of payments issues. The regulatory function involves establishing and overseeing a structure that ensures the proper functioning of market forces and rules to regulate individual behaviour. The public service function involves providing public goods through national budgets.

The EU performs relatively few of these functions, and only some of them have budgetary implications. Currently, EU budget transfers are primarily linked to agricultural and regional policies, resulting in the EU mainly performing distribution and redistribution tasks. Furthermore, a clear development function can be observed. The primary objective of current transfers is redistribution, as funds mainly move from wealthier regions to poorer ones or from consumers and taxpayers to farmers (Omelchyk et al., 2022). However, most policy areas related to redistribution remain unchanged. In addition to regional development transfers, the EU supports development functions through expenditures on research activities, construction of the Trans-European Transport Network, and human resource development via educational programs. As the single market develops, the EU's regulatory function becomes increasingly important. However, this has minimal budgetary implications.

The role of economic stabilization is primarily the responsibility of national governments, except for monetary policy. To achieve a more balanced and dynamic growth of the European economy, it is necessary to improve the effectiveness of the stabilization function. However, member states view it as unrealistic for the EU budget to carry out the stabilization function in the future. Therefore, the revitalization of the slowly growing European economy will require coordination of economic policies among member states, possibly supplemented by a few initiatives at the EU level. Due to the size of the EU budget, it is unsuitable for participating in macroeconomic stabilization.

An effective institutional environment for budget planning has a significant impact on the macroeconomic balance, socio-economic development of the country, and the achievement of medium-term social goals. The ongoing war in Ukraine presents a significant challenge, including for the financial and budgetary institutional environment.

The budget for the European Union (EU) in 2022 is €245 billion, equivalent to approximately 1 % of the EU's GDP and 2 % of total government spending in the region. Despite its small size in proportional terms, the EU budget undergoes intensive and highly developed parliamentary, political, and auditing processes (Downes et al., 2017).

New financing requirements have emerged recently due to unforeseen crisis events, which were not accounted for during the formation of the long-term EU budget for 2021-2027. The implementation of the EU budget for the same period has faced challenges since the beginning of 2021 due to the pandemic and its consequences. In response, the EU and its member states mobilised a total of 3.7 trillion euros. The EU budget allocated 70 billion euros in direct assistance to help EU citizens and businesses, as well as countries outside the EU, cope with the COVID-19 crisis. In 2022, Russia's aggressive war against Ukraine led to increased financial pressure. To date, the EU and its member states have provided Ukraine with 72 billion euros in financial, military, and humanitarian aid. The war has caused inflationary pressure and reduced the real value of financial resources.

The EU budget for 2021-2027 was initially set at 1.8 trillion euros under the Multiannual Financial Framework (MFF) and the Next Generation EU (NGEU) temporary recovery instrument. However, these financial resources were spent much faster than expected. The funds allocated for unforeseen expenditures, namely special measures, amounting to 10.5 billion euros for the period 2021-2024, were almost entirely depleted. The European Parliament has repeatedly called for a significant and urgent review of the EU budget. This briefing presents the financial situation of the EU for the period 2021-2027 as initially approved and updated in June 2023. It also provides an overview of how two major unforeseen crises have impacted the EU's financial capacity: the crisis in Ukraine, announced by the European Commission on June 20, 2023, and the crisis related to the UK's withdrawal from the EU. Additionally, it contains reference information related to the adoption of the MFF review.

The MFF ceiling for commitments in 2024 is €185,963 million, equivalent to 1.05 % of GNI. The MFF ceiling for payments is €170,543 million, equivalent to 0.96 % of GNI. Council Decision (EU, Euratom) 2020/2053 of December 14, 2020, on the system of own resources (ORD 2020), entered into force on

June 1, 2021, and applies retroactively from January 1, 2021. The maximum size of own resources for payments is limited to 2.0 % of the total GNI of all member states. Out of this, 0.60 percentage points is a temporary increase solely intended to cover all obligations arising from the European Union Recovery Instrument. The resulting margin for 2024 between the upper limit of the MFF for payments and the upper limit of own resources for payments is €183,398 million, which is equivalent to 1.04 % of GNI.

For the period 2021-2027, there is a significant decrease in the percentage difference between the upper limit of the MFF for payments and the upper limit of own resources for payments in 2022. This is due to the allocation of aid to Ukraine to overcome the consequences of Russian military aggression, as shown in Figure 3.

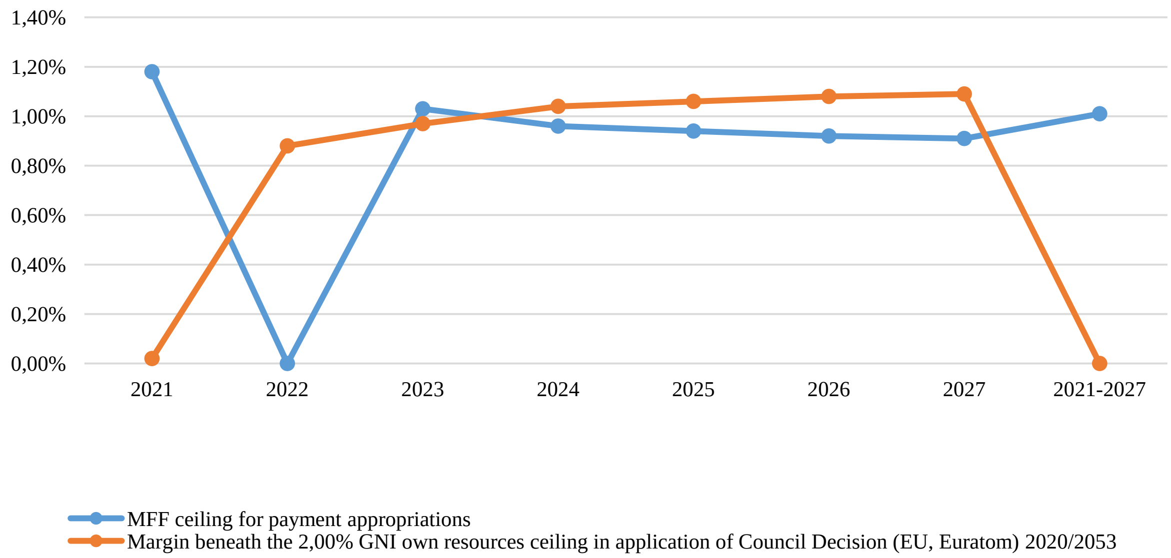

Figure 3: Limit of allocations for payments and own resources of the EU budget, % of GNI
Source: Compiled by the authors based on (An official website of the European Union)

A budgeting mechanism is a set of processes and procedures that determine how the budget is planned, developed, approved, executed, and monitored. An effective budgeting mechanism is a crucial tool in financial management and strategic planning, facilitating goal achievement and efficient resource utilization (Bouckaert & Reeth, 1996; Putra, 2021). Budget development starts with defining the strategic goals of the country or organization. The budget should reflect plans and tasks that will help achieve the stated goals.

To achieve this, the budget control mechanism employs a matrix of indicators for continuous monitoring and analysis of variances between planned and actual results (Sands & Lindars, 2012). Based on the results obtained, conclusions are drawn, and managerial decisions are made regarding budget formation for the next year and adjustments to current activities.

The budget management mechanism is a dynamic process that requires continuous analysis and improvement to ensure efficient resource utilization and goal achievement. It includes a range of processes and tools aimed at effective planning, execution, and control of financial resources within the organization's budget. The main stages of this mechanism include assessing the current state, analysing financial management, and identifying potential improvements.

4 Discussion

To ensure the effectiveness of budgeting and financial management mechanisms, it is necessary to adapt to the dynamics of economic growth and budgetary fund redistribution. This is particularly important in light of the transformation of the economic prerequisites of modern market participants. Scholarly sources (Tampubolon et al., 2024; Ndou & Gumata, 2023) support this approach. E. Ndou and N. Gumata highlight the significance of economic and political uncertainty in the expansion of budget deficits.

Contemporary researchers have shown that budgetary policy plays a crucial role in times of war in the formation and improvement of strategies to ensure Ukraine's economic security (Shein, 2023; Radionov, 2023). Y. Radionov highlights the priority of sustainable development and Euro-integration processes in Ukraine's budgetary policy during times of war and post-war recovery. Meanwhile, scholars (Lobodina et al., 2024) argue that the trends and features of local budget functioning during times of war reflect the necessity of adaptive transformation of the existing budgeting and financial management system.

A. Yeryomenko (2023) highlights the role of local budgets in the financial support system of territorial communities. The scholar argues for optimizing the structural-regional differentiation of the budgeting system within the concept of regional strategic development.

R. Bolgov (2023) investigates the impact of open budgeting on corrupt practices. Simultaneously, scholars stress that the improvement of budgeting and financial management mechanisms should aim to mitigate the consequences of corrupt activities and prevent their recurrence in the future.

Based on academic research, contemporary scholars (Shalashna, 2023) have outlined the key requirements for effective financial and budgetary policies to enhance socio-economic development. According to Shalashna, an effective budgeting concept can stimulate economic growth potential and enhance social processes. The conclusions drawn by scholars are similar to the results of the current research.

Contemporary scholars (Sánchez-Bayón et al., 2023) affirm that the modern process of optimizing the budgeting and financial management system should focus on effectively evaluating expenditure efficiency within the budget. They argue that new approaches to budgetary structuring are necessary, given the dynamic processes of globalization and economic integration.

The findings presented in academic research align with the conclusions of the current study, particularly regarding the need to prioritize the optimization of budgeting mechanisms and managerial systems to intensify their impact on shaping the strategic management paradigm. The conceptual principles identified are prioritised as vectors for optimising the budgetary policy formation system.

However, most academic research today focuses on the theoretical aspects of the phenomenon under study, describing traditional algorithms and approaches to budgeting management. There is a lack of research on practical mechanisms and tools for optimising the budgeting and financial management system.

5 Conclusion

During the research, we analysed the fundamental theoretical principles of the budgetary mechanism formation process, identified the stages and conditions for its implementation, and explored the peculiarities of budgeting in today's economic and social realities. It was identified the essence, algorithms, and main components of the budgeting system mechanism. The discussion included the practical aspects of implementing budgeting methodology as a component of financial management policy. The main factors influencing its effectiveness were determined, and the basic conceptual principles of applying budgeting methodology in the process of effective financial management were established.

The study established that the quality of the budget implementation procedure largely determines the existing parameters and standards of budgeting methodology implementation. Achieving the expected socio-economic effect requires effective control over the budget execution process. One potential challenge and risk of implementing budgeting methodology is the shifting of financial responsibility centres and inconsistency in the algorithm and forms of budget compilation. It is essential to correctly identify responsibility centres and delegate effective management powers to them to achieve positive results from improving budgeting mechanisms.

Therefore, the research supports the need to optimize the organizational mechanism of the current budgetary system to enhance the overall management paradigm of strategic development. This involves providing the process with the necessary key instruments to achieve a positive socio-economic effect.

The proposed directions for improving the budgeting mechanism are an integral component of the innovative paradigm of financial management. Effective implementation of these directions can significantly improve budgetary policy in the context of sustainable development and European integration processes. Practical testing of methods for improving the budgeting and financial management system in the perspective of post-war recovery in Ukraine is necessary for further scientific consideration.

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