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Intergovernmental Transfers as a Tool of Budgetary Policy: Transformation under Wartime Conditions in Ukraine

Abstract. Introduction. Ukraine's budget system from 2018 to 2025 was shaped by two interrelated processes: the completion of financial decentralization reform and the transformation of fiscal policy amid wartime conditions. These changes significantly impacted the distribution of financial resources among levels of government and the role of intergovernmental transfers within the public finance system.

Purpose. The study examines the transformation of the intergovernmental transfer system as a means of redistributing financial resources and assesses its evolving role within Ukraine's budget system under wartime conditions.

Results. The study identifies a structural shift in the dynamics and composition of revenues and expenditures between state and local budgets. This shift is characterized by a pronounced increase in the role of the central government after 2022. While local budgets demonstrated relatively stable positions supported by decentralization reforms in the pre-war period, wartime conditions led to a significant centralization of financial resources. The analysis shows that intergovernmental transfers have undergone a functional transformation, evolving from instruments of fiscal equalization and financing delegated responsibilities into mechanisms of stabilization and resource mobilization. Notably, the increasing significance of equalization grants underscores the imperative to bolster regions impacted by the war, while the substantial surge in reverse grants signifies the reinforcement of horizontal equalization and the expansion of centralized resource accumulation. Concurrently, the reduction in earmarked transfer volumes reflects shifts in financing public services and reallocating expenditure responsibilities.

Conclusions. The findings suggest a shift from a financial decentralization model aimed at strengthening local fiscal autonomy to a recentralization model driven by wartime priorities. This transformation reflects the need to ensure the state's financial stability under crisis conditions while maintaining the functioning of local budgets. The results underscore the importance of balancing short-term stabilization objectives with long-term incentives for local revenue development when designing intergovernmental fiscal relations.

Keywords: intergovernmental transfers, budgetary system, fiscal decentralization, equalization grant, reverse grant, war-time conditions

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Міжбюджетні трансферти як інструмент бюджетної політики: трансформація в умовах війни в Україні

Анотація. Досліджено трансформацію системи міжбюджетних трансфертів в Україні як інструменту бюджетної політики в умовах воєнного стану. Розглянуто особливості розвитку бюджетної системи України у 2018–2025 роках під впливом реалізації реформи фінансової децентралізації та зміни пріоритетів державної політики в умовах воєнних викликів. Проаналізовано динаміку доходів і видатків державного та місцевих бюджетів, що дозволило виявити основні тенденції у зміні співвідношення фінансових ресурсів між рівнями бюджетної системи.

Виявлено, що у довоєнний період спостерігалось пропорційне зростання доходів державного та місцевих бюджетів, що забезпечувало відносну стабільність їх структури у зведеному бюджеті України. Одночасно, аналіз видаткових бюджетів засвідчив наявність асиметричних тенденцій вже у 2018–2021 роках, що було зумовлено, зокрема, зміною підходів до фінансування окремих соціальних видатків, у тому числі реформуванням системи фінансування охорони здоров'я та централізацією соціальних виплат. Під впливом воєнних факторів у 2022–2025 роках відбулося суттєве зростання доходів та видатків державного бюджету при одночасно більш помірному зростанні показників місцевих бюджетів, що призвело до формування дисбалансу у розподілі фінансових ресурсів.

Оцінено динаміку та структуру міжбюджетних трансфертів у розрізі їх основних видів. Виявлено, що у довоєнний період домінуючу роль відігравали субвенції як інструмент фінансування делегованих державних повноважень, а у воєнний період відбулося посилення дотаційних механізмів, базової та додаткових дотацій зросло, що свідчить про зростання їх стабілізаційної функції, тоді як реверсна дотація набула ознак інструменту не тільки горизонтального вирівнювання, але й централізованого перерозподілу фінансових ресурсів.

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Обґрунтовано, що трансформація міжбюджетних трансфертів відображає зміну моделі бюджетних відносин в Україні – від орієнтації на фінансову децентралізацію до формування ознак фіскальної рецентралізації в умовах воєнного стану. Визначено, що така модифікація має об'єктивний характер, але супроводжується потенційними ризиками для довгострокового розвитку територій, зокрема щодо зниження стимулів до нарощування власної дохідної бази місцевих бюджетів. Зроблено висновок про необхідність удосконалення механізмів міжбюджетного регулювання у післявоєнний період з метою забезпечення балансу між централізацією фінансових ресурсів та фінансовою автономією місцевого самоврядування.

Ключові слова: міжбюджетні трансферти, бюджетна система, фінансова децентралізація, базова дотація, реверсна дотація, воєнний стан

Problem statement in general form and its connection with important scientific or practical tasks.

In the current context of Ukraine's budget system, the effectiveness of intergovernmental fiscal relations has become a particularly relevant issue. This is due to the influence of two interrelated processes: the completion of the financial decentralization reform launched in 2014, and the transformation of fiscal policy due to wartime challenges. While the primary objective of public policy in the pre-war period was to ensure the financial autonomy of local governments and strengthen their revenue base, the priorities of the budget system have shifted towards greater centralization of resources and financing key government functions related to defense and security since 2022.

Under these conditions, intergovernmental transfers play a dual role. They equalize the fiscal capacity of communities and territories, ensuring guaranteed access to quality public services. They also function as a centralized resource redistribution mechanism that affects the financial autonomy of local budgets. Changes in the volume and structure of intergovernmental transfers, the strengthened role of the equalization grant compared to the prewar period, and the growing importance of the reverse grant reflect a shift in their functional role in a wartime economy.

At the same time, an analysis of the revenue and expenditure dynamics of state and local budgets reveals asymmetric trends in the distribution of financial resources throughout the budget system. This is reflected by the faster growth of state budget indicators and the reduced share of local budgets. These findings underscore the importance of a thorough examination of the role of intergovernmental transfers in maintaining budgetary balance, as well as their influence on the evolution of budgetary relations in Ukraine. Accordingly, this analysis focuses on identifying the nature and direction of the transformation of the intergovernmental transfer system under martial law and assessing its role in shaping the modern model of interaction between the state and local levels of the budget system.

Analysis of Recent Research and Publications. The issue of improving the efficiency of intergovernmental transfers within Ukraine's public finance system has gained particular relevance in the context of the transformation of the fiscal policy, driven both by the implementation of the decentralization reform and by wartime factors. Currently, intergovernmental transfers

serve as an instrument of fiscal equalization and an important mechanism for ensuring the financial resilience of territorial communities. They compensate for losses in revenue bases, finance delegated government functions, and address the investment needs of individual communities.

Many contemporary international studies consider intergovernmental transfers not only as instruments of vertical and horizontal equalization but also as mechanisms for creating incentives to expand own-source revenues, enhance fiscal discipline, and strengthen the institutional capacity of subnational governments [1; 2]. The focus has shifted from passive redistribution of resources to ensuring the long-term financial sustainability of territories, minimizing excessive dependence on transfer support, and preventing the crowding out of own-source revenues [3]. Following the global financial crisis of 2008–2009, policymakers turned their attention to improving the fiscal sustainability of subnational budgets by introducing fiscal and debt constraints, which also affected the functioning of intergovernmental transfers [4; 5].

In Ukrainian academic literature, intergovernmental transfers are primarily examined in the context of financial decentralization, fiscal equalization, and the strengthening of the fiscal capacity of local governments [6]. Researchers have noted that these transfers have become an important instrument for supporting administrative-territorial reform while retaining features of centralized resource redistribution and continued dependence on state fiscal policy [7, 8]. Some studies emphasize that changes in the role of intergovernmental transfers in local budget revenues do not necessarily imply an increase in communities' real financial autonomy, but rather, are often the result of revised approaches to financing specific expenditures and the transformation of the model of intergovernmental fiscal relations [9].

This issue has become particularly relevant under wartime conditions. Contemporary studies [10] indicate that, during wartime, the share of intergovernmental transfers in local budget revenues decreases, their structure changes, equalization and supplementary grants grow in importance, and the stabilizing function of transfer policy strengthens. However, recent academic works largely focus on general issues of fiscal decentralization and selected aspects of local revenue formation. A comprehensive analysis of the

transformation of intergovernmental transfers in relation to changes in the dynamics of state and local budget revenues and expenditures during wartime remains insufficiently explored.

Formulation of the article's goals (problem statement). This research explores the evolution of the intergovernmental transfer system as a means of redistributing financial resources within a wartime economy.

The study employs general and specialized research methods, including theoretical generalization and systematization to substantiate the economic nature of intergovernmental transfers and their role in the budget system; comparative and structural analysis to evaluate the revenue and expenditure dynamics of state and local budgets and the transformation of intergovernmental transfers by type; statistical analysis to process and summarize empirical data from 2018 to 2025; and a systems approach to examine intergovernmental transfers as part of the intergovernmental fiscal relations regulatory mechanism.

Presentation of the main research material. Considering the study's stated purpose, the analysis will focus on evaluating the dynamics and relationship between the revenues and expenditures of Ukraine's state and local budgets, as well as the changes in the intergovernmental transfer system, which is an important instrument for redistributing financial resources. This approach allows for a thorough evaluation of resource allocation changes across budget

levels and identifies primary trends in their development under a wartime economy (Figure 1).

Over the study period (2018–2025), revenues steadily increased for both the state and local budgets. However, it should be noted that growth rates and revenue distribution between budget levels changed unevenly, particularly after 2022. During the pre-war period (2018–2021), the revenues of the state and local budgets (excluding intergovernmental transfers) grew at a similar rate of approximately 40%. Notably, state budget revenues increased from UAH 920 billion in 2018 to UAH 1,297 billion in 2021, while local budget revenues increased from UAH 263 billion in 2018 to UAH 365 billion in 2021. As a result, proportional growth rates ensured relative stability in the shares of the consolidated budget of Ukraine, with local budgets accounting for 22–23% and the state budget for 77–78%.

Since the beginning of the war in 2022, revenue trends have shifted dramatically. From 2022 to 2025, state budget revenues increased by 2.1 times (from UAH 1,778 billion to UAH 3,782 billion), while local budget revenues grew by only 33% (from UAH 418 billion to UAH 555.8 billion). As a result, a marked disparity in revenue growth rates across different levels of the budget system emerged during the wartime period, as reflected by the changing distribution of budget revenues. The state budget's share of the consolidated budget increased from 78% in 2021 to 87.2% in 2025, while local budgets' share declined to 12.8%.

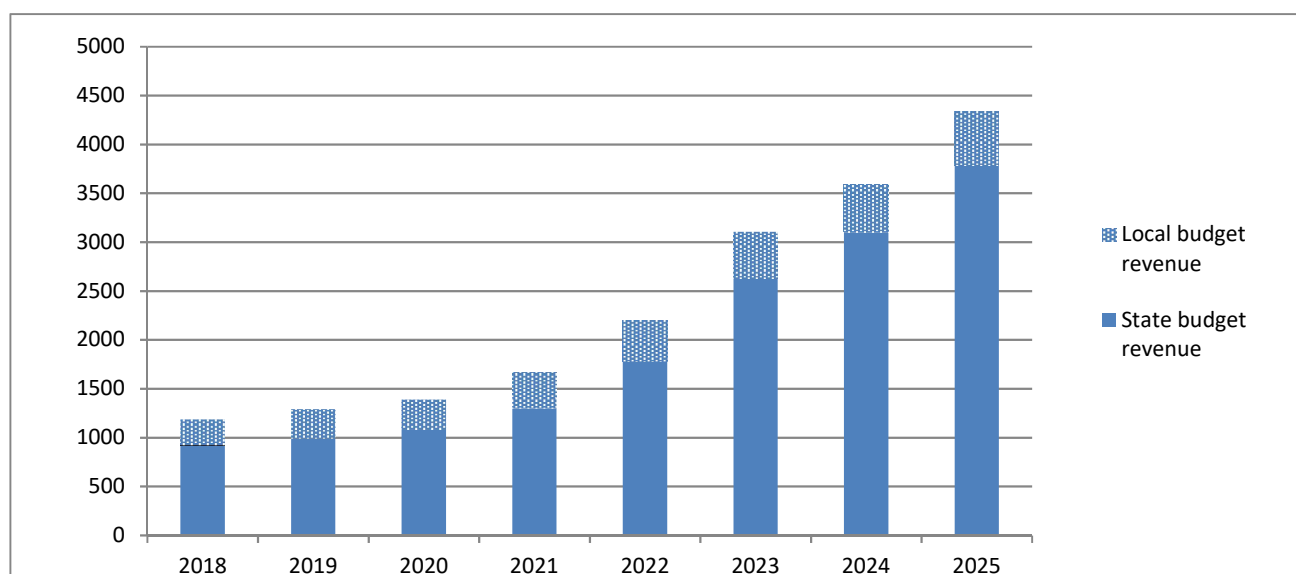


Figure 1 – Revenue dynamics (excluding intergovernmental transfers) of Ukraine's state and local budgets, 2018–2025, UAH billion

Source: compiled by the author based on [11]

Alongside the transformation of the revenue side of the budgets, significant changes also occurred in the structure and dynamics of expenditures, allowing for a

more comprehensive assessment of the nature of financial resource redistribution across levels of Ukraine's budget system.

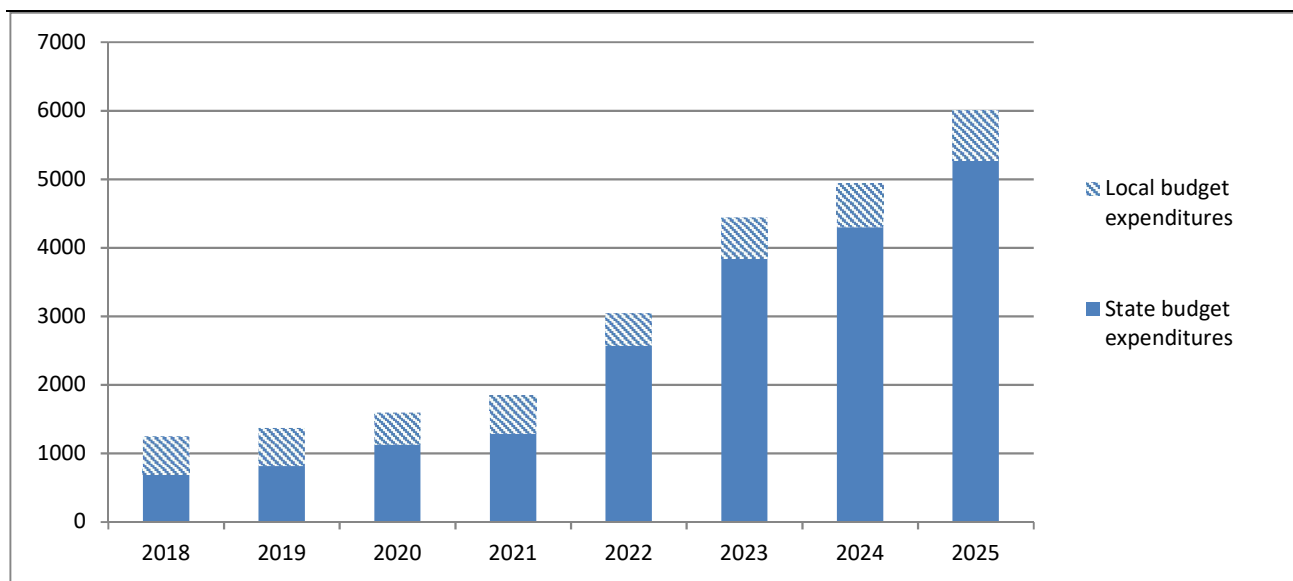


Figure 2 – **Expenditure dynamics (excluding intergovernmental transfers) of Ukraine's state and local budgets, 2018–2025, UAH billion**

Source: compiled by the author based on [11]

From 2018 to 2025, the dynamics of state and local budget expenditures also exhibited contrasting trends. Between 2018 and 2021, state budget expenditures (excluding intergovernmental transfers) increased by 1.9 times (from UAH 686.9 billion to UAH 1,287 billion), whereas local budget expenditures decreased by 1% (from UAH 563 billion to UAH 557 billion). This divergence reflects an early reallocation of resources within the budget system, driven partly by reforms to healthcare and social service delivery. The share of local budgets in total budget expenditures declined from 45% in 2018 to 30.2% in 2021, while the share of the state budget increased from 54.8% to 69.8%.

Since 2022, the trend toward centralizing financial resources has intensified. Over the period 2022–2025, state budget expenditures (excluding intergovernmental transfers) doubled (from UAH 2,568 billion to UAH 5,277 billion), primarily due to a significant increase in spending on defence and security, social support, and infrastructure recovery. At the same time, local budget expenditures also increased by 1.5 times (from UAH 475 billion to UAH 722 billion). Consequently, between 2022 and 2025, the share of local budgets in total expenditures decreased further (to 12%), while the state

budget's share increased to 88%. The gap between levels of the budget system expanded significantly, indicating a growing concentration of financial resources at the central level.

The structural changes identified in the budget system's revenues and expenditures point to a transformation in the distribution of financial resources across levels of government. In this context, particular attention should be given to analyzing the dynamics and structure of intergovernmental transfers, as they are an important instrument of budgetary policy.

In the public finance system, intergovernmental transfers play a crucial role in maintaining fiscal balance by combining vertical and horizontal equalization mechanisms. In a system of financial decentralization, these transfers redistribute resources across levels of government while guaranteeing minimum social standards and access to public services, regardless of a region's or community's level of economic development.

The main types of intergovernmental transfers are grants, such as equalization, reverse, and supplementary grants, as well as earmarked transfers, including educational grants and others.

Table 1 Main types of intergovernmental transfers in Ukraine

Type of transfer	Economic essence, examples	Method of determination / allocation	Functional purpose
Equalization grant (basic grant)	A transfer provided from the state budget to local budgets for horizontal equalization of fiscal capacity across territories.	If the fiscal capacity index of a budget is below 0.9, the grant is provided at 80% of the amount required to reach the index value of 0.9.	Horizontal equalization of the fiscal capacity of communities and regions; reduction of interregional disparities.
Earmarked transfer	A targeted transfer provided for financing specific programs or expenditures of a social or economic nature. <i>Examples:</i> – state social protection programs; – preparation and implementation of public investment projects and programs; – educational subvention.	Allocated in accordance with budget legislation and the designated purpose defined in the Budget Code of Ukraine or the Law of Ukraine “On the State Budget” for the certain year.	Financing delegated responsibilities; ensuring the implementation of state social and economic policy at the local level.
Reverse grant	Funds transferred from local budgets to the state budget for horizontal equalization of fiscal capacity across territories.	If the fiscal capacity index of a budget exceeds 1.1, the transfer is applied at 50% of the amount exceeding the threshold of 1.1.	Horizontal equalization; redistribution of “excess” financial resources.
Supplementary grant	A transfer provided to local budgets to compensate for revenue losses or to finance delegated responsibilities. <i>Examples:</i> – compensation for revenue losses resulting from state tax benefits; – financing delegated responsibilities for the maintenance of education and healthcare institutions.	Determined based on the needs of a specific local budget and decisions of central government authorities.	Stabilization of the budget system; compensation for local budget revenue losses; support of territories under crisis conditions.

Source: compiled by the author based on [12, Chapter 16]

Thus, intergovernmental transfers vary in form, economic nature, and functional role. They combine instruments of horizontal equalization, financing of delegated government functions, centralized resource redistribution, and budget system stabilization.

To assess these changes, it is necessary to analyze the dynamics of intergovernmental transfers by their main types. This makes it possible to identify shifts in their functional role within the budget system (Figure 3).

The dynamics of intergovernmental transfers in Ukraine’s budget system from 2018 to 2025 reflect a gradual transformation of the intergovernmental fiscal relations model driven by structural and situational factors. These include the completion of budgetary, tax, and administrative-territorial reforms; the pandemic crisis; the reorientation of public finance priorities toward defense and security; the reconfiguration of expenditure responsibilities between government levels; and institutional changes in sectoral financing models. Additionally, wartime conditions have intensified the need for centralized coordination and rapid resource allocation, further reinforcing the state budget's role in redistribution processes.

Over the study period, the volume of grants to local budgets nearly doubled, increasing by 96%. This indicates a strengthening of the basic fiscal equalization mechanism and support for communities with fewer financial resources. Conversely, the volume of earmarked

transfers to local budgets decreased by 47%, reflecting changes in approaches to financing delegated responsibilities and shifts in fiscal policy priorities. The reverse grant was the most dynamic component, increasing by 7.1 times, which indicates a significant strengthening of the mechanism for redistributing excess resources from financially stronger communities for subsequent redistribution.

Throughout the period under review, earmarked transfers were the dominant component of the system. However, after reaching peak levels in 2018–2019, their volume substantially declined in 2020 due to changes in the financing framework of key sectors associated with ongoing reforms. These changes included the monetization of social benefits and housing subsidies, the centralization of certain social programs, and healthcare financing reform. Under the Medical Guarantees Program, medical institutions shifted to direct financing from the National Health Service of Ukraine (NHSU). A further decline in earmarked transfers was observed in 2022 due to wartime redistribution of budgetary resources. In 2023–2025, their volumes gradually recovered. At the same time, the volume of equalization grants to local budgets increased significantly after 2022, indicating a strengthening of vertical equalization mechanisms and support for communities under wartime conditions.

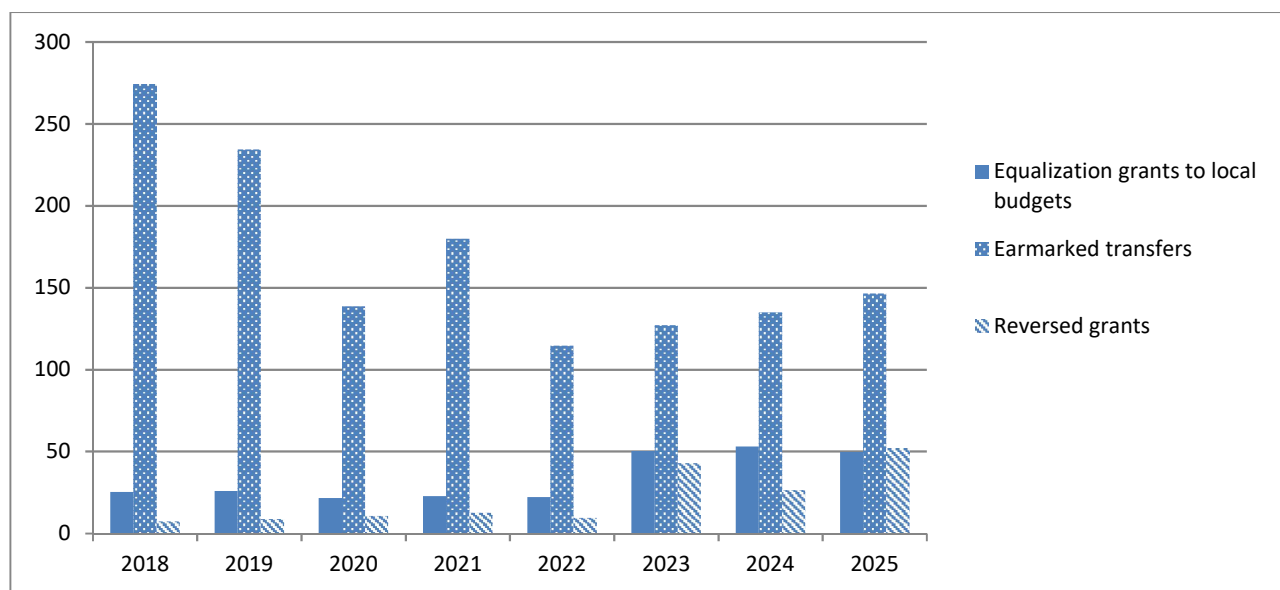


Figure 3 – Intergovernmental transfer dynamics in Ukraine's budget system, 2018–2025, UAH billion

Source: compiled by the author based on [11]

The most notable changes occurred in 2022–2025. During this period, the volume of equalization grants to local budgets increased 2.2 times, reflecting the need to strengthen support mechanisms for territories under wartime economic conditions. Meanwhile, the volume of earmarked transfers increased by 27%. The volume of reverse grants also increased significantly during this period, growing 5.5 times. This reflects the increased role of horizontal equalization mechanisms and their use as an additional channel for resource mobilization for the state budget. Prior to 2022, the intergovernmental transfer system primarily functioned as a tool for equalization and financing delegated responsibilities. Under wartime conditions, however, it acquired features of a crisis response and resource mobilization mechanism.

Particular attention should be paid to the reverse grant mechanism as part of the horizontal fiscal equalization system. This mechanism serves as a tool for withdrawing a portion of excess revenues from financially capable communities for subsequent redistribution to less fiscally capable territories. This approach aligns with the principle of budgetary solidarity and helps reduce territorial asymmetries. However, under wartime conditions, the reverse grant takes on additional significance because its expansion reflects not only the functioning of horizontal equalization mechanisms but also an effective increase in the volume of resources accumulated in the state budget. Thus, it partially transforms into a source of centralized financial resource mobilization.

Strategically, the growing importance of reverse grants reflects a trend toward temporary recentralization of financial flows under wartime conditions. However, the prolonged and excessive withdrawal of additional resources from local budgets may weaken fiscally strong

communities' incentives to increase their own-source revenues. This requires a careful balancing of the principles of solidarity and financial autonomy. The intensification of this recentralization could pose long-term risks to the development of local public finances. In particular, an increased reliance on redistributive tools could weaken the incentive to mobilize revenue at the local level and reduce fiscal autonomy. This underscores the importance of maintaining a balance between short-term stabilization objectives and long-term principles of decentralized financial governance.

Analyzing the dynamics of the budget system's revenues and expenditures, as well as intergovernmental transfers, reveals a transformation in Ukraine's budgetary relations and the gradual emergence of a new financial resource distribution model. This model is characterized by a significant strengthening of the central government under wartime conditions.

Conclusions from this research and prospects for further research in this direction. The results of the study suggest that Ukraine's budget system evolved in 2018–2025 due to two interrelated factors: the completion of decentralization reforms and a shift in fiscal policy priorities amid wartime conditions. During the pre-war period, the fiscal capacity of local governments gradually strengthened, as evidenced by the accelerated growth of local budget revenues and the growing share of local budgets within Ukraine's consolidated budget. These findings are important for developing a more balanced intergovernmental transfer system that supports fiscal resilience while maintaining incentives for local revenue generation.

An analysis of expenditure dynamics shows that, even in the pre-war period, state and local budget expenditure growth was uneven. While state budget expenditures increased, local budget expenditures did not

demonstrate comparable growth. This can be partly explained by changes in approaches to financing certain social expenditures in 2020–2021, particularly in healthcare and social protection.

Since 2022, fiscal policy has assumed an anti-crisis and mobilization role in response to wartime challenges, as evidenced by a sharp increase in state budget revenues and expenditures, and more moderate growth in the corresponding local budget indicators. Consequently, a clear imbalance in the distribution of financial resources has emerged, accompanied by a declining share of local budgets in revenues and expenditures, as well as a growing dominance of the central government.

These processes are significantly shaped by the transformation of the intergovernmental transfer system. In the pre-war period, transfers primarily financed delegated government responsibilities and equalized the fiscal capacity of territories, with earmarked transfers playing a dominant role. By contrast, from 2022 to 2025, the functional role of

transfers changed as equalization grants gained importance as instruments of stabilization and support for territories most affected by the crisis. Meanwhile, the role of reverse grants increased significantly. Alongside its horizontal equalization function, the reverse grant increasingly acts as a means of concentrating financial resources at the central level.

The study's results suggest a transition from a financial decentralization model focused on expanding local government financial autonomy to a fiscal recentralization model under wartime conditions. This model is driven by the need to concentrate resources to ensure state functioning in crisis circumstances.

In the context of postwar recovery, there is a growing need to improve intergovernmental fiscal regulatory mechanisms, particularly by enhancing their incentive role, ensuring transparent resource allocation, and supporting local economic development. Further research should assess the long-term financial sustainability impact of transfer policy on local budgets.

References:

1. Dougherty S., Montes Nebreda A., & Urrutia N. (2025). *Intergovernmental fiscal transfers and fiscal equalisation in a time of consolidation*. OECD Working Papers on Fiscal Federalism. https://www.oecd.org/content/dam/oecd/en/publications/reports/2025/06/intergovernmental-fiscal-transfers-and-fiscal-equalisation-in-a-time-of-consolidation_a6b7aadb/4853a4d0-en.pdf
2. Dougherty S., Montes Nebreda A., & Mota T. (2024). *Adapting intergovernmental fiscal transfers for the future: Emerging trends and innovative approaches*. OECD Working Papers on Fiscal Federalism. https://www.oecd.org/content/dam/oecd/en/publications/reports/2024/07/adapting-intergovernmental-fiscal-transfers-for-the-future_ad8ee08d/6389ca23-en.pdf
3. Bergvall D., Charbit C., Kraan D.-J., & Merk O. (2006). *Intergovernmental Transfers and Decentralised Public Spending*. OECD Working Papers on Fiscal Federalism. No. 3. URL: https://www.oecd.org/content/dam/oecd/en/publications/reports/2006/09/intergovernmental-transfers-and-decentralised-public-spending_g17a2163/5k97b11z2hwx-en.pdf
4. Kim, J., Lotz, J., & Blöchliger, H. (Eds.). (2013). *Measuring Fiscal Decentralisation. Concepts and policies*. OECD. https://www.oecd.org/content/dam/oecd/en/publications/reports/2013/01/measuring-fiscal-decentralisation_g1g1c53d/9789264174849-en.pdf
5. Vammalle, C., & Hulberth, C. (2013). *Sub-national finances and fiscal consolidation: walking on thin ice*. https://www.oecd.org/content/dam/oecd/en/publications/reports/2013/03/sub-national-finances-and-fiscal-consolidation_g17a225b/5k49m8cqkcf3-en.pdf
6. Kruhlyashov, A., & Burega, V. (2021). Zdobutky ta trudnoshchi u realizatsii detsentralizatsiyi vlyady v Ukraini. *Aspekty derzhavnoho upravlinnya* [Achievements and Challenges in the Implementation of Decentralization of Power in Ukraine]. *Aspekty derzhavnoho upravlinnya*, Vol. 9, issue 2. pp. 68–76.
7. Pysmennyi, V. (2017). Mizhbyudzhetni transferty yak instrument finansovoho vyvnyuvannya terytoriy [Interbudgetary transfers as a tool for financial equalization of territories]. *Ekonomika ta derzhava*, Vol 6. pp. 24 – 30.
8. Sochka, K. (2021). Local budgets in Ukraine: current trends and issues. Prague: *Scientific Publishing Center "InterConf"*, vol. 87. P. 56 – 65.
9. Yushko, S. (2025). Nova paradyhma rozpodilu dokhodiv biudzhetu yak rezultat realizatsii reformy detsentralizatsii [A new paradigm of budget revenue distribution as a result of decentralization reform implementation], *Finansy Ukrainy*, vol. 5, pp. 23–42. doi: <https://doi.org/10.33763/finukr2025.05.023>.
10. Boguslavskaya, S., & Velhan, O. (2024). Derzhavna finansova polityka shchodo mistsevykh byudzhetu u voyennyy chas. [State financial policy regarding local budgets in wartime]. *Vcheni zapysky TNU imeni V.I. Vernads'koho. Seriya: Derzhavne upravlinnya ta administruvannya*, vol. 35 (74). issue 1. pp. 116 – 124. DOI <https://doi.org/10.32782/TNU-2663-6468/2024.2/20>
11. State web-portal of the budget for citizens. Open Budget. <https://openbudget.gov.ua/national-budget/incomes>.
12. The Verkhovna Rada of Ukraine (2010), *Budget Code of Ukraine* (№ 2456-VI). <https://zakon.rada.gov.ua/laws/show/2456-17#Text>

