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## ACCOUNTING OF EXPENDITURES ON FINANCING TERRITORIAL COMMUNITIES IN TIMES OF WAR

### ОБЛІК ВИТРАТ НА ФІНАНСУВАННЯ ТЕРИТОРІАЛЬНИХ ГРОМАД В УМОВАХ ВІЙНИ

The article analyses the statistical data on the volume of budget expenditures for financing the socio-economic development of communities in Ukraine. Based on the analysis of statistical data for the last eleven years, the main trends are identified. The economy of our country had a significant social orientation: social expenditures in 2010 amounted to almost 30% of total budget expenditures. The main components of social expenditures include the following elements: social protection of pensioners, healthcare, social protection of military personnel and others. War leads to a decrease in business activity, which reduces tax revenues to the budget. Loss of jobs and lower incomes also lead to a reduction in tax revenues as a revenue stream. The destruction of enterprises and other business entities, as well as residential buildings, reduces the ability to generate revenues for the state and local budgets. This is a significant loss of expenditures to finance social and other needs of local budgets. These factors lead to a growing need to find additional sources of funding and a transparent mechanism for their accounting and audit. Military operations require the prompt introduction of new technologies for the smooth management and accounting of expenditures, and active cooperation with state, international and local organisations will contribute to effective financial management and increase the resilience of communities in difficult conditions. Accordingly, this requires improving the mechanism of accounting for the costs of financing local communities. In particular, the authors propose the following measures: introduction of modern accounting IT solutions, increasing the level of transparency and reporting of actually spent funds, improving the skills of accounting personnel, improving the regulatory framework by updating regulations in line with international standards and international experience, strengthening the role of internal and external audit of expenditures, involving citizens in the financial management process through open budget discussions with communities.

**Keywords:** accounting; audit, expenditures, budget, local communities, efficiency, international experience.

У статті проаналізовано статистичні дані щодо обсягу бюджетних витрат на фінансування соціально-економічного розвитку громад в Україні. На основі аналізу статистичних даних за останні одинадцять років визначено основні тенденції. Економіка нашої країни мала значну соціальну спрямованість: соціальні видатки у 2010 році становили майже 30% від загальних видатків бюджету. Основними складовими соціальних видатків є такі елементи: соціальний захист пенсіонерів, охорона здоров'я, соціальний захист військовослужбовців та інші. Війна призводить до зниження ділової активності, що зменшує податкові надходження до бюджету. Втрата робочих місць та зниження доходів також призводять до скорочення податкових надходжень як одного з основних джерел доходів бюджету. Руїнування підприємств та інших суб'єктів господарювання, а також житлових будинків зменшує можливість генерувати доходи для державного та місцевих бюджетів. Це значні втрати видатків на фінансування соціальних та інших потреб місцевих бюджетів. Зазначені фактори зумовлюють зростаючу потребу у пошуку додаткових джерел фінансування та прозорого механізму їх обліку та аудиту. Військові дії вимагають оперативного впровадження нових технологій для безперебійного управління та обліку витрат. Водночас, активна співпраця з державними, міжнародними та місцевими організаціями сприятиме ефективному управлінню фінансами та підвищенню стійкості громад у складних умовах. Відповідно, це вимагає вдосконалення механізму обліку витрат на фінансування територіальних громад. Зокрема, автори пропонують такі заходи: впровадження сучасних облікових IT-рішень, підвищення рівня прозорості та звітності про фактично витрачені кошти, підвищення кваліфікації облікового персоналу, вдосконалення нормативно-правової бази шляхом оновлення нормативно-правових актів відповідно до міжнародних стандартів та міжнародного досвіду, посилення ролі внутрішнього та зовнішнього аудиту витрат, залучення громадян до процесу управління фінансами шляхом проведення відкритих бюджетних обговорень з громадами.

**Ключові слова:** облік, аудит, витрати, бюджет, місцеві громади, ефективність, міжнародний досвід.



**Problem statement.** Growing local community budgets require a high level of transparency in accounting and financial management. Transparent accounting of expenditures allows communities to demonstrate to their residents how budget funds are used and promotes more active participation of citizens in decision-making. Accounting for the financing of territorial communities is extremely relevant in the context of martial law in terms of decentralisation, transparency of financial management, efficient use of resources and compliance with the law. This requires communities to be more responsible for the use of budget funds, so accounting and auditing of expenditures becomes a key tool for ensuring transparency, efficiency and accountability of financial transactions. High-quality expenditure accounting is the foundation for sustainable community development, investment attraction and increased public trust in local authorities. In the context of military operations, the priority of expenditures may change. Communities can reallocate funds to the most urgent needs, including cooperation with other communities to solve problems together. It is also important to establish coordination and information exchange between communities to build up reserve funds, which can provide financial stability to respond quickly to unforeseen circumstances. Comparison of budget and accounting data allows for an audit of actual expenditures at different levels of government and is a key to effective management of budget funds.

**Analysis of recent research and publications.** The theoretical and applied principles of financing the development of territorial communities have been covered by both foreign and Ukrainian economists, including: O. Krainyk, O. Fedorchak [1; 2], T. Kutsenko, Ya. Sirenko [3], A. Yeryomenko [4], I. Lyubchak, L. Marshuk [5], O. Kovalova [6],

D. Mitlin, S. Kolenbrander, D. Satterthwaite [7], O. Vysochan [8] and others. These authors have made a significant contribution to the understanding and development of the methodology for accounting for the costs of financing territorial communities, which contributes to more effective management of local resources and finances. Although their contribution is significant, today the scientific literature does not have unambiguous answers to a number of questions regarding the accounting and audit of expenditures on financing the development of territorial communities under martial law in Ukraine. Therefore, the issue of the optimal structure of revenues and accounting for expenditures on financing the development of territorial communities remains relevant. The solution of these problems is possible if local authorities focus their efforts on strengthening the financial capacity of territorial entities and on the efficient use of these funds.

**Formulating the purposes of the article.** The purpose of the article is to develop methodological recommendations for improving the efficiency of the mechanism of accounting and auditing of expenditures on financing territorial communities in times of war based on the analysis of the dynamics of social expenditures and implementation of international experience.

**Presentation of the main research material.** In conducting the study, the authors used data from the State Statistics Service of Ukraine, which is available on the official website of this service. Official statistics for Ukraine are limited to the period before the beginning of the war and show a general upward trend in the amount of consolidated budget expenditures on social protection and social security of the population during 2010-2021 (Fig. 1). However, compared to the total size of the State Budget and the

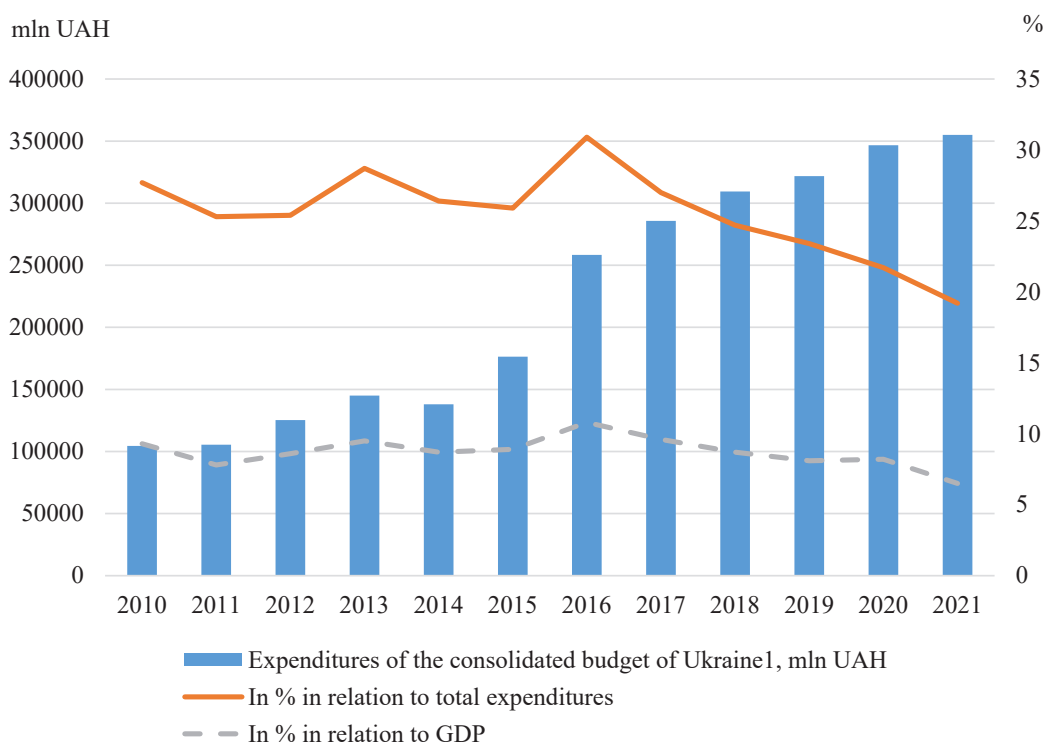


Figure 1. Government expenditures on social protection and social security of the population

Source: built based on [9]

country's GDP, the share of these expenditures has been gradually decreasing over the analysed period. Thus, in 2010, social spending accounted for 27,7% of total budget expenditures and 9,3% of GDP. By contrast, in 2021, total social protection expenditures amounted to 19,2% of consolidated budget expenditures and 6,5% of GDP.

An analysis of the amount of funding for social protection expenditures in Ukraine in 2017-2021 shows a steady upward trend. The social protection of pensioners accounts for a larger share in the structure of these expenditures (Fig. 2). Moreover, over the past five years, the share of these expenditures has increased from 43,0% to 46,2%. The reason for this situation is the general global trend towards population ageing, including in Ukraine, where the number of people receiving state pensions is increasing. Comparison of the amount of funding for this item with actual expenditures shows that there is a shortage of financial resources to pay this item. Given the impact of the war, which has led to an increase in mortality and significant migration of young people, we can expect this component of expenditure to grow in the future.

At the same time, it is worth noting the rise in the unemployment rate (Fig. 3). The negative impact of the war in Ukraine, which also affects economic activity in the country, poses a threat of rapid growth in this indicator in the near future.

This situation is threatening to the national economy and requires the implementation of pension reform as part of the strategy of post-war economic recovery in Ukraine, which will reduce the burden on the financial system. The next largest area of funding is healthcare, which accounts for 14-18% of social spending. This area of expenditure may have increased significantly in the recent period, as the war in Ukraine has led to numerous casualties among the population. This area of social expenditures will also require further systemic transformation with the possible involvement of financial support from foreign partners, etc. On the other hand, the share of expenditures on housing compensation is decreasing from 13,8% in 2017 to 4,6% in 2021, due to the revision of programmes for providing state subsidies for utility payments to the population.

According to the State Statistics Service of Ukraine, the structure of household income in 2020-2021 shows a high degree of dependence on social benefits, which account for about 30% of total household income (Fig. 4):

An analysis of the structure of household expenditures shows that on average 49% of income is spent on food; 13,5% on utilities; 6,2% on clothing and footwear, and 4,3% on healthcare. For comparison, in Poland, 26,7% of income is spent on food, and 13,8% in Germany. The relatively low level of household income in Ukraine results in a significant share of food expenditures in total household income. However, a comparative analysis with EU coun-

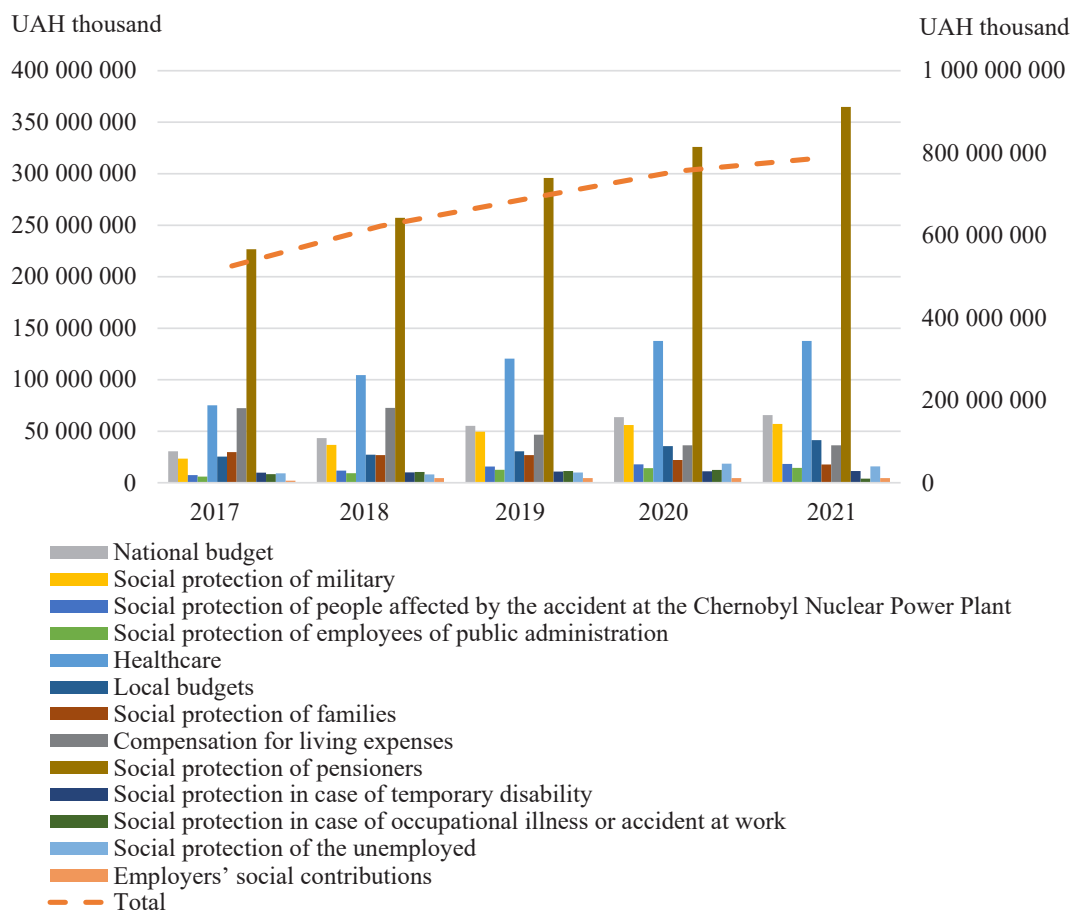
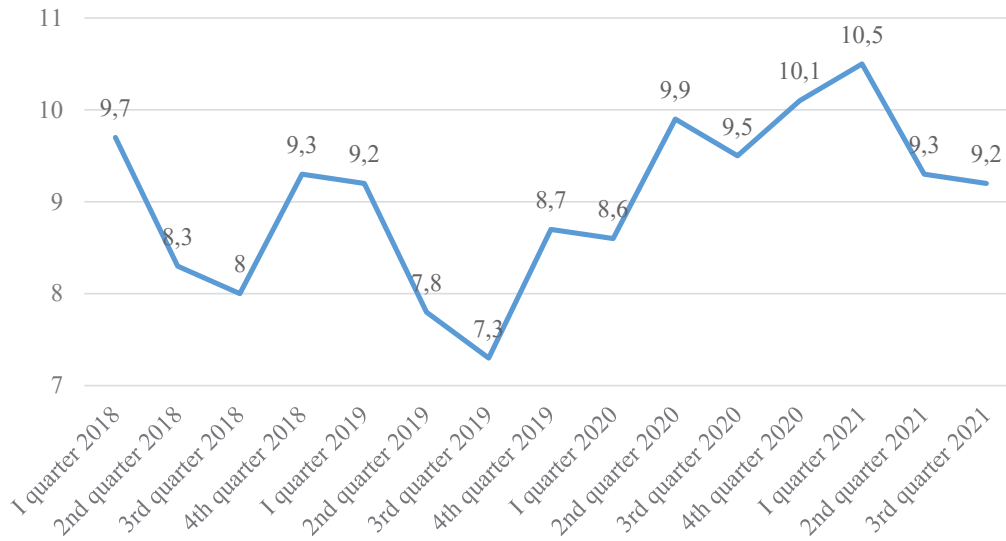


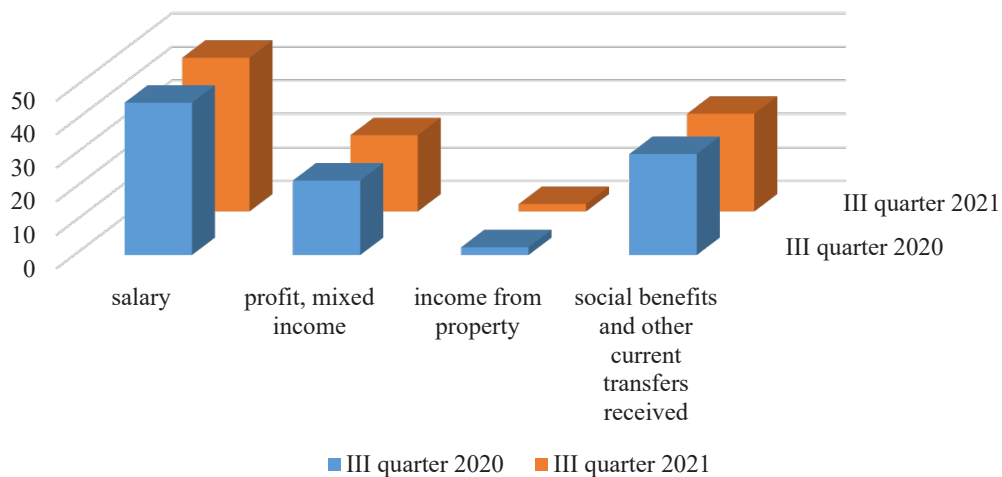
Figure 2. Dynamics of expenditures by areas of social protection

Source: built based on [9]



**Figure 3. Unemployment rate of the population aged 15–70 (according to the ILO methodology) (in % of the labor force of the corresponding age)**

Source: built based on [9]



**Figure 4. Income structure of the population of Ukraine in 2020-2021**

Source: built based on [9]

tries shows a relatively low level of expenditures on utilities: while in Ukraine it is 13,5% of household income, in Poland it is 19,5%, and in Germany it is 35,6%. Given the downward trend in the government's share of expenditures on tariff compensation for the population of Ukraine, we can also expect this component of household expenditures to grow. Thus, the problem of improving the mechanism of financing social expenditures of the population needs to be resolved as soon as possible [10]. In addition to finding sources of funding, it is necessary to improve the mechanism of accounting and auditing of these expenditures.

Financing and accounting of operations related to the cooperation of territorial communities in the context of military operations require a flexible approach, the use of modern technologies and transparency, as they (ATCs) face numerous financial challenges during the war. The

war leads to a decrease in business activity, which reduces tax revenues, in particular from enterprises, small and medium-sized businesses. Job losses and lower incomes affect personal income tax revenues to local budgets. The destruction of businesses, retail facilities and residential buildings reduces the ability to collect taxes and fees. At the same time, budgets are used to finance expenditures to support internally displaced persons (IDPs) and war-affected citizens. There is a need to finance the restoration of destroyed buildings, power grids, roads and other infrastructure. Local budgets largely cover education and almost entirely housing and communal services.

Expenditures on security measures, including funding for local territorial defence units, are increasing. Military operations reduce the ability of communities to obtain loans on favourable terms due to high risks. And

the reduced investment attractiveness of the war-affected regions affects the inflow of investment funds. In addition, military operations make it difficult to forecast expenditures, as needs can change very quickly. The destruction of transport infrastructure and blocked routes can make it difficult to supply essential goods, including food, medicine and construction materials. Logistics costs increase as alternative routes and means of transport are required.

Evacuation or mobilisation of workers leads to a shortage of qualified personnel in local authorities. Lack of resources and constant stress affect the ability of local authorities to effectively manage finances and implement plans. In such circumstances, it is necessary to quickly adapt accounting and financial systems to the conditions of war, including changes in financial flows and reporting. Military operations require the rapid introduction of new technologies to ensure continuity of management and accounting, and active cooperation with government, international and other local organisations will contribute to effective financial management and increase the resilience of communities in difficult circumstances.

Despite the war in Ukraine, more than 70% (1009) of territorial communities are in the range of optimal, satisfactory levels of financial capacity by the end of 2023. According to the study, in 2023, 495 or 34,4% of communities were classified as having a high level of capacity; 314 or 21,8% of communities as having an optimal level, and 200 or 13,9% of communities as having a satisfactory level. At the same time, 182 territorial communities have a critical level of capacity, and 247 – a low level. That is, 429 communities (29,8%) belong to the lowest capacity categories, while 1009 (70,2%) are in the high category [11; 12; 13]. A significant increase in the number of communities with a critical level of capacity was recorded in Donetsk, Zaporizhzhia, Luhansk, and Kherson oblasts, where hostilities are ongoing. In Ukraine, quite significant differentiations have emerged between the territories, as new types of territories can now be identified: frontline, border, with active hostilities, and temporarily occupied territories.

Therefore, we believe that the mechanism of accounting for local community funding expenditures needs to be improved, which should include the following elements:

1. Implementation of modern accounting IT solutions based on the automation of accounting processes using specialised cost accounting software. On the one hand, this will reduce the risk of errors and increase efficiency. However, measures should be taken to comply with the requirements for protection against cyber threats.

2. Increase the level of transparency of accounting and reporting on the amounts actually spent through regular reporting using the developed forms, publishing them in open sources on local community websites. Such information should be available to all stakeholders. At the same time, we believe that the reporting forms should be prepared in a format that is easy to understand, including not only purely financial indicators.

3. Professional development of accounting staff through professional training by participating in regular trainings and refresher courses for local community accountants with a focus on modern accounting and reporting methods. There should also be a requirement for mandatory certification for accountants working for local authorities.

4. Improving the regulatory framework by updating legal acts to reflect the requirements of international

accounting standards and the practice of their use in foreign countries. In this context, we consider it appropriate to adapt the requirements of international standards to the realities of the Ukrainian economy, taking into account the risks and uncertainties of war.

5. Strengthening internal and external control through audits, which can be carried out by internal audit services to regularly review accounting processes and expenditures and by independent external audits to assess the reliability of accounting data and the use of funds.

6. Involve citizens in the financial management process by organising open budget discussions with citizens, which will allow taking into account their suggestions and comments. It would also be appropriate to conduct information campaigns to explain to citizens the principles of formation and use of local budgets.

Thus, we believe that the implementation of the proposed measures will help to improve the mechanism of accounting for local community funding, as well as ensure transparency and efficiency of their use of funds.

**Conclusions.** The study, based on data from the State Statistics Service of Ukraine, showed that over the past 11 years, social spending has been growing, but its share in the overall budget and GDP has been declining, reflecting the state's changing financial priorities. The significant increase in spending on social protection for pensioners is due to the ageing of the population, and the war is exacerbating the situation by increasing mortality and youth migration. Rising unemployment due to the war threatens the country's economic stability and requires effective reforms. Healthcare financing, which accounted for up to 20% of social spending in the period under review, may increase due to the many casualties. At the same time, the need to finance the social sector will grow in the future. The high dependence of household incomes on social payments (around 30%) and the large percentage of expenditures on food reflect low incomes. In the context of the war, local budgets face financial challenges, such as reduced business activity, lower tax revenues, infrastructure destruction, and increased costs of supporting internally displaced persons. Security spending, including funding for territorial defence, is also on the rise.

In order to improve the efficiency of the accounting and financial system in a war-time environment, we propose to implement a number of measures: use of modern IT solutions to automate accounting processes and ensure cyber security; increase in transparency of accounting and reporting; professional training of accounting personnel; improvement of the regulatory framework and strengthening of control through audits. We believe that these measures will contribute to effective financial management, and the involvement of citizens in financial management will increase the transparency of processes.

Further development is required in terms of the methodological implementation of the proposed measures, taking into account the size and structure of territorial communities.

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